

Academic Schools, Departments, and Courses

Course Information

Lower-division courses typically numbered at the 100 and 200 levels are introductory and foundational courses designed for freshman and sophomore level students. Upper-division courses numbered at the 300 and 400 levels build upon higher knowledge and principles and usually require junior or senior classification to demonstrate an advanced level of independence, writing ability, and critical thinking skills in learning difficult content material within various academic disciplines.

Some curricular courses or course components listed in this catalog include physical or off-campus activities for which students must sign a waiver of liability as a precondition of participation.

Course offerings (including changes in time, day, and the assignment of instructors) may be added to, amended, or canceled by the decision of a department or the University.

Certain courses in the course schedules or transcripts have additional attributes added to the course title or number. "IS" indicates the course is taken as an independent study; "SL" is added to courses designated as service learning; "SP" indicates the course section includes a speaking component and meets one of two required by the foundational core curriculum; "CC" indicates the course section includes a cross-cultural component and meets the foundational core curriculum requirement; "Hon" added to the end of the course title or "H" added to the end of the course number designates the course as an honors section.

Additional courses offered through Taylor University are listed under the **Academic Enrichment Center**, **English as a Second Language**, **Off-Campus Programs**, and **Student Development** sections of this catalog.

The following courses are offered in many academic areas with descriptions for these courses being the same for all but carrying different prefixes and applicable prerequisites. Registration forms are available online at <https://www.taylor.edu/offices/registrar/forms>.

170 **Selected Topics** **1-4 hours**
A course offered on a subject of interest but not listed as a regular course offering.

270 **Selected Topics** **1-4 hours**
A course offered on a subject of interest but not listed as a regular course offering.

360 **Independent Study** **1-4 hours**
An individualized, directed study involving a specified topic.

370 **Selected Topics** **1-4 hours**
A course offered on a subject of interest but not listed as a regular course offering.

393 **Practicum** **1-4 hours**
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Offered primarily during Summer.

450 **Directed Research** **1-4 hours**
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

480 **Seminar** **1-4 hours**
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

490 **Honors** **1-2 hours**
Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.

499 **Instructional Assistant** **1 hour**
Serve as an instructional assistant in the student's major department. Prerequisites: Junior standing; cumulative GPA of at least 2.60; major GPA of at least 3.00; and permission of the instructor, department chair, and dean.

Honors Guild

Scott Moeschberger, Director

Taylor University's Honors Guild is a challenging academic experience for high ability, highly motivated students from across academic disciplines. Students must be selected to be part of the Honors Guild. The Honors Guild seeks to provide an intentional environment where curiosity is nurtured and ideas are examined. The honors curriculum emphasizes the integration of faith and learning, ideas, and values through discussion-based courses, mentoring relationships, global engagement, and student initiative. All students participating in the Honors Guild should register for the honors preceptorial discussion group associated with IAS 110. The Honors Guild functions as an academic minor, but is designed to offer students a four-year experience through diverse course offerings (many of which meet foundational core requirements) and co-curricular programming. Many honors courses are listed in the schedule of classes by the academic areas that offer them and are noted by an "H" after the course number.

Due to the structure of the first year, as well as the intended four-year design, students must apply to the Honors Guild by February 1, prior to their freshman year. Typically, incoming freshmen applying to the program have earned a minimum 3.70 high school GPA and a combined (Math and Reading) SAT score of 1280 or ACT composite score of 28. The application process is competitive due to size limitations. Further information about the Honors Guild, including application procedures, may be obtained by contacting the Director of the Honors Guild.

Honors Guild

The requirements for completion of the Honors Guild includes at least 18 hours and a cumulative GPA of 3.40. A 3-4 credit study abroad course approved by and designated for the Honors Guild during Interterm is required. All courses counting toward the Honors Guild must be completed with a grade of C- or better.

Program Requirements

GBS 130H	3	Introduction to Global Studies
HNR 225	1	Honors Colloquium
HNR 225	1	Honors Colloquium
HNR 225	1	Honors Colloquium

Theology and Philosophy Requirement

Select one additional course from the following:

BIB 210H	3	Biblical Literature II
HNR 370	3-4	Selected Topics (<i>advisor approved</i>)
PHI 121H	3	Society and Philosophy
PHI 413H	3	Contemporary Christian Belief

Arts and Humanities Requirement

Select one additional course from the following:

ENG 230H	3	World Literature
ENG 373H	3	Literature of Diverse Cultures
HNR 264	4	Going Up to Glory: Migration and Voice in African American Lives
HNR 370	3-4	Selected Topics (<i>advisor approved</i>)
HUM 330H	4	Arts and Ideas

Social and Natural Sciences Requirement

Select one additional course from the following:

CHE 120H	4	Forensic Science
COS 321H	3	Ethics and Technology
GBS 325H	3	Peace and Conflict: Peacebuilding and Reconciliation
HNR 270	3-4	Selected Topics (<i>advisor approved</i>)
HNR 370	3-4	Selected Topics (<i>advisor approved</i>)
MAT 220	4	Ways of Knowing
PPE 361H	3	Western Political Thought

Electives

Select at least one additional course to reach the required 18 credits from the following:

HNR 225	1	Honors Colloquium
IAS 340	1-2	Lewis and Related Authors Seminar
IAS 370H	1	Selected Topics (<i>advisor approved</i>)
PHI 382	1-3	Ethics Bowl
SDV 216*	1	Exploring Your Calling
SDV 217*	1	Vocation: Life After Taylor

*A maximum of one course from SDV 216 and SDV 217 may count toward the required 18 credits.

Honors Guild Courses

HNR 120 2 hours

Global Paradigms of Leadership

This seminar style course will explore leadership from diverse, global perspectives. Students will engage leaders and leadership styles from other cultures, studying how the Christian faith integrates into diverse leadership structures.

HNR 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

HNR 225 1 hour

Honors Colloquium

The Honors colloquium is an interdisciplinary course which brings together a group of like-minded students to discuss a variety of topics with a focus on the year's theme. Requirements for this course include attending a variety of campus lectures and events and engaging in dialogue around "big ideas" in culture, Christianity, and public discourse. Students will have the opportunity to facilitate discussion of a topic of their choosing. *May be repeated for credit.*

HNR 264 4 hours

Going Up to Glory: Migration and Voice in African American Lives

This interdisciplinary course presents an integrative survey of African American literature and history from African origins through the modern civil rights movement. The historical focus is on the three major migrations African Americans have experienced during this period. Literary selections from multiple genres will span these eras and highlight the development and patterns of African American voice. *Meets both the foundational core literature and history requirements. Prerequisite: ENG 110.*

HNR 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

HNR 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

HNR 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

HNR 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

HNR 450 1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

HNR 480 1-4 hours

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

HNR 490 1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Individual Goal-Oriented Major

The Individual Goal-Oriented major recognizes that available majors may not meet the unique needs of some students who attend Taylor University. This major allows a student (with faculty guidance and University approval) to design, from existing courses, a program of study that is valid academically and meets personal or professional goals. It is expected that the major will be thoughtfully and carefully designed. Therefore, a student should have some college experience before applying for the Individual Goal-Oriented major. The Curriculum Management Committee (CMC) will make the final decision on the approval of the application. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

To explore an Individual Goal-Oriented major, the student must meet the following requirements:

- Student must be at least a second-semester sophomore.
- Student must have a minimum 2.80 GPA to request an Individual Goal-Oriented major.
- Student must consult with an individual within the field of interest.
- Student must seek advice from at least two faculty advisors from different departments that most appropriately relate to the proposed major.

To begin the official process of requesting an Individual Goal-Oriented major, the student must complete the following steps in order:

- Student must write a detailed rationale for pursuing the major, including opportunities the major might offer after graduation.
- Student must work with the two advisors referenced above and utilize the rationale to develop an academically challenging curriculum of required courses to be included in the Individual Goal-Oriented major.
- Student must create a complete four-year plan addressing all degree requirements, including this major.
- Student must obtain letters of support from both faculty advisors.
- Student must complete the "Request for Goal-Oriented Major" form available from the Office of the Registrar.
- Student must submit the items listed above to the Registrar and schedule a meeting.
- Student must meet with the Registrar to discuss the proposed curriculum and four-year plan.
- Student must meet with the designated representative of CMC to discuss plans for the Individual Goal-Oriented major.
- Student must complete all steps above and request the Individual Goal-Oriented major by April 15 of the academic year.

The requirements for an Individual Goal-Oriented major include the following:

- An academically challenging curriculum that adheres to one of the following:
 - Bachelor of Arts degree requires 46 credit hours in the major and proficiency in two years of one foreign language.
 - Bachelor of Science degree requires 46 credit hours in the major when combined with the curriculum requirements in information systems and analytics.
 - Bachelor of Science degree requires 60 credit hours in the major, including a minimum 3-credit hour practicum.
- 48 credit hours must be completed after the approval of the Individual Goal-Oriented major.
- All degrees with this major require 128 credit hours, including 42 upper-division credit hours, proficiency requirements, foundational core curriculum, a minimum cumulative GPA of 2.00, a minimum major GPA of 2.30, a senior comprehensive paper (3,000 words minimum) integrating several components of the major, along with residency requirements (i.e., 22 of final 30 hours, fifty percent of major, and fifty percent of degree hours must be completed through Taylor). See academic catalog for additional degree requirements.

Interarea Studies

Interarea Courses

Interarea courses are general in scope and exist apart from any single academic area. For additional course offerings, refer to the **Academic Enrichment Center and Student Development** sections of this catalog.

IAS 102 1 hour

Orientation to Distance Learning

This course is an introduction to Blackboard, TU Online history and staff, and University policies that pertain to the distance learner. An overview of learning styles and time management strategies make up the content of the course which is supplemented by John Stott's *Your Mind Matters*. Students will use Blackboard communication tools to complete assignments. This course is offered through Taylor University Online (TUO).

IAS 110 4 hours

Foundations of the Christian Liberal Arts

This course is an introduction to the liberal arts, the integration of faith and learning, the foundational core, improved learning, and the transition to college. Through large group lectures and small group discussion sessions, the themes of right relationship with God, self, others, and the world are developed. Required of all students. Meets foundational core requirement. Offered Fall semester.

IAS 111 3 hours

God, Humanity, and Knowledge

An interdisciplinary introduction to the liberal arts and the integration of faith and learning. Through lectures, readings, films, and discussion, the course intentionally seeks to challenge students to be more confident in the development of a meaningful belief system. For students enrolled in two-week pre-college summer program. Meets foundational core requirement for IAS 110. Offered Summer term.

IAS 120 1 hour

Introduction to International Ministry

To prepare for Lighthouse projects, students study the concept of culture, American cultural distinctives, and the cultural, religious and historical characteristics of Lighthouse host nations. Students examine the components of effective intercultural ministry and communicating faith in Christ cross-culturally. Attention is given to personal character, spiritual life, commitment, and teamwork essential for effective service. Offered Fall semester. Grade only.

IAS 125 1 hour

Short-Term Missions Engagement

This course is designed to prepare students for and involve them in a spring break ministry experience within the framework of service-learning. Students will receive training specific to the ministry in which they will participate, experience a pre-trip local service experience with their team, participate in an 8-10 day spring break missions project, and reflect upon what they are learning throughout the course. Through participation in this course, students should have a greater understanding of an involvement in the Christian call to service. Concepts related to a life of service will be addressed including evangelism, cultural awareness, team dynamics, meaningful service, reflection, debriefing, and stewardship. Offered Spring semester.

IAS 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

IAS 230 1 hour

Issues in Science and Religion

An interdisciplinary examination of key issues underlying the relationship of science and Christianity, focusing on issues concerning creation, the fall, the flood, and the world in which we live today. The course will be a focus on general scientific concepts and theological principles involved in the integration of faith and learning. Counts as one elective credit in either physics or religion and toward foundational core science credits.

IAS 231H 2 hours

Issues in Science and Religion

A more in depth interdisciplinary examination of key issues underlying the relationship of science and Christianity, focusing on issues concerning creation, the fall, the flood, and the world in which we live today. The course will be a focus on general scientific concepts and theological principles involved in the integration of faith and learning. Students will pursue research into a particular issue within this area, as well as more in depth study groups. Counts as elective credit in both physics and religion and toward foundational core science credits.

IAS 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

IAS 320 3 hours

Cross-Cultural Outreach

Through this Lighthouse service-learning experience, students are immersed in another culture and provide needed service to gain cross-cultural understanding, interpersonal and skill development and spiritual growth. Emphasis is given to reflection on God's global purposes, intercultural relationships and life stewardship. Prerequisite: IAS 120 or permission of instructor. Meets foundational core cross-cultural requirement. Offered January interterm.

IAS 340 1-2 hours

Lewis and Related Authors Seminar

A seminar offered by the Center for the Study of C. S. Lewis and Friends focusing on the works of authors represented in the Edwin W. Brown Collection: C. S. Lewis, George MacDonald, Dorothy Sayers, Charles Williams, and Owen Barfield as well as related authors. An interdisciplinary course which seeks to encourage scholarship and critical thinking. Specific topics vary from semester to semester. May be repeated three times for credit. Open to all students.

IAS 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

IAS 373 1 hour

Conversations on Race

This course is designed to help students explore the topic of race through readings, discussions, media presentations, and reflection on personal and field experiences. It will guide students in a meaningful thought process and dialogue that will allow them to consider their own racial identity, the meaning of race in interpersonal relationships on this campus and in society, as well as the important connection between Christian faith and race in the church and American society. An emphasis will be placed upon creating a safe environment where questions and dissent will be respected and welcomed, resulting in learning for all involved.

IAS 403 4 hours

A Christian Worldview

A foundational course designed to introduce students to a Christian worldview. Attention is given to the definition, function, formation, and evaluation of worldview. The course then explores significant biblical and theological perspectives on the ultimate issues of life, including God's purposes for humans, the reality of sin, God's redemption of humanity, and the ultimate realization of glory. Students will also learn how the church historically has faced these issues and how these issues have shaped the church. This course is offered through Taylor University Online (TUO).

IAS 495 1 hour

Senior Seminar

Senior Seminar is an integrative, interdisciplinary foundational core requirement. Students will register for it during either the Fall or Spring semester of their senior year. Meets foundational core requirement.

Library and Information Science Courses

LIS 165 3 hours

Introduction to Archives

An introduction to the purpose and practice of archives and special collections. Emphasis is placed on the history and development of the profession, basic collection management and preservation, working with patrons and researchers, and digital resources.

Liberal Arts

The Associate of Arts degree in Liberal Arts is offered for students who desire a two-year program that emphasizes a breadth of knowledge. It is not to be taken with nor awarded with any baccalaureate degree.

A core of courses from a variety of academic disciplines is combined with 14 hours from the student's specialty area plus sufficient elective hours to total 64 credit hours. The cross-cultural course may double count with either the core requirement or the specialty area, but not both. No other core requirement may be used to meet the 14 credit specialty requirement.

The area of specialty (or a combination of related areas if sufficient offerings are not available in one selected field of study) must be approved by the Dean for Arts and Humanities.

Liberal Arts (AA)

Core Requirements

BIB 110	3	Biblical Literature I
BIB 210	3	Biblical Literature II
COS 104	2	Computing and Culture – Applications and Context
ENG 110	3	College Composition
HUM 230	4	Art as Experience
IAS 110	4	Foundations of the Christian Liberal Arts
KIN 100	2	Living Well
KIN 200_	1	General Physical Education
REL 313	3	Historic Christian Belief

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Select one literature course from:

ENG 230	3	World Literature
ENG 240	3	American Literature
ENG 250	3	British Literature

Select one science or mathematics course of at least 3 credits.

Select one history course of at least 3 credits.

Select one social science course of at least 3 credits.

Select one cross-cultural course of at least 3 credits.

Specialty Requirements

Complete at least 14 hours within an approved specialty area.

Electives

Select enough electives to reach the 64 credit hour requirement.

Notes



TAYLOR
UNIVERSITY

**School of Arts
and Humanities**

NANCY DAYTON, PHD, DEAN

ART, FILM, AND MEDIA

BIBLICAL STUDIES, CHRISTIAN MINISTRIES, AND PHILOSOPHY

COMMUNICATION

ENGLISH AND MODERN LANGUAGES

HISTORY, GLOBAL, AND POLITICAL STUDIES

MUSIC, THEATRE, AND DANCE

Art, Film, and Media

Co-Chairs, Professor K. Bruner, Assistant Professor J. Miles
Professors J. Bouw, J. Bruner, R. Smith
Assistant Professors S. Bailey, R. James, L. Reed, H. Richardson, J. Riggleman, L. Stevenson

In support of the overall University mission, the Department of Art, Film, and Media exists to cultivate and develop its students both artistically and spiritually, equipping them to be transformative agents in a contemporary culture significantly shaped by the arts, media, and entertainment. The department aspires to:

1. Develop professional practicing artists who demonstrate exemplary competence in their discipline.
2. Provide students with a comprehensive body of artistic knowledge and skills as they relate to their biblical worldview.
3. Continually engage the global community through culturally relevant artistic production and social dialog.

The department offers majors for several degrees including Bachelor of Fine Arts, Bachelor of Arts, and Bachelor of Science, as well as several minors. Areas of study include art education, art history, design, film and media arts, illustration, photography, pre-art therapy, and studio art.

Many professional career paths are available to graduates from the department including: art education, graphic design, web design, photography, illustration, fine art production, arts administration, film and television production, independent filmmaking, broadcasting, and corporate and nonprofit media production.

All majors in the department are required to meet with department faculty at the end of their second year within the major to assess strengths, growth areas, and recommendations for continued participation.

A senior exhibit is also required for all majors in the department, as fulfillment of the senior comprehensive requirement.

The department provides professional development opportunities for art majors by hosting trips to major art centers such as Chicago and New York, as well as Cincinnati, Dayton, and Grand Rapids. Furthermore, the department encourages participation in study abroad art programs such as Orvieto, Italy. The Film and Media Arts program offers a Taylor-run Hollywood Internship Program, an annual trip to the Sundance Film Festival, international documentary trips, the Envision Film Festival, and a 24-hour film festival in January.

Art Education (BA/BS)

The Bachelor of Science degree in Art Education requires 45-47 major hours in addition to education courses. This major is for students who desire licensure in art for all grades (P-12). Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Art Courses

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 210	3	Introduction to Art Education
ART 221	3	Painting I
ART 253	3	Foundations of Photography
ART 281	3	Ceramics: Handbuilt Forms
ART 302	3	Figure Drawing
ART 310	3	Elementary Art Education
ART 322	3	Water-Based Media
ART 380	3	Ceramics: Wheel Throwing

Select one course from the following:

ART 271	3	Three-Dimensional Design
ART 272	3	Sculpture: Casting

Select one course from the following:

ART 345	3	Relief and Serigraphy Printmaking
ART 347	3	Intaglio and Lithography Printmaking

Select one course from the following:

ART 383	1	The Christian and the Arts
ART 481	3	Studio Capstone

Select two art history courses from:

ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 316	3	Asian Art History
ART 413	3	Contemporary Art

Professional Education

ART 309	2	Secondary Art Methods
EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Design (BFA)

The Bachelor of Fine Arts degree in Design requires 72-73 major hours. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
ART 253	3	Foundations of Photography
ART 271	3	Three-Dimensional Design
ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts

Major Requirements

ART 152	3	Visual Communications
ART 251	3	Typography
ART 254	3	Illustration I: Visual Voice
ART 257	3	Layout and Prepress
ART 308	2	Digital Tools: Blender
ART 351	3	Product ID
ART 356	4	Web Design
ART 357	3	History of Graphic Art
ART 393	3-4	Practicum
ART 456	4	Web Animation
ART 457	3	Portfolio Development
ART 485	3	Portfolio Exhibition

Electives

Select one course from the following:

ART 203	3	Drawing II
ART 302	3	Figure Drawing

Select one course from the following:

ART 221	3	Painting I
ART 322	3	Water-Based Media

Select one course from the following:

ART 272	3	Sculpture: Casting
ART 372	3	Sculpture: Fabrication
ART 353	3	Commercial Photography

Select one course from the following:

ART 345	3	Relief and Serigraphy Printmaking
ART 347	3	Intaglio and Lithography Printmaking

Film and Media Arts (BA)

The Bachelor of Arts degree in Film and Media Arts requires two years of one foreign language and 52 major hours. Optional off-campus study programs are available. Students must apply and be accepted to the programs. The Art, Film, and Media department cannot guarantee acceptance into these programs. *All majors must participate in three semesters of media participation. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

ART 156	1	Digital Tools: Photoshop
CAC 160	3	Integrative Communication
FMA 125	1	Film and Media Arts: New Majors Orientation
FMA 145	2	Introduction to Visual Storytelling
FMA 215	3	Audio Production
FMA 220	3	Film and Video Production
FMA 230	3	Scriptwriting
FMA 355	3	Multi-Camera Live Production
FMA 393	3	Practicum
FMA 440	3	Narrative Filmmaking
FMA 485	3	Senior Capstone
JRN 255	3	Media and Society
JRN 332	3	Layout and Design

Select one course from the following:

FMA 350*	3	Media Theory and Ethics
FMA 352*	3	History and Criticism of Film
FMA 388*	3	Media, Faith, and Culture

Select two courses from the following:

FMA 335*	3	International Production
FMA 375*	3	Post-Production Methods
FMA 395*	3	Directing and Cinematography
FMA 420*	3	Documentary Filmmaking
FMA 430*	3	Producing for Clients

Select 2 additional credit hours from the following:

ART 356	4	Web Design
FMA 185	2	Digital Tools: After Effects
FMA 270	3	Selected Topics (approved by advisor)
FMA 310	3	Introduction to TV Writing
FMA 312	2	Steadicam® Workshop
FMA 320	3	Advanced Screenwriting
FMA 330	2	Audio Field Production
FMA 335*	3	International Production
FMA 350*	3	Media Theory and Ethics
FMA 351	3	Media Performance
FMA 352*	3	History and Criticism of Film
FMA 358	3	Sundance Study Trip
FMA 365	3	Inside the Entertainment Industry
FMA 370	3	Selected Topics (approved by advisor)
FMA 375*	3	Post-Production Methods
FMA 380	3	Editing Aesthetics
FMA 388*	3	Media, Faith, and Culture
FMA 395*	3	Directing and Cinematography
FMA 420*	3	Documentary Filmmaking
FMA 430*	3	Producing for Clients
FMA 492	6-12	Internship
FMA 493	12-13	Internship: TU Hollywood Internship Program
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
MUS 250	1	Audio Visual Technologies in the Church
THR 212	3	Mask Characterization and Movement

*Course may count only once.

Off-campus study programs at Taylor University's Hollywood Internship Program, the Los Angeles Film Studies Center or Contemporary Music Center in Nashville are available for juniors and seniors. The Art, Film, and Media department cannot guarantee acceptance into these programs. Contact your advisor or Off-Campus Studies for additional information.

Semester at the Los Angeles Film Studies Center:

FSC 305	3	Hollywood Production Workshop (may count as FMA 440)
FSC 332	4	Faith and Artistic Development in Film (may count as FMA 388)
FSC 492	6	Internship (may count as FMA 393)

Select one course from the following:

FSC 312	3	Screenwriting (may count as FMA 230)
FSC 327	3	Narrative Storytelling (may count as FMA elective)
FSC 340	3	Professional Acting for Camera (may count as FMA elective)
FSC 360	3	Independent Study

Semester at the Taylor University Hollywood Internship Program:

FMA 365	3	Inside the Entertainment Industry (may count as FMA elective)
FMA 493	12-13	Internship: TU Hollywood Internship Program (may count as FMA 393)

Semester at the Contemporary Music Center in Nashville:

CMC 300	3	Faith, Music, and Culture (may count as FMA 388)
CMC 301	3	Inside the Music Industry
CMC 393	1	Practicum (may count as 1 credit of FMA 393)
CMC 406	3	Advanced Studio Recording (may count as FMA elective)
CMC 407	3	Audio Engineering (may count as FMA elective)
CMC 408	3	Concert Production

Film and Media Arts (BS)

The Bachelor of Science degree in Film and Media Arts requires 67-68 major hours. Off-campus study programs are available. Students must apply and be accepted to the programs. The Art, Film, and Media department cannot guarantee acceptance into these programs. All majors must participate in three semesters of media participation. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

ART 156	1	Digital Tools: Photoshop
CAC 160	3	Integrative Communication
FMA 125	1	Film and Media Arts: New Majors Orientation
FMA 145	2	Introduction to Visual Storytelling
FMA 215	3	Audio Production
FMA 220	3	Film and Video Production
FMA 230	3	Scriptwriting
FMA 355	3	Multi-Camera Live Production
FMA 393	3	Practicum
FMA 440	3	Narrative Filmmaking
FMA 485	3	Senior Capstone
JRN 255	3	Media and Society
JRN 332	3	Layout and Design

Select one course from the following:

FMA 350*	3	Media Theory and Ethics
FMA 352*	3	History and Criticism of Film
FMA 388*	3	Media, Faith, and Culture

Select two courses from the following:

FMA 335*	3	International Production
FMA 375*	3	Post-Production Methods
FMA 395*	3	Directing and Cinematography
FMA 420*	3	Documentary Filmmaking
FMA 430*	3	Producing for Clients

Select an additional 2 additional credit hours from the following:

FMA 185	2	Digital Tools: After Effects
FMA 270	3	Selected Topics (approved by advisor)
FMA 310	3	Introduction to TV Writing
FMA 312	2	Steadicam® Workshop
FMA 320	3	Advanced Screenwriting
FMA 330	2	Audio Field Production
FMA 335*	3	International Production
FMA 350*	3	Media Theory and Ethics
FMA 351	3	Media Performance
FMA 352*	3	History and Criticism of Film
FMA 358	3	Sundance Study Trip
FMA 370	3	Selected Topics (approved by advisor)
FMA 375*	3	Post-Production Methods
FMA 380	3	Editing Aesthetics
FMA 388*	3	Media, Faith, and Culture
FMA 395*	3	Directing and Cinematography
FMA 420*	3	Documentary Filmmaking
FMA 430*	3	Producing for Clients
MUS 250	1	Audio Visual Technologies in the Church

*Course may count only once.

Select an additional 15 credit hours from the following to complete the major or complete one of the Off-Campus Programs listed below:

ART 356	4	Web Design
ART 456	4	Web Animation
CAC 345	3	Social Media Strategy
COS 102	3	Fundamentals of Systems and Computing
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Web Page Design
COS 243	3	Multi-tier Web Application Development
COS 350	3	Computer Graphics
ENT 310	3	Creativity and Concept Development
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 422	3	New Venture Planning
FMA 393	3	Practicum
MGT 201	3	Introduction to Business
MKT 231	3	Principles of Marketing
MKT 390	3	Digital Marketing

Off-campus study programs at Taylor University's Hollywood Internship Program, the Los Angeles Film Studies Center or Contemporary Music Center in Nashville are available for juniors and seniors. The Art, Film, and Media department cannot guarantee acceptance into these programs. Contact your advisor or Off-Campus Studies for additional information.

Semester at the Taylor University Hollywood Internship Program:

FMA 365	3	Inside the Entertainment Industry
FMA 493	12-13	Internship (may count as FMA 393)

Semester at the Los Angeles Film Studies Center:

FSC 305	3	Hollywood Production Workshop
FSC 332	4	Faith and Artistic Development in Film
FSC 492	6	Internship (may count as FMA 393)

Select one course from the following:

FSC 312	3	Screenwriting
FSC 327	3	Narrative Storytelling
FSC 340	3	Professional Acting for Camera
FSC 360	3	Independent Study

Semester at the Contemporary Music Center in Nashville:

CMC 300	3	Faith, Music, and Culture
CMC 301	3	Inside the Music Industry
CMC 393	1	Practicum (may count as 1 credit of FMA 393)
CMC 406	3	Advanced Studio Recording
CMC 407	3	Audio Engineering
CMC 408	3	Concert Production

Graphic Art (BA)

The Bachelor of Arts degree with a major in Graphic Art, with a concentration in Design (58-59 hours), Illustration (60 hours), or Photography (56-57 hours), requires two years of one foreign language and 56-60 hours in the major. Students may not double major with Computer Science-Digital Media. Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Art Core Requirements

ART 101	3	Drawing I	ART 311	3	Western Art History I
ART 151	3	Two-Dimensional Design	ART 313	3	Western Art History II
ART 156	1	Digital Tools: Photoshop	ART 382	2	The Christian and the Arts
ART 271	3	Three-Dimensional Design			

Select one of the following concentration areas:

Design

Concentration Requirements

ART 152	3	Visual Communications	ART 351	3	Product ID
ART 154	1	Digital Tools: Illustrator	ART 356	4	Web Design
ART 157	1	Digital Tools: InDesign	ART 357	3	History of Graphic Art
ART 251	3	Typography	ART 393	3-4	Practicum
ART 253	3	Foundations of Photography	ART 456	4	Web Animation
ART 254	3	Illustration I: Visual Voice	ART 457	3	Portfolio Development
ART 257	3	Layout and Prepress	ART 485	3	Portfolio Exhibition

Graphic Art requirements continued on next page

Illustration

Concentration Requirements

ART 152	3	Visual Communications	ART 302	3	Figure Drawing
ART 154	1	Digital Tools: Illustrator	ART 322	3	Water-Based Media
ART 157	1	Digital Tools: InDesign	ART 324	3	Painting II
ART 162	1	Digital Tools: Painter	ART 357	3	History of Graphic Art
ART 203	3	Drawing II	ART 365	3	Illustration 2: Visual Narrative
ART 221	3	Painting I	ART 445	3	Illustration 3: Thesis
ART 253	3	Foundations of Photography	ART 457	3	Portfolio Development
ART 254	3	Illustration I: Visual Voice	ART 485	3	Portfolio Exhibition

Photography

Concentration Requirements

ART 152	3	Visual Communications	ART 317	3	History of Photography
ART 154	1	Digital Tools: Illustrator	ART 346	3	Portraiture
ART 157	1	Digital Tools: InDesign	ART 353	3	Commercial Photography
ART 253	3	Foundations of Photography	ART 393	3-4	Practicum
ART 254	3	Illustration I: Visual Voice	ART 457	3	Portfolio Development
ART 257	3	Layout and Prepress	ART 461	3	Experimental Photography
ART 261	3	Film and Darkroom	ART 485	3	Portfolio Exhibition

Graphic Art/Systems (BS)

The Bachelor of Science degree with a major in Graphic Art/Systems consists of the 56-60 hour graphic art major core requirements, concentration requirements, and curriculum requirements in information systems and analytics. *Students may not double major with Computer Science–Digital Media. Except where indicated below, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

ART 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Illustration (BFA)

The Bachelor of Fine Arts degree in Illustration requires 74-75 major hours. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
ART 253	3	Foundations of Photography
ART 271	3	Three-Dimensional Design
ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts

Major Requirements

ART 152	3	Visual Communications
ART 162	1	Digital Tools: Painter
ART 203	3	Drawing II
ART 221	3	Painting I
ART 254	3	Illustration I: Visual Voice
ART 302	3	Figure Drawing
ART 322	3	Water-Based Media
ART 324	3	Painting II
ART 357	3	History of Graphic Art
ART 365	3	Illustration 2: Visual Narrative
ART 445 [†]	3	Illustration 3: Thesis
ART 445 [†]	3	Illustration 3: Thesis
ART 457	3	Portfolio Development
ART 485	3	Portfolio Exhibition

Electives

Select one course from the following:

ART 272	3	Sculpture: Casting
ART 372	3	Sculpture: Fabrication

Select two courses from the following:

ART 308	2	Digital Tools: Blender
ART 345	3	Relief and Serigraphy Printmaking
ART 347	3	Intaglio and Lithography Printmaking

Select one course from the following:

ENG 211	3	Introduction to Creative Writing
PWR 365	3	Writing Seminar

[†]ART 445 must be taken twice.

Photography (BFA)

The Bachelor of Fine Arts degree in Photography requires 73-74 major hours. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
ART 253	3	Foundations of Photography
ART 271	3	Three-Dimensional Design
ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts

Major Requirements

ART 152	3	Visual Communications
ART 254	3	Illustration I: Visual Voice
ART 257	3	Layout and Prepress
ART 261	3	Film and Darkroom
ART 308	2	Digital Tools: Blender
ART 317	3	History of Photography
ART 346	3	Portraiture
ART 353	3	Commercial Photography
ART 393	3-4	Practicum
ART 457	3	Portfolio Development
ART 461	3	Experimental Photography
ART 485	3	Portfolio Exhibition

Electives

Select one course from the following:

ART 203	3	Drawing II
ART 302	3	Figure Drawing

Select one course from the following:

ART 221	3	Painting I
ART 322	3	Water-Based Media

Select one course from the following:

ART 272	3	Sculpture: Casting
ART 372	3	Sculpture: Fabrication

Select one course from the following:

ART 345	3	Relief and Serigraphy Printmaking
ART 347	3	Intaglio and Lithography Printmaking

Select one course from the following:

ART 316	3	Asian Art History
ART 413	3	Contemporary Art

Pre-Art Therapy (BA)

The Bachelor of Arts degree in Pre-Art Therapy major requires 62 hours and two years of one foreign language. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 211	3	Introduction to Art Therapy
ART 271	3	Three-Dimensional Design
ART 382	2	The Christian and the Arts

Select one course from the following:

ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 413	3	Contemporary Art

Studio Core Requirements

ART 281	3	Ceramics: Handbuilt Forms
ART 322	3	Water-Based Media
ART 393	3	Practicum
ART 481	3	Studio Capstone

Psychology Core Requirements

PSY 100	3	Introductory Psychology
PSY 250	3	Life Span Development
PSY 272	3	Research Methods in Psychology
PSY 275	3	Introductory Statistics
PSY 300	3	Abnormal Psychology
PSY 320	3	Multicultural Psychology
PSY 400	3	Theories of Personality
PSY 461	3	Fundamentals of Counseling

Select one concentration in Studio or Counseling:

Studio

Select 2 credits from the following:

ART 221	3	Painting I
ART 253	3	Foundations of Photography
ART 272	3	Sculpture: Casting
ART 302	3	Figure Drawing
ART 345	3	Relief and Serigraphy
ART 372	3	Sculpture: Fabrication
ART 380	3	Ceramics: Wheelthrowing

Counseling

Select 2 credits from the following:

General Psychology

PSY 205	3	Psychology of Adjustment
PSY 280	3	Introduction to Autism Spectrum Disorders
PSY 305	3	Behavior Problems of Children and Adolescents
PSY 382	3	Sensation and Perception

Applied Psychology

PSY 375	3	Loss and Bereavement
PSY 422	3	Psychological Testing
PSY 462	3	Counseling Skills

Pre-Art Therapy/Systems (BS)

The Bachelor of Science degree with a major in Pre-Art Therapy/Systems consists of the 62 hour pre-art therapy major requirements and curriculum requirements in information systems and analytics. Except where indicated, *no more than 50% of completed requirements may overlap with another major, minor, or concentration.* All major courses, including systems curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select at least 3 credits¹ from the following:

ART 393	1-4	Practicum
PSY 393	1-4	Practicum
SYS 393	1-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Studio Art (BA)

The Bachelor of Arts degree in Studio Art major requires 57 hours and two years of one foreign language. Except where indicated, *no more than 50% of completed requirements may overlap with another major, minor, or concentration.* All major courses must be completed with a grade of C- or better and are included in the major GPA.

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 156	1	Digital Tools: Photoshop
ART 271	3	Three-Dimensional Design
ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts

Studio Art Requirements

ART 160	3	Contemporary Strategies in Art
ART 413	3	Contemporary Art
ART 481	3	Studio Capstone
ART 484	3	Senior Exhibition

Select one course from the following:

ART 221	3	Painting I
ART 322	3	Water-Based Media

Select one course from the following:

ART 253	3	Foundations of Photography
ART 261	3	Film and Darkroom

Select one course from the following:

ART 345	3	Relief and Serigraphy
ART 347	3	Intaglio and Lithography

Select 18 credit hours from the following:

ART 203	3	Drawing II
ART 221*	3	Painting I
ART 253*	3	Foundations of Photography
ART 261*	3	Film and Darkroom
ART 272	3	Sculpture: Casting
ART 281	3	Ceramics: Handbuilt Forms
ART 302	3	Figure Drawing
ART 316	3	Asian Art History
ART 317	3	History of Photography
ART 322*	3	Water-Based Media
ART 324	3	Painting II
ART 345*	3	Relief and Serigraphy
ART 346	3	Portraiture
ART 347*	3	Intaglio and Lithography
ART 353	3	Commercial Photography
ART 356	4	Web Design
ART 372	3	Sculpture: Fabrication
ART 380	3	Ceramics: Wheelthrowing
ART 417	3	Advanced Ceramics
ART 441	3	Advanced Printmaking
ART 461	3	Experimental Photography

*Courses in both areas may count only once.

Studio Art/Systems (BS)

The Bachelor of Science degree with a major in Studio Art/Systems consists of the 57-hour studio art major requirements and curriculum requirements in information systems and analytics. Except where indicated, *no more than 50% of completed requirements may overlap with another major, minor, or concentration.* All major courses, including systems curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

ART 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Studio Art 2D (BFA)

The Bachelor of Fine Arts degree in Studio Art major requires 74-75 major hours. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
ART 253	3	Foundations of Photography
ART 271	3	Three-Dimensional Design
ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts

Major Requirements

ART 160	3	Contemporary Strategies in Art
ART 203	3	Drawing II
ART 221	3	Painting I
ART 272	3	Sculpture: Casting
ART 302	3	Figure Drawing
ART 322	3	Water-Based Media
ART 324	3	Painting II
ART 345	3	Relief and Serigraphy
ART 347	3	Intaglio and Lithography
ART 413	3	Contemporary Art
ART 441	3	Advanced Printmaking
ART 481	3	Studio Capstone
ART 484	3	Senior Exhibition

Electives

Select four courses from the following:

ART 254	3	Illustration I: Visual Voice
ART 261	3	Film and Darkroom
ART 281	3	Ceramics: Handbuilt Forms
ART 316	3	Asian Art History
ART 356	4	Web Design
ART 372	3	Sculpture: Fabrication
ART 461	3	Experimental Photography
ART 254	3	Illustration I: Visual Voice
ART 261	3	Film and Darkroom
ART 281	3	Ceramics: Handbuilt Forms
ART 316	3	Asian Art History
ART 356	4	Web Design
ART 372	3	Sculpture: Fabrication
ART 461	3	Experimental Photography

Studio Art 3D (BFA)

The Bachelor of Fine Arts degree in Studio Art major requires 74-75 major hours. *Except where indicated, no more than 50% of completed requirements may overlap with another major, minor, or concentration. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Art Core Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
ART 253	3	Foundations of Photography
ART 271	3	Three-Dimensional Design
ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts

Major Requirements

ART 160	3	Contemporary Strategies in Art
ART 221	3	Painting I
ART 272	3	Sculpture: Casting
ART 281	3	Ceramics: Handbuilt Forms
ART 372	3	Sculpture: Fabrication
ART 380	3	Ceramics: Wheelthrowing
ART 413	3	Contemporary Art
ART 417	3	Advanced Ceramics
ART 472	3	Sculpture: Advanced Topics
ART 481	3	Studio Capstone
ART 484	3	Senior Exhibition

Electives

Select one course from the following:

ART 203	3	Drawing II
ART 302	3	Figure Drawing

Select one course from the following:

ART 345	3	Relief and Serigraphy
ART 347	3	Intaglio and Lithography

Select four courses from the following:

ART 261	3	Film and Darkroom
ART 316	3	Asian Art History
ART 322	3	Water-Based Media
ART 324	3	Painting II
ART 356	4	Web Design
ART 461	3	Experimental Photography

Art History Minor

The Art History minor requires 20 hours. *Open to all students. Graphic Art and Studio Art majors may overlap more than 50% of completed requirements with this minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 382	2	The Christian and the Arts
ART 413	3	Contemporary Art

Select one course from the following:

ART 393	3	Practicum
ART 450	3	Directed Research

Select two courses from the following:

ART 316	3	Asian Art History
ART 317	3	History of Photography
ART 357	3	History of Graphic Art
PHI 342	3	Aesthetics

Photography Minor

The Photography minor requires 21 hours. Minor is open to all students, except Photography, Graphic Art (Photography concentration), and Studio Art majors. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ART 156	1	Digital Tools: Photoshop
ART 261	3	Film and Darkroom
ART 346	3	Portraiture

Select one course from the following:

ART 253	3	Foundations of Photography
JRN 225	3	Foundations of Photojournalism

Select 11 hours from the following:

ART 101*	3	Drawing I
ART 151*	3	Two-Dimensional Design
ART 154	1	Digital Tools: Illustrator
ART 157	1	Digital Tools: InDesign
ART 271*	3	Three-Dimensional Design
ART 308	2	Digital Tools: Blender
ART 311*	3	Western Art History I
ART 313*	3	Western Art History II
ART 317	3	History of Photography
ART 353	3	Commercial Photography
ART 356	4	Web Design
ART 382*	2	The Christian and the Arts
ART 393	3	Practicum
ART 461	3	Experimental Photography

*Course may not be used to meet a requirement in both major and minor.

Studio Art Minor

The Studio Art minor requires 24 hours. No more than 50% of completed requirements may overlap with another major, minor or concentration. Not open to Graphic Art or Studio Art majors. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ART 101	3	Drawing I
ART 151	3	Two-Dimensional Design
ART 160	3	Contemporary Strategies in Art

Select one course from the following:

ART 221	3	Painting I
ART 253	3	Foundations of Photography
ART 322	3	Water-Based Media
ART 345	3	Relief and Serigraphy Printmaking
ART 347	3	Intaglio and Lithography Printmaking

Select one course from the following:

ART 271	3	Three-Dimensional Design
ART 281	3	Ceramics: Handbuilt Forms
ART 380	3	Ceramics: Wheel Throwing

Select one course from the following:

ART 311	3	Western Art History I
ART 313	3	Western Art History II
ART 316	3	Asian Art History
ART 413	3	Contemporary Art

Select at least two additional 3-hour courses in a single area from drawing, painting, ceramics, printmaking, or sculpture to complete the 24-hour minor requirement.

Art Courses

ART 101 3 hours

Drawing I

Introduction to the fundamentals of observation and rendering, perspective, and composition, using a variety of drawing mediums.

ART 151 3 hours

Two-Dimensional Design

A foundational course in understanding the elements and principles of two-dimensional design composition and color theory, as well as methods for creative problem solving. A studio-skills class utilizing a variety of mediums in a related series of projects.

ART 152 3 hours

Visual Communications

An introduction to the graphic design industry, with emphasis in visual problem solving, a basic understanding of typography, color and composition as well as the implementation of the various additional elements of design.

ART 154 1 hour

Digital Tools: Illustrator

This course focuses on the development of drawing and design skills using Adobe Illustrator, the industry standard software for vector image and logo generation.

ART 156 1 hour

Digital Tools: Photoshop

This course focuses on the development of painting and image editing skills using Adobe Photoshop, the industry standard software for bitmap image generation and digital photo manipulation.

ART 157 1 hour

Digital Tools: InDesign

This course focuses on the development of print layout and compositing skills, manipulating type and images, using Adobe InDesign, the industry leading software for page layout construction and desktop publishing.

ART 160 3 hours

Contemporary Strategies in Art

This course is designed to calibrate freshman studio art majors via collaborative engagement and exploration of processes, theories, and art works relevant to producing art in our present age.

ART 162 1 hour

Digital Tools: Painter

An introductory course focusing on digital image creation, utilizing the drawing and painting controls found in Corel Painter.

ART 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ART 172 2-3 hours

Art Appreciation

A study of art through a historical survey. This course introduces the student to the great masters and art periods of the past while broadening the student's appreciation and understanding of art. Meets a foundational core aesthetic literacy requirement. This course is offered through Taylor University Online (TUO).

ART 203 3 hours

Drawing II

Advanced conceptual approaches as they relate to drawing as an artistic end. Prerequisites: ART 101 and ART 151.

ART 210 3 hours

Introduction to Art Education

A survey of the history and philosophy of art education. The course utilizes the disciplines of art criticism, history, aesthetics, and production to acquire information, develop resources, and create a variety of learning experiences for students of various developmental levels.

ART 211 3 hours

Introduction to Art Therapy

A survey course introducing the history and philosophy of art therapy. Material covered will include history, theory, and practice as well as a survey of populations and settings of art therapy. The role of art making in the therapeutic process will be explored. A mix of lecture, case studies, guest speakers, research, discussion, group art exercises, and journal exercises will be used to give students exposure to the different therapeutic arts. Prerequisite: PSY 100.

- ART 221** **Painting I** **3 hours**
Beginning experiences in the materials, theory, techniques and composition used in historical and contemporary styles of oil painting. Consideration of the work of individual painters introduces various conceptual approaches to painting. *Prerequisites: ART 101 and ART 151.*
- ART 230** **Art and Life** **2 hours**
Lecture sessions focus upon works from several art forms, with the goal of developing students' perceptual skills. A major focus of this course is experiencing art. Written critiques on selected events are part of the course curriculum. *Meets a foundational core aesthetic literacy requirement.*
- ART 250C** **Participation: Ceramics** **1 hour**
Meets a foundational core aesthetic literacy requirement.
- ART 250D** **Participation: Drawing** **1 hour**
Meets a foundational core aesthetic literacy requirement.
- ART 251** **Typography** **3 hours**
An introduction to the essential principles of typography; the design and expressive capacities of letter forms are explored through historical study, typesetting assignments, discussions, and studio projects. *Prerequisites: ART 101, ART 151, ART 152, and ART 154.*
- ART 253** **Foundations of Photography** **3 hours**
Provides ground-level introduction to the tools, concepts, and techniques of photography. Students will explore composition, style, color, tonality, and light. Strong emphasis on full comprehension and technical mastery of digital cameras, digital processing, and color-managed output.
- ART 254** **Illustration I: Visual Voice** **3 hours**
An introductory course to the art and business of illustration with an emphasis in developing conceptual skills, a personal visual voice and unique stylistic approach. Coursework will include the production of editorial, promotional, and personal illustrations. *Prerequisites: ART 101 and ART 151.*
- ART 257** **Layout and Prepress** **3 hours**
An editorial design course, with a focus on page layout construction, digital pre-press and tabloid design. Students will learn terms and skills necessary for a career in the editorial design industry. Projects may include book covers, brochures, magazines and newspaper layouts. *Prerequisites: ART 101, ART 151, ART 154, ART 156, ART 157, and ART 251.*
- ART 261** **Film and Darkroom** **3 hours**
Maintains the heritage of analog photography by exploring silver halide films and various darkroom processes. Emphasis on shooting and processing black-and-white film and printing paper prints with enlargers. Color films and processing discussed, as well as experimental darkroom techniques. The course culminates with large format view camera work. *Students must present a 35mm film camera in good order to enroll. Prerequisite: ART 253.*
- ART 270** **Selected Topics** **1-4 hours**
A course offered on a subject of interest but not listed as a regular course offering.
- ART 271** **Three-Dimensional Design** **3 hours**
A foundational course in understanding the elements and principles of three-dimensional design composition, as well as creative problem solving. A studio skills class utilizing a variety of mediums in a related series of projects.
- ART 272** **Sculpture: Casting** **3 hours**
Three-dimensional studies on form as practiced through art history, classical to abstract representations of the human form, and architectural sculptural methods (welding and additive methods). *Materials for this course cover clay, stone, and metal. Prerequisite: ART 271.*
- ART 275** **Metals I** **3 hours**
Beginning metalworking projects use various techniques, with precious and non-precious metals. Soldering, enameling, metal casting and stone setting are covered.
- ART 281** **Ceramics: Handbuilt Forms** **3 hours**
An introduction to basic clay formation techniques with an emphasis on the sculptural and asymmetrical potentials of hand constructed clay forms. Covers essentials of the ceramic process: forming, glazing, and transformation through firing.
- ART 300** **Art for Teachers** **2 hours**
Opportunities for the development of skills and learning experiences for use in the elementary classroom. Introduction to the components of Discipline-Based Art Education through lecture, studio projects, and out of class assignments.
- ART 302** **Figure Drawing** **3 hours**
Intermediate level drawing course with emphasis in rendering the human figure. *Prerequisite: ART 101.*
- ART 308** **Digital Tools: Blender** **2 hours**
A ground-level primer in 3D imagery using Blender. Introduces rudiments of modeling, lighting, materials, sculpting, particle systems, simple animation, and rendering. Intended for absolute beginners and not recommended for intermediate to advanced users or developers. *Prerequisites: ART 154 and ART 156.*
- ART 309** **Secondary Art Methods** **2 hours**
Examine methodology and teaching practices in art, organizing and writing the art curriculum, classroom management, assessment of student progress, and general strategies and methods for conducting an art program for the middle and high school level students. In addition, studio work will be utilized to create a portfolio of art projects suitable for middle and high school students. *Written assignments for the course will be added to the professional portfolio.*
- ART 310** **Elementary Art Education** **3 hours**
Theory and foundations for the development of skills and learning experiences for use in the elementary art classroom. The Discipline-Based Art Education model will be utilized in preparing lesson plans, studio projects, and practical application content.
- ART 311** **Western Art History I** **3 hours**
A survey of architecture, sculpture, and painting from prehistory to the Late Gothic in Europe and the Near East.
- ART 313** **Western Art History II** **3 hours**
A survey of architecture, sculpture, and painting from the Proto-Renaissance to the Modern era in Western Europe and the United States. *Prerequisite: ART 311.*
- ART 316** **Asian Art History** **3 hours**
A survey of the arts of South and East Asia including India, China, Japan, and Korea with an emphasis on understanding works within their cultural contexts. *Meets a foundational core aesthetic literacy requirement.*
- ART 317** **History of Photography** **3 hours**
Invites students not only to know the factual, international history of the medium, but to consider its implications for society and culture in general. Projects and assignments will fully acquaint students with the rudimentary mechanics of optics and cameras in their earliest development, as well as major photographers and their styles. *Camera required. Meets a foundational core aesthetic literacy requirement.*
- ART 320** **Acrylic Painting** **3 hours**
An introduction to the techniques, materials and processes involved in acrylic painting. The course will focus on various aspects of acrylic painting on a mixed variety of surfaces and utilizing various varnishes, mediums, and brush techniques. *Prerequisite: ART 101.*
- ART 322** **Water-Based Media** **3 hours**
An introduction to distinctive techniques, materials, and processes involved in water-based painting. The course will explore watercolor, gouache, and ink wash. *Prerequisite: ART 101.*
- ART 324** **Painting II** **3 hours**
An intermediate level course where students engage in the advancement of their technical proficiency, explore a greater degree of self-initiated projects, and engage in in-depth critical analysis of contemporary painting. *Prerequisite: ART 221.*
- ART 345** **Relief and Serigraphy** **3 hours**
Handprinting as an expressive medium is investigated through relief and screen printing processes, including linoleum block printing, woodcut printing, cut stencils, drawing fluid/screen filler use, and photo-based silkscreen. This course serves as an introduction to the essential tools, materials, and techniques related to relief and serigraphy. Readings and discussion pertaining to the history of radical thought expressed via prints and the subsequent dissemination of printed materials will augment studio projects.

- ART 346** **3 hours**
Portraiture
 Provides the opportunity to explore portraiture in depth, including conventional, environmental, expressive and experimental work. *Camera required. Prerequisite: ART 253.*
- ART 347** **3 hours**
Intaglio and Lithography
 Handprinting as an expressive medium is investigated through intaglio and lithographic processes. Projects explore the use of hardground etching, soft-ground etching, whiteground, aquatint, chine colle, drypoint, photo etching and plate and stone lithography. This course serves as an introduction to the essential tools, materials, and techniques related to intaglio and lithography. Readings and discussion pertaining to the history of radical thought expressed via prints and the subsequent dissemination of printed materials will augment studio projects.
- ART 351** **3 hours**
Product ID
 A design course with emphasis in creating a product identity from concept to completion. This course will discuss but not be limited to, conceptual design, logo/logotype development, packaging design, advertising design and the development of promotional materials. Professional presentation and client skills will also be discussed. *Prerequisites: ART 251 and ART 257.*
- ART 353** **3 hours**
Commercial Photography
 Introduces various commercial photo categories and demonstrates ways to make a living with a camera. Emphasis is always on the marketing and stylistic needs of clients rather than the personal style of the photographer. Covers images for various facets of marketing and retail: advertising, fashion, product and food photos, and selling stock. *Camera required. Prerequisite: ART 253.*
- ART 356** **4 hours**
Web Design
 This course will teach students design fundamentals for interactive media with a focus on designing user interfaces for the internet. Students will be introduced to the vocabulary, foundational technology, design elements, and techniques for creating interactive media. Projects will cover a range of topics that will introduce students to the many uses for interactive design, identifying, and designing for different target audiences, and the basics of how to deliver the finished product to those audiences. Additionally, through the projects and class exercises, students will be introduced to and gain a better understanding of industry standard tools. *Prerequisite: ART 156.*
- ART 357** **3 hours**
History of Graphic Art
 A design course focusing in depth on the stylistic history of graphic design, from Gutenberg to the present. Weekly studio assignments will be given with specific historical and stylistic goals. The purpose of this course is to create a strong awareness of historical styles and to develop artwork applicable to a working portfolio. *Prerequisites: ART 251 and ART 257.*
- ART 360** **1-4 hours**
Independent Study
 An individualized, directed study involving a specified topic.
- ART 365** **3 hours**
Illustration 2: Visual Narrative
 An intermediate level course focusing on continued development of the illustrator's personal voice while producing a unified series of location based sequential images useful for a professional working portfolio. Students will continue to explore new media, refine technique, and discuss essential business practices.
- ART 370** **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- ART 372** **3 hours**
Sculpture: Fabrication
 Intermediate use of technical skills and conceptual issues of creating sculpture with form and space. *Prerequisite: ART 271 or permission of the instructor.*
- ART 380** **3 hours**
Ceramics: Wheelthrowing
 The use of the potter's wheel for throwing vessel and sculptural forms. Form and surface design are considered, as well as various firing techniques.
- ART 382** **2 hours**
The Christian and the Arts
 Seminar that deals with topics related to the Christian and the Arts emphasizing the development of critical abilities via the discussion of readings, student presentations, and writing assignments. *Prerequisite: Junior status.*
- ART 383** **1 hour**
The Christian and the Arts—Art Education
 Seminar that deals with topics related to the Christian and the Arts for Art Education majors emphasizing the development of critical abilities via the discussion of readings, student presentations, and writing assignments. *Prerequisites: Art Education major and junior status.*
- ART 393** **1-4 hours**
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience.
- ART 413** **3 hours**
Contemporary Art
 Introduces the student to a wide range of contemporary art, emphasizing the development of analytical and critical skills. *Meets a foundational core aesthetic literacy requirement. Prerequisite: Junior status.*
- ART 417** **3 hours**
Advanced Ceramics
 Largely self-directed, this course will give the student opportunity to further skills and concepts developed in their previous handbuilding and wheelthrowing courses. This course will also allow for exploration in making clay, glazes, and experimental firings. *Prerequisites: ART 281 and ART 380.*
- ART 441** **3 hours**
Advanced Printmaking
 Advanced studies in printmaking, addressing the refining of skills, and the individual exploration of one or two printmaking processes. *Prerequisites: ART 241 and ART 342.*
- ART 445** **3 hours**
Illustration 3: Thesis
 An advanced level course focusing on a large scale thesis project of personal imagery for the student's senior show and portfolio. *May be taken twice for credit.*
- ART 450** **1-4 hours**
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.
- ART 456** **4 hours**
Web Animation
 Students will build on the skills learned in ART 356, by focusing on industry standard animation and interactive software for the world wide web. This course will further develop each student's conceptual, interactive page layout, and web programming skill sets. Emphasis will be placed on fully utilizing Flash's unique animation, interactivity and scripting controls, to create a self-promotional website useful in the pursuit of a future design career. *Prerequisite: ART 356 or COS 143.*
- ART 457** **3 hours**
Portfolio Development
 Advanced design course emphasizing development of a working portfolio. Projects may include book covers, advertisements, brochures, posters, editorial design, logotypes, and corporate identity campaigns. *Prerequisite: ART 351 and ART 357.*
- ART 461** **3 hours**
Experimental Photography
 Encourages the student to explore personal photographic aesthetics, vision, and statement with an eye toward galleries and markets or a personal portfolio. Work would most likely be conceptual and expressive in nature. The course also provides wide-open opportunity for technical experimentation. *Camera required. Pre-requisites: ART 253 and ART 261.*
- ART 472** **3 hours**
Sculpture: Advanced Topics
 Advanced use of technical skills and conceptual issues of creating sculpture with form and space. Studio projects employ additive, subtractive, and casting methods utilizing such materials as clay, plaster, wood, plastics, and metals. *Prerequisite: ART 272 or ART 372 or permission of the instructor.*
- ART 480** **1-4 hours**
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.
- ART 481** **3 hours**
Studio Capstone
 This course serves as a culmination of students' undergraduate art making endeavor, providing guidance in the development of a body of work to be presented in a final exhibition with thematic and aesthetic cohesiveness. Class includes a trip to a significant contemporary art destination. *Prerequisite: Senior status.*

ART 484 3 hours
Senior Exhibition
Senior Thesis II provides continued support as students prepare for their senior thesis exhibition. This course also serves as a seminar devoted to the conceptualization of a career in the arts, given its many forms. Students will also gain exposure to practicalities of life as a working artists such as funding, grant-writing, exhibiting, and pursuit of higher education.

ART 485 3 hours
Portfolio Exhibition
Creation of a body of work for the student's senior exhibition with thematic and aesthetic cohesiveness. Students should plan for the costs associated with the exhibition. *Prerequisite: Senior status.*

ART 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Film and Media Arts Courses

FMA 125 1 hour
Film and Media Arts: New Majors Orientation
An introduction to the Film and Media Arts major, focusing on the work habits, mindset, and requirements for success in the major with preliminary work on discovering one's voice as a visual storyteller. Course includes the development of critical skills such as self-reflection, creativity, observation, collaboration, story development, and awareness of the impact of one's creative work on audiences. *Offered Fall semester.*

FMA 145 2 hours
Introduction to Visual Storytelling
An introduction to the visual language and story structure of film and television in American culture. Students will learn to identify the elements of story structure; analyze the use of lighting, camera composition/movement, and production design; and then develop original visual stories that have emotional resonance.

FMA 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

FMA 185 2 hours
Digital Tools: After Effects
An introduction to Adobe After Effects software for motion graphics and animation. *Prerequisite: ART 156. Offered January interterm.*

FMA 215 3 hours
Audio Production
An exploration of the principles and applications of audio for film and media production. Topics discussed include sound theory, microphones, audio fundamentals, systems theory, recording, and editing with Avid Pro Tools. Emphasis is on communicating and producing creative and technically excellent work for commercials, interviews, podcasts, long-form audio storytelling, and Foley/sound design. *Meets a foundational core aesthetic literacy requirement. Offered Fall and Spring semesters.*

FMA 220 3 hours
Film and Video Production
A hands-on immersion in visual storytelling using single camera film-style shooting techniques. Course includes digital cinematography, nonlinear editing, lighting, audio for video/film and producing with an emphasis on creative storytelling and visual aesthetics. *Meets a foundational core aesthetic literacy requirement. Prerequisite: FMA 215. Offered Fall and Spring semesters.*

FMA 230 3 hours
Scriptwriting
This course covers the theory and practice of nonfiction writing (e.g., scripting for clients and documentary) and fiction writing (e.g., short film screenplay).

FMA 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

FMA 300 1-2 hours
Media Laboratory
Two hours of credit may be earned per semester by students holding top leadership positions in WTUR, the campus radio station or Envision Productions, the department's in-house television and video production team. One hour of credit may be earned per semester by those holding secondary positions in those organizations. One or two hours of credit may also be earned by assisting with approved departmental production projects. *A maximum of six hours may be earned. Prerequisite: Permission of instructor.*

FMA 310 3 hours
Introduction to TV Writing
An introduction to writing television drama and comedy beyond the principles covered in FMA 230. Includes generating ideas, breaking a story, and how to apply the essentials of narrative storytelling to traditional half-hour and one-hour time formats. *Prerequisite: FMA 230. Offered occasionally.*

FMA 312 2 hours
Steadicam® Workshop
A workshop covering the proper safety, operation, and creative use of the Steadicam® camera support system for cinematography. *Offered January interterm.*

FMA 320 3 hours
Advanced Screenwriting
An advanced exploration of the screenplay format, leading to the creation of a full-length screenplay. Includes dramatic theory from Aristotle's Poetics, the essentials of writing visually, story structure, beat sheets, outlines, treatments, creating story beats, mastering subtext, and finding one's voice as a writer. *Prerequisite: FMA 230. Offered occasionally.*

FMA 330 2 hours
Audio Field Production
A hands-on exploration of the technology and practices of audio professionals with the goal of developing both the ear and the skills required for the audio role on a film/television/video crew. Selection and placement of microphones for optimal recordings on-location and operation of field audio recording equipment are also included.

FMA 332 2-3 hours
Audio Post-Production
A survey of the methods and techniques used to import, correct, sweeten, mix, and export audio for film, television, and video production using advanced audio software. *Prerequisite: FMA 215.*

FMA 335 3 hours
International Production
A team-based experience shooting a video or film project internationally including research and pre-production planning, exploration of cultural and technical issues that impact field production, and significant gathering of footage with the goal of later telling an impactful nonfiction story. *Offered Interterm of even years and as needed. Prerequisites: FMA 215 and FMA 220.*

FMA 350 3 hours
Media Theory and Ethics
An overview of media communication theories and ethical challenges in the media workplace. *Prerequisite: JRN 255.*

FMA 351 3 hours
Media Performance
An introduction to the theory and practice of television and radio/podcast announcing, commercial and corporate voice-over work, voice-over for animation, and film acting.

FMA 352 3 hours
History and Criticism of Film
A survey of film history, artistic growth, and early influences and techniques of filmmaking. Theories for critiquing films are emphasized. *Prerequisite JRN 255. Offered Spring semester of even years.*

FMA 355 3 hours
Multi-Camera Live Production
An overview of multi-camera live production processes, techniques and personnel in the studio setting and on-location. Students will plan and produce programming, functioning as a production team. Included required lab. *Prerequisite: FMA 220. Offered Fall semesters.*

FMA 358 3 hours
Sundance Study Trip
An exploration of the intersections between faith and independent film including reading and writing, followed by a week-long trip to the Sundance Film Festival. *Offered January interterm by application.*

FMA 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

FMA 365 3 hours
Inside the Entertainment Industry
An overview of the people, skills, and processes required for success in the film and television industries from both business and creative perspectives. *Taught by entertainment industry professionals in Los Angeles as the academic component of Taylor University's semester-long Hollywood Internship Program. Prerequisites: FMA major, junior or senior standing, acceptance into TUHIP program.*

FMA 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

FMA 375 Post-Production Methods	3 hours		
Video editing principles and practices, leading to the certification test for Avid Media Composer. Advanced color correction for film and television using DaVinci Resolve. <i>Prerequisite: FMA 220. Offered Spring semester.</i>			
FMA 380 Editing Aesthetics	3 hours		
An exploration of the art of editing including how editing contributes to rhythm, tempo, emotion, and storytelling. Students will also focus on how editing relates to dialogue, audio, and action. Students will edit using techniques specific to fiction, documentary, commercials, and film trailers. <i>Prerequisite: FMA 220.</i>			
FMA 388 Media, Faith, and Culture	3 hours		
An exploration of the intersections between media, popular culture, and the gospel. Topics include evangelical responses to popular culture through history, religious broadcasting, religious filmmaking, media in the local church setting, media in global missions, and portrayals of Christ and Christians on TV and film. <i>Prerequisite: JRN 255 and junior standing. Offered occasionally.</i>			
FMA 393 Practicum	1-4 hours		
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Pass/fail only. Offered primarily during Summer.</i>			
FMA 395 Directing and Cinematography	3 hours		
An advanced production course leading to deeper understanding of image creation, both in theory and practice. Emphasizes camera technology and associated equipment such as wireless focus, aperture, and video as well as advanced lighting techniques. Course includes visualizing a script, the director/cinematographer collaboration in storytelling, how visual theories inform storytelling, and how a director directs talent. Course involves both individual and group work. <i>Prerequisite: FMA 220. Offered Fall semester.</i>			
FMA 420 Documentary Filmmaking	3 hours		
An exploration of the art of documentary film. Includes critique of notable documentaries, the study of multiple approaches to nonfiction storytelling and the creation of a festival-ready short documentary including pre-production, production, and post-production. <i>Prerequisite: FMA 220. Offered Fall semester.</i>			
FMA 430 Producing for Clients	3 hours		
This course develops the skills required to create a client-driven video or film production project. Producing tasks including pre-production, budgeting, scheduling and client relations are emphasized. Students work in teams with an outside organization to produce a professional video or film project. <i>Prerequisite: FMA 220. Offered Fall semester of even years.</i>			
FMA 440 Narrative Filmmaking	3 hours		
Students work in teams to create a festival-ready short film including scripting, pre-production, production, and post-production. Students will develop an ability to integrate Christian thought and storytelling. <i>Prerequisites: FMA 220 and FMA 230.</i>			
FMA 450 Directed Research	1-4 hours		
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.			
FMA 480 Seminar	1-4 hours		
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.			
FMA 485 Senior Capstone	3 hours		
Seniors will complete a senior portfolio and prepare for employment and graduate school. <i>Offered Spring semester.</i>			
FMA 490 Honors	1-2 hours		
Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>			
FMA 492 Internship	8-16 hours		
Professional semester of supervised internship in a work setting related to the major field of study. <i>Prerequisites: Completion of departmental core and approval of the department faculty. Pass/fail only.</i>			
FMA 493 Internship: Taylor University Hollywood Internship Program	12-13 hours		
Entertainment industry internship completed as part of Taylor University's Hollywood Internship Program.			

Biblical Studies, Christian Ministries, and Philosophy

Chair, Professor P. Collins
Biblical Studies Program Director, Associate Professor M. Young
Christian Ministries Program Director, Professor M. Severe
Philosophy Program Director, Associate Professor B. Seeman
Missions Program Director, Associate Professor J. Collins
Professors K. Diller, G. MaGee, E. Meadors, J. Pak
Associate Professors T. Carrington, R. Smith, H. Voss
Assistant Professors D. Flanders, K. Verhagen

The purpose of the Biblical Studies, Christian Ministries, and Philosophy Department is to provide students with a substantive understanding of the foundation of the Christian faith to enhance any vocation; to prepare students for church, para-church, or cross-cultural ministry; or to prepare students for graduate study. This preparation is two-fold. First, the department provides a significant portion of the “faith” side of the integration of faith and learning by teaching the four foundational core courses required for the entire student body. These four courses (BIB 110, BIB 210, REL 313, and PHI 413) are sequenced with each successive course serving as the prerequisite for the next. These foundational core courses are designed to equip students with enough theological and philosophical substance to be able to integrate biblical truth within their respective disciplines as well as think and live “Christianly” in our post-modern world. These four courses also make up the majority of the Scripture engagement minor for all students. The Scripture engagement minor is designed to inspire, encourage, and equip students to engage Scripture so that they can encounter Christ. Thus, the ultimate goal of the foundational core courses taught within this department is that students know and love God with all their heart and mind (John 17:31; Luke 10:27) and become more Christ-like in thought, speech, and action (Romans 8:29).

Second, the department offers five majors—Biblical Literature, Christian Ministries, Intercultural Studies, Philosophy, and Youth Ministry—to prepare students who will demonstrate competence in biblical, educational, intercultural, and philosophical truth in preparation for graduate studies and lifelong servant-leadership roles in professional Christian ministries. In addition, seven minors are offered in Biblical Languages, Biblical Literature, Christian Ministries, Philosophy, Intercultural Studies, Youth Ministry, and Ethics. These majors and minors are designed to complement other majors, and consequently, students are encouraged to consider adding a second major or a minor from the BSCP department to enhance their primary program of study.

Students within the department may choose to take advantage of Taylor’s affiliation with Jerusalem University College (JUC) and spend a semester studying in Jerusalem. Men and women anticipating seminary study should also select other electives in their undergraduate course of study that encompass the world of ideas, nature, and human affairs. Other overseas academic trips are offered in January for Foundational Core credit. They include Israel (BIB 110 or 210 equivalencies) and Greece and Italy (BIB 210 equivalency).

Biblical Studies

The Biblical Studies program is designed for students who desire a robust intellectual understanding of the foundation of the Christian faith. In the process of the program, students study biblical texts and explore various approaches to understanding them. Majors and minors in Biblical Literature develop proficiency as informed and observant interpreters of biblical passages as they learn to draw upon theological, historical, linguistic, and literary insights for richer, more complete understandings of texts. Students also grow in their ability to think about, write about, discuss, and apply biblical teachings.

Students who take the Biblical Literature major anticipating graduate study and professional ministry should also take an introductory course in philosophy and logic and be able to read at least one theologically significant foreign language. The primary language is Greek, although Hebrew is also recommended. Students who plan to pursue seminary study should seek the counsel of the department faculty and consult with representatives from their church or ministry network to determine which graduate school(s) would best prepare them for their anticipated career. Early in their senior year, students should correspond with the school(s) to which they intend to apply.

Biblical Literature (BA)

The Bachelor of Arts degree with a major in Biblical Literature includes 33 hours; two years of sequential study in one foreign language; and the writing, presenting, and defending of a scholarly paper in the senior year to meet the comprehensive exam requirement. Students are encouraged to fulfill their language requirement by studying two years of Greek or Hebrew. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIB 272	3	Inductive Study of the Bible
BIB 320	3	Pentateuch
BIB 341	3	The Gospels
BIB 462	3	Biblical Theology
BIB 493	3	Biblical Literature Capstone

Select one course from the following:

PHI 262	3	Contemporary Moral Issues
PHI 371	3	Principles of Ethics

Electives

Select 2 hours of BIB[†] electives.

Select 6 additional elective hours from BIB[†], CMI, PHI[†], REL[†], or YMI courses.

Major requires a minimum grade of C- in four of the Foundational Core’s Spiritual Foundation[†] courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

[†]BIB 110, BIB 210, REL 313, and PHI 413 (and any course substitutions for these foundational core courses) do not fulfill elective requirements.

Biblical Literature/Systems (BS)

The Bachelor of Science degree with a major in Biblical Literature/Systems includes 33 hours in the major; curriculum requirements in information systems and analytics; and the writing, presenting, and defending of a scholarly paper in the senior year to meet the comprehensive exam requirement. *All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

BIB 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Major requires a minimum grade of C- in four of the Foundational Core's Spiritual Foundation[†] courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

Biblical Literature Minor

A minor in Biblical Literature requires 15 hours of credit beyond the foundational core curriculum required courses of BIB 110, BIB 210, and REL 313. Courses in both areas may count only once. All minor courses must be completed with a grade of C- or better and are included in the minor GPA. *Christian Ministries and Youth Ministry majors must take at least one course from Old Testament and one course from New Testament besides BIB 272 and BIB 462.*

Minor Requirements

Select six hours of Old Testament courses from:

BIB 272	3	Inductive Study of the Bible
BIB 320	3	Pentateuch
BIB 340	3	Hebrew Prophets
BIB 350	3	Poetic and Wisdom Literature
BIB 420	3	Apocalyptic Literature of the Bible
BIB 452	3	Old Testament Historical Literature
BIB 462	3	Biblical Theology
BIB 493	3	Biblical Literature Capstone

Select six hours of New Testament courses from:

BIB 272	3	Inductive Study of the Bible
BIB 330	3	Acts and the Early Church
BIB 331	3	Pauline Epistles
BIB 332	3	Hebrews and General Epistles
BIB 341	3	The Gospels
BIB 420	3	Apocalyptic Literature of the Bible
BIB 462	3	Biblical Theology
BIB 493	3	Biblical Literature Capstone

Select at least one additional 3-credit BIB[†], CMI, REL[†], or YMI course.

[†]BIB 110, BIB 210, and REL 313 (and any course substitutions for these foundational core courses) do not fulfill elective requirements.

Biblical Languages Minor

A minor in Biblical Languages consists of 23 credit hours. Primarily, these courses enable one to read and study the Bible in the original languages. Enrichment of historical concepts of communication, depth and breadth of Christian perspective and cultural appreciation of the biblical world are secondary concerns of biblical language studies. Two years study of Greek or Hebrew meets the language requirement for graduation and satisfies or exceeds language entrance requirements for most seminaries. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

GRK 201	4	Elementary New Testament Greek I
GRK 202	4	Elementary New Testament Greek II
GRK 301	3	Greek Grammar and Syntax
HEB 211	3	Elementary Old Testament Hebrew I
HEB 212	3	Elementary Old Testament Hebrew II
HEB 311	3	Hebrew Syntax and Lexicography

Select one course from the following:

GRK 302	3	Exegesis of the Greek New Testament
HEB 312	3	Hebrew Exegesis

Biblical Studies (AA) – Taylor University Online

The Associate of Arts with a major in Biblical Studies requires 21 hours in the major and 44-45 hours in foundational core. The curriculum is designed to give the students a foundational understanding of the Bible, Christian theology, and the knowledge and skills to serve in a church or para-church setting. All major courses must be completed with a grade of C- or better and are included in the major GPA. This program is only offered through Taylor University Online and residential students are not eligible.

Curriculum Requirements

ART 172	2	Art Appreciation
BIB 110	3	Biblical Literature I
BIB 210	3	Biblical Literature II
COS 101	2	Information Technology Concepts
ENG 110	3	College Composition
IAS 102	1	Orientation to Distance Learning
IAS 110	4	Foundations of the Christian Liberal Arts
KIN 100	2	Living Well
KIN 2001	1	Individualized Physical Education
MUS 149	2	Music Appreciation
REL 313	3	Historic Christian Belief

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Select one course from the following:

ENG 240	3	American Literature
ENG 250	3	British Literature

Select one course from the following:

BIO 106	4	Human Biology
PHY 201	3-4	Introductory Astronomy

Select one course from the following:

ANT 200	3	Cultural Anthropology
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

Select one additional course from the following:

ANT 200	3	Cultural Anthropology
JUS 100	3	Introduction to Criminal Justice
PSY 100	3	Introductory Psychology
PSY 240	3	Child Psychology
PSY 495	3	Integration of Psychology and Christianity
SOC 210	3	Contemporary Social Issues
SWK 355	3	Helping Troubled Families

Select one history course of at least 3 credits.

Major Requirements

BIB 272	3	Inductive Study of the Bible
BIB 320	3	Pentateuch
BIB 341	3	The Gospels
BIB ____	3	Biblical Literature Elective
BIB ____	3	Biblical Literature Elective

Select 6 hours of additional electives.

Christian Ministries and Youth Ministry

The purpose of the Christian Ministries program of Taylor University is to provide a foundation for students who are pursuing careers in church, para-church ministry, or graduate school. In addition to the Christian Ministries major and Youth Ministry major, students often pursue one of the following interdisciplinary areas of concentration: youth ministry, children's ministry, ministry leadership, intercultural ministry, urban ministry, camping and recreational ministry, administrative ministry, or music ministry. The Christian Ministries program at Taylor University is characterized by a whole-person focus. Courses balance theory and practice as the biblical, theological, historical, philosophical, and educational foundations of ministry are explored. Spiritual formation in the context of a learning community is emphasized. Students learn collaborative thinking, planning, programming, and evaluation strategies while they are encouraged to identify and use their spiritual gifts in ministry. Students are encouraged to study in an off-campus program for at least one semester. Students may apply for admission to the Christian Ministries and Youth Ministry program upon completion of CMI 100 and 262 and one semester of experience in a departmentally approved ministry. Students are considered for acceptance if they meet the following criteria: major GPA of 3.00; cumulative GPA of 2.50; at least one semester of experience in a departmentally approved ministry; and an interview with members of the Christian Ministries and Youth Ministry faculty.

The application process includes the following components: (1) complete a written application; (2) submit letters of recommendation from a pastor, ministry supervisor, and for residential students, a residence-life staff person [nonresidential students must provide an additional character reference]; and (3) participate in an interview with the Christian Ministries and Youth Ministry faculty.

Christian Ministries (BA)

A Bachelor of Arts degree with a major in Christian Ministries includes 51 hours in the major, four semesters of a departmentally approved ministry, two years of sequential study in one foreign language, and the writing of a scholarly paper in the senior year to meet the comprehensive exam requirement. Students are encouraged to fulfill their language requirement by studying two years of Greek or Hebrew. Students may not double major with youth ministry. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

BIB 272	3	Inductive Study of the Bible
BIB 462	3	Biblical Theology
CMI 100	3	Introduction to Christian Ministries
CMI 232	3	Historical and Theological Foundations for Christian Ministries
CMI 242	3	Psychological and Educational Foundations for Christian Ministries
CMI 262	3	Personal Foundations for Ministry
CMI 325	3	Discipleship and Evangelism
CMI 345	3	Care, Kingdom, and Culture
CMI 351	3	Teaching and Learning Strategies
CMI 352	3	Program and Curriculum Development
CMI 371	3	Leadership Development
CMI 393	3	Practicum
CMI 421	3	Philosophy and Strategies for Christian Ministries
CMI 493	3	Christian Ministries Senior Capstone

Select one course from the following:

PHI 262	3	Contemporary Moral Issues
PHI 371	3	Principles of Ethics

Electives

Select two BIB† 3-credit elective courses

*BIB 110 and BIB 210 (and any course substitutions for these foundational core courses) do not fulfill elective requirements. Elective course must be at least 3 credits.

Major requires a minimum grade of C- in four of the Foundational Core's Spiritual Foundation† courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

Christian Ministries/Systems (BS)

A Bachelor of Science degree with a major in Christian Ministries/Systems includes 51 hours in the major, curriculum requirements in information systems and analytics, four semesters of a departmentally approved ministry, and the writing of a scholarly paper in the senior year to meet the comprehensive exam requirement. *Students may not double major with youth ministry. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

CMI 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Major requires a minimum grade of C- in four of the Foundational Core's Spiritual Foundation[†] courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

Christian Ministries Minor

A minor in Christian Ministries requires at least 18 credit hours and two semesters of experience in departmentally approved ministry. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

BIB 272	3	Inductive Study of the Bible
CMI 100	3	Introduction to Christian Ministries
CMI 262	3	Personal Foundations for Ministry
CMI 351	3	Teaching and Learning Strategies
CMI 352	3	Program and Curriculum Development
CMI 371	3	Leadership Development

Youth Ministry (BA)

A Bachelor of Arts degree with a major in Youth Ministry includes 54 hours in the major, four semesters of a departmentally approved ministry, two years of sequential study in one foreign language, and the writing of a scholarly paper in the senior year to meet the comprehensive exam requirement. Students are encouraged to fulfill their language requirement by studying two years of Greek or Hebrew. *Students may not double major nor minor with Christian ministries. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIB 272	3	Inductive Study of the Bible
BIB 462	3	Biblical Theology
CMI 100	3	Introduction to Christian Ministries
CMI 262	3	Personal Foundations for Ministry
CMI 351	3	Teaching and Learning Strategies
CMI 352	3	Program and Curriculum Development
CMI 371	3	Leadership Development
CMI 493	3	Christian Ministries Senior Capstone
PSY 340	3	Adolescent Psychology
YMI 221	3	Ministry to Youth
YMI 315	3	Youth Culture and Issues
YMI 325	3	Discipleship and Evangelism in Youth Ministry
YMI 393	3	Practicum
YMI 421	3	Philosophy and Strategies for Youth Ministry

Select one course from the following:

CMI 232	3	Historical and Theological Foundations for Christian Ministries
CMI 370	3	Selected Topics (approved by advisor)

Select one course from the following:

PHI 262	3	Contemporary Moral Issues
PHI 371	3	Principles of Ethics

Electives

Select two BIB[†] 3-credit elective courses

[†]BIB 110 and BIB 210 (and any course substitutions for these foundational core courses) do not fulfill elective requirements. Elective course must be at least 3 credits.

Major requires a minimum grade of C- in four of the Foundational Core's Spiritual Foundation[†] courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

Youth Ministry/Systems (BS)

A Bachelor of Science degree with a major in Youth Ministries/Systems includes 54 hours in the major, curriculum requirements in information systems and analytics, four semesters of a departmentally approved ministry, and the writing of a scholarly paper in the senior year to meet the comprehensive exam requirement. *Students may not double major with Christian ministries. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

SYS 393	3-4	Practicum
YMI 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Major requires a minimum grade of C- in four of the Foundational Core's Spiritual Foundation¹ courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

Youth Ministry Minor

The minor in Youth Ministry is an academic program for students from various baccalaureate majors interested in developing their skills in ministering to youth. This program also provides Christian ministries majors with an optional area of specialization in youth ministry. The minor in Youth Ministry helps prepare graduates for ministries such as InterVarsity, Campus Crusade, Young Life, and Youth for Christ. In addition, the minor may be earned in combination with any major as an ideal way for students to integrate career and ministry goals. Students majoring in Biblical Literature, Christian Ministries or Philosophy who plan to work with youth may strengthen their credentials by adding the minor. The student must complete 17 credit hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

BIB 272	3	Inductive Study of the Bible	YMI 315	3	Youth Culture and Issues
CMI 100	3	Introduction to Christian Ministries	YMI 325	3	Discipleship and Evangelism in Youth Ministry
YMI 221	3	Ministry to Youth	YMI 393	2	Practicum

Intercultural Studies

The Intercultural Studies (ICS) program is designed for students who seek to engage with God's redemptive mission in the world and reflect critically and productively on intercultural or global service that is integrated with their Christian faith. The program provides students with a robust foundation in the main areas of applied missiology so they will be equipped to contribute positively to God's global purposes in a variety of vocations.

ICS students often pursue careers with a broad range of non-profit agencies and ministries, yet others serve in business, international education, sustainable development, and a variety of other fields. The large number of electives allows students to shape the ICS major toward their individual goals and interests. The ICS program effectively prepares students for graduate school through exposure to key missiological scholarship, primary sources, intercultural competencies, and a capstone service-learning research course. A cross-cultural experience is required to provide valuable real-world intercultural experience.

Intercultural Studies (BA)

A Bachelor of Arts degree with a major in Intercultural Studies includes 47 hours in the major, two years of sequential study in one foreign language, and the writing of a scholarly paper in the senior year to meet the comprehensive exam requirement. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

ANT 200	3	Cultural Anthropology
BIB 272	3	Inductive Study of the Bible
BIB 330	3	Acts and the Early Church
CAC 340	3	Intercultural Communication
CMI 100	3	Introduction to Christian Ministries
CMI 262	3	Personal Foundations of Ministry
CMI 325	3	Discipleship and Evangelism
CMI 371	3	Leadership Development
REL 311	3	Foundations of Christian World Mission
REL 350	3	Global Theology
REL 391	3	Preparation and Strategy for Christian World Mission
REL 432	2	World Mission Area Studies

Select one course from the following:

PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

Intercultural Studies requirements continued on next page

Intercultural Studies requirements continued from previous page

Electives

Select 2 additional credits from any of the following courses. At least 6 credits must be upper-division (300/400 level).

Biblical Literature, Christian Ministries, and Philosophy

BIB 320	3	Pentateuch
BIB 331	3	Pauline Epistles
BIB 341	3	The Gospels
BIB 462	3	Biblical Theology
CMI 351	3	Teaching and Learning Strategies
CMI 493	3	Christian Ministries Senior Capstone
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

Public Health and Sustainability

PBH 110	3	Global Health
PBH 340	4	Community Health Development in Practice
SUS 310	3	Poverty and Sustainable Development
SUS 315	4	Sustainable Food Systems and Health
SUS 325	4	Sustainable Development in Practice

History and Political Science

HIS 230	3	American Religious History
POS 321	3	Modern Middle East
POS 374	3	Religious Liberty and Christian Freedom

TESOL (Teaching English to Speakers of Other Languages)

TSL 201	3	Introduction to SLA and the Field of Teaching ESOL
TSL 210	3	Teaching ELL in P-12 Classroom
TSL 211	3	Teaching English Internationally
TSL 303	3	Methods of TESOL
TSL 305	3	Pedagogical Grammar and Applied Linguistics in TESOL

Additional Electives

COM 335	3	Nonprofit Organizational Communication
ENT 381	3	Global Entrepreneurship and Business as Missions
OVC 110	3	Introduction to Working with Orphans and Vulnerable Children
SOC 410	3	Community and Urban Affairs

In addition, the student must complete a cross-cultural experience that may or may not be for credit. Suggestions include involvement in Taylor World Outreach/Lighthouse, other Taylor service-learning trips, a semester abroad or study tour, the HEART institute, or REL 393 practicum. Approval is to be secured in advance from the missions program director.

Major requires a minimum grade of C- in four of the Foundational Core's Spiritual Foundation[†] courses: BIB 110, BIB 210, REL 313, and PHI 413. These courses are not included in the major GPA nor total required credit hours for the major.

Intercultural Studies Minor

A minor in Intercultural Studies requires the completion of 17 credit hours and prepares students for effective and empowering cross-cultural ministry, global service, or missions mobilization. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ANT 200	3	Cultural Anthropology
BIB 330	3	Acts and the Early Church
REL 311	3	Foundations of Christian World Mission
REL 391	3	Preparation and Strategy for Christian World Mission
REL 432	2	World Mission Area Studies

Select one course from the following:

PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

In addition, the student must complete a cross-cultural experience that may or may not be for credit. Suggestions include involvement in Taylor World Outreach/Lighthouse, other Taylor service-learning trips, a semester abroad, the HEART institute, or the REL 393 practicum. Approval is to be secured in advance from the department through the missions program director.

Certificate in Missions

The BSCP department awards a Certificate in Missions to students in any baccalaureate major program. Students are required to complete 14 hours. Students desiring to work for the Missions Certificate must complete an application, which is available through the program director or the BSCP program assistant. The student will be responsible for demonstrating his or her completion of the certificate requirements by submitting a completed application along with a copy of his or her transcript to the program director no less than 30 days prior to graduation. Work in progress will be accepted. In addition to the courses listed, the student must complete a cross-cultural experience that may or may not be for credit; suggestions include involvement in Taylor World Outreach/Lighthouse, other Taylor service-learning trips, a semester abroad, the HEART Institute, or the REL 393 practicum; approval is to be secured in advance from the department through the program director. *This certificate is awarded by the department and does not include a transcript entry.*

Certificate Requirements

BIB 330	3	Acts and the Early Church
REL 311	3	Foundations of Christian World Mission
REL 391	3	Preparation and Strategy for Christian World Mission
REL 432	2	World Mission Area Studies

Select one course from the following:

PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

Philosophy

The purpose of a major in Philosophy is to provide students with a basic understanding in the main areas of philosophical inquiry, thereby furthering their skills in reasoning, oral and written expression, and the formulation of an informed Christian world view.

Philosophy (BA)

The Bachelor of Arts degree with a major in Philosophy requires two years of one foreign language, 31 hours in the major, and the writing of a scholarly paper in the senior year that meets the comprehensive exam requirement. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

PHI 191†	1	Faith and Philosophy
PHI 201	3	Logic
PHI 202	3	History of Philosophy I
PHI 203	3	History of Philosophy II
PHI 413	3	Contemporary Christian Belief

Select one course from the following:

PHI 425	3	Philosophical and Theological Methods
PHI 452	3	Philosophy of Religion

†PHI 191 must be taken no later than the year the first upper division philosophy course is taken.

Select an additional 15 hours from:

PHI 110	3	Introduction to Philosophy
PHI 121	3	Society and Philosophy
PHI 170	1-4	Selected Topics
PHI 262	3	Contemporary Moral Issues
PHI 270	1-4	Selected Topics
PHI 311	3	Medical Ethics
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition
PHI 342	3	Aesthetics
PHI 355	3	Metaphysics
PHI 360	1-4	Independent Study
PHI 370	1-4	Selected Topics
PHI 371	3	Principles of Ethics
PHI 382*	1	Ethics Bowl
PHI 420	3	Continental Philosophy
PHI 425	3	Philosophical and Theological Methods
PHI 432	3	Epistemology
PHI 445	3	Philosophy of Mind
PHI 452	3	Philosophy of Religion
PPE 361	3	Western Political Thought

*Up to 3 credit hours of PHI 382 may be counted.

Philosophy/Systems (BS)

A Bachelor of Science degree with a major in Philosophy/Systems requires the 31-hour philosophy major requirements, curriculum requirements in information systems and analytics, and the writing of a scholarly paper in the senior year to meet the comprehensive exam requirement. *All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Design
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

PHI 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Philosophy Minor

A minor in Philosophy requires the completion of 16 hours.

Minor Requirements

PHI 201	3	Logic
PHI 413	3	Contemporary Christian Belief

Select one course from the following:

PHI 202	3	History of Philosophy I
PHI 203	3	History of Philosophy II

Select 7 hours of PHI electives. POS 362 and PPE 361 may also count as electives for the minor.

Ethics Minor

A minor in Ethics requires the completion of 18 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PHI 371 3 Principles of Ethics

Select 15 credit hours from the following:

BIO 410 3 Bioethics
COS 311 3 Ethics in Computer Science
ENS 383 4 Environmental Ethics
MGT 311 3 Business Law
MGT 442 3 Business Ethics
PHI 262 3 Contemporary Moral Issues
PHI 311 3 Medical Ethics
PHI 382* 1 Ethics Bowl
PSY 210 2 Ethics in Psychology
SOC 210 3 Contemporary Social Issues

* Up to 3 credit hours of PHI 382 may be counted.

Biblical Literature Courses

BIB 103 4 hours

Introduction to Holy Land Studies

A study of the biblical background and contemporary significance of Israel. Taught in Israel during January, this travel-study course may count for either BIB 110 or a departmental elective. Offered January interterm—when available.

BIB 110 3 hours

Biblical Literature I

A course that has as its primary content the Old Testament, with special attention given to the law, the prophets and the history of Israel. Meets foundational core requirement.

BIB 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

BIB 203 3 hours

In the Footsteps of Paul

A study of the biblical background and contemporary significance of cities Paul visited and wrote to in Greece and Turkey or Greece and Italy. Taught during January, this travel-study course may count for BIB 210 or a departmental elective. Offered January interterm.

BIB 204 4 hours

Introduction to Holy Land Studies

A study of the biblical background and contemporary significance of Israel and Jesus Christ. Taught in Israel during January, this travel-study course may count for either BIB 210 or a departmental elective. Offered January interterm—when available.

BIB 210 3 hours

Biblical Literature II

A course that includes a foundation in New Testament study with focus on Jesus Christ as portrayed in the Gospels and Epistles. Also included is a series of explorations into the relevancy of Christ to modern life. Meets foundational core requirement. Prerequisite: BIB 110 or BIB 310.

BIB 213 4 hours

Survey of Biblical Literature

A survey of the Bible, both Old and New Testaments, designed to help students learn the central ideas and themes of the Bible; to become familiar with its chief persons, places, and events; to become aware of the types of biblical literature; and to develop the ability to study the Bible effectively. This course is offered through Taylor University Online (TUO).

BIB 217 3 hours

Genesis

A detailed study of the book of "beginnings," giving attention to its authorship, authenticity, chronology, and spiritual implication. This course is offered through Taylor University Online (TUO).

BIB 218 3 hours

Matthew

A detailed study of the purpose, structure, and theology of Matthew's gospel, with special emphasis on titles and teachings of Jesus, significant events in His life, and the application of the gospel to the present time. This course is offered through Taylor University Online (TUO).

BIB 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

BIB 272 3 hours

Inductive Study of the Bible

Students learn to study biblical texts carefully, inquisitively, and according to literary context. Students learn to attend to literary genre, relevant socio-historical and theological contexts, and using biblical studies resources and tools in order to grow in their ability to interpret biblical texts. Students learn to draw connections from what a text meant to its original audience to what its significance might be for people today, including how it might be lived out and taught in contemporary contexts. Prerequisites: BIB 110 or BIB 310; and BIB 210.

BIB 310 3 hours

Biblical Literature I

See BIB 110. Primarily for transfer students and has additional requirements. Meets foundational core requirement. Available upon request and with permission of the instructor.

BIB 311 3 hours

Gospel of John

An analytical study of the content of the fourth gospel, with special emphasis on the distinctive elements of John's message. This course is offered through Taylor University Online (TUO).

BIB 313 3 hours

Romans

This course combines inductive study of the New Testament letter of Paul to the Romans with critical investigation of contemporary approaches to Paul, with special focus on the "New Perspective." Prerequisites: BIB 110 and BIB 210. This course is offered through Taylor University Online (TUO).

BIB 320 3 hours

Pentateuch

Emphasizes the historical narrative and the content of the Law of God. Special attention is given to the Genesis account of the origin of the cosmos, man, sin and salvation. The authorship of the Pentateuch is considered. Prerequisite: BIB 110 or BIB 310. Offered Spring semester.

BIB 330 3 hours

Acts and the Early Church

A historical study with particular attention given to the missionary expansion of the early Church, the work of the Holy Spirit and the place of the Church in the world. Prerequisite: BIB 210. Offered Spring semester.

BIB 331 3 hours

Pauline Epistles

Attention is given to the life, ministry, and writings of Paul. The doctrinal, pastoral, and personal epistles of Paul are studied with reference to their geographical and historical settings, the organization of the Apostolic Church and the development of Christian doctrine. Careful exegesis is made of selected portions of each epistle. Prerequisite: BIB 210. Offered most Fall semesters.

BIB 332 3 hours

Hebrews and General Epistles

A study of the non-Pauline epistles with attention to their authorship, historical place in the canon and doctrinal uniqueness. The contents of each book are analyzed, and problem texts are treated. Prerequisite: BIB 210. Offered Spring semester of odd years.

BIB 340 3 hours

Hebrew Prophets

Selected major and minor prophetic works of the Old Testament are considered, with special emphasis given to the historical background, Messianic message, and content, together with specific theological concepts and teachings that are pertinent to modern times. Prerequisite: BIB 110 or BIB 310. Offered most Fall semesters.

BIB 341 **3 hours**
The Gospels
 Stresses the life and teaching of Jesus as set forth in the Synoptic Gospels and John. Attention is given to the literary and theological characteristics of each individual gospel and to the development of gospel criticism. The primary focus, however, is on the words and works of Jesus Christ and their significance for Christians today. *Prerequisite: BIB 210. Offered Fall semester.*

BIB 350 **3 hours**
Poetic and Wisdom Literature
 Hebrew poetry and wisdom as presented in the books of Job, Psalms, Proverbs, Ecclesiastes, Lamentations, and the Song of Solomon. *Prerequisite: BIB 110 or BIB 310. Offered most Fall semesters.*

BIB 360 **1-4 hours**
Independent Study
 An individualized, directed study involving a specified topic.

BIB 370 **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

BIB 393 **3-4 hours**
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

BIB 420 **3 hours**
Apocalyptic Literature of the Bible
 Examines the historical and theological dimensions of Old Testament, New Testament, and second Temple period apocalypticism. Special attention is given to apocalyptic thought in Daniel, the gospels, and Revelation. *Prerequisite: BIB 210. Offered Spring semester of even years.*

BIB 450 **1-4 hours**
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

BIB 452 **3 hours**
Old Testament Historical Literature
 Selected historical books in the Old Testament are considered, with particular emphasis given to the authorship, historical theory, and theological content of these books. *Prerequisite: BIB 110 or BIB 310. Offered Spring semester of odd years.*

BIB 462 **3 hours**
Biblical Theology
 A study of the Bible and its central message and meaning. The Bible is viewed as recording a special kind of history revealing God's will and purpose and giving essential meaning to all human life and destiny. This course is normally taken during the senior year. *Prerequisite: BIB 272. Offered Fall semester.*

BIB 480 **3 hours**
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

BIB 490 **1-2 hours**
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

BIB 493 **3 hours**
Biblical Literature Capstone
 Designed as a culminating experience for all Biblical Literature majors wherein students focus on key exegetical, historical, and theological issues crucial to a proper understanding of the biblical literature. *The completion of the course paper and its presentation to peers meets university requirements for senior comprehensive exams for Biblical Literature majors. Prerequisites: BIB 272, BIB 320, and BIB 341. Offered Spring semester.*

Christian Ministries Courses

CMI 100 **3 hours**
Introduction to Christian Ministries
 A course that focuses on the purpose and scope of Christian ministries and the types of ministries available to majors.

CMI 170 **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

CMI 232 **3 hours**
Historical and Theological Foundations for Christian Ministries
 A course focusing on the biblical, theological, historical, and philosophical foundations for Christian ministry. *Prerequisite: CMI 100. Offered Fall semester.*

CMI 242 **3 hours**
Psychological and Educational Foundations for Christian Ministries
 A course focusing on theories of human development and learning, as well as educational theory. Applications for ministry settings are explored. *Prerequisite: CMI 100. Offered Spring semester.*

CMI 262 **3 hours**
Personal Foundations for Ministry
 Students' capacity for ministry is enhanced in this course by facilitating personal growth and development. Emphasis is given to the ways theological truths address life issues. *Prerequisite: CMI 100.*

CMI 270 **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

CMI 325 **3 hours**
Discipleship and Evangelism
 An intensive study of the theology, theories and approaches used to help people grow and develop in their faith. A special focus will be placed on the life of Christ as a model for ministry. *Prerequisite: CMI 100. Offered Spring semester.*

CMI 345 **3 hours**
Care, Kingdom, and Culture
 Provides a theological and kingdom of God lens to engage contemporary, personal, and cultural issues. Includes topics relating to sexuality and gender, race and ethnicity, and mental health. Students will be equipped to engage their context missionally through cultural exegesis and connoisseurship while developing skills in pastoral care. *Prerequisite: CMI 100. Offered Fall semester.*

CMI 351 **3 hours**
Teaching and Learning Strategies
 A practical course designed to help the student teach the Bible more effectively by the use of educational strategies. A teaching lab and supervision are included, and competency in the use of instructional media is required. *Prerequisites: CMI 100 and BIB 272. Offered Fall semester.*

CMI 352 **3 hours**
Program and Curriculum Development
 A course that focuses on the development of educational programs within church and parachurch ministries. Emphasis is on published curricula and the development of curricular writing skills. *Prerequisite: CMI 351. Offered Spring semester.*

CMI 360 **1-4 hours**
Independent Study
 An individualized, directed study involving a specified topic.

CMI 370 **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

CMI 371 **3 hours**
Leadership Development
 A course designed to facilitate the development of students' skills in leadership, organization and management related to specific ministry situations. *Prerequisite: CMI 100. Offered Fall semester.*

CMI 393 **2-4 hours**
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer. Prerequisite: senior status or permission of instructor.*

CMI 421 **3 hours**
Philosophy and Strategies for Christian Ministries
 A research course designed to help students articulate their philosophies of ministry within a particular age group or ministry context. Attention is given to critical areas of need within Christian ministry. *This course meets university requirements for senior comprehensive exams for Christian ministry majors. Graduating Christian Ministries majors only. Offered Spring semester.*

CMI 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

CMI 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. *Prerequisite: major GPA of at least 3.00.*

CMI 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

CMI 492 5-8 hours
Christian Ministries Internship
 A practical, semester-long, supervised ministry experience in Cuenca, Ecuador. *Permission required from CMI program advisor and CMI Ecuador program liaison.*

CMI 493 3 hours
Christian Ministries Senior Capstone
 This integrative course exposes students to models of ministry and vocational direction through research and participative observation and experiences. This course introduces the method for the final philosophy of ministry comprehensive paper. A substantive exposure trip is part of the course structure. *Offered January interterm.*

Greek and Hebrew Courses

†Greek or Hebrew may be used to fulfill Taylor University's foreign language requirements.

GRK 170 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

GRK 201† 4 hours
Elementary New Testament Greek I
 A study of the fundamental principles of New Testament (Koine) Greek grammar. Emphasis is placed on the mastery of forms, memorization of vocabulary, and translation of sentences from Greek to English. *Offered Fall semester of even years.*

GRK 202† 4 hours
Elementary New Testament Greek II
 A continuation of the study of the fundamental principles of New Testament (Koine) Greek grammar. John's First Epistle is translated during the last half of the semester. *Prerequisite: GRK 201. Offered Spring semester of odd years.*

GRK 270 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

GRK 301† 3 hours
Greek Grammar and Syntax
 An intermediate Koine Greek grammar course that places special emphasis on the more exegetically significant details of Greek grammar and syntax by reading and analyzing selected portions of the Greek New Testament. *Prerequisite: GRK 202. Offered Fall semester of odd years.*

GRK 302† 3 hours
Exegesis of the Greek New Testament
 An introduction to the procedure and practice of Greek exegesis. Emphasis is placed on the "how-to's" of doing textual criticism, word studies, outlining the argument of a passage, validating exegetical decisions, and the proper use of exegetical tools. *Prerequisite: GRK 301. Offered Spring semester of even years.*

GRK 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.

GRK 370 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

GRK 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

GRK 401 3 hours
Advanced Exegesis of the Greek New Testament
 An extension of skills developed in GRK 301 and GRK 302. *Offered by arrangement with the instructor.*

GRK 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

GRK 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

GRK 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

HEB 170 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

HEB 211† 3 hours
Elementary Old Testament Hebrew I
 A study of the fundamental principles of Old Testament Hebrew. Emphasis is placed on the mastery of forms and memorization of vocabulary skills, with a focus on the basic forms of the verb (sometimes called "Qal" stem). *Offered Fall semester of odd years.*

HEB 212† 3 hours
Elementary Old Testament Hebrew II
 A continuation of the study of basic Old Testament Hebrew grammar and vocabulary with an emphasis on solidifying Hebrew reading skills and a focus on the more complex forms of the verb (sometimes called "derived" stems). *Prerequisite: HEB 211. Offered Spring semester of even years.*

HEB 270 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

HEB 311† 3 hours
Hebrew Syntax and Lexicography
 Introduction to principles and practice of Hebrew syntactical analysis and lexicography, along with development of reading skills and additional Hebrew vocabulary. *Prerequisite: HEB 212. Offered Fall semester of even years.*

HEB 312† 3 hours
Hebrew Exegesis
 An introduction to the principles and practice of exegesis and textual criticism of the Hebrew Bible with an emphasis on developing vocabulary skills. *Prerequisite: HEB 311. Offered Spring semester of odd years.*

HEB 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.

HEB 370 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

HEB 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

HEB 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

HEB 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

HEB 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Philosophy Courses

PHI 110 Introduction to Philosophy A survey of important issues and traditions in philosophy.	3 hours	PHI 370 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours
PHI 121 Society and Philosophy A philosophical inquiry into pressing issues for contemporary society. This course addresses questions concerning public discourse, citizenship, government, civil disobedience, science, technology, popular music, film, and sports. Topics are considered in light of philosophical perspectives from ancient to contemporary times as well as in light of historical Christian theology. <i>Meets foundational core civic engagement or general social science requirement.</i>	3 hours	PHI 371 Principles of Ethics A survey of the theoretical foundations of ethics, such as the distinction between absolutist and relativistic views, the nature of justice, and the need for rules. Readings from classical and modern authors are included.	3 hours
PHI 170 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	PHI 382 Ethics Bowl An intensive study of practical moral issues, culminating in regional and national competitions involving Ethics Bowl teams from other colleges. <i>May be repeated twice for credit. Prerequisite: consent of the instructor.</i>	1 hour
PHI 191 Faith and Philosophy An examination of issues related to the integration of Christian faith and philosophy. <i>Must be completed by philosophy majors no later than the year of their first upper division philosophy courses.</i>	1 hour	PHI 393 Practicum Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during Summer.</i>	1-4 hours
PHI 201 Logic A study of classical and contemporary formulations of the principles of human thought. Proper deductive and inductive logic is contrasted with fallacies. Categorical logic, truth functional logic, and quantificational logic are examined. <i>Offered Fall semester.</i>	3 hours	PHI 410 Bioethics This course will consider, from a Christian perspective, some of the philosophical issues and questions related to many of the current health-care and end-of-life concerns in modern society. The course will consider the importance of a worldview perspective in addressing the issue of personhood and in ethical decision making. <i>This course is offered through Taylor University Online (TUO).</i>	3 hours
PHI 202 History of Philosophy I A survey of philosophical thought from the early pre-Socratic Greeks to the modern period. <i>Offered Fall semester.</i>	3 hours	PHI 413 Contemporary Christian Belief The integration of Christian thought with contemporary ideas and an introduction to Christian apologetics. <i>Meets foundational core requirement and is required of all students. Prerequisite: REL 313.</i>	3 hours
PHI 203 History of Philosophy II A survey of philosophical thought from the modern period to contemporary movements such as linguistic analysis and phenomenology. <i>Offered Spring semester.</i>	3 hours	PHI 420 Continental Philosophy A seminar giving detailed attention to influential works in continental philosophy, from its roots in Kant down to the present. <i>Prerequisite: Any PHI course or instructor permission.</i>	3 hours
PHI 262 Contemporary Moral Issues A systematic analysis of pressing issues such as sexual morality, divorce, abortion, homosexuality, euthanasia, and war and peace. <i>Offered Spring semester.</i>	3 hours	PHI 425 Philosophical and Theological Methods An interdisciplinary examination of both the history and current movements within philosophical and theological methodology. <i>Prerequisite: Any PHI course or instructor permission.</i>	3 hours
PHI 270 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	PHI 432 Epistemology Contemporary theories on the nature and limits of knowledge and the justification of beliefs. <i>Prerequisite: Any PHI course or instructor permission.</i>	3 hours
PHI 311 Medical Ethics An examination of ethical issues in medicine and healthcare with an emphasis on learning to develop and communicate Christian ethical positions in a pluralistic world. Issues discussed will include respect for patients, the moral status of embryos and fetuses, terminal care and euthanasia, and justice in healthcare.	3 hours	PHI 445 Philosophy of Mind A study of philosophical theories of consciousness, perception, and intelligence, with special attention on contemporary research. <i>Prerequisite: One other course in philosophy or consent of the instructor.</i>	3 hours
PHI 322 World Religions: Western Tradition A study of Judaism, Islam, Zoroastrianism, and related religious movements. <i>Offered Fall semester.</i>	3 hours	PHI 450 Directed Research Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.	1-4 hours
PHI 323 World Religions: Eastern Tradition A study of Hinduism, Buddhism, Sikhism, Shinto, and Chinese religions. <i>Offered Spring semester.</i>	3 hours	PHI 452 Philosophy of Religion A study of the major issues in the philosophy of religion, including religious experience, theism, religious language, and the problem of evil. <i>Prerequisite: Any PHI course or instructor permission.</i>	3 hours
PHI 342 Aesthetics A study of classical and contemporary theories about the nature of art, the artistic process, the psychology of aesthetic experience, and standards for good art. <i>Prerequisite: one other course in philosophy or consent of the instructor.</i>	3 hours	PHI 480 Seminar A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. <i>Prerequisite: major GPA of at least 3.00.</i>	1-4 hours
PHI 355 Metaphysics A study of such issues as the nature of existence, identity, essences, causality, freedom, and space and time. <i>Prerequisite: One other course in philosophy or consent of the instructor.</i>	3 hours	PHI 490 Honors Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>	1-2 hours
PHI 360 Independent Study An individualized, directed study involving a specified topic.	1-4 hours		

Religion Courses

REL 170 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	REL 360 Independent Study An individualized, directed study involving a specified topic.	1-4 hours
REL 270 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	REL 370 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours
REL 303 Revelation, the Seven Cities, and the Seven Councils A survey of Christian belief with special emphasis on Revelation and the seven church councils. <i>January interterm course involving two weeks study on campus and two weeks on site in Turkey. Meets REL 313 foundational core requirement. Prerequisites: BIB 110 or BIB 310; and BIB 210.</i>	3 hours	REL 391 Preparation and Strategy for Christian World Mission An introduction to the essentials of missionary life and global service. Current global and mission trends and holistic outreach strategies are explored. Attention is given to knowledge, skills, and attitudes essential for adaptation and intercultural relationships. <i>Offered Spring semester.</i>	3 hours
REL 310 Theology of Worship A theological Biblical and historical study of Christian worship from a classical as well as contemporary perspective. This course examines the pattern, purpose and essential and non-essential features of worship found in the Bible and in church history with the goal of formulating one's own theology and practice of Biblical worship. <i>Open to Music, Biblical Studies, and Philosophy majors. Prerequisite: REL 313. Offered Spring semester of even years.</i>	3 hours	REL 393 Practicum Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during Summer.</i>	1-4 hours
REL 311 Foundations of Christian World Mission A study of the biblical, theological, and historical foundations of Christian mission strategy. <i>Offered Fall semester.</i>	3 hours	REL 432 World Missions Area Studies A research seminar designed for students to explore global opportunities in a region of the world that interests them. The religion, history, economics, culture, government, language, and geography of an area and outreach strategies appropriate to the region are considered. <i>Prerequisite: ANT 200 or REL 311 or REL 391 or junior status. Offered Spring semester.</i>	2 hours
REL 313 Historic Christian Belief A survey of Christian belief as developed during the history of the Church. <i>May not be counted toward BIB, CMI, or PHI majors or minors. Meets foundational core requirement and is required of all students. Prerequisites: BIB 110 or 310; 210 or 203; and junior or senior status.</i>	3 hours	REL 450 Directed Research Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.	1-4 hours
REL 350 Global Theology Global theology investigates international contemporary Christian understandings of God through the rubric of systematic theology. A seminal dimension of Christian global engagement, global theology seeks to understand how international Christians express their faith against the backgrounds of their respective histories and in the context of their current social, political, and religious contexts. The course pays special attention to dialogue between international Christians and believers of neighboring faiths, who often constitute the majority in various global contexts. A goal of the course is to increase awareness that western Christianity has much to gain through partnership with Christians from the majority world. <i>Offered Spring semester of even years.</i>	3 hours	REL 480 Seminar A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.	1-4 hours
		REL 490 Honors Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>	1-2 hours

Theology Courses

THE 243 Introduction to Theology A detailed study of Bibliology, theology, and angelology. This course is foundational to all systematic theology. <i>This course is offered through Taylor University Online (TUO).</i>	3 hours
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Youth Ministry Courses

YMI 170 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	YMI 393 Practicum Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during Summer. Prerequisite: senior status or permission of instructor.</i>	2-4 hours
YMI 221 Ministry to Youth A general study of the various programs used to meet the needs of junior high and senior high youth through church and parachurch ministries. <i>Offered Spring semester.</i>	3 hours	YMI 421 Philosophy and Strategies for Youth Ministry A research course designed to help students articulate their philosophies of ministry within a particular youth ministry context. Attention is given to critical areas of need within youth ministry. <i>This course meets university requirements for senior comprehensive exams for youth ministry majors. Graduating youth ministry majors only. Offered Spring semester.</i>	3 hours
YMI 270 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	YMI 450 Directed Research Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.	1-4 hours
YMI 315 Youth Culture and Issues An intensive study of theories and approaches used to understand culture and issues facing adolescents today. <i>Offered Fall semester.</i>	3 hours	YMI 480 Seminar A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. <i>Prerequisite: major GPA of at least 3.00.</i>	1-4 hours
YMI 325 Discipleship and Evangelism in Youth Ministry An intensive study of the theories and approaches used to help junior high and senior high youth to grow and develop in their faith. <i>Prerequisite: YMI 221.</i>	3 hours	YMI 490 Honors Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>	1-2 hours
YMI 360 Independent Study An individualized, directed study involving a specified topic.	1-4 hours		
YMI 370 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours		

Communication

Chair, Professor J. Groeling
Associate Professors A. Blanchard, D. Downs
Assistant Professors J. Borkin, L. Taylor

Grounded in the understanding that the Word becoming flesh was the ultimate communicative act, the mission of the Communication Department is to develop competent, caring communicators prepared for world service.

Within the Communication Department, students may select one of four majors: Communication, Multimedia Journalism, Professional Writing, or Public Relations. Additional majors or minors may be added with no more than 50 percent of credits overlapping with a major in this department. The Bachelor of Arts degree requires the completion of two years sequential study in one foreign language. Minors are available.

Communication (BA)

The Bachelor of Arts degree with a major in Communication requires two years of one foreign language and 44-53 major hours. An optional concentration in Organizational Communication may be added. No more than 50% of the credits may overlap with another major or minor. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

CAC 125	2	Communication Major Orientation
CAC 220	3	Essentials of Written Communication
CAC 225	3	Communication Theory and Research
CAC 340	3	Intercultural Communication
CAC 485	2	Senior Capstone

Major Requirements

CAC 160	3	Integrative Communication
COM 111	3	Introduction to Organizational Communication
COM 210	3	Public Speaking
COM 320	3	Interpersonal Communication
COM 330	3	Mediated Communication
COM 372	3	Persuasion
COM 393	3	Practicum
COM 430	3	Restorative Communication
COM 486	1	Senior Paper/Portfolio Development

Select an additional 6 credits from courses in CAC, COM, JRN, PBR, PWR, or complete a concentration in Organizational Communication.

Concentration—Students may select an optional concentration:

Organizational Communication

COM 301	3	Strategic Communication
COM 325	3	Conflict Resolution
COM 327	3	Leadership Communication
COM 335	3	Nonprofit Organizational Communication
COM 411	3	Advanced Organizational Communication
COM 420	3	Communication Audit

Communication/Systems (BS)

The Bachelor of Science degree with a major in Communication/Systems consists of the 44 major hours and curriculum requirements in information systems and analytics. An optional concentration in Organizational Communication may be added. No more than 50% of the credits may overlap with another major or minor. All major courses, including information systems and analytics curriculum, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

COM 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Communication Minor

The Communication minor requires 15 hours. No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

CAC 220	3	Essentials of Written Communication
CAC 340	3	Intercultural Communication
COM 210	3	Public Speaking
COM 320	3	Interpersonal Communication
COM 325	3	Conflict Resolution

Multimedia Journalism (BA)

The Bachelor of Arts degree in Multimedia Journalism requires two years of one foreign language and 54-57 major hours including a concentration in Business Media, Digital Media, News Media, Sports Media, or Visual Media. Majors must participate in three semesters of media involvement and one year of student newspaper involvement. No more than 50% of the credits may overlap with another major or minor. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

CAC 125	2	Communication Major Orientation
CAC 220	3	Essentials of Written Communication
CAC 225	3	Communication Theory and Research
CAC 340	3	Intercultural Communication
CAC 485	2	Senior Capstone

Major Requirements

ART 156	1	Digital Tools: Photoshop
CAC 345	3	Social Media Strategy
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
JRN 245	3	Introduction to Multimedia Storytelling
JRN 255	3	Media and Society
JRN 315	3	Advanced Media Writing
JRN 332	3	Layout and Design
JRN 393	3	Practicum
JRN 486	1	Senior Portfolio Development

Concentrations—Students must select one of the following concentrations:

Business Media

MGT 201	3	Introduction to Business
MGT 231	3	Principles of Marketing
MKT 312	3	Professional Selling

Select an additional 6 credits not taken elsewhere in the major from the electives below.

Digital Media

COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science

Select one course from the following:

SYS 101	3	Introduction to Systems
SYS 120	4	Introduction to Problem Solving

Select an additional 6 credits not taken elsewhere in the major from the following:

COS 143	3	Interactive Webpage Development
COS 243	3	Multi-tier Web Application Development
COS 265	4	Data Structures and Algorithms
SYS 214	3	Principles of Human Computer Interaction

Entrepreneurship Media

ENT 225	3	Exploring Innovation and Entrepreneurship
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 422	3	New Venture Planning

Select an additional 7 credits not taken elsewhere in the major from the following:

COM 372	3	Persuasion
ENT 310	3	Creativity and Concept Development
ENT 386	1	Founders Fellowship
MGT 201	3	Introduction to Business
MGT 352	3	Management Analysis and Practice
MKT 231	3	Principles of Marketing

News Media

PWR 230	3	Technical Writing
PWR 243	3	Editing
JRN 435	3	Magazine Production and Feature Writing

Select an additional 6 credits not taken elsewhere in the major from the electives below.

Sports Media

JRN 230	3	Introduction to Sports Writing
SMA 115	3	Introduction to Sport Management
SMA 350	3	Sport Management

Select an additional 6 credits not taken elsewhere in the major from the electives below.

Visual Media

ART 261	3	Film and Darkroom
ART 346	3	Portraiture
ART 353	3	Commercial Photography

Select an additional 6 credits not taken elsewhere in the major from the following:

ART 356	4	Web Design
FMA 220	3	Film and Video Production
FMA 420	3	Documentary Filmmaking
JRN 393	3	Practicum (approved by advisor—Photography)

Concentration Electives (may not double-count within major or concentrations)

COM 210	3	Public Speaking
COM 372	3	Persuasion
ENG 305	3	Writing Theory and Grammar
FMA 215	3	Audio Production
FMA 220	3	Film and Video Production
FMA 420	3	Documentary Filmmaking
JRN 230	3	Introduction to Sports Writing
JRN 435	3	Magazine Production and Feature Writing
MGT 352	3	Management Analysis and Practice
PBR 261	3	Introduction to Public Relations
PWR 230	3	Technical Writing
PWR 243	3	Editing
SMA 351	3	Sport Public Relation

Multimedia Journalism/Systems (BS)

The Bachelor of Science degree in Multimedia Journalism/Systems consists of the above 39 major hours and curriculum requirements in information systems and analytics; optional concentrations in Business Media, Digital Media, Entrepreneurship Media, News Media, Sports Media, or Visual Media may be added (see Multimedia Journalism (BA) for requirements). Majors must participate in three semesters of media involvement and one year of student newspaper involvement. No more than 50% of the credits may overlap with another major or minor. All major courses, including information systems and analytics curriculum, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

JRN 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Multimedia Journalism (BS)

The Bachelor of Arts degree in Multimedia Journalism requires two years of one foreign language and 57-60 major hours including a concentration in Business Media, Digital Media, Entrepreneurship Media, News Media, Sports Media, or Visual Media. Majors must participate in three semesters of media involvement and one year of student newspaper involvement. No more than 50% of the credits may overlap with another major or minor. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

CAC 125	2	Communication Major Orientation
CAC 220	3	Essentials of Written Communication
CAC 225	3	Communication Theory and Research
CAC 340	3	Intercultural Communication
CAC 485	2	Senior Capstone

Major Requirements

ART 156	1	Digital Tools: Photoshop
CAC 345	3	Social Media Strategy
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
JRN 245	3	Introduction to Multimedia Storytelling
JRN 255	3	Media and Society
JRN 315	3	Advanced Media Writing
JRN 332	3	Layout and Design
JRN 393†	3	Practicum
JRN 393†	3	Practicum
JRN 486	1	Senior Portfolio Development

†Must complete different practicums.

Concentrations—Students must select one of the following concentrations:

Business Media

MGT 201	3	Introduction to Business
MKT 231	3	Principles of Marketing
MKT 312	3	Professional Selling

Select an additional 6 credits not taken elsewhere in the major from the electives below.

Digital Media

COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science

Select one course from the following:

SYS 101	3	Introduction to Systems
SYS 120	4	Introduction to Problem Solving

Select an additional 6 credits not taken elsewhere in the major from the following:

COS 143	3	Interactive Webpage Development
COS 243	3	Multi-tier Web Application Development
COS 265	4	Data Structures and Algorithms
SYS 214	3	Principles of Human Computer Interaction

Entrepreneurship Media

ENT 225	3	Exploring Innovation and Entrepreneurship
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 422	3	New Venture Planning

Select an additional 7 credits not taken elsewhere in the major from the following:

COM 372	3	Persuasion
ENT 310	3	Creativity and Concept Development
ENT 386	1	Founders Fellowship
MGT 201	3	Introduction to Business
MGT 352	3	Management Analysis and Practice
MKT 231	3	Principles of Marketing

News Media

PWR 230	3	Technical Writing
PWR 243	3	Editing
JRN 435	3	Magazine Production and Feature Writing

Select an additional 6 credits not taken elsewhere in the major from the electives below.

Sports Media

JRN 230	3	Introduction to Sports Writing
SMA 115	3	Introduction to Sport Management
SMA 350	3	Sport Management

Select an additional 6 credits not taken elsewhere in the major from the electives below.

Multimedia Journalism Minor

The Multimedia Journalism minor requires 19 hours. No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ART 156	1	Digital Tools: Photoshop
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
JRN 315	3	Advanced Media Writing

Select 2 credits from the following:

FMA 215	3	Audio Production
FMA 220	3	Film and Video Production
JRN 230	3	Introduction to Sports Writing
JRN 245	3	Introduction to Multimedia Storytelling
JRN 255	3	Media and Society
JRN 332	3	Layout and Design
RN 393	3	Practicum
JRN 435	3	Magazine Production and Feature Writing
PWR 230	3	Technical Writing

Professional Writing (BA)

The Bachelor of Arts degree with a major in Professional Writing requires 54 hours. No more than 50% of the credits may overlap with another major or minor. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

CAC 125	2	Communication Major Orientation
CAC 220	3	Essentials of Written Communication
CAC 225	3	Communication Theory and Research
CAC 340	3	Intercultural Communication
CAC 485	2	Senior Capstone

Major Requirements

ART 156	1	Digital Tools: Photoshop
CAC 158	2	Digital Tools: Office Suite
CAC 345	3	Social Media Strategy
JRN 115	3	Introduction to Media Writing
JRN 332	3	Layout and Design
JRN 435	3	Magazine Production and Feature Writing
PWR 101	3	Introduction to Professional Writing
PWR 215	3	The Writer's Craft
PWR 243	3	Editing
PWR 365	3	Writing Seminar
PWR 393	3	Practicum
PWR 444	3	Book Editing and Publishing
PWR 472	3	Freelance Writing
PWR 486	1	Senior Paper/Portfolio Development

Select an additional 4 credits from the following:

ART 356	4	Web Design
COM 301	3	Strategic Communication
COM 111	3	Introduction to Organizational Communication
COM 372	3	Persuasion
ENG 211	3	Introduction to Creative Writing
ENG 305	3	Writing Theory and Grammar
ENG 410	3	Advanced Creative Writing
PBR 261	3	Introduction to Public Relations
PWR 230	3	Technical Writing
PWR 345	3	Inspirational Writing
PWR 360	1-4	Independent Study (advisor approved)
PWR 365 [‡]	3	Writing Seminar
PWR 370	1-4	Selected Topics (advisor approved)
PWR 393	1-4	Practicum

[‡]May take twice for major.

Professional Writing (BS)

The Bachelor of Science degree with a major in Professional Writing requires 63 hours. No more than 50% of the credits may overlap with another major or minor. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

CAC 125	2	Communication Major Orientation
CAC 220	3	Essentials of Written Communication
CAC 225	3	Communication Theory and Research
CAC 340	3	Intercultural Communication
CAC 485	2	Senior Capstone

Major Requirements

ART 156	1	Digital Tools: Photoshop
CAC 158	2	Digital Tools: Office Suite
CAC 345	3	Social Media Strategy
JRN 115	3	Introduction to Media Writing
JRN 332	3	Layout and Design
JRN 435	3	Magazine Production and Feature Writing
PWR 101	3	Introduction to Professional Writing
PWR 215	3	The Writer's Craft
PWR 230	3	Technical Writing
PWR 243	3	Editing
PWR 365	3	Writing Seminar
PWR 393*	3	Practicum
PWR 393*	3	Practicum
PWR 444	3	Book Editing and Publishing
PWR 472	3	Freelance Writing
PWR 486	1	Senior Paper/Portfolio Development

Select an additional 7 credits from the following:

ART 356	4	Web Design
COM 301	3	Strategic Communication
COM 111	3	Introduction to Organizational Communication
COM 372	3	Persuasion
ENG 211	3	Introduction to Creative Writing
ENG 305	3	Writing Theory and Grammar
ENG 410	3	Advanced Creative Writing
PBR 261	3	Introduction to Public Relations
PWR 345	3	Inspirational Writing
PWR 360	1-4	Independent Study (advisor approved)
PWR 365 [‡]	3	Writing Seminar
PWR 370	1-4	Selected Topics (advisor approved)

[‡]May take twice for major.

*Must complete two different practicums.

Professional Writing Minor

The Professional Writing minor requires 21 hours. No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

CAC 345	3	Social Media Strategy
JRN 115	3	Introduction to Media Writing
PWR 101	3	Introduction to Professional Writing
PWR 215	3	The Writer's Craft
PWR 243	3	Editing

Select 6 hours of electives from the following:

ART 356	4	Web Design
COM 301	3	Strategic Communication
COM 111	3	Introduction to Organizational Communication
COM 372	3	Persuasion
PBR 261	3	Introduction to Public Relations
PWR 230	3	Technical Writing
PWR 345	3	Inspirational Writing
PWR 365	3	Writing Seminar

Professional Writing (AA) - Taylor University Online

The Associate of Arts degree with a major in Professional Writing requires 19 hours in the major and 47-48 hours in foundational core. Emphasis is on learning the different styles of publishable genres through courses in article writing, freelance writing, journalism, and scriptwriting in order to train the student to deliver quality content in various forms. All major courses must be completed with a grade of C- or better and are included in the major GPA. This program is only offered through Taylor University Online and residential students are not eligible.

Curriculum Requirements

ART 172	2	Art Appreciation
BIB 110	3	Biblical Literature I
BIB 210	3	Biblical Literature II
COS 101	2	Information Technology Concepts
ENG 110	3	College Composition
IAS 102	1	Orientation to Distance Learning
IAS 110	4	Foundations of the Christian Liberal Arts
KIN 100	2	Living Well
KIN 2001	1	Individualized Physical Education
MAT 110	3	Finite Mathematics
MUS 149	2	Music Appreciation
REL 313	3	Historic Christian Belief

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Select one course from the following:

ENG 240	3	American Literature
ENG 250	3	British Literature

Select one course from the following:

BIO 106	4	Human Biology
PHY 201	3-4	Introductory Astronomy

Select one course from the following:

ANT 200	3	Cultural Anthropology
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

Select one additional course from the following:

ANT 200	3	Cultural Anthropology
JUS 100	3	Introduction to Criminal Justice
PSY 100	3	Introductory Psychology
PSY 240	3	Child Psychology
PSY 495	3	Integration of Psychology and Christianity
SOC 210	3	Contemporary Social Issues
SWK 355	3	Helping Troubled Families

Select one history course of at least 3 credits.

Major Requirements

JRN 115	3	Introduction to Media Writing
PWR 313	2	Article Writing I
PWR 314	2	Article Writing II
PWR 323	3	Non-Fiction and Scriptwriting
PWR 472	3	Freelance Writing

Select 6 hours of additional electives.

Certificate in Professional Writing - Taylor University Online

A certificate in Professional Writing emphasizes learning the different styles of writing and requires 22 hours. This certificate does not include a transcript entry. This certificate is only offered through Taylor University Online and residential students are not eligible.

Certificate Requirements

CAC 220	3	Essentials of Written Communication
ENG 110	3	College Composition
PWR 313	2	Article Writing I
PWR 314	2	Article Writing II
PWR 323	3	Non-Fiction and Scriptwriting
PWR 327	3	Introduction to Fiction Writing
PWR 472	3	Freelance Writing

Select one course from the following:

ENG 240	3	American Literature
ENG 250	3	British Literature

Public Relations (BA)

The Bachelor of Arts degree in Public Relations requires two years of one foreign language and 48-60 major hours. Majors must participate in three semesters of media involvement. Optional concentrations in Health Public Relations, Integrated Marketing, Nonprofit Public Relations, or Sport Public Relations may be added. No more than 50% of the credits may overlap with another major or minor. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

CAC 125	2	Communication Major Orientation
CAC 220	3	Essentials of Written Communication
CAC 225	3	Communication Theory and Research
CAC 340	3	Intercultural Communication
CAC 485	2	Senior Capstone

Major Requirements

ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
CAC 158	2	Digital Tools: Office Suite
CAC 345	3	Social Media Strategy
JRN 332	3	Layout and Design
PBR 261	3	Introduction to Public Relations
PBR 361	3	Public Relations Cases and Campaigns
PBR 393	3	Practicum
PBR 461	3	Public Relations Writing and Production
PBR 486	1	Senior Portfolio Development

Select 12 credits from the following not taken in a concentration:

ART 154	1	Digital Tools: Illustrator
ART 356	4	Web Design
COM 111	3	Introduction to Organizational Communication
COM 325	3	Conflict Resolution
COM 327	3	Leadership Communication
COM 330	3	Mediated Communication
COM 372	3	Persuasion
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
JRN 245	3	Introduction to Multimedia Storytelling
JRN 315	3	Advanced Media Writing
PBR 355	3	Networking Study Trip
PBR 455	3	Event and Venue Planning
PBR 457	3	Media Agency
PWR 230	3	Technical Writing
PWR 243	3	Editing
PWR 472	3	Freelance Writing
SOC 250	2	Principles of Research and Analysis

Public Relations requirements continued on next page

Public Relations requirements continued from previous page

Optional Concentrations—Students may select one or more of the following concentrations:

Health Public Relations

KIN 221	3	Exercise as Medicine
PBH 100	3	Introduction to Public Health
PBH 110	3	Global Health

Select 3 credits from the following not already taken in the major:

COM 325	3	Conflict Resolution
EXS 217	3	Health Promotion Program Planning
NAS 230	2	Health Education for Behavior Change
PBR 455	3	Event and Venue Planning
PBR 457	3	Media Agency
PSY 100	3	Introductory Psychology
SUS 120	1	Environmental Stewardship and Sustainable Living

Integrated Marketing

MGT 201	3	Introduction to Business
MKT 231	3	Principles of Marketing
MKT 390	3	Digital Marketing

Select 3 credits from the following not already taken in the major:

COM 325	3	Conflict Resolution
COM 327	3	Leadership Communication
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 422	3	New Venture Planning
JRN 245	3	Introduction to Multimedia Storytelling
MKT 410	3	Marketing Research
MKT 445	3	Best Practices in Marketing
MKT 460	3	Consumer Behavior
PBR 355	3	Networking Study Trip
PBR 455	3	Event and Venue Planning
PBR 457	3	Media Agency

Nonprofit Public Relations

COM 111	3	Introduction to Organizational Communication
COM 327	3	Leadership Communication
COM 335	3	Nonprofit Organizational Communication
OVC 310	3	Philanthropy and Grant-Writing

Sport Public Relations

SMA 210	3	Introduction to Sport Technology and Analytics
SMA 350	3	Sport Management
SMA 351	3	Sport Public Relations

Select 3 credits from the following not already taken in the major:

COM 325	3	Conflict Resolution
COM 327	3	Leadership Communication
JRN 230	3	Introduction to Sports Writing
MKT 231	3	Principles of Marketing
PBR 455	3	Event and Venue Planning
PBR 457	3	Media Agency
SMA 352	3	Event and Facility Management
SMA 354	3	Sport Finance
SMA 393	1-4	Practicum
SMA 430	3	Legal Issues in Sport

Public Relations/Systems (BS)

The Bachelor of Science degree in Public Relations/Systems consists of at least 48 major hours and curriculum requirements in information systems and analytics. Majors must participate in three semesters of media involvement. Optional concentrations in Health Public Relations, Integrated Marketing, Nonprofit Public Relations, or Sport Public Relations may be added. No more than 50% of the credits may overlap with another major or minor. All major courses, including information systems and analytics curriculum, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

¹Selection may depend on major.

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

PBR 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

Public Relations Minor

The Public Relations minor requires 21 hours. No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

CAC 345	3	Social Media Strategy
PBR 261	3	Introduction to Public Relations
PBR 361	3	Public Relations Cases and Campaigns
PBR 461	3	Public Relations Writing and Production

Select 9 credits from the following:

ART 156	1	Digital Tools: Photoshop
ART 157	1	Digital Tools: InDesign
ART 356	4	Web Design
CAC 158	2	Digital Tools: Office Suite
COM 111	3	Introduction to Organizational Communication
COM 325	3	Conflict Resolution
COM 327	3	Leadership Communication
COM 330	3	Mediated Communication
COM 372	3	Persuasion
JRN 115	3	Introduction to Media Writing
JRN 315	3	Advanced Media Writing
JRN 332	3	Layout and Design
PBR 355	3	Networking Study Trip
PBR 455	3	Event and Venue Planning
PBR 457	3	Media Agency
PWR 472	3	Freelance Writing

Communication Courses

CAC 125 2 hours
Communication Major Orientation
Explores the communication majors, focusing on requirements and career options. The course is designed to aid students as they prepare for both their coursework on campus and career decisions upon graduation. *Offered Fall semester.*

CAC 158 2 hours
Digital Tools: Office Suite
Provides an overview of Microsoft Office Suite, particularly focusing on Excel. *Offered Fall and Spring semesters.*

CAC 160 3 hours
Integrative Communication
Integrative communication explores and develops public, interpersonal, organizational, and small group communication skills. Students will learn how to analyze and adapt to the needs of diverse audiences and contexts using verbal and nonverbal communication principles. *Meets foundational core speaking requirement.*

CAC 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

CAC 220 3 hours
Essentials of Written Communication
Teaches fundamentals of professional written communication. Students complete a variety of assignments exemplifying the types of writing routinely practiced in business settings including letters, resumes, news releases, reports, proposals, instructions, and other forms of business communication. The emphasis is on real world experience and application. *Offered Fall and Spring semesters.*

CAC 225 3 hours
Communication Theory and Research
Examines paths of inquiry in the communication discipline. Students study, analyze, and explain dimensions of communication within a variety of contexts. *Offered Fall and Spring semesters.*

CAC 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

CAC 340 3 hours
Intercultural Communication
The study of the complex process of intercultural communication. The course seeks to create an awareness of culture-bound assumptions and ways to communicate more effectively with persons from other cultures.

CAC 345 3 hours
Social Media Strategy
Explores using social media strategically and creating written strategy for usage. First half of the semester focuses on students' professionalizing their personal social media; second half includes working with clients to build a social media strategy for their businesses.

CAC 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

CAC 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

CAC 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during the Summer.*

CAC 450 1 hour
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. *Tutorial and peer review methods are used to monitor student's progress in writing the senior thesis. Offered Spring semester.*

CAC 485 2 hours
Senior Capstone
Senior communication department majors will complete a senior project or paper and prepare for employment and graduate school. **Offered Fall semester.**

CAC 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Communication Courses

COM 111 3 hours
Introduction to Organizational Communication
Introduces students to foundational principles of communication as applied in general organizational contexts.

COM 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

COM 210 3 hours
Public Speaking
Explores the development of speaking strategies and skills, including audience analysis, nonverbal and visual communication, research, organization, the use of evidence to support a point of view, delivery, and listening. *Meets foundational core speaking requirement.*

COM 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

COM 301 3 hours
Strategic Communication
Explores communication issues in organizations through an application of communication principles, concepts, and theories to prepare students for critical evaluation and management of communication plans, strategies, and assessments.

COM 320 3 hours
Interpersonal Communication
Studies interpersonal theories, research, and biblical principles in order to better understand one's own identity and interactions with others. Understanding, creating, and analyzing personal messages in various contexts.

COM 325 3 hours
Conflict Resolution
Applies foundational principles of communication in organizations to conflict contexts with the purpose of preparing students to mediate and resolve conflict in organizations.

COM 327 3 hours
Leadership Communication
Applies foundational principles and theories of communication to issues common in leadership contexts.

COM 330 3 hours
Mediated Communication
Explores principles of interpersonal and public communication through the lens of mediated forms of communication.

COM 335 3 hours
Nonprofit Organizational Communication
Applies foundational principles of organizational communication to issues common in nonprofit and faith-based organizations.

COM 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

COM 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

COM 372 3 hours
Persuasion
Analysis and application of the strategies and theories of verbal and visual persuasive messages and persuasive campaigns in a variety of contexts including advertising, politics, and social movements. *Prerequisite: COM 210.*

COM 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

COM 411 3 hours
Advanced Organizational Communication
Students apply developed understanding of principles, theories, and issues to evaluate popular organizational wisdom. *Prerequisites: COM 301 and COM 327.*

COM 420 3 hours
Communication Audit
Applies a developed understanding of principles, theories, and issues through the practical creation of a communication strategy and training material developed after primary research in a communication audit. *Prerequisites: COM 301 and COM 327.*

COM 430 3 hours
Restorative Communication
Examines dysfunctional communication behaviors which lead to the deterioration of interpersonal relationships and the unique communication behaviors which lead to reconciliation of interpersonal relationships. *Prerequisite: COM 320.*

COM 486 1 hour
Senior Paper/Portfolio Development
Seniors will develop their senior paper/portfolio. *Prerequisite: CAC 485. Offered Spring semester.*

COM 492 8-16 hours
Internship
Professional semester of supervised internship in a work setting related to the major field of study. *Prerequisites: Completion of departmental core and major core courses and approval of the department faculty.*

Multimedia Journalism Courses

JRN 115 3 hours
Introduction to Media Writing
Examines a variety of journalistic writing techniques and formats, with a focus on accurate and concise writing. Students will write for print, broadcast, and the web. Emphasis is on improving writing/editing and on telling stories across different media platforms. *Offered Fall and Spring semesters.*

JRN 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

JRN 225 3 hours
Foundations of Photojournalism
Provides a solid understanding of camera use, focusing on camera settings, equipment, techniques, skills, and concepts of digital photography as applied to journalistic storytelling for news, features, and photo essay. Students should own or have access to a digital SLR camera (some department cameras are available to loan). *Prerequisite: ART 156. Offered Spring semester of odd years.*

JRN 230 3 hours
Introduction to Sports Writing
This introductory course in sports writing and reporting covers the basics of how to create and pursue story ideas, then write and execute them for public consumption, whether in print or online. Students will receive experience covering live sporting events of area high school, collegiate, or professional athletic teams and writing stories about the same.

JRN 245 3 hours
Introduction to Multimedia Storytelling
Teaches students basics of multimedia storytelling best practices to produce multimedia news and feature stories via video, audio, photography, research, and writing. Specifically, this course will help prepare students to further develop their skills as reporters, interviewers, writers, photographers and audio/video recorders, and editors for traditional media, nonprofits, business, and industry. *Prerequisites: JRN 115; JRN 225 is preferred.*

JRN 255 3 hours
Media and Society
This course examines the history, operations, and effects of media industries including magazines, newspapers, radio, television, film, public relations, advertising, and the Internet. *Offered Fall and Spring semesters.*

JRN 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

JRN 300 1-2 hours
Media Laboratory
Two hours may be earned per semester by students holding the top leadership positions in authorized campus student communications: newspaper, yearbook, radio, or in-house production. One hour of credit may be earned per semester by those holding secondary media positions. Media lab hours may also be earned for special departmental projects approved by the faculty advisor and department chair. *A maximum of eight hours of media lab may be counted toward graduation. Offered Fall and Spring semesters. Prerequisite: Instructor permission.*

JRN 315 3 hours
Advanced Media Writing
Explores in-depth journalistic writing, introducing students to advanced research and interviewing methods, writing, and editing. *Prerequisite: JRN 115.*

JRN 332 3 hours
Layout and Design
Provides communication students with an understanding of the basic principles of graphic design. Students will learn to recognize, evaluate, and create good design by practicing the points presented in class. *Meets a foundational core aesthetic literacy requirement. Offered Fall and Spring semesters.*

JRN 355 3 hours
Networking Study Trip
Offers an off-campus, partially online course. Students spend the equivalent of one week in a midwest city (e.g. Chicago, Columbus, Grand Rapids). Students read and research corporate culture and communication before visiting various organizations (both NFP and corporate). *Offered Interterm of even years. Course fee.*

JRN 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

JRN 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

JRN 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

JRN 435 3 hours
Magazine Production and Feature Writing
Develops advanced student research and reporting skills in magazine writing. Specifically, this course prepares students to be competent reporters, interviewers, designers, and writers as they plan and create a magazine. The course also introduces students to the magazine industry and its inner workings. *Prerequisites: JRN 115 and JRN 332. Offered Fall semester of even years.*

JRN 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

JRN 457 3 hours
Media Agency
Provides a real-world, client-focused experience for students through an in-house media agency. Select students will manage media campaigns from start to completion, assuming a variety of roles: writing, graphic design, web design, social media, public relations, photography, and communication strategy. *Prerequisites: JRN 332, significant upper division courses in the major, and instructor permission. Offered Fall semester of even years.*

JRN 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

JRN 486 1 hour
Senior Portfolio Development
Senior journalism majors will complete a senior portfolio. *Prerequisites: CAC 485 and senior status. Offered Spring semester.*

JRN 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

JRN 492 8-16 hours
Internship
Professional semester of supervised internship in a work setting related to the major field of study. *Prerequisites: Completion of departmental core and major core courses and approval of the department faculty.*

Public Relations Courses

PBR 170 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	PBR 450 Directed Research Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.	1-4 hours
PBR 261 Introduction to Public Relations Analyzes public relations theory and practice, examining public relations environments, audiences, and message strategies. Emphasis is placed on history, ethics, writing, and crisis management. Offered Fall semester and offered Spring semester as needed.	3 hours	PBR 455 Event and Venue Planning Focuses on the event planning aspect of public relations. Students learn concepts of venue and event planning and management from theory to the initial phases to the evaluation phase of a major event they plan throughout the semester. Prerequisite: PBR 261. Offered Fall semester of odd years.	3 hours
PBR 270 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	PBR 457 Media Agency Provides a real-world, client-focused experience for students through an in-house media agency. Select students will manage media campaigns from start to completion, assuming a variety of roles: writing, graphic design, web design, social media, public relations, photography, and communication strategy. Prerequisites: JRN 332, significant upper division courses in the major, and instructor permission.	3 hours
PBR 300 Media Laboratory Two hours may be earned per semester by students holding the top leadership positions in authorized campus student communications: newspaper, yearbook, radio, or in-house production. One hour of credit may be earned per semester by those holding secondary media positions. Media lab hours may also be earned for special departmental projects approved by the faculty advisor and department chair. A maximum of eight hours of media lab may be counted toward graduation. Offered Fall and Spring semesters. Prerequisite: instructor permission.	1-2 hours	PBR 461 Public Relations Writing and Production Emphasizes the development and application of public relations writing, including promotional kits, grant proposals, pitches, and other forms of public relations writing. This class connects with outside clients for real-world experience. Prerequisite: PBR 261. Offered Spring semester.	3 hours
PBR 355 Networking Study Trip Offers an off-campus, partially online course. Students spend the equivalent of one week in a midwest city (e.g. Chicago, Columbus, Grand Rapids). Students read and research corporate culture and communication before visiting various organizations (both NFP and corporate). Offered Interterm of even years or as needed. Course fee.	3 hours	PBR 480 Seminar A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.	1-4 hours
PBR 360 Independent Study An individualized, directed study involving a specified topic.	1-4 hours	PBR 486 Senior Portfolio Development Senior public relations majors will complete a senior portfolio. Prerequisite: CAC 485. Offered Spring semester.	1 hour
PBR 361 Public Relations Cases and Campaigns Examines the theory and practice behind creating a public relations campaign and a communication case study. Students work with clients to produce a strategic campaign. They also write a case study following the guidelines of the Arthur Page Society. Prerequisite: PBR 261. Offered Fall semester.	3 hours	PBR 490 Honors Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.	1-2 hours
PBR 370 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	PBR 492 Internship Professional semester of supervised internship in a work setting related to the major field of study. Prerequisites: Completion of departmental core and approval of the department faculty.	8-16 hours
PBR 393 Practicum Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Offered primarily during Summer.	1-4 hours		

Professional Writing Courses

PWR 101 Introduction to Professional Writing Introduces the fundamentals of becoming a professional writer and how using words well translates into many areas of the job world—publishing and beyond. Foundational course for professional writing majors and minors. Offered Fall semester.	3 hours	PWR 243 Editing Provides training in content editing, copyediting, and proofreading for book publishers, magazines, and newspapers. Prerequisites: JRN 115 and PWR 101. Offered Fall semester.	3 hours
PWR 170 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	PWR 270 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours
PWR 215 The Writer's Craft Studies the writer's art. This course considers literary models from a writer's perspective, examining elements of classic and contemporary fiction and nonfiction and discussing their application. It emphasizes reading to develop skill in writing. Prerequisite: PWR 101. Offered Spring semester.	3 hours	PWR 313 Article Writing I An introduction to writing from a Christian worldview and an overview of the different writing genres, with an emphasis on writing articles for publication. Stresses functional skills such as self-editing, interviewing techniques, developing vocabulary skills, and learning to cover news. Through readings and writing assignments, the student will follow a step-by-step process of learning the foundations of article writing. This course is offered through Taylor University Online (TUO).	2 hours
PWR 230 Technical Writing Technical Writing prepares students to design effective technical documents for both written and oral communication. The course emphasizes business communications, technical reports, scientific papers, compliance reporting, and technical documentation.	3 hours	PWR 314 Article Writing II A course concentrating on finding, evaluating, researching, and writing the various kinds of non-fiction articles. Self-editing, interviewing techniques, and developing vocabulary skills are emphasized as students write humor, how-to, inspirational, investigative, opinion, and other types of articles. Building on the foundational skills learned in Article Writing I, students will learn the advanced specialty areas of article writing. This course is offered through Taylor University Online (TUO).	2 hours

PWR 323 3 hours
Non-Fiction and Scriptwriting
Introductory course and workshop in the instruction and practice of writing non-fiction and scriptwriting. *This course is offered through Taylor University Online (TUO).*

PWR 327 3 hours
Introduction to Fiction Writing
An introductory course concentrating on the instruction and practice of writing fiction. *This course is offered through Taylor University Online (TUO).*

PWR 345 3 hours
Inspirational Writing
Focuses on writing for the Christian market: nonfiction (using the Bible well to write good Bible questions for studies and lesson plans for various age groups), devotionals, personal testimonies, and fiction (e.g., short stories, flash fiction). Students develop the ability to write in a captivating manner, showing solid Bible knowledge and understanding. Students also explore Christian writers past and present. *Prerequisite: PWR 101.*

PWR 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

PWR 365 3 hours
Writing Seminar
Concentrated instruction in an area of specialized writing. Writers in residence lead classes and writing workshops on such topics as Detective Fiction, Inspirational Writing, Biography, Magazine Features, Screenplays, and Writing for Children and Young Adults. *Students may receive credit for approved off-campus experiences such as the Los Angeles Film Studies Program and semester at York St. John University. Prerequisite: Permission of chair of the Communication Department. May be taken multiple times for credit. May only count twice toward major or minor requirements.*

PWR 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

PWR 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience.

PWR 423 3 hours
Advanced Non-Fiction Writing
The purpose of this course is to provide advanced academic instruction in applying ethical principles to the process of gathering, analyzing and integrating information into powerful nonfiction books. The ultimate goal is to seek out powerful stories reflecting a Christian worldview and in all work to clearly and accurately communicate truth. *This course is offered through Taylor University Online (TUO).*

PWR 427 3 hours
Advanced Fiction Writing
The purpose of this course is to provide academic instruction in reviewing classic and current prominent fiction written from a Christian perspective, analyzing current fiction and novels, and learning the basics of writing effective fiction. The ultimate goal is to clearly and accurately communicate themes that reflect a Christian worldview in an excellent and effective manner. *Prerequisites: PWR 313, PWR 314, PWR 323, and PWR 327. This course is offered through Taylor University Online (TUO).*

PWR 444 3 hours
Book Editing and Publishing
Students participate in the process of turning a manuscript into a print-ready book. Instructor will solicit manuscripts (potentially from faculty or other established writers) and walk students through the entire process as if they are a publishing house. Students will study publishing houses in depth, work as publishing boards, create pro formas and budgets, work as agents and acquisition editors, then as editors and copy editors. *Offered Spring semester.*

PWR 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

PWR 472 3 hours
Freelance Writing
Offers experience in the techniques and strategies of freelance writing. This course focuses on writing and marketing manuscripts for both religious and secular publications. Students will be required to submit work for publication. *Prerequisite: PWR 101 or instructor permission. Offered Fall semester.*

PWR 475 3 hours
Writing for Publication
Intensive seminar on writing manuscripts for publication. Course offered in partnership with "Write to Publish" conference, often held in Wheaton each June. Students participate in conference and attend workshops with authors, editors, literary agents, and publishers. Students then work closely with instructor to prepare manuscripts for publication. *In addition to tuition, students must pay conference registration fee. Offered Summer term.*

PWR 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

PWR 486 1 hour
Senior Paper/Portfolio Development
Seniors will develop their senior paper/portfolio. *Prerequisite: CAC 485. Offered Spring semester.*

PWR 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

PWR 492 8-16 hours
Internship
Professional semester of supervised internship in a work setting related to the major field of study. *Prerequisites: Completion of departmental core and major core courses and approval of the department faculty.*

English and Modern Languages

Chair, Associate Professor C. King
Professors B. Bird, A. Chang, N. Dayton, A. Housholder, C. Warren
Associate Professors D. Bowman, L. Mook
Assistant Professors A. Pacheco, E. Parker
Instructor G. Hoffman
Visiting Instructor J. Wood

The Department of English and Modern Languages offers courses intended to help students write clearly and effectively and to read literature with critical appreciation and provides the opportunity for students to develop their communication skills in another language in order to gain linguistic, cultural, and literary understanding and to interact meaningfully with people from other cultures.

A major in English prepares students to enter such careers as education, law, business, Christian ministry, writing, editing, research, library science, public relations, travel, civil service, and administration. The major also prepares for graduate-level studies in English. Creative writers will find publishing and editing opportunities in *Parnassus*, an on-campus literary magazine published each Spring semester, and in *Relief*, an international literary journal published each summer. The January interterm offers a travel course to London, England, that combines the study of British literature with visits to important literary and historical sites throughout the United Kingdom. The major in English is offered with a concentration in either Creative Writing or Literature, or in both if there are no overlaps except for ENG 212, ENG 493, and one foundational core survey course.

A major in Spanish prepares students for the future, whether that means sharing their faith, conversing with a neighbor whose first language is not English, or performing a job in the professional realm. In addition to offering foreign language courses to meet the two-year language requirement for the Bachelor of Arts degree, the department offers teaching and non-teaching majors and a minor in Spanish. Majors will need to take courses abroad in order to complete the departmental requirements; in all cases, the department must approve the study abroad courses in advance.

The Bachelor of Arts degree requires completion of two years of one foreign language. The Bachelor of Science degree must be combined with education or systems analysis.

English—Creative Writing Concentration (BA)

The Bachelor of Arts degree in English with a concentration in Creative Writing requires two years of sequential college-level study in one foreign language and at least 46 hours in addition to ENG 110 College Composition. *All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

ENG 211*	3	Introduction to Creative Writing
ENG 212 [^]	3	Critical Approaches to Literature
ENG 492	1	Senior Project Research
ENG 493	3	English Capstone

*Introduction to Creative Writing is a pre-requisite for all upper level writing
[^]Majors must complete ENG 212 prior to taking upper-level literature courses.

Select one course from the following:

ENG 230	3	World Literature
ENG 233	3	Literary London
ENG 240	3	American Literature
ENG 250	3	British Literature

Electives

Select an additional 2 hours of upper-division (300-/400-level) literature courses.

Select at least 24 hours from:

ENG 300	1-2	Literary Editing and Publishing I: Parnassus
ENG 305	3	Writing Theory and Grammar
ENG 320	3	Poetry Writing
ENG 321	3	Fiction Writing
ENG 325	3	Creative Nonfiction
ENG 360 [†]	1-4	Independent Study
ENG 393 [†]	1-4	Practicum
ENG 410 [‡]	3	Advanced Creative Writing
ENG 470 [‡]	3	Literary Editing and Publishing II: Relief Journal
FMA 230 [†]	3	Scriptwriting
JRN 115 [†]	3	Introduction to Media Writing
JRN 315 [†]	3	Advanced Media Writing
JRN 435 [†]	3	Magazine Production and Feature Writing

[†]No more than 9 credits may be used to fulfill the 24-hour requirement.

[‡]ENG 410 and ENG 470 each may be taken twice.

English—Literature Concentration (BA)

The Bachelor of Arts degree in English with a concentration in Literature requires two years of sequential college-level study in one foreign language and at least 46 hours in addition to ENG 110 College Composition. *All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

ENG 212*	3	Critical Approaches to Literature
ENG 230	3	World Literature
ENG 240	3	American Literature
ENG 362	3	Shakespeare
ENG 492	1	Senior Project Research
ENG 493	3	English Capstone

*Majors must complete ENG 212 prior to taking upper-level literature courses.

Literature Requirements

At least one course must be an American^A literature course, and at least one course must be a British^B literature course. Each course may be selected from either before or after 1900.

Select four courses in literature before 1900 from:

ENG 331 ^A	3	American Literature to 1865
ENG 332 ^A	3	American Literature 1865-1945
ENG 361 [†]	3	Drama
ENG 371 ^{A†}	3	The Novel
ENG 412 ^B	3	Early English Literature
ENG 422 ^B	3	Renaissance Literature
ENG 426 ^B	3	Restoration and Eighteenth-Century Literature
ENG 431 ^B	3	Romantic Literature
ENG 441 ^B	3	Victoria Literature

Select two course in literature after 1900 from:

ENG 332 ^{A†}	3	American Literature 1865-1945
ENG 361 [†]	3	Drama
ENG 371 ^{A†}	3	The Novel
ENG 373	3	Literature of Diverse Cultures
ENG 443 ^A	3	American Literature 1945-Present
ENG 444	3	Contemporary Literature
ENG 445 ^B	3	Modern British Literature

[†]May count toward only one category, although they qualify for either pre-1900 or post-1900 requirements.

Electives

Select at least 12 additional elective hours in either literature or writing courses above the 100 level.

English/Systems (BS)

The English/Systems major with a concentration in either Creative Writing or Literature requires the 42-44 hour major and curriculum requirements in information systems and analytics. *All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

ENG 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

English Education (BA/BS)

The English Education major requires 49 hours in addition to education courses. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. *All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

English Requirements

ENG 211	3	Introduction to Creative Writing
ENG 212 [‡]	3	Critical Approaches to Literature
ENG 230	3	World Literature
ENG 240	3	American Literature
ENG 250	3	British Literature
ENG 305	3	Writing Theory and Grammar
ENG 362	3	Shakespeare
ENG 492	1	Senior Project Research
ENG 493	3	English Capstone

[‡]Must complete ENG 212 prior to taking upper-level literature courses.

Literature Requirements

At least one course must be an American literature course, and at least one course must be a British literature course. Each course may be selected from either before or after 1900.

Select four courses in literature before 1900 from:

ENG 331 ^A	3	American Literature to 1865
ENG 332 ^A	3	American Literature 1865-1945
ENG 361 [†]	3	Drama
ENG 371 ^{A†}	3	The Novel
ENG 412 ^B	3	Early English Literature
ENG 422 ^B	3	Renaissance Literature
ENG 426 ^B	3	Restoration and Eighteenth-Century Literature
ENG 431 ^B	3	Romantic Literature
ENG 441 ^B	3	Victoria Literature

Select two course in literature after 1900 from:

ENG 332 ^{A†}	3	American Literature 1865-1945
ENG 361 [†]	3	Drama
ENG 371 ^{A†}	3	The Novel
ENG 373	3	Literature of Diverse Cultures
ENG 443 ^A	3	American Literature 1945-Present
ENG 444	3	Contemporary Literature
ENG 445 ^B	3	Modern British Literature

Electives

Select 6 additional hours of English electives above the 100 level, excluding ENG 309.

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 344	1	Educational Technology in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
ENG 309	3	Teaching English in Secondary, Junior High/Middle School
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

[†]May count toward only one category, although they qualify for either pre-1900 or post-1900.

^AAmerican literature course

^BBritish literature course

Spanish (BA)

The Bachelor of Arts degree with a major in Spanish requires a minimum of 30 hours. Majors will need to take 16 credits abroad in order to complete the departmental requirements. A minimum of 15 credit hours must be completed through Taylor and approved off-campus programs. A maximum of 15 credit hours may be met through transfer courses and AP/CLEP testing. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

SPA 201*	3	Intermediate Spanish I
SPA 202*	3	Intermediate Spanish II
SPA 304	3	Introduction to Spanish Linguistics
SPA 305	3	Communication in Spanish

Select 2 hours from the following:

SPA 310	3	Culture and Civilization of Hispanic America
SPA 370	1-3	Selected Topics (approved by advisor)
SPA 450	1-3	Directed Research
SPA 480	1-3	Seminar

*SPA 201 and/or 202 may be taken as part of the program for approved students. Credit for SPA 201 and 202 may be earned through the College Board Advanced Placement Program (AP) prior to enrollment at Taylor, by completing one upper-level course with a minimum grade of B- or better. The upper-level course must be the first Taylor Spanish course taken at Taylor. Credit may also be earned through the College-Level Examination Program (CLEP). The CLEP test should be completed by the end of the freshman year. Refer to **Language Requirement for Bachelor of Arts Degree** in the Degree Requirements section of this catalog.

Spanish requirements continued on next page

Spanish requirements continued from previous page

Off-Campus Requirements

Select 16 hours from the following approved off-campus programs:

January Program* (Chile, Peru, Cuba)

SPA 3__ 3 Spanish Language Study

Summer in Ecuador*

SPA 3__ 6 Spanish Language Study

Summer in Spain*

SPA 3__ 6 Spanish Language Study

Latin American Studies Program†

LAS 300 6 Spanish Acquisition
 LAS 315 3 Perspectives on Latin America
 LAS 318 1-3 Regional Study Travel
 LAS 350 3 Language and Literature Seminar
 LAS 355 3 Community Immersion/Internship

Semester in Spain†

SIS 304 4 Spanish Short Story
 SIS 306 4 History of Spanish Art
 SIS 307 1-2 Modern Spanish Culture
 SIS 311 4 History and Civilization of Spain
 SIS 312 4 Spain of Three Cultures
 SIS 352 4 Advanced Grammar and Composition
 SIS 355 4 Spanish Literature
 SIS 366 4 Spanish American Literature II
 SIS 401 4 Advanced Communication in Spanish
 SIS 407 4 20th Century Spanish Theater
 SIS 408 4 La Historia de España en el Siglo X

†Students are required to register for 16 credits for the semester. Participation in the program must be approved by the Department of English and Modern Languages.

Spanish Education (BA/BS)

The Spanish Education major consists of the 30-hour major in addition to education curriculum courses. Majors will need to take courses abroad in order to complete the departmental requirements. A minimum of 15 of the 30 major credit hours above must be completed through Taylor and approved off-campus programs. A maximum of 15 of the 30 major credit hours above may be met through transfer courses and AP/CLEP testing. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Professional Education

EDU 150 3 Education in America
 EDU 222 2 Reading in the Content Area for Secondary Teachers
 EDU 260 3 Educational Psychology
 EDU 307 2 Discipline and Classroom Management for Secondary Teachers
 EDU 309 1 Methods of Instruction and Assessment in Secondary Education
 EDU 332 2 The Junior High/Middle School
 EDU 344 1 Educational Technology in Secondary Education
 EDU 384 1 Perspectives on Diversity
 EDU 431 17 Supervised Internship in Secondary Schools
 MDL 309 2 Teaching Modern Languages in Secondary, Junior High/Middle School
 SED 220 3 Exceptional Children

Additional Education Requirements

ENG 110 3 College Composition
 PSY 340 3 Adolescent Psychology

Select one course from the following:

CAC 160 3 Integrative Communication
 COM 210 3 Public Speaking

Spanish/Systems (BS)

The Bachelor of Science degree with a major in Spanish/Systems consists of the 30-hour major and curriculum requirements in information systems and analytics. Majors will need to take 16 credits abroad in order to complete the departmental requirements. A minimum of 15 credit hours must be completed through Taylor and approved off-campus programs. A maximum of 15 credit hours may be met through transfer courses and AP/CLEP testing. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143 3 Interactive Webpage Development
 COS 326 3 Data Visualization
 MAT 151 4 Calculus I
 MAT 382 3 Advanced Statistical Methods
 SYS 390 3 Information Systems Analysis
 SYS 394 4 Information Systems Design

Select one course¹ from the following:

COS 102 3 Fundamentals of Systems and Computing
 SYS 101 3 Introduction to Systems

Select one course¹ from the following:

COS 120 4 Introduction to Computational Problem Solving
 SYS 120 4 Introduction to Problem Solving

Select one course¹ from the following:

PSY 425 3 Industrial-Organizational Psychology
 SYS 330 3 Human Relations in Organizations

Select one course¹ from the following:

MAT 311 3 Introduction to Data Science
 SYS 401 3 Operations Research
 SYS 402 3 Modeling and Simulation

Select one course¹ from the following:

MAT 210 4 Introductory Statistics
 MAT 352 4 Mathematical Statistics

Select one course¹ from the following:

SPA 393 3-4 Practicum
 SYS 393 3-4 Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121 4 Foundations of Computer Science
 ENT 422 3 New Venture Planning
 MGT 201 3 Introduction to Business
 MGT 403 3 Operations Management
 SYS 214 3 Principles of Human Computer Interaction
 SYS 310 3 E-Commerce

¹Selection may depend on major.

Creative Writing Minor

The Creative Writing minor consists of at least 18 hours in addition to ENG 110 College Composition and is excluded from English majors with Creative Writing concentrations. *Literature concentration majors may overlap only ENG 212 Critical Approaches to Literature and English Education majors may only overlap ENG 211 Introduction to Creative Writing and ENG 212 Critical Approaches to Literature.* All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ENG 211	3	Introduction to Creative Writing
ENG 212	3	Critical Approaches to Literature

Note: Introduction to Creative Writing is a pre-requisite for all upper level writing.
Note: Majors must complete ENG 212 prior to taking upper-level literature courses.

Select 6 credits from the following:

ENG 320	3	Poetry Writing
ENG 321	3	Fiction Writing
ENG 325	3	Creative Nonfiction
ENG 360†	1-4	Independent Study
ENG 393†	1-4	Practicum
ENG 410‡	3	Advanced Creative Writing

Select 6 additional credits from the following:

ENG 331	3	American Literature to 1865
ENG 332	3	American Literature 1865-1945
ENG 361	3	Drama
ENG 371	3	The Novel
ENG 373	3	Literature of Diverse Cultures
ENG 412	3	Early English Literature
ENG 422	3	Renaissance Literature
ENG 426	3	Restoration and Eighteenth-Century Literature
ENG 431	3	Romantic Literature
ENG 441	3	Victoria Literature
ENG 444	3	Contemporary Literature
ENG 445	3	Modern British Literature

†Both ENG 360 and ENG 393 cannot be used together to meet the requirement.

‡ENG 410 may be taken twice.

Literature Minor

The Literature minor consists of at least 18 hours in addition to ENG 110 College Composition and cannot be earned with English Education or English with Literature concentrations. *Creative Writing concentration majors may overlap only ENG 212 Critical Approaches to Literature.* All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ENG 212*	3	Critical Approaches to Literature
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Select one course from the following:

ENG 230	3	World Literature
ENG 233	3	Literary London
ENG 240	3	American Literature
ENG 250	3	British Literature

Select four additional 3-hour courses (300-/400-level) in English literature. At least one course must be American literature; at least one course must be British literature; at least one course must be pre-1900; at least one course must be post-1900.

*Majors must complete ENG 212 prior to taking upper-level literature courses.

Spanish Minor

The minor in Spanish requires a minimum of 15 hours. A minimum of 8 minor credits hours must be taken through Taylor and approved off-campus programs. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

SPA 201*	3	Intermediate Spanish I
SPA 202*	3	Intermediate Spanish II
SPA 305	3	Communication in Spanish

*SPA 201 and 202 may be taken as part of the summer program in Ecuador for approved students. Credit for SPA 201 and 202 may be earned through the College Board Advanced Placement Program (AP) prior to enrollment at Taylor, by completing one upper-level course with a minimum grade of B- or better. The upper-level course must be the first Taylor Spanish course taken at Taylor. Credit may also be earned through the College-Level Examination Program (CLEP). The CLEP test should be completed by the end of the freshman year. Refer to **Language Requirement for Bachelor of Arts Degree** in the Degree Requirements section of this catalog.

†Students are required to register for 16 credits for the semester. Participation in the program must be approved by the Department of English and Modern Languages and Off-Campus Programs.

Additional Requirements

Select 6 hours from the following:

On-Campus Courses

SPA 304	3	Introduction to Spanish Linguistics
SPA 310	3	Culture and Civilization of Hispanic America
SPA 370	1-3	Selected Topics (approved by advisor)
SPA 450	1-3	Directed Research
SPA 480	1-3	Seminar

January Program* (Chile, Peru, Cuba)

SPA 3__	3	Spanish Language Study
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Summer in Ecuador*

SPA 3__	6	Spanish Language Study
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Summer in Spain*

SPA 3__	6	Spanish Language Study
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Latin American Studies Program†

LAS 300	6	Spanish Acquisition
LAS 315	3	Perspectives on Latin America
LAS 318	1-3	Regional Study Travel
LAS 350	3	Language and Literature Seminar
LAS 355	3	Community Immersion/Internship

Semester in Spain†

SIS 304	4	Spanish Short Story
SIS 306	4	History of Spanish Art
SIS 307	1-2	Modern Spanish Culture
SIS 311	4	History and Civilization of Spain
SIS 312	4	Spain of Three Cultures
SIS 352	4	Advanced Grammar and Composition
SIS 355	4	Spanish Literature
SIS 401	4	Advanced Communication in Spanish
SIS 407	4	20th Century Spanish Theater
SIS 408	4	La Historia de España en el Siglo X

Chinese Courses

CHI 101 4 hours

Elementary Chinese I

The skills of listening, speaking, and writing are taught in the context of daily happenings in the Chinese-speaking world. The essentials of grammar are studied. Lab activities are provided. Offered Fall semester.

CHI 102 4 hours

Elementary Chinese II

See CHI 101. Prerequisite CHI 101. Offered Spring semester.

CHI 201 3 hours

Intermediate Chinese I

Emphasis is placed on the conversational approach with additional reading and writing. Prerequisite: CHI 102. Offered Fall semester.

CHI 202 3 hours

Intermediate Chinese II

See CHI 201. Prerequisite CHI 201. Offered Spring semester.

English Courses

ENG 101 3 hours

Fundamentals of College Composition

Introduction to college-level writing and preparation for ENG 110. Students will improve their ability to read academic texts and respond to them in their own writing. They will learn fundamental writing processes, including improving their credibility, confidence, and voice as writers and revising their writing to meet minimum college-level standards. Offered Fall semester.

ENG 110 3 hours

College Composition

Practice in writing clear and effective prose through several expository modes, including a formal research paper. Brief review of grammar and mechanics as necessary, with concentration on analytical thinking. This course must be taken during the freshman year. Meets foundational core writing requirement. ENG 110 is a prerequisite to all other English courses except ENG 101, ENG 230, ENG 233, ENG 240, ENG 243, and ENG 250.

ENG 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ENG 211 3 hours

Introduction to Creative Writing

A general introduction to and overview of creative writing (including poetry, fiction, drama, and creative nonfiction) that meets the requirement for secondary education students and also serves potential majors and other interested students. Classroom setting with textbook; directed workshop activities after midterm facilitated by selected ENG 410 students. Prerequisite: ENG 110. Offered Fall semester.

ENG 212 3 hours

Critical Approaches to Literature

Introduction to basic literary analysis and theory with emphasis on informed reading and critical, written response to selections of poetry, fiction, drama and film. Includes minorities literature. Primarily intended for English majors, but recommended for all students who desire greater reading and writing skills. Prerequisite: ENG 110.

ENG 230 3 hours

World Literature

A selective survey of world literary achievement from antiquity to the present, tracing the development of themes and ideas. Meets foundational core literature requirement.

ENG 233 3 hours

Literary London

An annual January-term course that travels to London and elsewhere in the United Kingdom, enriching the reading and discussion of assigned works of British Literature by experiencing the locations and culture that helped shape those works. Meets foundational core literature requirement. Enrollment with permission of instructor. Offered January interterm.

ENG 240 3 hours

American Literature

A survey of the American literary tradition from its origins to the present, evaluating and comparing themes, ideas and styles. Meets foundational core literature requirement.

ENG 243 3 hours

Latin American Literature

Survey of Latin American Literature offered through the Taylor University Ecuador program. Students will study a variety of genres and literary periods comparing themes, ideas, and styles. Meets the foundational core literature requirement.

ENG 250 3 hours

British Literature

Explores British literature from its beginnings to the present, including a brief historical overview of the development of the English language. Meets foundational core literature requirement.

ENG 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ENG 300 1-2 hours

Literary Editing and Publishing I: Parnassus

Hands-on production of Taylor's literary magazine from concept to finished product. Two credit hours per semester may be earned by students holding senior editorships of Taylor's official literary magazine. One hour per semester may be earned by those holding secondary positions approved by the instructor. A maximum of four hours may count toward fulfilling the English writing concentration requirements; two hours maximum may count toward the English literature concentration requirements. A maximum of six hours in all writing lab courses from any discipline may be earned toward graduation. Prerequisites: Permission of writing coordinator, ENG 211, and ENG 212.

ENG 305 3 hours

Writing Theory and Grammar

An introduction to the theories, research, and pedagogy of composition (including grammar). Topics include rhetorical, philosophical, and cognitive theories of writing; composition research; and writing pedagogy. Course designed for both creative writing and English education majors. Prerequisite: ENG 110.

ENG 309 3 hours

Teaching English in Secondary, Junior High/Middle School

A junior-level course that presents models of professionalism for English Education majors. Strategies and techniques for effective planning, teaching, and evaluating materials with English/Language Arts curricula are demonstrated and developed. Does not count as a major or minor elective. Prerequisites: EDU 150, EDU 260, and approval into the Teacher Educational Program.

ENG 311 3 hours

Writing and Rhetoric

Examines the foundational ideas from rhetoric and composition studies that relate to the effectiveness of written communication. Students will learn to apply these ideas to their own writing. Topics include classical to contemporary rhetoric, the essay, persuasion, and construction of meaning through writing, invention, and voice. Offered January interterm of odd years. Prerequisites: ENG 211 and 212.

ENG 320 3 hours

Poetry Writing

Comprehensive instruction and guided workshop in writing poetry. Recommended for English BA majors with either literature or writing concentrations; available to all majors. Prerequisites: ENG 110 and 211. Offered Spring semester.

ENG 321 3 hours

Fiction Writing

Comprehensive instruction and guided workshop in writing fiction. Recommended for English BA majors with either literature or writing concentrations; available to all majors. Prerequisites: ENG 110 and 211. Offered Spring semester.

ENG 325 3 hours

Creative Nonfiction

Comprehensive instruction and guided workshop in creative nonfiction. Emphasis on distinguishing and practicing sub-genres, such as memoir, nature essay, personal essay and journalistic essay. Prerequisites: ENG 110 and ENG 211. Offered Spring semester of even years.

ENG 331 3 hours

American Literature to 1865

Explores the complexity of literary origins with its variety of Native-American, discovery, colonial, federal, Enlightenment, and African-American voices through the Romantic period. Prerequisites: ENG 212 and 200-level English literature course. Offered Fall semester of odd years.

ENG 332 3 hours

American Literature 1865-1945

Explores the themes and characteristics of key works of American fiction, poetry, and drama in the context of the late nineteenth and mid-twentieth century. Prerequisites: ENG 212 and 200-level English literature course. Offered Fall semester of even years.

ENG 333 3 hours

Business and Technical Writing

Practice in the forms of writing required in business and industry. Prerequisites: ENG 110, ENG 211, and ENG 212.

ENG 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic. *Prerequisites: ENG 211 and ENG 212.*

ENG 361 3 hours
Drama
 A selective survey of the historical development of drama from its origins to the present day. Counts for either pre-twentieth- or twentieth-century requirement. *Prerequisite: ENG 212 and 200-level English literature course. Offered Spring semester of odd years.*

ENG 362 3 hours
Shakespeare
 Intensive analysis of selected plays and sonnets. Attention is given to the conventions of the Elizabethan and Jacobean theater. *Prerequisite: ENG 212 and 200-level English literature course. Offered Spring semester.*

ENG 370 1-4 hours
Selected Topics
 A course offered on a subject of interest at the discretion of the department but not listed as a regular course offering. *Such courses may count as major elective hours or foundational core hours, pending the approval of the English Department. Prerequisite: ENG 212 and 200-level English literature course. Offered primarily during January interterm and occasional Fall or Spring semesters.*

ENG 371 3 hours
The Novel
 A selective survey of the historical development of the novel, from its origins to the present day. Counts for either pre-twentieth- or twentieth-century requirement. *Prerequisite: ENG 212 and 200-level English literature course. Offered Spring semester of even years.*

ENG 373 3 hours
Literature of Diverse Cultures
 A critical study of life in a global community, focusing on the twentieth-century literature of one or more cultures. Primarily intended for English majors, but recommended for all students desiring cross-cultural awareness. *Prerequisite: ENG 212 and 200-level English literature course. Offered Spring semester of even years.*

ENG 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer. Prerequisites: ENG 211 and ENG 212.*

ENG 410 3 hours
Advanced Creative Writing
 Intensive practice in selected creative genres. Students may also serve as workshop leaders for ENG 211 students. *May be taken twice. Prerequisite: Permission of instructor and ENG 211, ENG 212, ENG 320, ENG 321, ENG 325, or ENG 472. Offered Fall semester.*

ENG 412 3 hours
Early English Literature
 A selective study of English literature from "Beowulf" through Chaucer and Malory's "Le Morte d'Arthur." *Prerequisite: ENG 212 and 200-level English literature course. Offered Fall semester of odd years.*

ENG 422 3 hours
Renaissance Literature
 A study of representative prose writers and non-dramatic poets of the English Renaissance, such as More, Spenser, Donne, Herbert, and Milton. *Prerequisite: ENG 212 and 200-level English literature course. Offered Spring semester of even years.*

ENG 426 3 hours
Restoration and Eighteenth-Century Literature
 A selective study of poets and prose writers from 1660 to 1798, such as Defoe, Dryden, Fielding, Pope, Swift, Boswell, and Johnson. *Prerequisites: ENG 212 and 200-level English literature course. Offered Fall semester of even years.*

ENG 431 3 hours
Romantic Literature
 A study of writers from 1798 to 1832, such as Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, and Lamb. Some attention is given to representative novelists. *Prerequisites: ENG 212 and 200-level English literature course. Offered Fall semester of even years.*

ENG 441 3 hours
Victorian Literature
 English authors from 1832 to 1901, such as Tennyson, Browning, Arnold, Carlyle, Newman and Ruskin. Some attention is given to representative novelists. *Prerequisite: ENG 212 and 200-level English literature course. Offered Fall semester of odd years.*

ENG 443 3 hours
American Literature 1945-Present
 Explores the themes and characteristics of American fiction, poetry, and drama from the mid-twentieth century period to the present. *Prerequisites: ENG 212 and 200-level English literature course. Offered Fall semester of even years and Spring semester of odd years.*

ENG 444 3 hours
Contemporary Literature
 A study of selected poetry, fiction, and drama since 1960. *Prerequisite: ENG 212 and 200-level English literature course. Offered Fall semester of odd years.*

ENG 445 3 hours
Modern British Literature
 A study of poetry, fiction, nonfiction, and drama by such twentieth-century writers as Woolf, Joyce, Eliot, Auden, Beckett, Lessing, and Larkin. *Prerequisites: ENG 212 and 200-level English literature course.*

ENG 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

ENG 470 3 hours
Literary Editing and Publishing II: Relief Journal
 This advanced course has two main focal points: an introduction to literary editing and publishing in general and the publication of the national journal Relief in particular. Relief publishes creative writing and visual art that help shape the landscapes of faith, imagination, and creativity for the contemporary reader. *May be taken twice. Prerequisites: Permission of the instructor, ENG 211, ENG 212, and ENG 300.*

ENG 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

ENG 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

ENG 492 1 hour
Senior Project Research
 Students are required to meet on a regular basis with senior project directors in order to plan, draft, and complete a preliminary version of the senior project.

ENG 493 3 hours
English Capstone
 Designed as a culminating experience for all English majors wherein students evaluate the status and the goals of their studies in a flexible forum exploring academic and professional issues. Senior Projects are completed for submission to project directors. *Prerequisite: ENG 492. Offered January interterm.*

French Courses

FRE 101 4 hours
Elementary French I
 Stresses reading and the use of spoken language, including the essentials of grammar, and offers an introduction to French culture. Includes coordinated lab activities. *Offered as needed.*

FRE 102 4 hours
Elementary French II
 See FRE 101. *Prerequisite FRE 101. Offered as needed.*

FRE 201 3 hours
Intermediate French I
 Continues and builds upon the approach of FRE 101 and FRE 102 through grammar review and intensive reading. Language lab activities are provided to promote oral communication. *Prerequisite FRE 102.*

FRE 202 3 hours
Intermediate French II
 See FRE 201. *Prerequisite FRE 201.*

Korean Courses

KOR 101 4 hours
Elementary Korean I
The first half of the elementary Korean language course. This course is designed for those who have no previous (or very limited) knowledge of the Korean language. Emphasis will be placed on the fundamentals of listening, speaking, and the introduction of Korean culture. *Offered Fall semester.*

KOR 102 4 hours
Elementary Korean II
The second part of first year Korean. The course provides students with further conversational and grammatical skills beyond those learned in the first semester. *Prerequisite KOR 101. Offered Spring semester.*

KOR 201 3 hours
Intermediate Korean I
The first half of second year Korean language course. The objective of the course is to equip students with communicative skills in speaking, reading, and writing at the intermediate level in Korean, such as expanding simple ideas into imposing various kinds of the speaker's stance. *Prerequisite: KOR 102. Offered Fall semester.*

KOR 202 3 hours
Intermediate Korean II
The second part of second year Korean. The course provides students with further conversational and grammatical skills beyond those learned in the first semester. *Prerequisite KOR 201. Offered Spring semester.*

Spanish Courses

SPA 101 4 hours
Elementary Spanish I
The skills of listening, speaking, reading, and writing are taught in the context of daily happenings in the Spanish-speaking world. The essentials of grammar are studied. Lab activities are provided.

SPA 102 4 hours
Elementary Spanish II
See SPA 101. Prerequisite: SPA 101.

SPA 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SPA 201 3 hours
Intermediate Spanish I
Emphasis is placed on the conversational approach with additional reading and writing. *Prerequisite: SPA 102.*

SPA 202 3 hours
Intermediate Spanish II
See SPA 201. Prerequisite: SPA 201.

SPA 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SPA 301 3-6 hours
Spanish Conversation I
Intensive practice in oral Spanish to increase fluency and authenticity through activities and conversation in Cuenca, Ecuador.

SPA 302 3 hours
Spanish Language Study
A course designed for the promotion of oral and written proficiency with an emphasis on experiential learning, cultural and linguistic immersion. Students will have intensive practice to increase communicative competence through advanced level activities and conversations. *Offered as Interterm and Summer trips in various locations and Fall and Spring in Ecuador.*

SPA 304 3 hours
Introduction to Spanish Linguistics
Introduction to the way the Spanish language is structured and to the various subfields of linguistic analysis, such as morphology, syntax, and semantics. Students will be required to analyze the linguistic structure of sounds, words, and phrases. *Prerequisite: SPA 202.*

SPA 305 3 hours
Communication in Spanish
A course designed for the promotion of oral proficiency that focuses on interpersonal and academic discourse of cultural topics related to the Spanish-speaking world. *Prerequisite: SPA 202.*

SPA 310 3 hours
Culture and Civilization of Hispanic America
An historical/cultural overview of the people, and the political, economic, and social forces that have shaped Spanish-speaking countries in the western hemisphere from the 15th century through the contemporary period. *Prerequisite: SPA 305 or instructor's permission.*

SPA 321 3 hours
The Art of Writing Spanish
An advanced workshop experience in the writing of Spanish. Includes a review of grammar and mechanics and practice in several expository modes, including a formal research paper. *Prerequisite: SPA 305 or instructor's permission.*

SPA 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic. *Prerequisite: SPA 305 or instructor's permission.*

SPA 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering. *Prerequisite: SPA 305 or instructor's permission.*

SPA 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Prerequisite: SPA 305 or instructor's permission. Offered primarily during summer.*

SPA 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. *Prerequisite: SPA 305 or instructor's permission.*

SPA 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. *Prerequisite: SPA 305 or instructor's permission.*

SPA 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field. Prerequisite: SPA 305 or instructor's permission.*

Modern Languages Courses

MDL 309 2 hours
Teaching Modern Languages in Secondary, Junior High/Middle School
This course is designed to provide students with fundamental linguistic knowledge of Spanish and French and the application of this knowledge to different aspects of instruction of Spanish/French and to language learning and teaching in bilingual situations. Those aspects include the acquisition of first and second language, the methodologies of foreign language instruction, socio-cultural variables and general knowledge of Spanish morphology and grammar, and understanding the difficulties of English-speaking students in Spanish class. This course consists of three major parts: (1) second language acquisition; (2) Spanish/French grammar approached from the teacher perspective; and (3) sociolinguistics, instructional technology and language assessment. *Prerequisites: EDU 150, 260, approval into the teacher education program, and junior status.*

History, Global, and Political Studies

Chair, Associate Professor K. Johnson
 Orphans and Vulnerable Children Director, Associate Professor C. Sisson
 Professors T. Jones, S. Moeschberger
 Associate Professors E. George, N. Kerton-Johnson, J. Miller, B. Wetzel
 Assistant Professor P. Byers

The Department of History, Global, and Political Studies prepares students for careers as servant-leaders in public service, teaching, law, ministry, public history, and to enter into the challenges presented by a world with millions of at-risk children and communities. The department offers majors in History; Global Studies; Orphans and Vulnerable Children; Political Science, Philosophy, and Economics (PPE); Politics and Law; Politics and Public Service; and Social Studies Education. Minors are offered in Geography, Global Studies, History, International Relations, Legal Studies, Orphans and Vulnerable Children, and Political Science, and PPE.

Most majors require a practicum (1-3 hours) in a professional setting for a Bachelor of Arts; the Bachelor of Science, which includes information systems and analytics, requires most majors to complete 3-4 hours of practicum. Orphans and Vulnerable Children requires two 3-credit practicums, PPE requires one 3-credit practicum, and Social Studies Education requires a 15-credit (student teaching) internship. Practicums are most often completed during the summer and must be pre-approved by the department chair.

Global Studies

The Global Studies program seeks to assist students in preparing for living and serving in the modern world. The focus of the Global Studies curriculum is upon the twenty-first century world and the humane disciplines more than the technical and scientific ones.

Majors from all disciplines who wish to develop a broad understanding of God's people throughout the world and are interested in careers in foreign service, humanitarian agencies, international law, overseas teaching, journalism and other mass media, translation, missions, or international business would clearly benefit from a major or minor in Global Studies.

Students interested in pursuing a major or minor in this program should consult the program director.

Global Studies (BA)

The Bachelor of Arts degree with a major in Global Studies requires completion of 45-47 hours in foundational courses, related field requirements, and a concentration area. Other requirements include a January interterm or semester of international study experience, and a senior paper. In addition, majors must also complete two years of one foreign language. All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.

Foundation Courses

GBS 130	3	Introduction to Global Studies
GBS 210	3	Learning in Global and Intercultural Contexts
GBS 393	3	Practicum
GBS 480	3	Global Studies Senior Seminar
HIS 103	3	World History I
HIS 104	3	World History II
POS 150	3	World Politics

iCross-Cultural Ministries Related Field Courses Requirements

ANT 200	3	Cultural Anthropology (may be taken through TU Online)
CAC 340	3	Intercultural Communication
Select <u>one</u> course from:		
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition

Related Field Courses

Select three courses from at least two related fields, which are not in the concentration area. East Asia Studies concentrations must take CAC 340 as one of three courses. ⁱCross-Cultural Ministries concentrations must take the three courses noted above.

Advanced Modern Language

SPA 305	3	Communication in Spanish
SPA 310	3	Culture and Civilization of Hispanic America
SPA 312	3	Culture and Civilization of Spain

Business and Economics

ECO 202	3	Principles of Macroeconomics
ITB 375	3	International Business

Communication Arts or English

CAC 340	3	Intercultural Communication
ENG 373	3	Literature of Diverse Cultures
ENG 444	3	Contemporary Literature

Environmental Science, Public Health, and Sustainable Development

SUS 310	3	Poverty and Sustainable Development
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Fine Arts

ART 316	3	Asian Art History
MUS 243	3	Music and World Cultures

Geography

GEO 220	3	Regional Geography
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Orphaned and Vulnerable Children

OVC 110	3	Introduction to Working with Orphans and Vulnerable Children
OVC 220	3	Violence Against Children

Philosophy and Religion

PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition
REL 391	3	Preparation and Strategy for Christian World Mission

Political Science

POS 215	3	Human Trafficking
POS 374	3	Religious Liberty and Christian Freedom

Sociology

ANT 200	3	Cultural Anthropology (may be taken through TU Online)
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Select one of the following concentration areas and complete a minimum of 15^t hours within that concentration:

Cross-Cultural Ministries (requires 17 hours)

CMI 100	3	Introduction to Christian Ministries
CMI 262	3	Personal Foundations for Ministry
REL 311	3	Foundations of Christian World Mission
REL 391	3	Preparation and Strategy for Christian World Mission
REL 432	2	World Mission Area Studies

Select one course from:

BIB 272	3	Inductive Study of the Bible
BIB 330	3	Acts and the Early Church

Global Studies requirements continued on next page

East Asia Studies

ART 316	3	Asian Art History	Select additional hours from the following to reach <u>15</u> credit hours:
HIS 226	3	Women in World History	
PHI 323	3	World Religions: Eastern Tradition	
HIS 312	3	History and Geography of East Asia	
IAS 370	3	Selected Topics (approved by advisor)	

Additional hours from language courses in Chinese or Korean, not counting toward foreign language proficiency, may count toward concentration elective hours with the approval of the department chair. Students must study overseas in China, Japan, Korea, or Thailand—ITB 381 cannot meet both this requirement and elective hours in the concentration.

ITB 381	3-4	International Business Study Tour
MUS 243	3	Music and World Cultures

European Studies

Select <u>15</u> credit hours from the following:			A minimum of <u>6</u> hours must be earned from off-campus programs in Europe.
HIS 240	3	European Religious History	
HIS 331	4	Reformation and Enlightenment	
HIS 342	4	History of England	
HIS 370	1-4	Selected Topics (approved by advisor)	

International Relations

POS 462	3	Theories of International Relations	Select <u>12</u> credit hours from the following:
POS 222	3	Comparative Politics	
POS 321	3	Modern Middle East	
POS 325	3	American Foreign Policy	
POS 350	3	International Security	
POS 374	3	Religious Liberty and Christian Freedom	

Middle East Studies

Select <u>15</u> credit hours from the following:			A maximum of <u>2</u> hours may be earned from Jerusalem University College or <u>12</u> hours from the Best Semester Program in Amman, Jordan.
HIS 226	3	Women in World History	
HIS 321	3	The Modern Middle East	

Peace and Conflict Studies

GBS 325	3	Peace and Conflict: Peacebuilding and Reconciliation	Select <u>one</u> course from the following:
HIS 310	3	The Modern Civil Rights Movement	
POS 325	3	American Foreign Policy	
HIS 226	3	Women in World History	
HIS 227	3	War in American History	

Select <u>3</u> credit hours from the following:		
OVC 220	3	Violence Against Children
SOC 220	3	Ethnic and Minority Issues
SOC 370	3-4	Selected Topics (approved by advisor)

A maximum of 2 hours may be earned from the Irish Studies Program Semester in Greystones, Ireland.

Spanish Language and Literature

Select <u>15</u> credit hours from the following:			SPA 321	3	The Art of Writing Spanish
SPA 304	3	Introduction to Spanish Linguistics	SPA 332	4	Contemporary Spanish American Literature
SPA 305	3	Communication in Spanish	SPA 370	1-4	Selected Topics (approved by advisor)
SPA 310	3	Culture and Civilization of Hispanic America	SPA 422	4	Spanish Literature from 1700 to Present
SPA 312	3	Culture and Civilization of Spain			

A maximum of 15 hours may be earned from the Cuenca (Ecuador), Latin American Studies Program, or the Semester in Spain Program.

Sustainability

PBH 110	3	Global Health	Select <u>one</u> course from the following:
SUS 120	1	Environmental Stewardship and Sustainable Living	
SUS 231	4	Environmental Science, Society, and Sustainability	
SUS 310	3	Poverty and Sustainable Development	
SUS 310L	1	Poverty and Sustainable Development Lab	
ENS 383	4	Environmental Ethics	
PBH 335	4	Environmental Health	
PBH 345	3	International Humanitarian Response	

SUS 315	4	Sustainable Agriculture and Food Systems
SUS 325	4	Sustainable Development in Practice
SUS 370	3-4	Selected Topics (approved by advisor)

World Politics and Economics

ECO 442	3	Economic Development	Select <u>one</u> course from the following:
PPE 213	3	International Political Economy	
HIS 311	3	History and Geography of Latin America	
HIS 312	3	History and Geography of East Asia	
HIS 313	3	History and Geography of Africa	

Select <u>two</u> courses from:		
POS 222	3	Comparative Politics
POS 321	3	Modern Middle East
POS 325	3	American Foreign Policy
POS 350	3	International Security

HIS 315	3	History and Geography of South Asia
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Global Studies/Systems (BS)

The Bachelor of Science degree with a major in Global Studies/Systems consists of the 45-47 major hours in addition to curriculum requirements in information systems and analytics. Other requirements include a senior paper and either a January interterm or semester of international study. *All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

GBS 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

Global Studies Minor

The Global Studies minor requires 18 hours with the completion of the foundational courses and three courses from related fields. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Foundation Courses

GBS 130	3	Introduction to Global Studies
GBS 210	3	Learning in Global and Intercultural Contexts

Electives

Select four courses from the following:

ANT 200	3	Cultural Anthropology
CAC 340	3	Intercultural Communication
ECO 442	3	Economic Development
FMA 335	3	International Production
GBS 325	3	Peace and Conflict: Peacebuilding and Reconciliation
HIS 226	3	Women in World History
ITB 375	3	International Business
MUS 243	3	Music and World Cultures
OVC 220	3	Violence Against Children
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition
POS 150	3	World Politics
POS 222	3	Comparative Politics
REL 311	3	Foundations of Christian World Mission
SUS 310	3	Poverty and Sustainable Development
TSL 201	3	Introduction to SLA and the Field of Teaching ESOL
TSL 211	3	Teaching English Internationally

History

History (BA)

The Bachelor of Arts degree with a major in History requires 39 hours and two years of one foreign language. Students majoring in History are advised to plan a program with a proper balance between United States and world history courses. All students expecting to major in History who do not have a strong history background on the secondary level should take HIS 103, 104, 124, and 125 as early in their program as possible. *Optional Women's History and Public History concentrations are available. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

HIS 130	3	Introduction to History
HIS 393	3	Practicum
HIS 480	3	Seminar

Select one of the following history and geography courses:

HIS 211/311	3	History and Geography of Latin America
HIS 212/312	3	History and Geography of East Asia
HIS 213/313	3	History and Geography of Africa
HIS 215/315	3	History and Geography of South Asia
HIS 223	3	The Greco-Roman World
HIS 320	3	Ancient Near Eastern History
HIS 321	3	The Modern Middle East
HIS 335	3	Modern European Empires

United States History Electives

Select a minimum of 12 hours in American history from:

HIS 124	3	History of the United States to 1877
HIS 125	3	History of the United States since 1877
HIS 170	1-4	Selected Topics (approved by advisor)
HIS 227	3	War in American History
HIS 228	3	The Roosevelts
HIS 230	3	American Religious History
HIS 235	3	Women in American History
HIS 245/345	3	Revolutionary America
HIS 270	1-4	Selected Topics (approved by advisor)
HIS 310	3	The Modern Civil Rights Movement
HIS 317	3	The Gilded Age and Progressive Era (1877-1920)
HIS 340	4	Colonial America
HIS 352	3	African-American History
HIS 370	1-4	Selected Topics (approved by advisor)
HIS 371	3	Civil War Era (1820-1880)
HIS 385	3	Constitutional Law I: Foundation
HIS 386	3	Constitutional Law II: Civil Liberties and Rights
HIS 391*	3	The World Since 1945
HIS 392	3	Twentieth Century U.S. History

History requirements continued on next page

History requirements continued from previous page

World History Electives

Select a minimum of 12 hours in world history from:

HIS 103	3	World History I
HIS 104	3	World History II
HIS 170	1-4	Selected Topics (approved by advisor)
HIS 211/311*	3	History and Geography of Latin America
HIS 212/312*	3	History and Geography of East Asia
HIS 213/313*	3	History and Geography of Africa
HIS 215/315*	3	History and Geography of South Asia
HIS 223	3	The Greco-Roman World
HIS 224	3	The Middle Ages
HIS 225	3	Women in Ancient Egypt
HIS 226	3	Women in World History
HIS 237	3	The World War I Generation
HIS 240	3	European Religious History
HIS 270	1-4	Selected Topics (approved by advisor)
HIS 320*	3	Ancient Near Eastern History
HIS 321*	3	The Modern Middle East
HIS 331	4	Reformation and Enlightenment
HIS 335*	3	Modern European Empires
HIS 342	4	History of England
HIS 370	1-4	Selected Topics (approved by advisor)
HIS 391*	3	The World Since 1945

Additional Electives

Select additional hours of history electives to reach 39 credits.

*Courses in different areas may count only once.

History/Systems (BS)

The Bachelor of Science degree with a major in History/Systems consists of the 39 major hours and curriculum requirements in information systems and analytics. Optional concentrations in Public History and Women's History are available. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one courseⁱ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one courseⁱ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one courseⁱ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one courseⁱ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one courseⁱ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one courseⁱ from the following:

HIS 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electivesⁱ, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

ⁱSelection may depend on major.

History—Public History Concentration (BA)

The Bachelor of Arts degree in History with an optional concentration in Public History requires 39 hours and two years of one foreign language. Students are advised to plan a program with a proper balance between United States and world history courses. All students expecting to major in History who do not have a strong history background on the secondary level should take HIS 103, 104, 124, and 125 as early in their program as possible. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

HIS 130	3	Introduction to History
HIS 393†	3	Practicum
HIS 480	3	Seminar

Additional Requirements

HIS 393†	3	Practicum
LIS 165	3	Introduction to the Archives

†Must complete different practicums.

Public History Electives

Select 12 hours in public history from the following:

HIS 223	3	The Greco-Roman World
HIS 224	3	The Middle Ages
HIS 225	3	Women in Ancient Egypt
HIS 226	3	Women in World History
HIS 228	3	The Roosevelts
HIS 235	3	Women in American History
HIS 237	3	The World War I Generation
HIS 245/345	3	Revolutionary America
HIS 317	3	The Gilded Age and Progressive Era (1877-1920)
HIS 320	3	Ancient Near Eastern History
HIS 340	4	Colonial America

History Electives

Select an additional 12 hours in history from the following:

HIS 103	3	World History I
HIS 104	3	World History II
HIS 124	3	History of the United States to 1877
HIS 125	3	History of the United States since 1877
HIS 170	1-4	Selected Topics (approved by advisor)
HIS 211/311	3	History and Geography of Latin America
HIS 212/312	3	History and Geography of East Asia
HIS 213/313	3	History and Geography of Africa
HIS 215/315	3	History and Geography of South Asia
HIS 227	3	War in American History
HIS 230	3	American Religious History
HIS 240	3	European Religious History
HIS 270	1-4	Selected Topics (approved by advisor)
HIS 310	3	The Modern Civil Rights Movement
HIS 321	3	The Modern Middle East
HIS 331	4	Reformation and Enlightenment
HIS 335	3	Modern European Empires
HIS 342	4	History of England
HIS 352	3	African-American History
HIS 370	1-4	Selected Topics (approved by advisor)
HIS 371	3	Civil War Era (1820-1880)
HIS 385	3	Constitutional Law I: Foundation
HIS 386	3	Constitutional Law II: Civil Liberties and Rights
HIS 391	3	The World Since 1945
HIS 392	3	Twentieth Century U.S. History

History—Women's History Concentration (BA)

The Bachelor of Arts degree in History with an optional concentration in Women's History requires 39 hours and two years of one foreign language. Students are advised to plan a program with a proper balance between United States and world history courses. All students expecting to major in History who do not have a strong history background on the secondary level should take HIS 103, 104, 124, and 125 as early in their program as possible. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

HIS 130	3	Introduction to History
HIS 393	3	Practicum
HIS 480	3	Seminar

Additional Requirements

HIS 226	3	Women in World History
HIS 235	3	Women in American History

Women's History Electives

Select 12 hours in women's history from the following:

HIS 223	3	The Greco-Roman World
HIS 224	3	The Middle Ages
HIS 225	3	Women in Ancient Egypt
HIS 228	3	The Roosevelts
HIS 237	3	The World War I Generation
HIS 245/345	3	Revolutionary America
HIS 317	3	The Gilded Age and Progressive Era (1877-1920)
HIS 320	3	Ancient Near Eastern History
HIS 340	4	Colonial America

History Electives

Select an additional 12 hours in history from the following:

HIS 103	3	World History I
HIS 104	3	World History II
HIS 124	3	History of the United States to 1877
HIS 125	3	History of the United States since 1877
HIS 170	1-4	Selected Topics (approved by advisor)
HIS 211/311	3	History and Geography of Latin America
HIS 212/312	3	History and Geography of East Asia
HIS 213/313	3	History and Geography of Africa
HIS 215/315	3	History and Geography of South Asia
HIS 227	3	War in American History
HIS 230	3	American Religious History
HIS 240	3	European Religious History
HIS 270	1-4	Selected Topics (approved by advisor)
HIS 310	3	The Modern Civil Rights Movement
HIS 321	3	The Modern Middle East
HIS 331	4	Reformation and Enlightenment
HIS 335	3	Modern European Empires
HIS 342	4	History of England
HIS 352	3	African-American History
HIS 370	1-4	Selected Topics (approved by advisor)
HIS 371	3	Civil War Era (1820-1880)
HIS 385	3	Constitutional Law I: Foundation
HIS 386	3	Constitutional Law II: Civil Liberties and Rights
HIS 391	3	The World Since 1945
HIS 392	3	Twentieth Century U.S. History

History Minor

Students majoring in PPE, OVC, or a major from another department may add a History minor of 18 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

HIS 130	3	Introduction to History
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Select 6 hours of (200-/300-level) HIS electives.

Select an additional 2 hours of HIS electives.

Women's History Minor

A minor in Women's History consists of 18 hours. No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

HIS 130	3	Introduction to History
HIS 226	3	Women in World History
HIS 235	3	Women in American History

Electives

Select 2 credits from the following:

HIS 223	3	The Greco-Roman World
HIS 224	3	The Middle Ages
HIS 225	3	Women in Ancient Egypt
HIS 228	3	The Roosevelts
HIS 237	3	The World War I Generation
HIS 245/345	3	Revolutionary America
HIS 317	3	The Gilded Age and Progressive Era (1877-1920)
HIS 320	3	Ancient Near Eastern History
HIS 340	3	Colonial America

Legal Studies

The best preparation for graduate training in the field of law is a regular four-year college academic program leading to the Bachelor of Arts degree. The student's major, chosen in consultation with the pre-law advisor, should be one that enhances reading, writing, and analytical skills.

Normally, the courses are taken during the junior or senior years. If, however, the student plans to participate in an off-campus program, such as the American Studies Program, it may be necessary to take one or two of the courses during the sophomore year. Students should consult with their academic advisors or the pre-law advisor about the best time to take pre-law courses.

Legal Studies Minor

As a supplement to their major, students may opt for a Legal Studies minor which consists of 18 hours. Not available to students with a major in Politics and Law. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

LGS 250	3	Law and Society
LGS 441	3	Principles of Legal Analysis
LGS 442	3	Legal Thought
POS 385	3	Constitutional Law I: Foundation
POS 386	3	Constitutional Law II: Civil Liberties and Rights

Select one course from the following:

MGT 311	3	Business Law
POS 327	3	International Law and Justice

Orphans and Vulnerable Children

The Orphans and Vulnerable Children major is an innovative “problem-focused major” where students can start with the challenges of a global orphan crisis and take courses designed to equip them to intervene in meaningful ways. It is designed to pair easily with a complementary discipline. By design, this interdisciplinary major includes elements of developmental psychology, global health, principles of community development, working with families, assessment, and skills in philanthropy.

Students will gain an understanding of issues that range from the development of the individual (including exposure to trauma and violence), to global health and policy issues, to assessing intervention efforts at all levels. Service-learning through practicums and research provide opportunities to apply learning in a hands-on environment and create opportunities for students to contribute to the field as emerging scholars.

Orphans and Vulnerable Children (BA)

The Bachelor of Arts degree with a major in Orphans and Vulnerable Children requires two years of one foreign language and 42-51 major hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

OVC 110	3	Introduction to Working with Orphans and Vulnerable Children
OVC 220	3	Violence Against Children
OVC 310	3	Philanthropy and Grant-Writing
OVC 329	3	Monitoring and Evaluation 1: Data Collection
OVC 393	3	Practicum (<i>global focus</i>)
OVC 393	3	Practicum (<i>United States focus</i>)
OVC 429	3	Monitoring and Evaluation 2: Data Analysis
OVC 493	3	Senior Capstone
PBH 330	3	Assessment for Program Planning
SWK 355	3	Helping Troubled Families

Select one course from the following:

ANT 280	3	Anthropology of Study Abroad, Short-term Mission, and Tourism
GBS 210	3	Learning in Global and Intercultural Contexts

Select one course from the following:

PSY 240	3	Child Psychology
PSY 250	3	Life Span Development

Select one course from the following:

PSY 305	3	Behavior Problems of Children and Adolescents
SED 220	3	Exceptional Children

Select one course from the following:

POS 331	3	Public Policy
SWK 362	3	Social Policy

Complete another major, minor, or select three additional courses totaling at least 2 credits—at least 6 of which must be upper-division (300/400)—from one of the following areas: PBH, PSY, SED, SOC, SWK, or approved Missions.

Orphans and Vulnerable Children (BS)

The Bachelor of Science degree with a major in Orphans and Vulnerable Children requires 45-57 major hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

OVC 110	3	Introduction to Working with Orphans and Vulnerable Children
OVC 220	3	Violence Against Children
OVC 310	3	Philanthropy and Grant-Writing
OVC 329	3	Monitoring and Evaluation 1: Data Collection
OVC 393	3	Practicum (<i>global focus</i>)
OVC 393	3	Practicum (<i>United States focus</i>)
OVC 429	3	Monitoring and Evaluation 2: Data Analysis
OVC 493	3	Senior Capstone
PBH 330	3	Assessment for Program Planning
SWK 355	3	Helping Troubled Families

Select one course from the following:

ANT 280	3	Anthropology of Study Abroad, Short-term Mission, and Tourism
GBS 210	3	Learning in Global and Intercultural Contexts

Select one course from the following:

PSY 240	3	Child Psychology
PSY 250	3	Life Span Development

Select one course from the following:

PSY 305	3	Behavior Problems of Children and Adolescents
SED 220	3	Exceptional Children

Select one course from the following:

POS 331	3	Public Policy
SWK 362	3	Social Policy

Select one course from the following:

PBH 370	3	Special Topics (<i>advisor approved</i>)
POS 215	3	Human Trafficking

Complete another major, minor, or select four additional courses totaling at least 12 credits—at least 2 of which must be upper-division (300/400)—from one of the following areas: PBH, PSY, SED, SOC, SWK, or approved Missions.

Orphans and Vulnerable Children Minor

A minor in Orphans and Vulnerable Children requires 21 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

OVC 110	3	Introduction to Working with Orphans and Vulnerable Children
OVC 220	3	Violence Against Children
OVC 393	3	Practicum

Select one course from the following:

PBH 110	3	Global Health
PBH 370	3	Special Topics (<i>advisor approved</i>)

Select one course from the following:

PSY 240	3	Child Psychology
PSY 250	3	Life Span Development

Select one course from the following:

PSY 305	3	Behavior Problems of Children and Adolescents
SED 220	3	Exceptional Children

Select one course from the following:

OVC 310	3	Philanthropy and Grant-Writing
POS 331	3	Public Policy
SWK 362	3	Social Policy

Political Studies

Political Science, Philosophy, and Economics (BA)

The Bachelor of Arts degree with a major in Political Science, Philosophy, and Economics requires two years of sequential study in one foreign language and 48 hours. A minimum of 28 credit hours must be from upper-division courses. *No more than 50% of the credits may overlap with another major or minor. Students may not double major with nor minor in Economics, Philosophy, or Political Science. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Political Science Requirements

POS 331	3	Public Policy
POS 462	3	Theories of International Relations
PPE 361	3	Western Political Thought
PPE 393	3	Practicum
PPE 467	3	Senior Seminar

Philosophy Requirements

Select one course from the following:

PHI 202	3	History of Philosophy I
PHI 203	3	History of Philosophy II

Select one course from the following:

PHI 201	3	Logic
PHI 262	3	Contemporary Moral Issues
PHI 371	3	Principles of Ethics

Select one additional 3-credit hour PHI[†] upper-division (300-/400-level) course.

Economics Requirements

ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics

Select one course from the following:

ECO 331	3	Intermediate Microeconomics
ECO 332	3	Intermediate Macroeconomics
PPE 213	3	International Political Economy
PPE 220	3	Completing Capitalism
SUS 310	3	Poverty and Sustainable Development

[†]A maximum of 9 credit hours of American Studies Program (ASP) credit may count and may only count toward the practicum or elective credits.

[‡]PHI 413 or approved FCC substitution will not meet requirement for major.

Electives

Select 15 additional hours from the following courses[†]:

ECO 331	3	Intermediate Microeconomics
ECO 332	3	Intermediate Macroeconomics
ECO 333	3	History of Economic Thought
ECO 360	1-4	Independent Study
ECO 442	3	Economic Development
ECO 450	3	Directed Research
PHI 110	3	Introduction to Philosophy
PHI 202	3	History of Philosophy I
PHI 203	3	History of Philosophy II
PHI 262	3	Contemporary Moral Issues
PHI 311	3	Medical Ethics
PHI 322	3	World Religions: Western Tradition
PHI 323	3	World Religions: Eastern Tradition
PHI 342	3	Aesthetics
PHI 355	3	Metaphysics
PHI 360	1-4	Independent Study
PHI 371	3	Principles of Ethics
PHI 382	1-3	Ethics Bowl
PHI 420	3	Continental Philosophy
PHI 425	3	Philosophical and Theological Methods
PHI 432	3	Epistemology
PHI 445	3	Philosophy of Mind
PHI 450	3	Directed Research
PHI 452	3	Philosophy of Religion
POS 100	3	American Politics
POS 150	3	World Politics
POS 222	3	Comparative Politics
POS 245	3	Research in Political Studies
POS 270	1-4	Selected Topics
POS 310	3	Constitutional Development
POS 312	3	Political Behavior
POS 321	3	Modern Middle East
POS 325	3	American Foreign Policy
POS 327	3	International Law and Justice
POS 345	3	Congress and the Presidency
POS 350	3	International Security
POS 360	1-4	Independent Study
POS 370	1-4	Selected Topics
POS 374	3	Religious Liberty and Christian Freedom
POS 450	3	Directed Research
PPE 213	3	International Political Economy
PPE 220	3	Completing Capitalism
SUS 310	3	Poverty and Sustainable Development

Political Science, Philosophy, and Economics/Systems (BS)

The Bachelor of Science degree with a major in Political Science, Philosophy, and Economics/Systems consists of the 48 hour major and curriculum requirements in information systems and analytics. A minimum of 28 credit hours, not including Systems, must be from upper-division courses. *No more than 50% of the credits may overlap with another major or minor. Students may not double major with nor minor in Economics, Philosophy, or Political Science. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

PPE 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Politics and Law (BA)

The Bachelor of Arts degree in Politics and Law requires two years of sequential study in one foreign language and 43-45 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

LGS 250	3	Law and Society
LGS 441	3	Principles of Legal Analysis
LGS 442	3	Legal Thought
PHI 201	3	Logic
POS 224	3	Foundations of Freedom
POS 327	3	International Law and Justice
POS 331	3	Public Policy
POS 385	3	Constitutional Law I: Foundation
POS 386	3	Constitutional Law II: Civil Liberties and Rights
POS 393	1-3	Practicum

Select 15 credits from the following:

COM 372	3	Persuasion
ENS 302	4	Environmental Law and Policy
HIS 124	3	History of the United States to 1877
HIS 125	3	History of the United States since 1877
HIS 392	3	Twentieth Century U.S. History
MGT 311	3	Business Law
PHI 202	3	History of Philosophy I
PHI 203	3	History of Philosophy II
POS 100	3	American Politics
POS 215	3	Human Trafficking
POS 232	3	Political Thinking
POS 245	3	Research in Political Studies
POS 304	3	Global Governance
POS 312	3	Political Behavior
POS 344	3	Campaigns and Elections
POS 345	3	Congress and the Presidency
POS 370	1-4	Selected Topics (advisor approved)
POS 450	1-4	Directed Research
POS 462	3	Theories of International Relations
PPE 361	3	Western Political Thought
PSY 357	3	Peace, Reconciliation, and Justice

Politics and Law/Systems (BS)

The Bachelor of Science degree in Politics and Law/Systems consists of the 43-45 hour major and curriculum requirements in information systems and analytics. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

POS 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Politics and Public Service (BA)

The Bachelor of Arts degree in Politics and Public Service requires two years of sequential study in one foreign language and 41-43 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

POS 100	3	American Politics
POS 150	3	World Politics
POS 222	3	Comparative Politics
POS 224	3	Foundations of Freedom
POS 245	3	Research in Political Studies
POS 331	3	Public Policy
POS 393	1-3	Practicum
PPE 467	3	Senior Seminar

Select one course from the following:

POS 310 [†]	3	Constitutional Development
POS 385 [†]	3	Constitutional Law I: Foundation

[†]Courses in both areas may only count once.

[‡]May not count both HIS 391 and HIS 392 toward elective hours.

*Approved courses from American Studies Program may count toward the 16 elective credits.

Electives

Select 16 credits* from the following:

COM 372	3	Persuasion
ENS 302	4	Environmental Law and Policy
GEO 220	3	Regional Geography
HIS 352	3	African-American History
HIS 391 [‡]	3	The World Since 1945
HIS 392 [‡]	3	Twentieth Century U.S. History
POS 215	3	Human Trafficking
POS 232	3	Political Thinking
POS 304	3	Global Governance
POS 310 [†]	3	Constitutional Development
POS 312	3	Political Behavior
POS 321	3	Modern Middle East
POS 325	3	American Foreign Policy
POS 327	3	International Law and Justice
POS 344	3	Campaigns and Elections
POS 345	3	Congress and the Presidency
POS 350	3	International Security
POS 360	1-4	Independent Study
POS 370	1-4	Selected Topics (advisor approved)
POS 374	3	Religious Liberty and Christian Freedom
POS 385 [†]	3	Constitutional Law I: Foundation
POS 386	3	Constitutional Law II: Civil Liberties and Rights
POS 450	3	Directed Research
POS 462	3	Theories of International Relations
PPE 213	3	International Political Economy
PPE 361	3	Western Political Thought

Politics and Public Service/Systems (BS)

The Bachelor of Science degree in Politics and Public Service/Systems consists of the 41-43 hour major and curriculum requirements in information systems and analytics. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

POS 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Political Science Minor

A minor in Political Science consists of 18 hours. No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

POS 232	3	Political Thinking
PPE 361	3	Western Political Thought

Electives

Select four^{*} courses from the following:

POS 222	3	Comparative Politics
POS 224	3	Foundations of Freedom
POS 312	3	Political Behavior
POS 325	3	American Foreign Policy
POS 331	3	Public Policy
POS 344	3	Campaigns and Elections
POS 345	3	Congress and the Presidency
POS 374	3	Religious Liberty and Christian Freedom

*9 hours from the American Studies Program may also be used toward minor hours.

Social Studies Education (BA/BS)

The Bachelor of Science degree in Social Studies Education requires 54 hours in addition to education requirements. A concentration in Historical Perspectives is required, as well as a second concentration in Economics, Geographical Perspectives, Government and Citizenship, Psychology, or Sociology. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. All education curriculum courses must be completed with a grade of C- or better and are included in the major GPA.

Social Studies Core

ECO 201	3	Principles of Microeconomics
GEO 220	3	Regional Geography
HIS 103	3	World History I
HIS 104	3	World History II
HIS 124	3	History of the United States to 1877
HIS 125	3	History of the United States since 1877
HIS 130	3	Introduction to History
POS 100	3	American Politics
SOC 100	3	Introduction to Sociology

Select one course from the following:

HIS 227	3	War in American History
HIS 317	3	The Gilded Age and Progressive Era (1877-1920)
HIS 391	3	The World Since 1945
HIS 392	3	Twentieth Century U.S. History

Select 12 additional credit hours of history electives.

Select 12 additional credit hours of electives from a single concentration: Economics, Geographical Perspectives, Government and Citizenship, Psychology, or Sociology.

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 344	1	Educational Technology in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
SOS 309	2	Teaching Social Studies in Secondary, Junior High/Middle School
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Geography Minor

The Geography minor requires 16 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

GEO 220	3	Regional Geography
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Select one course from the following:

ENS 240	3	Introduction to Geology
ENS 241	4	Physical Geology
GEO 210	4	Physical Geography

Select one course from the following:

HIS 211/311	3	History and Geography of Latin America
HIS 212/312	3	History and Geography of East Asia
HIS 213/313	3	History and Geography of Africa
HIS 215/315	3	History and Geography of South Asia

Electives

Select additional hours not taken (course number or title) to meet the 16 hours:

ENS 242	3	Geology of Indiana
ENS 355	4	Geospatial Analysis
ENS 361	4	Geomorphology
GEO 230	3	Political Geography
GEO 360	1-4	Independent Study
GEO 370	1-4	Selected Topics (approved by advisor)
GEO 393	1-4	Practicum
HIS 211/311	3	History and Geography of Latin America
HIS 212/312	3	History and Geography of East Asia
HIS 213/313	3	History and Geography of Africa
HIS 215/315	3	History and Geography of South Asia
SUS 231	4	Environmental Science, Society, and Sustainability

International Relations Minor

A minor in International Relations consists of 18 hours. No more than 50% of the credits may overlap with another major or minor. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

POS 462	3	Theories of International Relations
PPE 361	3	Western Political Thought

Electives

Select 12 hours from the following:

POS 150	3	World Politics
POS 222	3	Comparative Politics
POS 304	3	Global Governance
POS 321	3	Modern Middle East
POS 325	3	American Foreign Policy
POS 350	3	International Security
POS 374	3	Religious Liberty and Christian Freedom
PPE 213	3	International Political Economy

Geography Courses

GEO 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

GEO 210 4 hours

Physical Geography

The study of the basic physical characteristics of the earth and the effect of the natural environment upon the activities of humankind. *Meets the foundational core earth science requirement.*

GEO 220 3 hours

Regional Geography

A course offering basic ideas and supporting facts about contemporary world geography. Students study eight world regions: Europe, former Soviet Union, Latin America, Anglo-America, Middle East, Orient, Pacific World and Africa. *Meets the foundational core general social science requirement.*

GEO 230 3 hours

Political Geography

The geographic interpretation of world relations. The relationships of geographic elements to the development of nations both past and present are examined.

GEO 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

GEO 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

GEO 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

GEO 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

GEO 450 1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

GEO 480 1-4 hours

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

GEO 490 1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Global Studies Courses

GBS 130 3 hours

Introduction to Global Studies

Required for international studies majors, this course introduces students to cross-cultural issues, international current events, and international career opportunities. *Meets the foundational core general social science requirement. Offered Spring semester.*

GBS 135 1 hour

Introduction to Intercultural Learning

This course focuses on preparation for an intercultural experience. It includes an overview of intercultural frameworks and encourage a learner's mindset that is curious about cultures, identity, value-formation, and similar and different ways of making meaning in the world. In an increasingly diverse and connected world, this course provides tools for reflection and learning that will help students bridge across cultural differences.

GBS 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

GBS 210 3 hours

Learning in Global and Intercultural Contexts

Students are introduced to intercultural concepts, while assuming a learner's posture towards an increased understanding of self and others, as well as various ways of making meaning in the world. In an increasingly diverse and connected world, this course provides tools for reflection and learning that help students bridge across differences. They consider identity and cultural formation, differences and similarities through the lens of a variety of cultural contexts, and frameworks for cultural dimensions.

GBS 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

GBS 325 3 hours

Peace and Conflict: Peacebuilding and Reconciliation

This course studies peace and conflict through an interdisciplinary lens, examining the impact of conflict across multiple sectors of society—religious, social, economic, and political. The impact of conflict on civic society and individuals will be examined through educational activities that explore identity, peacebuilding, conflict resolution, and mediation. *Meets foundational core general social science requirement.*

GBS 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

GBS 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

GBS 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

GBS 450 1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

GBS 480 1-4 hours

Global Studies Senior Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. *Students develop, revise, and complete a major research project resulting in a 20-25 page paper. This course serves as the senior capstone experience for the Global Studies major and fulfills the senior comprehensive requirement. Prerequisite: GBS 130.*

GBS 490 1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

History Courses

All 3 credit hour HIS courses may meet the foundational core curriculum history requirement except where indicated. The same course may not meet both the foundational core curriculum history and social science requirements.

HIS 103 **3 hours**
World History I
A survey of the foundations of civilizations and complex societies across the globe from 3200 BC to AD 1500.

HIS 104 **3 hours**
World History II
A survey of the early modern and modern world (AD 1500 to present), with attention given to international economic, political, and cultural contact, and its consequences for peoples and cultures.

HIS 124 **3 hours**
History of the United States to 1877
A survey of the social, political, and cultural development of the people of the United States from the colonization period through Reconstruction.

HIS 125 **3 hours**
History of the United States since 1877
A survey of the social, political, and cultural development of the people of the United States from Reconstruction to the present.

HIS 130 **3 hours**
Introduction to History
This course introduces students to the discipline of professional history. Topics covered include but are not limited to rival forms of historiography; how to research, write, and cite academic papers; understanding archives, professional organizations, university presses, and other marks of the historical practice; and the application of a Christian worldview to the study of the past. *Does not meet foundational core requirement.*

HIS 170 **1-4 hours**
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering. *Departmental approval is needed to meet the foundational core history requirement.*

HIS 211 **3 hours**
History and Geography of Latin America
Historical and geographical study of the nations between the Rio Grande River and Cape Horn. Attention is given to the development of each Latin American area and its relationship to the United States. *Meets foundational core general social science requirement.*

HIS 212 **3 hours**
History and Geography of East Asia
An examination of the histories of China, Japan, and Korea from their earliest foundations to the contemporary era, with particular emphasis on the political, religious, philosophical and cultural underpinnings of these societies. The geographic aspects of the region are also included. *Meets foundational core general social science requirement.*

HIS 213 **3 hours**
History and Geography of Africa
A study of the historic, physical, and cultural aspects of Africa, with primary emphasis on sub-Saharan Africa and including the significant role Africa plays in the modern world. *Meets foundational core general social science requirement. Offered Fall semester.*

HIS 215 **3 hours**
History and Geography of South/Southeast Asia
An exploration of the political, cultural, and religious development of the Indian subcontinent from 2500 B.C. to the modern era, as well as a survey of Southeast Asia with a focus on Indonesia, the Philippines, Thailand, Singapore and Vietnam. The course includes study of the impact of geography on the region's people and history. *Meets foundational core general social science requirement.*

HIS 223 **3 hours**
The Greco-Roman World
An examination of the ancient Mediterranean civilizations of Greece and Rome from the Bronze Age cultures of the Minoans and Mycenaeans to the "Fall" of Rome and its aftermath. Attention is given to the importance of geographical and spatial concepts in the formation of global trends. *Students taking this course for the Women's History minor will write a paper on an aspect of the life of women during this time period.*

HIS 224 **3 hours**
The Middle Ages
A study of the history of the Medieval world from the 4th century AD to the 15th century AD. This course will focus primarily on Western Europe, but it will also include both Byzantium and the Islamic world and the interaction of these three spheres. Special attention is given to the dramatic changes in religion, culture, gender, and ideology that occurred during this period. *Students taking this course for the Women's History minor will write a paper on an aspect of the life of women during this time period.*

HIS 225 **3 hours**
Women in Ancient Egypt
An examination of the lives of women in Pharaonic Egypt from approximately 3200 BC to 332 BC. To do this, we will utilize evidence from ancient literature and art, historical inscriptions, and archaeological finds.

HIS 226 **3 hours**
Women in World History
This course is a comparative study of the history of women in the world from the early modern period to the present day, with a particular focus on women of the non-Western world. It examines the similarities and differences in their cultural, social, religious, political, and economic status.

HIS 227 **3 hours**
War in American History
This course examines issues of war and peace in American history from the early seventeenth century to the early twenty-first century. While most military conflicts will receive coverage, more in-depth attention will be paid to major ones like the American Revolution, Civil War, World Wars I and II, and Vietnam. The course will analyze American wars from various angles, including but not limited to: military history, social history, race and gender, intellectual life, and religion. Through an examination of primary and secondary sources, students will leave with an enriched understanding of war in American history. *Offered Fall semester of odd years.*

HIS 228 **3 hours**
The Roosevelts
This course examines the Roosevelt family and its importance to American history. Students will be acquainted with some of the specialized scholarship on the Roosevelts as well as with broader work on American history in the nineteenth and twentieth centuries. Students will also consider the benefits and drawbacks of historical documentary filmmaking as exemplified in the Ken Burns film, *The Roosevelts* (2014). *Students counting this course toward the women's history minor must write their research paper on some aspect of the Roosevelt women.*

HIS 230 **3 hours**
American Religious History
A study of the historical development in the United States of such movements as Puritanism, revivalism, the social gospel, Judaism, Catholicism, and variant forms of Protestantism.

HIS 233 **3 hours**
Reformation Christianity
A study of the history of Christianity from 1500 to 1650, dealing with the achievements of Luther, Zwingli, and Calvin; the expansion of Protestantism in Germany, Switzerland, and England; the Anabaptist movement; the Catholic Reformation; and the religious wars up to the Treaty of Westphalia. *This course is offered through Taylor University Online (TUO).*

HIS 235 **3 hours**
Women in American History
A survey of women in America from the colonial era to the present. Emphasis is placed on the historical experience of women in terms of perceptions, restrictions and resistance, and activities.

HIS 237 **3 hours**
The World War I Generation
This course examines the generation that came of age during World War I. The course focuses on the changes that the war caused as well as the spiritual crisis that developed in response to the war. The course uses the British authors collection in the Zondervan library to explore themes that defined the World War I generation. *This course meets the requirements for the Public History and Women's History concentrations and minors.*

HIS 240 **3 hours**
European Religious History
A survey of the development of Christianity and Judaism in Europe from the Roman Empire to the contemporary era, with special emphasis on the early church, the conversion of the barbarians, the medieval church, the Reformation, Pietism, 19th century reform movements and the impact of World Wars I and II.

HIS 245 **3 hours**
Revolutionary America
This course examines the complex society that developed in eastern North America during the 17th and 18th centuries. It explores the far-reaching repercussions of contact between Europeans, Native Americans, and Africans; the cultural, intellectual, military, and political dimensions of European imperial endeavors; the unique social formations that resulted from migration and the challenges of sharing space; the development of the American Revolution; and the role of Christianity in the founding of the United States.

HIS 270 **1-4 hours**
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering. *Departmental approval is needed to meet the foundational core history requirement.*

HIS 310	3 hours	The Modern Civil Rights Movement This course examines the modern Civil Rights Movement in the United States. The focus is on the years 1954-1970, but significant attention is also placed on the background to and aftermath of this period. <i>This course is offered in both on-campus and travel-study formats.</i>
HIS 311	3 hours	History and Geography of Latin America See HIS 211.
HIS 312	3 hours	History and Geography of East Asia See HIS 212.
HIS 313	3 hours	History and Geography of Africa See HIS 213.
HIS 315	3 hours	History and Geography of South/Southeast Asia See HIS 215.
HIS 317	3 hours	The Gilded Age and Progressive Era (1877-1920) This course probes deeply into the Gilded Age and Progressive Era (1877-1920). Students will deepen their understanding of the principal issues and controversies in this period through readings in primary and secondary sources. Oral presentations and written assignments will comprise the bulk of student work. The course will be organized around several prominent figures from this period. <i>Students may count this course toward a minor in women's history with a research paper on some aspect of women's history in this period. Does not meet foundational core history requirement. Offered Spring semester of even years.</i>
HIS 320	3 hours	Ancient Near Eastern History An examination of the cultures of the ancient Near East from prehistoric times through the 4th century B.C. Attention is given to the importance of geographical and spatial concepts in the formation of global trends. <i>Prerequisite: HIS 130.</i>
HIS 321	3 hours	Modern Middle East See POS 321.
HIS 331	4 hours	Reformation and Enlightenment Historical study of Europe from Luther to the Bastille, including the Ages of the Reformation, Absolutism, and the Enlightenment.
HIS 335	3 hours	Modern European Empires An examination of Europe's cooperation and competition to build global empires in the nineteenth century. An emphasis on ideologies, policies, and broad understanding of the scope of European imperialism. Attention is given to the importance of geographical and spatial concepts in the formation of global trends. <i>Does not meet foundational core history requirement.</i>
HIS 340	4 hours	Colonial America This course examines the complex society that developed in eastern North America during the 17th and 18th centuries. It explores the far-reaching repercussions of contact between Europeans, Native Americans, and Africans; the cultural, intellectual, military, and political dimensions of European imperial endeavors; the unique social formations that resulted from migration and the challenges of sharing space; and the role of Christianity in the founding of the United States.
HIS 342	4 hours	History of England A study of English political, constitutional, cultural and intellectual developments, the growth of the British Empire and international relations.
HIS 345	3 hours	Revolutionary America See HIS 245.
HIS 352	3 hours	African-American History A survey of African-American history from African origins through the modern civil rights movement. Emphasis is placed on the oppression and resistance to oppression that characterize the African-American experience. <i>Offered Spring semester.</i>
HIS 360	1-4 hours	Independent Study An individualized, directed study involving a specified topic. <i>Does not meet the foundational core history requirement.</i>
HIS 370	1-4 hours	Selected Topics A course offered on a subject of interest but not listed as a regular course offering. <i>Departmental approval is needed to meet the foundational core history requirement.</i>
HIS 371	3 hours	Civil War Era (1820-1880) A study of the most dominant public issue in mid-nineteenth century America, namely the sectional conflict stemming from the issue of slavery. The course gives major emphasis to: (1) the institutions, ideas and events that led to the Civil War; (2) the war itself; and (3) the reconstruction of the Union.
HIS 376	3 hours	History of Constitutional Issues: Institutional Powers Considers the development of judicial review in relation to the powers of the President and Congress. Focuses on judicial interpretations of the commerce and taxing clauses as well as state powers under the due process clause of the 14th Amendment. <i>This course is offered through Taylor University Online (TUO).</i>
HIS 385	3 hours	Constitutional Law I: Foundation See POS 385.
HIS 386	3 hours	Constitutional Law II: Civil Liberties and Rights See POS 386.
HIS 391	3 hours	The World Since 1945 An examination of key world events in Africa, Asia, Europe, Latin America, the United States, and Canada since World War II. The emphasis is on the political and economic development, though cultural and social aspects are also included.
HIS 392	3 hours	Twentieth Century U.S. History A study of the political, military, economic, and cultural development of the nation during its rise to world prominence. <i>Prerequisites: HIS 124 and HIS 125.</i>
HIS 393	1-4 hours	Practicum Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Does not meet the foundational core history requirement. Offered primarily during Summer.</i>
HIS 450	1-4 hours	Directed Research Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.
HIS 480	1-4 hours	Seminar A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. <i>Does not meet the foundational core history requirement. This course, including the 30-page major research project, fulfills the senior comprehensive requirement.</i>
HIS 490	1-2 hours	Honors Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>

Legal Studies Courses

LGS 170	1-4 hours	Selected Topics A course offered on a subject of interest but not listed as a regular course offering.
LGS 250	3 hours	Law and Society Examines the role of laws and the legal system in a societal context. Topics include the structure and function of the federal and state judicial systems, relationship of courts to legislatures and administrative agencies, and critical analyses of law as a tool for preserving social order and effecting change. The course will include a comparative study of legal systems and a discussion of the rule of law and development of democratic institutions of government. Students will also address the cultural view of law, lawyers, and the legal system including a consideration of law as a vocation for Christ followers.

LGS 270 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

LGS 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.

LGS 370 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

LGS 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

LGS 441 3 hours
Principles of Legal Analysis
 Taught by an attorney, this course is designed for those who expect to attend law school. Students gain experience with the writing, reading, and critical thought levels expected of all law students.

LGS 442 3 hours
Legal Thought
 An overview of ancient, modern, and contemporary theories of the law. The course explores the nature of law and its relationship to politics, morality, and ethics. *Prerequisite: MGT 311 or permission of instructor.*

LGS 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

LGS 480 3 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

LGS 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Orphans and Vulnerable Children Courses

OVC 110 3 hours
Introduction to Working with Orphans and Vulnerable Children
 This course serves as the introduction to the field of working with OVC in a variety of settings, exposing students to global needs and best practices in terms of addressing those needs. It takes an ecological approach to understand the child in a vulnerable context. Topics include orphan care, adoption, foster care, trafficking, and refugees. This course also includes theological and ethical approaches to care.

OVC 170 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

OVC 220 3 hours
Violence Against Children
 This course introduces students to the global epidemic of violence against children. It will explore causes and consequence of violence at the individual and systemic level. Topics will cover human rights of children, violence in the home, violence in the work-place, and violence in the community. *Meets the foundational core general social science requirement.*

OVC 270 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

OVC 310 3 hours
Philanthropy and Grant-Writing
 This course examines the role that grant-making foundations and individuals have played in supporting activities designed to affect social change and public policies, and the significance of that work on local and international communities. Patterns of giving, understanding philanthropy, structural and organizational issues, outlining and writing proposals, as well as programmatic opportunities and constraints are examined.

OVC 329 3 hours
Monitoring and Evaluation 1: Data Collection
 This course provides students with an introduction to methods in monitoring and evaluation. It will focus on designing research that would establish both efficacy and effectiveness. Students will be trained in how to collect data designed to measure program and intervention objectives. Attention is given to working with stakeholders and beneficiaries, with particular focus on respecting the rights and welfare of all those involved. Both qualitative and quantitative methods will be taught.

OVC 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.

OVC 370 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

OVC 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

OVC 429 3 hours
Monitoring and Evaluation 2: Data Analysis
 This course equips students with specific statistical procedures related to monitoring and evaluation. Students will be trained in presenting results in both oral and written format, with a focus on client consultation. In addition, qualitative analysis will be taught.

OVC 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

OVC 480 3 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

OVC 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

OVC 493 3 hours
Senior Capstone
 This course serves as a culminating learning experience that requires students to develop a senior portfolio that synthesizes the curriculum. Students will be encouraged to work on projects that would lead to focus on selected topics.

Political Science Courses

POS 100 3 hours
American Politics
 Primary emphasis is given to the relationship between the theories and ideals of democracy and the actual practice of making and implementing policy. The course considers the constitutional system, as well as the institutions of American government. *Meets foundational core civic engagement or general social science requirement. Offered Fall semester.*

POS 150 3 hours
World Politics
 Surveys the development of the international political system and the relations among nation-states, international organizations, and other entities. Gives special attention to war, conflict resolution, and international law. *Meets foundational core civic engagement or general social science requirement.*

POS 170 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

POS 215 3 hours
Human Trafficking
 An examination of human trafficking in the United States and the world utilizing the expertise of professionals who serve trafficked victims and their specific roles. Students will gain a clear understanding of the forms of human trafficking as well the work of professionals and survivors who serve these disadvantaged persons.

POS 222 3 hours
Comparative Politics
Studies political institutions and processes in selected countries. Focuses on political culture, democracy, and factors affecting how well governments function. *Meets general social science requirement. Offered Fall semester of even years.*

POS 224 3 hours
Foundations of Freedom
This course studies the roles played by the U.S. Constitution, free market economic system, Judeo-Christian faith, and public policies promoting strong communities and families in establishing and sustaining fundamental freedoms envisioned by our founders from political, historical, and other relevant social science perspectives. It examines why the founders believed the governmental framework established in the Constitution is essential to sustain the fundamental freedoms of life, liberty, and the pursuit of happiness. *Meets foundational core civic engagement or general social science requirement.*

POS 232 3 hours
Political Thinking
Introduces students to central concepts and theories of politics and engages students in critical analysis of those concepts and theories. Special consideration is given to key works on the integration of Christianity and politics. *Offered Spring semester.*

POS 233 3 hours
State and Local Politics
This course is designed to introduce the student to the theory, function, institutions, processes, policies, and operations of state and local government and politics. The increase in the importance and status of state and local politics and policy in meeting the needs of its citizens necessitates such a course, particularly with the increasing complexity of constitutional challenges, policy advocacy and innovation, and intergovernmental relations. During times of economic and political crises, and the increasing expansion of national governmental legal and regulatory authority, state and local government politics is under increasing pressure to adapt during times of economic and constitutional crisis. It is imperative that students have a solid understanding of how state and local governments and politics work with the non-profit and private sectors.

POS 245 3 hours
Research in Political Studies
An introduction to the conduct of research in the study of politics. Students engage in activities that help them develop basic research literacy and understanding as they apply basic research methodology utilized by political scientists and practitioners.

POS 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

POS 304 3 hours
Global Governance
The course begins by surveying different approaches to the study of security. It then takes a thematic approach. It considers whether liberal democracies are different from other types of state in relation to war and attitudes to the laws or war. It also examines the issues of nuclear weapon, terrorism, controls on conventional arms transfers, ethnic conflict, the news media and public opinion, humanitarian intervention, the occupation of Iraq, Christians' war and pacifism, and the relationships between security and development. Designed to serve as a foundation for participation in the American National Model United Nations (AMUN) simulation. *Offered Fall semester.*

POS 310 3 hours
Constitutional Development
A survey of the major political battles that have defined the United States Constitution over time. Introduces students to prominent figures in Constitutional thought, issues in Constitutional interpretation, and contemporary legal struggles.

POS 312 3 hours
Political Behavior
A description and examination of the voting behavior of the American people and opinions about candidates, political parties and public policy. Some attention is also given to the formation of public opinion in a democratic polity. *Meets general social science requirement. Offered Spring semester of odd years.*

POS 321 3 hours
Modern Middle East
A political history of Southwest Asia and North Africa in the 20th century. Special attention is given to the variety of governments in the region, Islam and politics and domestic and international conflict. *Meets general social science requirement. Offered Spring semester.*

POS 325 3 hours
American Foreign Policy
Uses case studies of major events in U.S. foreign relations since World War II to consider the relationship between morality and politics. Includes an overview of the process of making and implementing foreign policy within the U.S. government. *Offered Fall semester of odd years.*

POS 327 3 hours
International Law and Justice
International Law and Justice offers students an overview of the role of law in international affairs and the benefits and challenges of supranational legal structures, including international organizations, conventions, and other bilateral and multilateral arrangements. The course will commence with an analysis of the foundational definitions and components of international law and the often-complicated relationships between domestic legal systems and international legal frameworks. Students then will explore in greater depth several specific content areas of international law, including trade, the environment, security, and human rights. The course also will provide an opportunity for critical engagement with the concept of justice in the development and application of international law, particularly for vulnerable and marginalized individuals and communities, as well as the theological foundations of justice. Throughout the course, students will have opportunities to discuss the unique expectations and opportunities for Christ followers to pursue justice in a global context.

POS 331 3 hours
Public Policy
An extensive examination of the interaction between Congress and the Presidency in making public policy. The course focuses on major theories of public policy and examines governmental policy-making from these perspectives. *Meets civic engagement or general social science requirement. Offered Fall semester.*

POS 344 3 hours
Campaigns and Elections
This course will examine the foundation and development of campaigns and elections in the US. In addition, it will also focus on the role of political parties and media and political communication. Students will engage in actual campaign and electoral behavior activity. Participation as a volunteer in an actual campaign is expected as part of course requirements. *Recommended course prerequisite: POS 100 and sophomore standing. Offered every two years coinciding with fall election cycle.*

POS 345 3 hours
Congress and the Presidency
Studies congressional processes such as leadership, committees and rules and the role of the President in American politics. Special emphasis is given to the interaction between Congress and the President in formulating public policy. *Offered Spring semester of even years.*

POS 350 3 hours
International Security
The concept of security is used very frequently in relation to international issues. This course introduces students to the study of international security, including theoretical, normative, and policy issues. *Offered January interterm.*

POS 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

POS 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

POS 374 3 hours
Religious Liberty and Christian Freedom
This course introduces students to the subject of religious liberty and Christian freedom, analyzing the nature of freedom and the position of Christianity as foundational to liberty. Students are then exposed to a comparative analysis of hostility and persecution, its development, and its typology. *Offered Spring semester.*

POS 385 3 hours
Constitutional Law I: Foundation
Considers the development of judicial review in relation to the powers of the President and Congress. Focuses on judicial interpretations of the commerce and taxing clauses, as well as state powers under the due process clause of the 14th Amendment. *Offered Fall semester.*

POS 386 3 hours
Constitutional Law II: Civil Liberties and Rights
Focus is on the Bill of Rights and the equal protection clause of the 14th Amendment. Considers such topics as freedoms of speech, press and religion, the civil rights movement and the controversy over privacy rights. *Offered Spring semester.*

POS 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

POS 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. *Advanced work under the supervision of a professor in connection with a special project or to enhance preparation for graduate work.*

POS 462 3 hours
Theories of International Relations
 International Relations as a discipline has always been characterized by the extensive and significant theoretical ferment. This course will provide an overview of key theoretical traditions in International Relations and their evolution and contestations in recent years. *Offered in odd years.*

POS 465 2 hours
Senior Paper
 A journal-length analytical research paper based on scholarship in the field that is related to the student's chosen topic. Fulfills the senior comprehensive requirement.

POS 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

POS 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Political Science, Philosophy, and Economics Courses

PPE 170 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

PPE 213 3 hours
International Political Economy
 Examines trade, development and environmental protection as issues involving both states and non-state actors in world politics. Uses case studies to consider the relationship between Christian ethics and the wealth and poverty of nations. *Meets foundational core civic engagement or general social science requirement. Offered Spring semester.*

PPE 220 3 hours
Completing Capitalism
 The course engages with the economic thought of leading economic practitioners as well as seating this analysis within a wider ethical analysis of capitalism. Students will be required to explore key debates that occur at the nexus of economic and political theory and policy. Students will have the opportunity to understand the nature of ethical challenges facing modern capitalism, the key political-economic debates within modern capitalist societies, multiple forms of capital that go beyond traditional understanding and how we can engage our faith in our analysis of capitalism.

PPE 270 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

PPE 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.

PPE 361 3 hours
Western Political Thought
 A survey of major thinkers from Plato to the present through discussion of perennial issues such as individualism and community, liberty and equality and governmental power. *Offered Fall semester.*

PPE 370 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

PPE 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

PPE 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. *Advanced work under the supervision of a professor in connection with a special project or to enhance preparation for graduate work.*

PPE 467 3 hours
Senior Seminar
 Senior Seminar is designed to accomplish three goals: 1) engage the political science graduating seniors in an overall assessment of the theory and practice of political science and international relations, largely through approved and required readings and writing projects; 2) provide the opportunity for political science graduating seniors to develop a comprehensive and integrative faith and learning component into a final research and writing project; and 3) to provide political science graduating seniors to present their research findings before an on campus and/or off campus audience, including faculty and peers.

PPE 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

PPE 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Social Studies Courses

SOS 309 2 hours
Teaching Social Studies in Secondary, Junior High/Middle School
 This course is a junior level secondary social studies methods course in which various aspects of classroom instruction are addressed including standards, unit and lesson planning, teaching strategies, questioning and critical thinking skills, P-12 student learning, and assessment. *Prerequisites: EDU 150 and EDU 260.*

Humanities

Humanities courses carry an interdisciplinary focus and are directly related to more than one single academic area. These courses include curricular offerings in arts, music, and theatre arts.

Humanities Courses

HUM 120 **4 hours**

Survey of 20th Century Music and Art

A lecture and on-location course focusing on 20th century musical and visual art. This course exists to develop students' perceptual skills, and encourage artistic literacy particularly as these concepts were conveyed during the past century. A major focus of this course is experiencing art and music. Written critiques on selected events are a vital part of the course curriculum. *The 300-level version of this course includes an additional research project. Meets a foundational core aesthetic literacy requirement.*

HUM 170 **1-4 hours**

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

HUM 230 **4 hours**

Art as Experience

Lecture sessions focus upon works from several art forms, with the goal of developing students' perceptual skills. A major focus of this course is experiencing art. Written critiques on selected events are part of the course curriculum. *Meets a foundational core aesthetic literacy requirement.*

HUM 250 **1 hour**

Participation in the Arts

Does not meet a foundational core aesthetic literacy requirement. Credit only.

- HUM 250A Drama
- HUM 250AE Acting for Everyone
- HUM 250B Books
- HUM 250E Enameling
- HUM 250FD Folk Dances of Other Cultures
- HUM 250J Jewelry
- HUM 250L Metals
- HUM 250P Photography
- HUM 250PW Printmaking-Woodcutting
- HUM 250SC Sculpture-Ceramics
- HUM 250W Watercolor

HUM 270 **1-4 hours**

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

HUM 320 **4 hours**

Survey of 20th Century Music and Art

See HUM 120.

HUM 330 **4 hours**

Arts and Ideas

This interdisciplinary course investigates the nature of human culture and creativity as prime aspects of what it means to be human through a consideration of the arts. Focusing on the visual arts, music, theater, and film, this course emphasizes the consideration of works within their original historical and cultural contexts and the ideas that inform them. Through discussion, collaborative and active learning assignments, and hands-on projects, students engage a wide range of frameworks for understanding human creativity and the arts from a multitude of disciplines as varied as psychology, marketing, neuroscience, and Christian theology. *Meets a foundational core aesthetic literacy requirement.*

HUM 360 **1-4 hours**

Independent Study

An individualized, directed study involving a specified topic.

HUM 370 **1-4 hours**

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

HUM 393 **1-4 hours**

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

HUM 450 **1-4 hours**

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

HUM 480 **1-4 hours**

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

HUM 490 **1-2 hours**

Honors

Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Music, Theatre, and Dance

Co-Chairs, Associate Professor C. Angell, Assistant Professor R. Spencer
 Professors C. Bade, L. Harshenin, T. Syswerda
 Associate Professor E. Kwan
 Assistant Professors T. Manning, L. Songer

The Department of Music, Theatre, and Dance exists with a three-fold purpose: to equip students with discipline-specific skills and experiences needed for their future academic and professional work; to educate students and the community in the value and integrity of music, theatre, and dance as expressive art forms; and to present performances and productions that creatively engage the minds and hearts of the community.

The department offers the Bachelor of Arts degree, Bachelor of Fine Arts degree, Bachelor of Science degree, and Bachelor of Music degree programs. A Department of Music, Theatre, and Dance handbook, outlining all areas of degree concentration and operational policies, is available on the Taylor University web site and from the department offices. Students in the BS in Music with concentration in Marketing or Management may apply for an off-campus semester in Nashville, Tennessee, for the purpose of more focused study in contemporary music. Please consult the appendix of the Department of Music, Theatre, and Dance handbook; for more details, refer to **Contemporary Music Center** in the Off-Campus/International Programs section of this catalog.

The department offers minors in Applied Music, Dance, Keyboard Pedagogy, Music Composition, Theatre Arts, and Worship Arts.

Taylor University is an institutional member of the National Association of Schools of Music (NASM).

A senior performance recital or project is required for all music degree programs. Performance guidelines for juries, proficiencies, and recitals/projects may be found in the department handbook.

Music (BA)

The Bachelor of Arts degree with a major in Music requires completion of 54-56 hours and two years of sequential study in one foreign language. Majors must satisfy the recital attendance policies stated in the department handbook. This degree is designed for students who are primarily interested in a liberal arts degree program with a focus in music. This broadly based degree program has as its foundation the study of music, history, theory, and literature. The program prepares students for diverse career opportunities or graduate study. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

Applied Primary Instrument (For students not using Voice as primary instrument)

MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)
MUS 400_	2	Applied Lesson (1 hour)
MUS 400_	2	Applied Lesson (1 hour)

Voice Requirements (Required for students with Voice as primary instrument)

MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 118	2	Vocal Diction I
MUS 119	1	Vocal Diction II
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)

Applied Secondary Instrument

MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)

Ensembles

Select 8 credit hours from:

MUS 210GM, 210JC, 210JE, 210LT, 210PB, 210TS, 210WC, 240, 280, 290, 310GM, 310JC, 310JE, 310LT, 310PB, 310TS, 310WC, 340, 380, 390
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Additional Major Requirements

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 342	3	Advanced Form and Analysis
MUS 343	3	Music and World Cultures
MUS 361	3	Conducting I
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II

Select one course from the following:

MUS 381	2	Piano Pedagogy I
MUS 440	3	Vocal Pedagogy and Literature
MUS 462	1	Instrumental Pedagogy

Select from the following to reach a minimum of 54 hours in the major:

MUS 331	1	Instrumental Methods III- Percussion
MUS 332	1	Instrumental Methods IV- Strings
MUS 346	1	Instrumental Methods I- Brass Instruments
MUS 347	1	Instrumental Methods II- Woodwinds
MUS 351	2	Choral Arranging
MUS 352	2	Instrumental Arranging
MUS 362	3	Conducting II
MUS 382	2	Piano Pedagogy II
MUS 470	2	Piano Literature
MTD 392	3	Entrepreneurship in the Arts

Music (BS)

The Bachelor of Science degree with a major in Music consists of a standard core of music courses and a concentration area and is designed to provide for the student a musical foundation to prepare for vocational opportunities in the area of concentration. The major with a Management concentration consists of 77-79 credit hours; the major with a Marketing concentration consists of 78-80 credit hours; the major with a Worship Arts concentration consists of 79-81 credit hours. Majors must satisfy the recital attendance policies stated in the department handbook. All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.

Major Core Requirements

Applied Primary Instrument (For all majors not using Voice as primary instrument)

MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)
MUS 400_	2	Applied Lesson (1 hour)
MUS 400_	2	Applied Lesson (1 hour)

Voice Requirements (Required for majors with Voice as primary instrument)

MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 118	2	Vocal Diction I
MUS 119	1	Vocal Diction II
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)

Applied Secondary Instrument

MUS 100_	1	Applied Lesson [†] (½ hour)
MUS 100_	1	Applied Lesson [†] (½ hour)

[†]Both must be in same instrument: guitar, piano, organ

Ensembles

Select 8 credit hours from the following:

MUS 210GM, 210JC, 210JE, 210LT, 210PB, 210TS, 210WC, 240, 280, 290, 310GM, 310JC, 310JE, 310LT, 310PB, 310TS, 310WC, 340, 380, 390
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Additional Major Requirements

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 361	3	Conducting I

Select one of the following concentration areas:

Management

Concentration Requirements

ACC 241	3	Accounting Principles I
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MKT 231	3	Principles of Marketing
MTD 392	3	Entrepreneurship in the Arts
MUS 372	3	Music History and Literature II
MUS 393	4	Practicum

Electives

Select three electives from the following:

ENT 422	3	New Venture Planning
HRM 362	3	Human Resource Management
HRM 462	3	Organizational Behavior and Development
MGT 442	3	Business Ethics

Additional Electives

Select an additional minimum of 8 hours from the following:

MUS 121	2	Seminar in Composition I
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 292	3	Introduction to Electronic Music
MUS 342	3	Advanced Form and Analysis
MUS 351	2	Choral Arranging
MUS 352	2	Instrumental Arranging
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 381	2	Piano Pedagogy I
MUS 440	3	Vocal Pedagogy and Literature
MUS 462	1	Instrumental Pedagogy

May select up to two of the following to count toward the above requirement:

MUS 331	1	Instrumental Methods III—Percussion
MUS 332	1	Instrumental Methods IV—Strings
MUS 346	1	Instrumental Methods I—Brass Instruments
MUS 347	1	Instrumental Methods II—Woodwinds

Marketing

Concentration Requirements

MAT 210	4	Introductory Statistics
MGT 201	3	Introduction to Business
MKT 231	3	Principles of Marketing
MKT 445	3	Best Practices in Marketing
MKT 460	3	Consumer Behavior
MTD 392	3	Entrepreneurship in the Arts
MUS 372	3	Music History and Literature II
MUS 393	4	Practicum

Electives

Select three electives from the following:

MKT 312	3	Professional Selling
MKT 313	3	Retailing and Services Marketing
MKT 380	3	International Marketing
MKT 410	3	Marketing Research
MKT 412	3	Advertising and Promotional Strategy

Additional Electives

Select an additional minimum of 8 hours from the following:

MUS 121	2	Seminar in Composition I
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 292	3	Introduction to Electronic Music
MUS 342	3	Advanced Form and Analysis
MUS 351	2	Choral Arranging
MUS 352	2	Instrumental Arranging
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 381	2	Piano Pedagogy I
MUS 440	3	Vocal Pedagogy and Literature
MUS 462	1	Instrumental Pedagogy

May select up to two of the following to count toward the above requirement:

MUS 331	1	Instrumental Methods III—Percussion
MUS 332	1	Instrumental Methods IV—Strings
MUS 346	1	Instrumental Methods I—Brass Instruments
MUS 347	1	Instrumental Methods II—Woodwinds

Music requirements continued on next page

Music requirements continued from previous page

Worship Arts

Concentration Requirements

BIB 272	3	Inductive Study of the Bible
CMI 100	3	Introduction to Christian Educational Ministries
CMI 262	3	Personal Foundations for Ministry
CMI 371	3	Leadership Development
MUS 243	3	Music and World Cultures
MUS 245	3	Foundations of Worship Arts
MUS 250	1	Audio Visual Technologies in the Church
MUS 345	3	Foundations of Worship Arts
MUS 357	3	Musical Leadership in the Church
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II
MUS 393	2	Practicum (<i>advisor approved</i>)
REL 310	3	Theology of Worship

Electives

Select 5 hours from the following:

MUS 121	2	Seminar in Composition I
MUS 292	3	Introduction to Electronic Music
MUS 331	1	Instrumental Methods III—Percussion
MUS 332	1	Instrumental Methods IV—Strings
MUS 342	3	Advanced Form and Analysis
MUS 346	1	Instrumental Methods I—Brass Instruments
MUS 347	1	Instrumental Methods II—Woodwinds
MUS 351	2	Choral Arranging
MUS 352	2	Instrumental Arranging
MUS 381	2	Piano Pedagogy I
MUS 440	3	Vocal Pedagogy and Literature
MUS 462	1	Instrumental Pedagogy
THR 362	3	Conversations About Theatre and Theology

Performance (BM)

The Bachelor of Music degree with a major in Performance is offered to students in three concentration areas. The major with an Instrumental concentration requires 81-82 credit hours; the major with a Piano concentration requires 79-80 credit hours; and the major with a Vocal concentration requires 72-73 credit hours. Majors must satisfy the recital attendance policies stated in the department handbook. The Bachelor of Music degree is the initial degree in the study of music performance and prepares students for graduate school and possible careers as solo performers in concert or church music, accompanists, private teachers, professional ensemble members, conductors, or college teachers. Its primary emphasis is on development of the skills, concepts, and sensitivity essential to the professional life of a musician. *All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.*

Instrumental

Applied Primary Instrument

MUS 200I	2	Applied Lesson (1 hour)
MUS 200I	2	Applied Lesson (1 hour)
MUS 200I	2	Applied Lesson (1 hour)
MUS 200I	2	Applied Lesson (1 hour)
MUS 400I	3	Applied Lesson (1 hour)
MUS 400I	3	Applied Lesson (1 hour)
MUS 400I	3	Applied Lesson (1 hour)
MUS 400I	3	Applied Lesson (1 hour)

Applied Secondary Instrument

MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)

Ensembles

Select 8 hours from:

MUS 210GM, 210JC, 210JE, 210LT, 210PB, 210TS, 210WC, 240, 280, 290, 310GM, 310JC, 310JE, 310LT, 310PB, 310TS, 310WC, 340, 380, 390

Additional Major Requirements

Complete the following courses:

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (<i>or competency</i>)
MUS 121	2	Seminar in Composition I
MUS 122	2	Seminar in Composition II
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 292	3	Introduction to Electronic Music
MUS 342	3	Advanced Form and Analysis
MUS 352	2	Instrumental Arranging
MUS 361	3	Conducting I
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II
MUS 462	1	Instrumental Pedagogy

Select one of the following:

MUS 331	1	Instrumental Methods III—Percussion
MUS 332	1	Instrumental Methods IV—Strings
MUS 346	1	Instrumental Methods I—Brass Instruments
MUS 347	1	Instrumental Methods II—Woodwinds

Select 4 additional hours of electives in MUS.

Piano

Applied Primary Instrument

MUS 200K	2	Applied Lesson—Piano (1 hour)
MUS 200K	2	Applied Lesson—Piano (1 hour)
MUS 200K	2	Applied Lesson—Piano (1 hour)
MUS 200K	2	Applied Lesson—Piano (1 hour)
MUS 400K	3	Applied Lesson—Piano (1 hour)
MUS 400K	3	Applied Lesson—Piano (1 hour)
MUS 400K	3	Applied Lesson—Piano (1 hour)
MUS 400K_	3	Applied Lesson—Piano (1 hour)

Applied Secondary Instrument

MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)

Ensembles

Select 8 hours from:

MUS 210GM, 210JC, 210JE, 210LT, 210PB, 210TS, 210WC, 240, 280, 290, 310GM, 310JC, 310JE, 310LT, 310PB, 310TS, 310WC, 340, 380, 390

Additional Major Requirements

Complete the following courses:

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (<i>or competency</i>)
MUS 121	2	Seminar in Composition I
MUS 122	2	Seminar in Composition II
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 292	3	Introduction to Electronic Music
MUS 342	3	Advanced Form and Analysis
MUS 361	3	Conducting I
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II
MUS 381	2	Piano Pedagogy I
MUS 382	2	Piano Pedagogy II
MUS 470	2	Piano Literature

Performance requirements continued on next page

Vocal**Applied Primary Instrument**

MUS 118	2	Vocal Diction I
MUS 119	1	Vocal Diction II
MUS 200V	2	Applied Lesson—Voice (1 hour)
MUS 200V	2	Applied Lesson—Voice (1 hour)
MUS 200V	2	Applied Lesson—Voice (1 hour)
MUS 200V	2	Applied Lesson—Voice (1 hour)
MUS 400V	2	Applied Lesson—Voice (1 hour)
MUS 400V	2	Applied Lesson—Voice (1 hour)
MUS 400V	3	Applied Lesson—Voice (1 hour)
MUS 400V	3	Applied Lesson—Voice (1 hour)

Applied Secondary Instrument

MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)

Ensembles

Select 8 hours from:

MUS 210GM, 210JC, 210JE, 210LT, 210PB, 210TS, 210WC, 240, 280, 290, 310GM, 310JC, 310JE, 310LT, 310PB, 310TS, 310WC, 340, 380, 390

Complete the following courses:

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 121	2	Seminar in Composition I
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 342	3	Advanced Form and Analysis
MUS 361	3	Conducting I
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II
MUS 440	3	Vocal Pedagogy and Literature

Composition (BM)

The Bachelor of Music degree with a major in Composition consists of 77-78 hours and prepares students for further studies in graduate school or composing or arranging sacred or secular music, as well as numerous opportunities in media. Majors must satisfy the recital attendance policies stated in the department handbook. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Applied Primary Instrument

MUS 200C	2	Applied Lesson—Composition (1 hour)
MUS 200C	2	Applied Lesson—Composition (1 hour)
MUS 400C	2	Applied Lesson—Composition (1 hour)
MUS 400C	2	Applied Lesson—Composition (1 hour)
MUS 400C	2	Applied Lesson—Composition (1 hour)
MUS 400C	2	Applied Lesson—Composition (1 hour)

Applied Instrument (Piano)

MUS 100K	1	Applied Lesson—Piano (1 hour)
MUS 100K	1	Applied Lesson—Piano (1 hour)
MUS 100K	1	Applied Lesson—Piano (1 hour)
MUS 100K	1	Applied Lesson—Piano (1 hour)

Applied Instrument (Other than Piano)

MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)

Ensembles

Select 8 credit hours from:

MUS 210GM, 210JC, 210JE, 210LT, 210PB, 210TS, 210WC, 240, 280, 290, 310GM, 310JC, 310JE, 310LT, 310PB, 310TS, 310WC, 340, 380, 390

Core Requirements

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 121	2	Seminar in Composition I
MUS 122	2	Seminar in Composition II
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History

Additional Requirements

MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 292	3	Introduction to Electronic Music
MUS 331	1	Instrumental Methods III—Percussion
MUS 332	1	Instrumental Methods IV—Strings
MUS 342	3	Advanced Form and Analysis
MUS 346	1	Instrumental Methods I—Brass Instruments
MUS 347	1	Instrumental Methods II—Woodwinds
MUS 351	2	Choral Arranging
MUS 352	2	Instrumental Arranging
MUS 361	3	Conducting I
MUS 362	3	Conducting II
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II

Music Education (BM)

The Bachelor of Music degree with a major in Music Education requires 64-67 hours in addition to education courses. Majors must satisfy the recital attendance policies stated in the department handbook. Completion of this program in four years may require 17 credit hours each semester and 3 credit hours each January interterm; the requirements of this program including the teacher education professional licensure program will result in certification for either Instrumental/General P-12 or Choral/General P-12. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Music Requirements**Applied Primary Instrument (For all majors not using Voice as primary instrument)**

MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)
MUS 300_	1	Applied Lesson (1 hour)

*Students with Voice as primary instrument must take Applied Lesson-Voice for all 7 credits.

Applied Secondary Instrument

MUS 100_	1	Applied Lesson (½ hour)
MUS 100_	1	Applied Lesson (½ hour)

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
SED 220	3	Exceptional Children

Additional Education Requirements

PSY 340	3	Adolescent Psychology
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Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Music Education requirements continued on next page

Music Education requirements continued from previous page

Music Education Courses

MUS 135	2	Introduction to Music Education
MUS 309	3	Secondary School Methods
MUS 311	3	Elementary School Music
MUS 361	3	Conducting I
MUS 362	3	Conducting II

Additional Music Requirements

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab
MUS 243	3	Music and World Cultures
MUS 342	3	Advanced Form and Analysis
MUS 371	3	Music History and Literature I
MUS 372	3	Music History and Literature II

Also complete one of the following areas of emphasis:

Choral/General Music

MUS 118	2	Vocal Diction I
MUS 119	1	Vocal Diction II
MUS 351	2	Choral Arranging
MUS 440	3	Vocal Pedagogy and Literature

Complete 7 credit hours of approved ensembles.

Instrumental/General Music

MUS 331	1	Instrumental Methods III—Percussion
MUS 332	1	Instrumental Methods IV—Strings
MUS 346	1	Instrumental Methods I—Brass Instruments
MUS 347	1	Instrumental Methods II—Woodwinds
MUS 352	2	Instrumental Arranging

Complete 7 credit hours of approved ensembles.

Musical Theatre (BFA)

The Bachelor of Fine Arts degree with a major in Musical Theatre requires 74-75 credits and is the initial professional baccalaureate degree in Musical Theatre. Its primary emphasis is on development of the skills, concepts, and sensitivity essential to the professional life of a performer. Majors must satisfy the recital attendance policies stated in the department handbook. Participation in two faculty directed productions required each year; one production each year must be a fully staged musical production or an opera; student must perform at least one significant role in a full production, musical, or opera during the course of the degree. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Applied Primary Instrument

MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 100V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)
MUS 300V	1	Applied Lesson—Voice (1 hour)

Applied Secondary Instrument

MUS 100K	1	Applied Lesson—Piano (½ hour)
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Ensembles

Select 8 credit hours[†] from the following:

MUS 210LT	1-4	Lyric Theatre
MUS 310LT	4-8	Lyric Theatre

[†]4 credits must be upper-division

Additional Music Requirements

MTD 131	1	Introduction to Performing Arts
MTD 392	3	Entrepreneurship in the Arts
MUS 101	0-1	Music Theory (or competency)
MUS 118	2	Vocal Diction I
MUS 119	1	Vocal Diction II
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 361	3	Conducting I

Theatre Requirements

THR 212	3	Mask Characterization and Movement
THR 220	1	Stage Diction: Fundamentals and Dialect
THR 230	3	Theatre History II: Renaissance to Postmodernism
THR 240	3	Acting II: Methods and Theories
THR 241	3	Stagecraft and Design
THR 270*	1	Selected Topics (advisor approval)
THR 330	2	Audition Techniques
THR 335	3	Musical Theatre: History and Styles
THR 362	3	Conversations About Theatre and Theology
THR 432	3	Play Directing
THR 433	1	Directing II: Application
THR 440	2	Musical Theatre Showcase

*Must be an approved Sophomore Seminar course.

Dance Requirements

DAN 221	2	Ballet
DAN 222/322 [†]	2	Jazz
DAN 223/323 [†]	2	Tap
DAN 224/324 [†]	2	Musical Theatre Styles

[†]4 credits must be upper-division

Advanced Techniques

Select 7 credit hours[†] from the following:

DAN 231/331 [†]	1-4	Technique: Ballet
DAN 232/332 [†]	1-4	Technique: Modern

[†]4 credits must be upper-division

Theatre Arts (BA)

The Bachelor of Arts degree with a major in Theatre Arts requires the completion of two years of sequential study in one foreign language, 53 credit hours, and participation in a minimum of two theatre productions per academic year. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Theatre Core Requirements

MTD 131	1	Introduction to Performing Arts
THR 112	3	Performing Literature
THR 130	3	Theatre History I: Antiquity to the Renaissance
THR 230	3	Theatre History II: Renaissance to Postmodernism
THR 241	3	Stagecraft and Design
THR 330	2	Audition Techniques
THR 362	3	Conversations About Theatre and Theology
THR 393	1-4	Practicum
THR 432	3	Play Directing
THR 433	1	Directing II: Application

Theatre Lab Requirements

Select 5 credit hours[†] from at least three areas[†]

THR 110A	1-3	Theatre Laboratory-Acting
THR 110P [†]	1-5	Theatre Laboratory-Production [†]

[†]Areas include Acting and three areas in Production: Costume/Make-up, Management, and Stagecraft.

Select from the following for the remaining required hours:

ENG 362	3	Shakespeare
THR 170 [†]	1	Selected Topics (approved by advisor)
THR 212	3	Mask Characterization and Movement
THR 220	1	Stage Diction: Fundamentals and Dialect
THR 240	3	Acting II: Methods and Theories
THR 270 [†]	3	Selected Topics (approved by advisor)
THR 301	3	Theories and History of Applied Theatre
THR 335	3	Musical Theatre: History and Styles
THR 340	3	Applications in Dramaturgy
THR 345	3	Stage Management
THR 360 [†]	1-4	Independent Study
THR 370 [†]	3	Selected Topics (approved by advisor)
THR 402	3	Contemporary American Theatre
THR 492 [†]	8	Internship

[†]A maximum of 8 hours from these courses may be used toward the Theatre Arts Core.

Applied Music Minor

The Applied Music minor is for non-music majors and is designed for a liberal arts music minor program. The minor consists of 20-26 hours including core requirements in four one-hour lessons. Minors must satisfy the recital attendance policies stated in the department handbook. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

Applied Primary Instrument

MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)

Voice Requirements (Required for minors with Voice as primary instrument)

MUS 118	2	Vocal Diction I
MUS 119	1	Vocal Diction II

Ensembles

Participate in 4 credit hours of a major or minor ensemble.

Core Courses

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History

Select one of the following:

MUS 381	2	Piano Pedagogy I
MUS 440	3	Vocal Pedagogy and Literature
MUS 462	1	Instrumental Pedagogy

Dance Minor

The Dance minor serves to prepare the young performer to explore, master, and integrate diverse styles within the performance area of dance. The aesthetic, intellectual, and physical learning objectives in the discipline of dance closely align with Taylor's whole person focused mission. The minor exists alongside the disciplines of music and theatre and often combining with these disciplines in performance settings. The minor consists of 22 hours. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA. No more than 50% of the credits may overlap with any major or minor. Students must participate in a faculty-directed dance production or musical theatre production each year.*

Minor Requirements

DAN 231/331	1	Technique: Ballet
DAN 231/331	1	Technique: Ballet
DAN 231/331	1	Technique: Ballet
DAN 232/332	1	Technique: Modern
DAN 232/332	1	Technique: Modern
DAN 232/332	1	Technique: Modern
DAN 241	3	Dance History
DAN 242	3	Dance Pedagogy
DAN 334	3	Dance Improvisation and Composition
MTD 131	1	Introduction to Performing Arts

Select 6 credit hours from the following:

DAN 221	2	Ballet
DAN 222/322	2	Jazz
DAN 223/323	2	Tap
DAN 224/324	2	Musical Theatre Styles
DAN 333	1	Pointe
DAN 383	1-4	Applications in Technique

Keyboard Pedagogy Minor

The Keyboard Pedagogy minor is for non-music majors and is designed to prepare students to teach private piano. The minor consists of 21-22 hours, including core requirements and specialty courses. Minors must satisfy the recital attendance policies stated in the department handbook. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

Applied Primary Instrument

MUS 100K	1	Applied Lesson—Piano (1 hour)
MUS 100K	1	Applied Lesson—Piano (1 hour)
MUS 100K	1	Applied Lesson—Piano (1 hour)
MUS 100K	1	Applied Lesson—Piano (1 hour)

Complete the following specialty courses:

MUS 381	2	Piano Pedagogy I
MUS 382	2	Piano Pedagogy II
MUS 470	2	Piano Literature

Complete the following courses:

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History

Music Composition Minor

The Music Composition minor is for non-music majors and is designed to provide students with a concentrated opportunity to enrich, sharpen, and broaden their personal writing skills through music composition. Course of study includes public performance of the student's original pieces. This minor provides the student with the opportunity to explore one of three areas of emphasis: instrumental, choral, and electro-acoustic composition. This minor consists of 23-25 hours. Minors must satisfy the recital attendance policies stated in the department handbook. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

MTD 131	1	Introduction to Performing Arts
MUS 100K	1	Applied Lesson—Piano (proficiency required)
MUS 101	0-1	Music Theory (or competency)
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 125	3	Music Theory and Harmony II
MUS 125L	1	Music Theory and Harmony II Lab
MUS 132	2	Survey of Music History
MUS 201	1	Computers, Technology, and Music
MUS 224	3	Music Theory and Harmony III
MUS 224L	1	Music Theory and Harmony III Lab

Complete one of the following areas of emphasis:

Instrumental

MUS 121	2	Seminar in Composition I
MUS 122	2	Seminar in Composition II
MUS 352	2	Instrumental Arranging

Choral

MUS 121	2	Seminar in Composition I
MUS 122	2	Seminar in Composition II
MUS 351	2	Choral Arranging

Electro-acoustic

MUS 121	2	Seminar in Composition I
MUS 122	2	Seminar in Composition II
MUS 292	3	Introduction to Electronic Music

Theatre Arts Minor

The Theatre Arts minor requires the completion of 23 credit hours and participation in at least one theatre production per academic year. *No more than 50% of the credits may overlap with another major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

MTD 131	1	Introduction to Performing Arts
THR 112	3	Performing Literature
THR 220	1	Stage Diction: Fundamentals and Dialect
THR 241	3	Stagecraft and Design
THR 432	3	Play Directing
THR 433	1	Directing II: Application

Select one course from the following:

THR 130	3	Theatre History I: Antiquity to the Renaissance
THR 230	3	Theatre History II: Renaissance to Postmodernism

Select one course from the following:

THR 212	3	Mask Characterization and Movement
THR 240	3	Acting II: Methods and Theories

Select one course from the following:

THR 301	3	Theories and History of Applied Theatre
THR 335	3	Music Theatre: History and Styles
THR 340	3	Applications in Dramaturgy
THR 345	3	Stage Management
THR 362	3	Conversations About Theatre and Theology
THR 402	3	Contemporary American Theatre

Select 2 credit hours¹ from two areas¹

THR 110A	1	Theatre Laboratory-Acting
THR 110P [†]	1-2	Theatre Laboratory-Production [†]

[†]Areas include Acting and three areas in Production: Costume/Make-up, Management, and Stagecraft.

Worship Arts Minor

The Worship Arts minor is for non-music majors and is designed to prepare the graduate for music ministry in the Christian Church. The minor consists of 31-32 hours including course requirements and four semesters of applied music lessons. Minors must satisfy the recital attendance policies stated in the department handbook. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

Applied Primary Instrument[†]

MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)
MUS 100_	1	Applied Lesson (1 hour)

[†]Recommend piano, organ, voice, or guitar.

Ensembles

Participate in 2 credit hours of a major ensemble.

Participate in an additional 2 credit hours of a major or minor ensemble.

Core Courses

MTD 131	1	Introduction to Performing Arts
MUS 101	0-1	Music Theory (or competency)
MUS 118	2	Vocal Diction I
MUS 124	3	Music Theory and Harmony I
MUS 124L	1	Music Theory and Harmony I Lab
MUS 132	2	Survey of Music History

Worship Arts Core

MUS 245	3	Foundations of Worship Arts
MUS 250	1	Audio Visual Technologies in the Church
MUS 345	3	Twenty Centuries of Christian Song
MUS 357	3	Musical Leadership in the Church
MUS 361	3	Conducting I
MUS 393	1	Practicum (advisor approved)

A minimum of one semester of piano study is recommended for voice or guitar students.

Dance Courses

DAN 221 2 hours

Ballet

This course is designed to teach positions, steps, terminology, and introductory level skills that form the basis of ballet technique. Barre exercises, center exercises including adagio, petite allegro and grand allegro, and quality stretching for a dancer's workout will be taught and perfected. Additionally, there will be an introduction to various notable performers and some of the historical and cultural aspects of ballet, presented through discussion and video observations. *Meets a foundational core aesthetic literacy requirement. Offered Fall semester of odd years.*

DAN 222 2 hours

Jazz

This course is designed to teach positions, steps, terminology, and introductory level skills that form the basis of jazz technique. A brief study of Luigi, Fosse, and contemporary jazz will be introduced. Stretches appropriate for the increase of flexibility and support will be stressed and perfected. Additionally, there will be an introduction to various notable performers and some of the historical and cultural aspects of jazz, presented through discussion and video observations. Jazz, contemporary and modern, techniques will be explored in this class. *Meets a foundational core aesthetic literacy requirement. Offered every fourth Spring semester (alternates with DAN 221, DAN 223, DAN 224).*

DAN 223 2 hours

Tap

This course is designed to teach positions, steps, terminology, and introductory level skills that form the basic tap technique. This course will be an elementary level of tap, teaching the basics steps in tap dancing. Theatre tap will be focused on in this class and taught while learning some invaluable time steps for future use in auditions and professional work. Additionally, there will be an introduction to various notable performers and some of the historical and cultural aspects of tap, presented through discussion and video observations. *Meets a foundational core aesthetic literacy requirement. Offered every fourth Spring semester (alternates with DAN 221, DAN 222, DAN 224).*

DAN 224 2 hours

Musical Theatre Styles

This course is designed to develop technique and ability from all aspects of dance (ballet, jazz, and tap) and incorporate them into performance of Musical Theatre. Students will be taught the importance of routine, weekly classes, and flexibility to maintain their craft. Classwork in stretching, small combinations, and a longer musical theatre dance will be incorporated in every class. Additionally, there will be an introduction to various notable performers and choreographers of Broadway and theatre, presented through discussion and video observations. *Meets a foundational core aesthetic literacy requirement. Offered every fourth Spring semester (alternates with DAN 221, DAN 222, DAN 223).*

DAN 231 1 hour

Technique: Ballet

This intermediate ballet course will provide progression, barre, center, and floor exercises, with an opportunity for pre-pointe work, floor barre, conditioning, and variations. Advanced level technique allows for the refinement of intermediate skills and breathing techniques for muscular strength and endurance exercises.

DAN 232 1 hour

Technique: Modern

This intermediate modern dance class focuses on proper technique, performing complex combinations, and developing a personal style of each individual dancer. Self-discovery, discipline, and expression in the modern dance form will be encouraged and explored.

DAN 241 3 hours

Dance History

Study the history of dance by learning the evolution of dance through the years, important choreographers and performers, how dance styles throughout the world have influenced mainstream, and where dance has been and where it is going. *Offered Fall semester of odd years.*

DAN 242 3 hours

Dance Pedagogy

Develop a strong knowledge in the classroom as an instructor. Learn to find corrections, know what to look for in ballet and modern technique, how to give corrections, and the proper flow of a class. *Offered Spring semester of even years.*

DAN 322 2 hours
Jazz
See DAN 222.

DAN 323 2 hours
Tap
See DAN 223.

DAN 324 2 hours
Musical Theatre Styles
See DAN 224.

DAN 331 1 hour
Technique: Ballet
See DAN 231.

DAN 332 1 hour
Technique: Modern
See DAN 232.

DAN 333 1 hour
Pointe

This course serves as an advance in the development of the student's skills in ballet. A focus is on specific ballet techniques and performance qualities in ballet. Offered Spring semester of even years.

DAN 334 3 hours
Dance Improvisation and Composition

This course concentrates on techniques of improvisation and dance choreography: improvisation in both singular and contact, composition in forms of ballet, modern, and musical theatre production. Offered Fall semester of even years.

DAN 383 1-4 hours
Applications in Technique

Application of study will serve as a practical measure of learning and expertise. The student will either serve as a teaching assistant for a modern, ballet, tap, jazz, or musical theatre class, or serve as dance captain in a faculty directed production.

Music Courses

MUS 100 1 hour
Applied Lesson

Learning practice methods, building good techniques, acquiring sufficient repertoire, gaining a broad knowledge of literature and composers, and achieving performance skills. Does not meet a foundational core aesthetic literacy requirement. Lessons are designed for music majors and minors (registration overrides will be required for minors). Lessons are ½ hour and 1 hour. May be taken multiple times for credit.

MUS 100G Applied Lesson—Guitar
MUS 100I Applied Lesson—Instrumental
MUS 100K Applied Lesson—Piano
MUS 100V Applied Lesson—Voice

MUS 101 1 hour
Music Theory

A course in the rudiments of music designed to prepare the beginning music major/minor for entrance into the music theory cycle. Consists of integrated laboratory experience for development of written, aural, and keyboard skills. Proficiency placement test offered during Fall welcome weekend. Meets a foundational core aesthetic literacy requirement. Offered Fall semester.

MUS 105 1 hour
Applied Lesson

Private instruction designed for personal enrichment and development of musical talent. Content determined by contract with instructor at the beginning of each semester. Meets a foundational core aesthetic literacy requirement. Lessons are ½ hour.

MUS 105B Applied Lesson—Brass
MUS 105G Applied Lesson—Guitar
MUS 105K Applied Lesson—Piano
MUS 105N Applied Lesson—Organ
MUS 105P Applied Lesson—Percussion
MUS 105S Applied Lesson—Strings
MUS 105V Applied Lesson—Voice
MUS 105V Applied Lesson—Woodwind

MUS 118 2 hours
Vocal Diction I

A study of the International Phonetic Alphabet and its application for singers in Italian, German, French, and English. Students will use classical and contemporary texts and songs as their basis of study. This class is to be taken in conjunction with Applied Lessons, supplying a firm foundation for future study. Required of all Voice specialties and Musical Theatre majors. Offered Spring semester.

MUS 119 1 hour
Vocal Diction II

A study of English, French, Italian, and German diction and its application in songs and arias. A working knowledge of the International Phonetic Alphabet is utilized as a learning tool. This class is to be taken in conjunction with applied lessons, supplying a firm foundation for future study. Required of all voice and musical theatre majors and minors. Prerequisite: MUS 118 or permission of instructor. Offered Fall semester.

MUS 121 2 hours
Seminar in Composition I

Original composition in elementary and advanced forms. Emphasis is on development of individual style of expression. Prerequisite: MUS 101 or permission of instructor.

MUS 122 2 hours
Seminar in Composition II

Original composition in elementary and advanced forms. Continued emphasis is on development of individual style of expression. Prerequisite: MUS 121 or permission of instructor.

MUS 124 3 hours
Music Theory and Harmony I

A study of the basic structural elements of tonal theory and harmony. Topics covered include construction of 7th chords, principles of part writing and voice leading, melodic phrase analysis, diatonic harmonic progression (including function progression, cadence types, and non-harmonic chord tones), and analysis of small forms. Prerequisite: MUS 101 or successful passing of music department's Music Theory placement exam. Corequisite: MUS 124L. Offered Spring semester.

MUS 124L 1 hour
Music Theory and Harmony I Lab

A laboratory experience that is designed to reinforce the content covered in MUS 124 through the development of aural and keyboard skills. Corequisite: MUS 124. Offered Spring semester.

MUS 125 3 hours
Music Theory and Harmony II

A continuation of Music Theory and Harmony I. An intermediate study in the principles of tonal harmonic progression, with an emphasis on the principles of chromaticism and modulation. Topics will include secondary dominants (vocabulary and part writing); closely related key structures; modulation types (common chord, chromatic, phrase, and sequential); and analysis of binary, ternary, and sonata forms. Prerequisite: MUS 124 and MUS 124L. Corequisite: MUS 125L. Offered Fall semester.

MUS 125L 1 hour
Music Theory and Harmony II Lab

A laboratory experience that is designed to reinforce the content covered in MUS 125 through the development of aural and keyboard skills. Corequisite: MUS 125. Offered Fall semester.

MUS 132 2 hours
Survey of Music History

This course will explore the basic elements of music. It is a survey course of music history and literature in the Western-European tradition, with emphasis on the major composers, genres, forms, stylistic characteristics, and aesthetic principles of the various eras. The survey also includes a review of the American Vernacular music culture, emphasizing the collateral influence it and European art music had on each other. Meets a foundational core aesthetic literacy requirement. Offered Spring semester.

MUS 135 2 hours
Introduction to Music Education

An introduction to the field of music education (P-12, general, choral, instrumental) in general, and the areas of licensure (performance, knowledge, and dispositions) that need to be demonstrated and documented in particular. The IPSE components—Indiana Standards, technology, diversity, service learning, literacy, exceptionality, P-12 proficiencies, induction and portfolio development and assessment—will be introduced in class. In addition, an all-day field trip will be taken to observe the music program in a model school and attendance will be expected at the IMEA state conference. Offered Fall semester.

MUS 149 2-3 hours
Music Appreciation

An introduction to the art of music and its materials. A course designed to develop greater understanding and appreciation of music and the various historical periods. Considerable attention is given to listening to recordings and studying the lives of leading composers. Meets a foundational core aesthetic literacy requirement. This course is offered through Taylor University Online (TUO).

MUS 170 1-4 hours
Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

MUS 200 2 hours
Applied Lesson

Learning practice methods, building good techniques, acquiring sufficient repertoire, gaining a broad knowledge of literature and composers, and achieving performance skills. *Does not meet a foundational core aesthetic literacy requirement. Lessons are designed for music majors and minors (registration overrides will be required for minors). Lessons are 1 hour. May be taken multiple times for credit.*

MUS 200C	Applied Lesson—Composition
MUS 200G	Applied Lesson—Guitar
MUS 200I	Applied Lesson—Instrumental
MUS 200K	Applied Lesson—Piano
MUS 200V	Applied Lesson—Voice

MUS 201 1 hour
Computers, Technology, and Music

This is a preliminary-level instructional course designed to train the music major in the knowledge and applications of computer and MIDI systems as used in the music profession. Emphasis is placed on acquiring basic knowledge and skills in MIDI and hardware systems, synthesizer performance, sequencing and desktop publishing. Basic keyboard skills are essential. Includes a supervised lab each week. *Meets a foundational core aesthetic literacy requirement. Prerequisites: MUS 124 and MUS 124L; or permission of the instructor.*

MUS 210GM 1 hour
Exploration of Global Music Ensemble

Exploration of Global Music Ensemble is an ensemble of singers and instrumentalists. Students will experience hands-on exploration of traditional musical repertoires from around the world. Students will perform on instruments and sing songs from Asia, Africa, and many countries around the world. Sometimes these styles are learned aurally/orally or with different kinds of musical notation. No prior experience with western music notation is necessary. *This ensemble is opened to all students. Singers and instrumentalists are welcomed. Meets a foundational core aesthetic literacy requirement.*

MUS 210JC 1 hour
Jazz Combo

The Jazz Combo is a selected ensemble by audition. The combo explores improvisatory stylings and performs a concert each semester. Beginning, intermediate and advanced level instruction is given. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 210JE 1 hour
Jazz Ensemble

The Jazz Ensemble is open to all wind and percussion players by audition. It performs contemporary stage band literature, as well as the jazz classics. This ensemble performs a concert each semester and tours in local schools and regional festivals. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 210LT 1 hour
Lyric Theatre

The Lyric Theatre program supports the liberal arts mission of Taylor University by providing a broad range of performance experiences that span historic and contemporary operatic and music theatre periods, genres, and styles. Lyric Theatre is open to all students by audition. Performances include fully staged productions and semi-staged "scenes" productions. The primary goal of the ensemble is to create live performances in which students demonstrate dramatic confidence, vocal ease, and aesthetic sensibility. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 210PB 1 hour
Pep Band

The Pep Band is open to all students who enjoy performing contemporary music at football and basketball home games. *No audition required. Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 210TS 1 hour
Taylor Sounds

The Taylor Sounds is a select group of musicians dedicated to a high standard of chamber choral performance. The goal of the group is to learn a breadth of quality musical styles by notable composers. The mission of the ensemble is to express the highest divine and human values through the choral chamber music art. Performance tours include domestic and overseas venues, as well as conferences, conventions, and banquets. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 210WC 1 hour
Taylor University Women's Chorus

A choral ensemble open by audition to all women at Taylor University. This choir utilizes contemporary sacred choral arrangements, spirituals, and praise and worship songs as a means of ministering. Pursuing vocal excellence, the Adoration Chorus focuses on leading others in worship, performing in churches, university functions, schools, and community venues. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 224 3 hours
Music Theory and Harmony III

A continuation of Theory and Harmony II. Advanced studies in the principles of extended tonal harmony, including introduction to hyper-tonal and post-tonal concepts as found in the early 20th century. Topics will include chromatic chord vocabulary and part writing practice, foreign-key and enharmonic modulation, and early twentieth century structural concepts. *Prerequisites: MUS 125 and MUS 125L. Corequisite: MUS 224L. Offered Spring semester.*

MUS 224L 1 hour
Music Theory and Harmony III Lab

A laboratory experience that is designed to reinforce the content covered in MUS 224 through the development of aural and keyboard skills. *Corequisite: MUS 224. Offered Spring semester.*

MUS 240 1 hour
Taylor University Chorale

The Taylor Chorale is open to all Taylor students on an audition basis. Repertoire consists of music drawn from the spectrum of sacred choral works. The mission of the ensemble is to express the highest divine and human values through the choral arts. Performances include domestic and international tours, as well as concerts for conferences and conventions. Performance of sacred works with professional orchestras are also part of the chorale tradition. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 243 3 hours
Music and World Cultures

An investigative study of selected non-Western cultures and the role of music within the cultures. Three components are basic principles of culture and basic principles of music, Asian culture and music, and African culture and music. *This cross-cultural course is open to all students. Upper-division credit requires a paper pertaining to music and a culture of the student's choice. Meets a foundational core aesthetic literacy requirement. Offered January interterm.*

MUS 245 3 hours
Foundations of Worship Arts

Biblical and musical foundations of Christian worship ministry. A survey of various worship styles including historic and contemporary worship formats. Principles of leadership and creativity in worship planning will be discussed. *Open to all majors. Meets a foundational core aesthetic literacy requirement. Offered Fall semester of odd years.*

MUS 250 1 hour
Audio Visual Technologies in the Church

A study of the use of technology in the modern Christian Church including sound reinforcement, video projection, computer assisted worship, and lighting formats. This course will have a practical application component which includes laboratory work with the chapel media technicians. *Offered January interterm of odd years.*

MUS 270 1-4 hours
Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

MUS 275 0 hours
Performance Class

Performance Class meets Friday (12:00 PM) and is required of all majors and minors in the Department of Music, Theatre, and Dance in every semester they are registered for Applied Lessons. The main focus of the class is to increase performance skills in a non-juried environment. In addition, presentations on related topics—performance injury, health, and hearing—are given periodically. Students are required to perform in a certain number of class sessions each semester, depending upon their degree program. *Students with unavoidable class conflicts must contact the instructor or Department Chair.*

MUS 280 1 hour
Wind Ensemble

The wind ensemble is open to all wind and percussion players by audition. The Wind Ensemble performs the classic and contemporary wind repertoire, sacred, pops, and pep band literature. The wind ensemble presents one full concert program each semester. *Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.*

MUS 290 Symphony Orchestra	1 hour	The Symphony Orchestra is open to all string, wind, and percussion players by audition. The symphony orchestra performs selected masterworks of the symphonic repertoire written for full orchestra from each of the major historical periods. The symphony orchestra performs one full concert program each semester. <i>Meets a foundational core aesthetic literacy requirement when taken for credit. Students may register to participate for 0 credit hours; 0 credit registration does not count toward foundational core requirement.</i>	MUS 320 Internship	1-4 hours	In-depth experience with a minister of music involving responsibilities in various phases of the church music program, including administration, organization, rehearsal and worship.
MUS 292 Introduction to Electronic Music	3 hours	Emphasis is placed on working with current technology with the objective of an introduction to the aesthetics and types of electronic music, creating an electronic composition as a final project. <i>Prerequisite: MUS 201. Offered Fall semester.</i>	MUS 331 Instrumental Methods III—Percussion	1 hour	Class instruction in percussion instruments. Designed to acquaint music education specialists, composition students, and church musicians with basic techniques for performing, arranging, and teaching percussion instruments. <i>Offered Spring semester of even years.</i>
MUS 300 Applied Lesson	1 hour	Learning practice methods, building good techniques, acquiring sufficient repertoire, gaining a broad knowledge of literature and composers, and achieving performance skills. <i>Lessons are designed for music majors and minors (registration overrides will be required for minors). Lessons are 1 hour. May be taken multiple times for credit.</i>	MUS 332 Instrumental Methods IV—Strings	1 hour	Class instruction in string instruments. Designed to acquaint music education specialists, composition students, and church musicians with basic techniques for performing, arranging, and teaching orchestral stringed instruments. <i>Offered Fall semester of odd years.</i>
MUS 300G MUS 300I MUS 300K MUS 300V	Applied Lesson—Guitar Applied Lesson—Instrumental Applied Lesson—Piano Applied Lesson—Voice		MUS 340 Taylor University Chorale	1 hour	See MUS 240.
MUS 301 Music for Elementary Teachers	2 hours	An introduction to the fundamentals of music and to the methods and materials involved in teaching music and integrating music at the elementary school curriculum. Specific focus is placed on incorporating music instruction, using the latest methods and most recently published materials, into the regular classroom setting to enhance enjoyment as well as whole person education.	MUS 342 Advanced Form and Analysis	3 hours	Exploration of representative works after 1600 through the lens of formal structure, harmonic analysis, and counterpoint, with an emphasis on the stylistic aspects of music. <i>Prerequisites or corequisites: MUS 125 and MUS 125L. Offered Fall semester of even years.</i>
MUS 309 Secondary School Methods	3 hours	An introduction to the methods and materials for teaching general music, instrumental music and choral music at the secondary level. <i>Prerequisites: EDU 150 and EDU 260. Offered Spring semester of even years.</i>	MUS 343 Music and World Cultures	3 hours	See MUS 243.
MUS 310CM Chamber Music	1 hour	Performance experience in chamber music organized by department faculty to provide interactive music making experiences. Offered as independent study with area faculty members. <i>Meets a foundational core aesthetic literacy requirement. Prerequisite: Junior status. Offered Fall semester of odd years.</i>	MUS 345 Twenty Centuries of Christian Song	3 hours	An introduction to the use of Christian congregational song through historical survey and theological reflection of music and lyrics from chant to rhythm-section led music. Additional focus on how to include a variety of song types in Christian worship and ways to introduce music to congregations.
MUS 310GM Exploration of Global Music Ensemble	1 hour	See MUS 210GM.	MUS 346 Instrumental Methods I—Brass Instruments	1 hour	Class instruction in various brass instruments. Designed to acquaint music education specialists, composition students and church musicians with basic performance problems, arranging and teaching techniques of the brasses. <i>Offered Fall semester of even years.</i>
MUS 310JC Jazz Combo	1 hour	See MUS 210JC.	MUS 347 Instrumental Methods II—Woodwinds	1 hour	Class instruction in various woodwind instruments. Designed to acquaint music education specialists, composition students and church musicians with basic techniques for teaching, arranging and playing woodwind instruments. <i>Offered Spring semester of odd years.</i>
MUS 310JE Jazz Ensemble	1 hour	See MUS 210JE.	MUS 351 Choral Arranging	2 hours	A course on the ranges, tonal possibilities, and technical limitations of the different voices and the analysis of scores of standard choral compositions. Arranging and adapting scores for various vocal combinations are included. <i>Prerequisites or corequisites: MUS 125 and MUS 125L. Offered Fall semester of even years.</i>
MUS 310LT Lyric Theatre	1 hour	See MUS 210LT.	MUS 352 Instrumental Arranging	2 hours	Band and orchestral instruments are studied with a view to practical and effective writing. Arranging of compositions for various instrumental combinations is included. <i>Prerequisites or corequisites: MUS 125 and MUS 125L. Offered Fall semester of odd years.</i>
MUS 310PB Pep Band	1 hour	See MUS 210PB.	MUS 357 Musical Leadership in the Church	3 hours	A study of the organization, administration, and operation of the Christian church music program. Areas of study include the graded children's choir program, adult choir ministry, praise team ministry, and utilization of various instruments. <i>Open to music majors and minors. Prerequisite: MUS 245 or permission of instructor. Offered Spring semester of even years.</i>
MUS 310TS Taylor Sounds	1 hour	See MUS 210TS.	MUS 360 Independent Study	1-4 hours	An individualized, directed study involving a specified topic.
MUS 310WC Taylor University Women's Chorus	1 hour	See MUS 210WC.	MUS 361 Conducting I	3 hours	An introduction to the psychological, technical, and musical elements of choral conducting. Study of musical scores of choral literature is also stressed. <i>Offered Fall semester.</i>
MUS 311 Elementary School Music	3 hours	A study of the role of the music specialist in planning musical experiences for children, with emphasis on child development, music literature, teaching aids, and teaching practices, utilizing recorders and Orff Instruments. Curriculum development and the organization of the elementary school music program are also included. <i>A laboratory experience is also included. Offered Spring semester of odd years.</i>			

MUS 362 3 hours
Conducting II
Continuation of MUS 361 with emphasis on advanced score studies, conducting, and rehearsal techniques of instrumental works. Lab experience with band and orchestra ensembles is included. *Prerequisite: MUS 361 or permission of the instructor. Offered Spring semester.*

MUS 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

MUS 371 3 hours
Music History and Literature I
An introduction to western music and styles from the Middle Ages to the Classical period. Stylistic cognizance is acquired through examination of prevailing musical idioms, forms, and literature. Composers, performers, and historical figures that influenced music history are also examined briefly, as well as terminology and vocabulary common to musicology. *Prerequisites: MUS 124 and MUS 132. Offered Fall semester.*

MUS 372 3 hours
Music History and Literature II
An introduction to western music and musical style from the Romantic period to the present. Stylistic cognizance is acquired through examination of prevailing musical idioms, forms, and literature. Composers, performers, and historical figures that influence music history are also examined, as well as terminology and vocabulary common to musicology. *Prerequisites: MUS 124 and MUS 132. Offered Spring semester.*

MUS 380 1 hour
Wind Ensemble
See MUS 280.

MUS 381 2 hours
Piano Pedagogy I
A study of the methods and materials of teaching beginning piano students. Supervised teaching experience is included. *Offered Spring semester of even years.*

MUS 382 2 hours
Piano Pedagogy II
A study of the methods and materials of teaching intermediate keyboard students. Supervised teaching experience is included. *Offered Fall semester of even years.*

MUS 390 1 hour
Symphony Orchestra
See MUS 290.

MUS 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

MUS 400 2-4 hours
Applied Lesson
Learning practice methods, building good techniques, acquiring sufficient repertoire, gaining a broad knowledge of literature and composers, and achieving performance skills. *Lessons are designed for music majors and minors (registration overrides will be required for minors). Lessons are 1 hour. May be taken multiple times for credit.*

MUS 400C	Applied Lesson—Composition
MUS 400G	Applied Lesson—Guitar
MUS 400I	Applied Lesson—Instrumental
MUS 400K	Applied Lesson—Piano
MUS 400V	Applied Lesson—Voice

MUS 440 3 hours
Vocal Pedagogy and Literature
Introduction to the scientific principles and theories of vocal production. Guides the student in building an appropriate repertoire of pedagogic materials and repertoire choices through class demonstration, discussion, and examination of current pedagogical attitudes and research. Class members are required to observe and teach voice lessons. *Offered Spring semester of even years.*

MUS 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

MUS 462 1 hour
Instrumental Pedagogy
Explores techniques and materials related to the teaching of instruments. A supervised lab experience is included.

MUS 463 1 hour
Instrumental Literature
A study of the literature of specific instruments from various historical periods with emphasis placed on current practice. Graded method books and technical materials will also be reviewed. *Taught as a private lesson with specialist instructor and requisite fee. Prerequisite: MUS 462. Offered Spring semester of even years.*

MUS 470 2 hours
Piano Literature
A survey of keyboard works chosen from Baroque to contemporary periods. Lecture, performance, recorded examples, and pedagogy techniques are used. *Open to piano majors, minors, and others by permission of the instructor. Offered Spring semester of odd years.*

MUS 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

MUS 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Music, Theatre, and Dance Courses

MTD 131 1 hour
Introduction to Performing Arts
An introduction to the performing arts as an outgrowth of the Truth, Beauty and Goodness of God. The discussion will begin the development of the scholar/artist who know their work as a continuation of the creative work of the Creator. An awareness of how Music Theatre and Dance share common philosophical foundations and create opportunities for the exploration and expression of our humanity will provide the structure of the course. *A requirement for all departmental freshmen. Meets a foundational core aesthetic literacy requirement. Offered Fall semester.*

MTD 392 3 hours
Entrepreneurship in the Arts
A study of the entrepreneurial aspects of the performing arts industry including marketing and branding, the recording industry, leading and sustaining arts ventures, communication, networking, and the overarching business of profit and not for profit artistic enterprises. *Offered Spring semester of even years.*

Theatre Courses

THR 110A 1 hour
Theatre Laboratory—Acting
Credit for participation in theatrical productions. Requires a minimum of 30 hours, one reflection paper, and peer and instructor assessment. For work in acting—includes audition, casting, rehearsal, creating a role, and performance. *Students may register to participate for 0 credit hours; 0 credit registration does not fulfill major requirement. May be repeated for five credits total. For theatre majors and minors. Instructor permission required.*

THR 110P 1 hour
Theatre Laboratory—Production
Credit for participation in theatrical productions. Requires a minimum of 30 hours, one reflection paper, and peer and instructor assessment. For work in costume and makeup, management, or stagecraft—includes project work and working within a group. *Students may register to participate for 0 credit hours; 0 credit registration does not fulfill major/minor requirement. May be repeated for five credits total. For theatre majors and minors. Instructor permission required.*

- THR 112** **3 hours**
Performing Literature
 This literature and performance course aims to explore the relationship between literature and theatre with emphasis given to translating analytical decisions into performance. The main focus of the course is the interaction between the literary skills of close reading, critical writing, and discussion and the practical, aesthetic, and symbolic elements of performance. *Meets either a foundational core aesthetic literacy requirement or foundational core literature requirement. Offered Fall semester.*
- THR 130** **3 hours**
Theatre History I: Antiquity to the Renaissance
 This survey course covers the development of the theatre from its supposed origins in ancient Greece and Rome to the European Renaissance including its architecture, production values, acting and directing styles, and the political and social movements that informed these traditions. Students will engage with selected readings, discussion, projects, and multimedia presentations. *Meets a foundational core aesthetic literacy requirement. Offered Spring semester.*
- THR 170** **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- THR 212** **3 hours**
Mask Characterization and Movement
 Study of the theories and principles of acting as an art, approached through a Christian perspective of life and the human situation. Practical application of performance techniques and character development are provided through laboratory theatre experiences. *Corequisite: KIN 200J. Offered Spring semester of even years.*
- THR 220** **1 hour**
Stage Diction: Fundamentals and Dialect
 Introduces and develops speech techniques for the actor, specifically in the areas of relaxation, posture and alignment, respiration, phonation, registration, resonance, and articulation, as well as study of the fundamental knowledge and skills required to perform specific and credible dialects for the stage. *Offered January interterm of even years.*
- THR 230** **3 hours**
Theatre History II: Renaissance to Postmodernism
 This course will explore the history of theatre including its architecture, production values, acting and directing styles, and the political and social movements that informed the traditions from the Renaissance to the present. Students will engage with selected readings, discussion, projects, and multimedia presentations. *Meets a foundational core aesthetic literacy requirement. Offered Spring semester.*
- THR 240** **3 hours**
Acting Methods and Theories
 The purpose of this course is to explore acting theory and teaching methods of those whose names are associated with the evolution of the modern theatre. This course will aid the student in the development of basic performance skills through scene work. *Meets a foundational core aesthetic literacy requirement.*
- THR 241** **3 hours**
Stagecraft and Design
 This course is designed as an introduction to the art of theatrical design and production. It will be taught as a survey course, exploring the many technical aspects of theatrical production work from the conceptual beginnings, through the design process, to the final work. Students will gain a basic understanding and competency in the areas of production research, scenic design, set construction, costume research and design, make-up design and application, scenic art techniques, properties, lighting, and sound design through projects and class discussion. *Meets a foundational core aesthetic literacy requirement. Offered Fall semester of even years.*
- THR 270** **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- THR 301** **3 hours**
Theories and History of Applied Theatre
 Theories and history of applied theatre covering a wide range of theatre applications in education, health, community development, and human rights. *Prerequisite: THR 112 or permission of instructor. Offered Fall semester of odd years.*
- THR 330** **2 hours**
Audition Techniques
 Students cultivate an understanding of the realities of the marketplace and necessary techniques for professional acting. The focus is on acquisition of performance skills. This course will aid the student in the development of basic performance skills through the building and refining of vocal/monologue audition repertoire. *Offered January interterm of odd years.*
- THR 335** **3 hours**
Music Theatre: History and Styles
 A practical application course that focuses on learning the ways in which musical and textual understanding inform the interpretation and performing of acting and singing techniques in various musical theatre forms from the 1920's through the 20th century. *Offered Spring semester of even years.*
- THR 340** **3 hours**
Applications in Dramaturgy
 This course is recommended for anyone who loves theatre and wishes to acquire a more sophisticated understanding of this art form. This course will introduce students to the profession of dramaturgy which began in 1867 in Germany and took root in the United States in the late 1960's. A single course or even an academic program in this field cannot train a professional dramaturg all at once. A mature dramaturg emerges gradually through incremental learning and hands-on-experience. This study and practical application will provide the student with an introduction to the discipline. *Offered Spring semester of even years.*
- THR 345** **3 hours**
Stage Management
 This course will provide students with the opportunity to explore their leadership potential and capabilities through the role of the Stage Manager in a theatrical context. Students will have the opportunity to interact with SM professionals. Students will be encouraged to assess their own skills and consider how to best address improvement. *Offered Fall semester of odd years.*
- THR 360** **1-4 hours**
Independent Study
 An individualized, directed study involving a specified topic.
- THR 362** **3 hours**
Conversations About Theatre and Theology
 The course will explore central tenets of the Christian faith, incarnation, community, and presence, and the ways in which those tenets are also essential to the theatre. The value of both cultural institutions will be explored as well as the threats to their flourishing. *Meets a foundational core aesthetic literacy requirement. Offered Fall semester of even years.*
- THR 370** **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- THR 393** **1-4 hours**
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Pass/fail only. Offered primarily during Summer.*
- THR 402** **3 hours**
Contemporary American Theatre
 The study and application of literary theory as it relates to theatre and performance. This course will examine current theoretical approaches from semiotics and post-structuralism through cultural materialism, post-colonial studies, and feminist theory.
- THR 432** **3 hours**
Play Directing
 Study of the theories and principles of directing as an art approached through a Christian perspective of life and the human situation. Emphasis is given to play analysis with practical application provided through laboratory theatre experience. *Prerequisite: THR 240 or permission of instructor. Offered Spring semester.*
- THR 433** **1 hour**
Directing II: Application
 The application of the theories and principles of directing explored in THR 432. Students will apply their learning to the production of a full-length play with focus given to actor/director communication, composition, and execution. *Prerequisite: THR 432. Offered Spring semester.*
- THR 440** **2 hours**
Musical Theatre Showcase
 Studio course for graduating musical theatre majors. Classwork involves extensive repertoire from genres of musical theatre appropriate for each individual. The course will culminate in a showcase performance presented at the end of the semester.
- THR 450** **1-4 hours**
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.
- THR 480** **1-4 hours**
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. *Prerequisite: Approved capstone proposal.*
- THR 490** **1-2 hours**
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*
- THR 492** **8-16 hours**
Internship
 Professional semester of supervised internship in a work setting related to the major field of study. *Prerequisites: Completion of departmental core and major core courses and approval of the department faculty. Pass/fail only.*



TAYLOR
UNIVERSITY

School of Business,
Education, and Social
Sciences

BENJAMIN HOTMIRE, PHD, DEAN

BUSINESS

EDUCATION

PSYCHOLOGY

SOCIOLOGY AND SOCIAL WORK

Business

Chair, Professor J. Hirschy
Professors M. Bates, J. Boyce, A. Tsang
Associate Professors J. Little, D. Poucher
Assistant Professors M. Chasara, A. Stucky

In support of the University's mission, the department prepares students to engage in a life of servant leadership characterized by lifelong learning, innovation, excellence, and ethics in organizations around the world.

As an expression of Taylor's multi-dimensional education philosophy, the department offers majors in Accounting, Finance, Management, Marketing, and Sport Management. Minors are available in Accounting, Economics, Innovation and Entrepreneurship, Finance, Management, Marketing, and Sport Management.

All business curriculum courses combine theory, principles, techniques, and practical applications to enhance graduates' employment opportunities and serve as a solid groundwork for graduate studies. The relevance of Christian faith through current, real-world situations is emphasized in classes, field trips, and expert Christian guest lecturers. Team development and business projects are available in selected business courses; a practicum experience is required of all business students. Development of communication skills, both written and oral, is emphasized. Many classes give attention to problem solving and quantitative analysis.

Formal acceptance into the Taylor University Business Department is a process that occurs by application after completing 30 credit hours of college coursework including four business prerequisite classes. Your college record serves as a predictor of success and acceptance will be based on academic performance as well as leadership and engagement. In addition to seeking students with strong academic records overall, we select candidates who display academic aptitude for business coursework by strong performance in business pre-admission courses and show evidence of leadership promise through involvement in diverse activities and strong essays. Prior to acceptance, selected major is tentative pending formal acceptance into the department. Criteria and the process for acceptance are available in the department office.

In the summer following a student's junior year, a practicum/internship for four credit hours is required of all majors except Sport Management.

Graduation requirements in the majors include passing all courses within the major with grades of C- or better. Any major course with a grade below C- must be repeated before subsequent sequential courses may be taken. All major courses (including electives) must be passed with a grade of C- or better. Seniors must pass a senior comprehensive examination in their major.

The Accounting, Finance, Management, and Marketing majors are accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Accounting

The Accounting major is designed to prepare students for accounting and financial careers in public accounting, business, government, education and nonprofit organizations. The program presents accounting theory and practice, current developments and ethical considerations discussed in a Christian context. Students are taught how to develop, analyze and interpret financial plans and results and to provide management information in the most useful manner. Guided by faculty advisors, students may pursue programs leading toward certification in public accounting or management accounting. Most states require completion of 150 credit hours before being licensed as a Certified Public Accountant, with some states requiring 150 credit hours before being eligible to sit for the CPA examination.

Accounting (BS)

The Bachelor of Science degree with a major in Accounting requires 82-84 major hours. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Business Core Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
FIN 361	3	Corporate Finance
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MGT 452	3	Strategic Management
MKT 231	3	Principles of Marketing

Accounting Core

ACC 303	3	Cost Accounting
ACC 308	3	Integrated Accounting Systems
ACC 341	4	Intermediate Accounting I
ACC 342	4	Intermediate Accounting II
ACC 405	3	Auditing I (with Data Analytics)
ACC 406	3	Auditing II (with Data Analytics)
ACC 416	4	Advanced Accounting
ACC 442	3	Federal Taxes I
Select <u>6</u> hours (<u>3</u> hours if taking ACC 394) from the following:		
ACC 353	3	Fraud Examination
ACC 370	3	Selected Topics (approved of advisor)
ACC 381	3	Governmental and Non-profit Accounting
ACC 443	3	Federal Taxes 2
ACC 475	6	CPA Topics and Certification
FIN 330	3	Investments

Select one option from the following:

ACC 393	4	Practicum
ACC 394	9	Extended Internship

Additional Major Requirements

MAT 151	4	Calculus I
MAT 210	4	Introductory Statistics
MGT 260	3	Business Systems Applications
SYS 120	4	Introduction to Problem Solving

Accounting (BA)

The Bachelor of Arts degree with a major in Accounting requires 68-70 major hours and two years of one foreign language. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Business Core Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
FIN 361	3	Corporate Finance
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MGT 452	3	Strategic Management
MKT 231	3	Principles of Marketing

Accounting Core

ACC 303	3	Cost Accounting
ACC 341	4	Intermediate Accounting I
ACC 342	4	Intermediate Accounting II
ACC 393	4	Practicum
ACC 405	3	Auditing I (with Data Analytics)
ACC 406	3	Auditing II (with Data Analytics)
ACC 416	4	Advanced Accounting
ACC 442	3	Federal Taxes I

Additional Major Requirements

MAT 210	4	Introductory Statistics
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Select one course from the following:

MGT 260	3	Business Systems Applications (recommended)
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

MAT 110	3	Finite Mathematics (recommended)
MAT 151	4	Calculus I

Accounting/Systems (BS)

The Bachelor of Science degree with a major in Accounting/Systems requires 70-72 major hours and curriculum requirements in information systems and analytics. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Business Core Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
FIN 361	3	Corporate Finance
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MGT 452	3	Strategic Management
MKT 231	3	Principles of Marketing

Accounting Core

ACC 303	3	Cost Accounting
ACC 341	4	Intermediate Accounting I
ACC 342	4	Intermediate Accounting II
ACC 393	4	Practicum
ACC 405	3	Auditing I (with Data Analytics)
ACC 406	3	Auditing II (with Data Analytics)
ACC 416	4	Advanced Accounting
ACC 442	3	Federal Taxes I

Additional Major Requirements

MAT 151	4	Calculus I
MAT 210	4	Introductory Statistics
SYS 120	4	Introduction to Problem Solving

Information Systems and Analytics Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

ACC 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Accounting Minor

The Accounting minor recognizes attainment of a sound, working knowledge of accounting in addition to another major field of study and requires 23-24 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ACC 303	3	Cost Accounting
ACC 341	4	Intermediate Accounting I
ACC 342	4	Intermediate Accounting II
ACC 442	3	Federal Taxes I

Select one course from the following:

ACC 370	3	Selected Topics (approved by advisor)
ACC 443	3	Federal Taxes 2
MGT 260	3	Business Systems Applications
SYS 120	4	Introduction to Problem Solving

Finance

A major in Finance prepares students for careers in corporate and personal finance, investments, and banking. Other possible career paths include insurance and money management. The curriculum focuses on the analytical, functional, and technical skills necessary to enter these professional settings.

Finance (BS)

The Bachelor of Science degree with a major in Finance requires 70 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Business Core Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
FIN 361	3	Corporate Finance
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MGT 452	3	Strategic Management
MKT 231	3	Principles of Marketing

Finance Core Requirements

FIN 330	3	Investments
FIN 393	4	Practicum
FIN 395	1	Professional Ethics in Finance

Additional Major Requirements

ACC 442	3	Federal Taxes I
ECO 428	3	Money and Banking
FIN 294	3	Personal Financial Planning
FIN 350	3	Financial Markets and Institutions
FIN 372	3	Risk Management and Insurance
FIN 431	3	Security Analysis and Portfolio Management
MAT 151	4	Calculus I
MAT 210	4	Introductory Statistics
MGT 260	3	Business Systems Applications

Electives

Select 3 hours from the following:

ECO 331	3	Intermediate Microeconomics
ECO 332	3	Intermediate Macroeconomics
FIN 340	3	Real Estate
FIN 375	3	Financial Data Analysis
FIN 390	3	Behavioral Finance
FIN 474	3	Estate Planning

Finance Minor

The Finance minor requires 22 hours. Additional prerequisite hours are required. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

FIN 330	3	Investments
FIN 361	3	Corporate Finance

Electives

Select 16 hours from the following:

ACC 442	3	Federal Taxes I
ECO 331	3	Intermediate Microeconomics
ECO 332	3	Intermediate Macroeconomics
ECO 428	3	Money and Banking
FIN 340	3	Real Estate
FIN 350	3	Financial Markets and Institutions
FIN 372	3	Risk Management and Insurance
FIN 375	3	Financial Data Analysis
FIN 390	3	Behavioral Finance
FIN 395	1	Professional Ethics in Finance
FIN 431	3	Security Analysis and Portfolio Management
FIN 474	3	Estate Planning

Management

The Management program teaches students how to motivate people, improve decision-making processes, and communicate effectively as leaders. The industry demands managers who are willing to sacrifice and serve for the greater good, attributes considered core to our Management major. A major in Management prepares students for careers in human resource management, operations management, supply chain/logistics, and general management in a variety of fields including sales, non-profit, hospitality, healthcare, finance, and real estate.

Management (BA)

The Bachelor of Arts degree with a major in Management requires two years of one foreign language and 62-71 hours in the major. An optional concentration in Human Resource Management may be added. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Business Core Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
FIN 361	3	Corporate Finance
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MGT 452	3	Strategic Management
MKT 231	3	Principles of Marketing

Management Core

ENT 422	3	New Venture Planning
HRM 362	3	Human Resource Management
HRM 462	3	Organizational Behavior and Development
MGT 393	4	Practicum
MGT 403	3	Operations Management

Management Electives

Select one course from the following:

ENT 381	3	Global Entrepreneurship and Business as Missions
ITB 375	3	International Business
ITB 381	3-4	International Business Study Tour
MKT 380	3	International Marketing

Select one (300-/400-level) elective totaling a minimum of 3 hours from the following areas: ACC, ECO, ENT, FIN, HRM, ITB, MGT, MKT, SYS, or complete a concentration in Human Resource Management.

Additional Major Requirements

MAT 210	4	Introductory Statistics
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Select one course from the following:

MGT 260	3	Business Systems Applications (recommended for BA)
SYS 120	4	Introduction to Problem Solving (recommended for BS)

Select one course from the following:

MAT 110	3	Finite Mathematics (recommended for BA)
MAT 151	4	Calculus I (recommended for BS)

Concentration—Students may select an optional concentration:

Human Resource Management

HRM 365	3-6	SHRM Student Chapter
HRM 472	3	Human Resources Management Topics and Cases

Management/Systems (BS)

The Bachelor of Science degree with a major in Management/Systems requires the 62-71 major hours plus curriculum requirements in information systems and analytics. An optional concentration in Human Resource Management may be added. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Information Systems and Analytics Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

MKT 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Management Minor

The Management minor requires 24 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

ACC 241	3	Accounting Principles I
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MKT 231	3	Principles of Marketing

Select three courses from:

ENT 422	3	New Venture Planning
HRM 362	3	Human Resource Management
HRM 365	3-6	SHRM Student Chapter
HRM 462	3	Organizational Behavior and Development
HRM 472	3	Human Resources Management Topics and Cases
MGT 403	3	Operations Management
MGT 442	3	Business Ethics

Marketing

An integral part of any organization, the Marketing program teaches students how to create, communicate, and deliver satisfying exchanges that have value to customers, clients, partners, and society at large. A major in Marketing prepares students for careers in a variety of fields including advertising, brand management, customer relations, digital analytics, logistics, product management, purchasing, retailing, sales, social media, and market research.

Marketing (BA)

The Bachelor of Arts degree with a major in Marketing requires two years of one foreign language and 62-64 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Business Core Requirements

ACC 241	3	Accounting Principles I
ACC 242	3	Accounting Principles II
ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
FIN 361	3	Corporate Finance
MGT 201	3	Introduction to Business
MGT 311	3	Business Law
MGT 352	3	Management Analysis and Practice
MGT 452	3	Strategic Management
MKT 231	3	Principles of Marketing

Marketing Core

MKT 393	4	Practicum
MKT 410	3	Marketing Research
MKT 445	3	Best Practices in Marketing
MKT 460	3	Consumer Behavior

Marketing Electives

Select 2 additional hours from the following:

ENT 310	3	Creativity and Concept Development
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 381	3	Global Entrepreneurship and Business as Missions
ENT 422	3	New Venture Planning
ENT 430	3	Leadership and Stewardship
ITB 375	3	International Business
ITB 381	3-4	International Business Study Tour
MKT 312	3	Professional Selling
MKT 313	3	Retailing and Services Marketing
MKT 380	3	International Marketing
MKT 390	3	Digital Marketing
MKT 412	3	Advertising and Promotional Strategy
MKT 451	3	Marketing Analytics

Additional Major Requirements

MAT 210	4	Introductory Statistics
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Select one course from the following:

MGT 260	3	Business Systems Applications (recommended for BA)
SYS 120	4	Introduction to Problem Solving (recommended for BS)

Select one course from the following:

MAT 110	3	Finite Mathematics (recommended for BA)
MAT 151	4	Calculus I (recommended for BS)

Marketing/Systems (BS)

The Bachelor of Science degree with a major in Marketing/Systems requires the 62-64 major hours plus curriculum requirements in information systems and analytics. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Information Systems and Analytics Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one courseⁱ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one courseⁱ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one courseⁱ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one courseⁱ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one courseⁱ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one courseⁱ from the following:

MKT 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electivesⁱ, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

ⁱSelection may depend on major.

Marketing Minor

The Marketing minor requires 25 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

MAT 210	4	Introductory Statistics
MGT 201	3	Introduction to Business
MKT 231	3	Principles of Marketing
MKT 445	3	Best Practices in Marketing
MKT 460	3	Consumer Behavior

Select three courses from the following:

MKT 312	3	Professional Selling
MKT 313	3	Retailing and Services Marketing
MKT 380	3	International Marketing
MKT 390	3	Digital Marketing
MKT 410	3	Marketing Research
MKT 412	3	Advertising and Promotional Strategy
MKT 451	3	Marketing Analytics

Sport Management

The Sport Management major blends two disciplines: business and sport. This major addresses the Taylor emphasis on Christian service in the growing area of sport business. The student will learn to identify and understand the internal and external factors that shape sports in a culture, apply management skills, and evaluate the goals of a variety of sport organizations (high school, college, and professional), and be able to apply fundamental business concepts to the sports industry. The student majoring in Sport Management will become familiar with the various agencies governing sports from the professional, collegiate, high school, and amateur levels. An internship is required for both baccalaureate degrees in Sport Management.

Sport Management (BA)

The Bachelor of Arts degree with a major in Sport Management requires two years of one foreign language and 57-58 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

ACC 241	3	Accounting Principles I
ECO 201	3	Principles of Microeconomics
JRN 230	3	Introduction to Sports Writing
KIN 220	3	Principles of Coaching
MGT 311	3	Business Law
MKT 231	3	Principles of Marketing
SMA 115	3	Introduction to Sport Management
SMA 210	3	Introduction to Sport Technology and Analytics
SMA 350	3	Sport Management
SMA 351	3	Sport Public Relations
SMA 352	3	Event and Facility Management
SMA 354	3	Sport Finance
SMA 393A	1	Practicum
SMA 393B	1	Practicum
SMA 430	3	Legal Issues in Sport
SMA 480	3	Seminar
SMA 492	4	Internship

Select one course from the following:

MAT 110	3	Finite Mathematics (recommended)
MAT 151	4	Calculus I

Electives

Select 6 hours of electives from:

ECO 202	3	Principles of Macroeconomics
ENT 422	3	New Venture Planning
FIN 361	3	Corporate Finance
HRM 362	3	Human Resources Management
HRM 462	3	Organizational Behavior and Development
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
KIN 472	2	Psychology of Coaching
LGS 250	3	Law and Society
LGS 441	3	Principles of Legal Analysis
MAT 210	4	Introductory Statistics
MGT 352	3	Management Analysis and Practice
MGT 442	3	Business Ethics
MGT 452	3	Strategic Management
MKT 312	3	Professional Selling
MKT 410	3	Marketing Research
MKT 412	3	Advertising and Promotional Strategy
PBR 261	3	Introduction to Public Relations
PBR 455	3	Event and Venue Planning
PSY 220	3	Sport Psychology
YMI 315	3	Youth Culture and Issues

Sport Management (BS)

The Bachelor of Science degree with a major in Sport Management requires 67-68 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

ACC 241	3	Accounting Principles I
ECO 201	3	Principles of Microeconomics
JRN 230	3	Introduction to Sports Writing
KIN 220	3	Principles of Coaching
MGT 311	3	Business Law
MKT 231	3	Principles of Marketing
SMA 115	3	Introduction to Sport Management
SMA 210	3	Introduction to Sport Technology and Analytics
SMA 350	3	Sport Management
SMA 351	3	Sport Public Relations
SMA 352	3	Event and Facility Management
SMA 354	3	Sport Finance
SMA 393A	1	Practicum
SMA 393B	1	Practicum
SMA 430	3	Legal Issues in Sport
SMA 480	3	Seminar
SMA 492	4	Internship

Additional Major Requirements

MAT 210	4	Introductory Statistics
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Select one course from the following:

MAT 110	3	Finite Mathematics (recommended)
MAT 151	4	Calculus I

Select one course from the following:

MGT 260	3	Business Systems Applications (recommended)
SYS 101	3	Introduction to Systems

Electives

Select 2 hours of electives from:

ECO 202	3	Principles of Macroeconomics
ENT 422	3	New Venture Planning
FIN 361	3	Corporate Finance
HRM 362	3	Human Resources Management
HRM 462	3	Organizational Behavior and Development
JRN 115	3	Introduction to Media Writing
JRN 225	3	Foundations of Photojournalism
KIN 472	2	Psychology of Coaching
LGS 250	3	Law and Society
LGS 441	3	Principles of Legal Analysis
MGT 352	3	Management Analysis and Practice
MGT 442	3	Business Ethics
MGT 452	3	Strategic Management
MKT 312	3	Professional Selling
MKT 410	3	Marketing Research
MKT 412	3	Advertising and Promotional Strategy
PBR 261	3	Introduction to Public Relations
PBR 455	3	Event and Venue Planning
PSY 220	3	Sport Psychology
YMI 315	3	Youth Culture and Issues

Sport Management Minor

The department offers a 20-hour Sport Management minor. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

SMA 115	3	Introduction to Sport Management
SMA 350	3	Sport Management
SMA 351	3	Sport Public Relations
SMA 352	3	Event and Facility Management
SMA 393	2	Practicum

Select 6 hours from the following:

ACC 241	3	Accounting Principles I
ECO 201	3	Principles of Microeconomics
FIN 361	3	Corporate Finance
JRN 115	3	Introduction to Media Writing
JRN 230	3	Introduction to Sports Writing
KIN 220	3	Principles of Coaching
MGT 311	3	Business Law
MKT 231	3	Principles of Marketing
PBR 261	3	Introduction to Public Relations
SMA 210	3	Introduction to Sport Technology and Analytics
SMA 354	3	Sport Finance
SMA 430	3	Legal Issues in Sport

Economics Minor

The Economics minor requires 18 credit hours. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics

Select two courses from:

ECO 331	3	Intermediate Microeconomics
ECO 332	3	Intermediate Macroeconomics
ECO 333	3	History of Economic Thought

Select two additional courses from:

ECO 331	3	Intermediate Microeconomics
ECO 332	3	Intermediate Macroeconomics
ECO 333	3	History of Economic Thought
ECO 428	3	Money and Banking
ECO 442	3	Economic Development

Innovation and Entrepreneurship Minor

The Innovation and Entrepreneurship minor requires 19-20 credit hours. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

ENT 225	3	Exploring Innovation and Entrepreneurship
ENT 310	3	Creativity and Concept Development
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 386	1	Founders Fellowship
ENT 393	3-4	Practicum
ENT 422	3	New Venture Planning

Electives

Select 3 hours from the following:

ART 154	1	Digital Tools: Illustrator	FMP 358	3	Sundance Study Trip
ART 156	1	Digital Tools: Photoshop	FMP 365	3	Inside the Entertainment Industry
ART 157	1	Digital Tools: InDesign	FMP 430	3	Producing for Clients
ART 356	4	Web Design	ITB 381	3	International Business Study Tour
ART 457	3	Portfolio Development	JRN 115	3	Introduction to Media Writing
ART 484	3	Senior Exhibition	MAT 311	3	Introduction to Data Science
CAC 220	3	Essentials of Written Communication	MTD 392	3	Entrepreneurship in the Arts
CAC 340	3	Intercultural Communication	NAS 201	3	Nature of Science
CAC 345	3	Social Media Strategy	OVC 310	3	Philanthropy and Grant-Writing
CHE 302	4	Analytical Chemistry II	PBR 261	3	Introduction to Public Relations
CHE 320	4	Environmental Pollution and Toxicology	PBR 455	3	Event and Venue Planning
CHE 420	1	Chemistry Thesis	POS 370	3	Selected Topics (approved by advisor)
COM 301	3	Strategic Communication	PSY 320	3	Multicultural Psychology
COM 325	3	Conflict Resolution	PSY 321	3	Social Psychology
COM 327	3	Leadership Communication	PSY 410	3	Motivation
COM 335	3	Nonprofit Organizational Communication	SMA 350	3	Sport Management
COM 372	3	Persuasion	SMA 351	3	Sport Public Relations
COS 143	3	Interactive Webpage Development	SMA 352	3	Event and Facility Management
COS 326	3	Data Visualization	SMA 354	3	Sport Finance
EDU 150	3	Education in America	SOC 210	3	Contemporary Social Issues
EDU 384	1	Perspectives on Diversity	SOC 330	3	Social Change and Social Movements
ENG 333	3	Business and Technical Writing	SUS 310	4	Principles of Sustainable Development
ENT 380	1	Enactus: Social, Environmental, and Economic Entrepreneurship	SUS 325	4	Sustainable Development in Practice
ENT 381	3	Global Entrepreneurship and Business as Missions	SYS 310	3	E-Commerce
ENT 386*	1	Founders Fellowship	SYS 330	3	Human Relations in Organizations
ENT 430	3	Leadership and Stewardship	SYS 390	3	Information Systems Analysis
EXS 320	3	Community Health Promotion	SYS 394	4	Information Systems Design

Certificate in Innovation and Entrepreneurship

The department awards a certificate in Innovation and Entrepreneurship to students in any baccalaureate major. Students are required to complete 13 credits and apply for the certificate within the Department of Business. *This certificate is awarded by the department and does not include a transcript entry.*

Certificate Requirements

ENT 225	3	Exploring Innovation and Entrepreneurship
ENT 320	3	Transformational Entrepreneurship and Innovation
ENT 386	1	Founders Fellowship
ENT 422	3	New Venture Planning

Electives

Select **3** hours from the list of electives located within the minor.

Accounting Courses

ACC 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ACC 241 3 hours

Accounting Principles I

An introduction to the language of business. Financial transactions are analyzed, recorded, summarized and reported in a meaningful manner to management. Also studied are basic financial statements and the various accounting and internal control procedures for recording and protecting assets. *Offered Fall semester.*

ACC 242 3 hours

Accounting Principles II

Continuation of ACC 241. Accounting problems and procedures pertaining to partnerships and corporations are studied. Also studied are various accounting procedures and reports used by management in acquiring fixed assets, budgeting and controlling manufacturing and departmental operations, reporting financial conditions, and analyzing the results of operations. *Prerequisite: ACC 241. Offered Spring semester.*

ACC 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ACC 303 3 hours

Cost Accounting

A study of the nature of costs and their importance in manufacturing, service and not-for-profit organizations. Topics include: collection and allocation of costs to products and processes, planning, budgeting, and control reports, relevant costs, cost-volume-profit analysis, responsibility accounting and other management analyses and reports. *Prerequisite: ACC 242.*

ACC 308 3 hours

Integrated Accounting Systems

Explores the use of integrated accounting software in a variety of business types through hands on use. Reinforces accounting principles and financial analysis. Emphasizes the setup and maintenance of an integrated software system. *Prerequisite: ACC 242. Offered in the Spring semester of odd calendar years.*

ACC 341 4 hours

Intermediate Accounting I

A detailed study of the theory and procedures used by accountants in recording and valuing assets and the resulting effect on profits. Emphasis is placed on current issues in accounting theory and practice in both intermediate accounting courses. *Prerequisite: ACC 242. Offered Fall semester.*

ACC 342 4 hours

Intermediate Accounting II

Continuation of ACC 341. A study of the theory and procedures used by accountants in recording and valuing liabilities and capital accounts. Special emphasis is placed on the preparation and interpretation of balance sheets, income statements and statements of changes in financial position. *Prerequisite: ACC 341 or permission of instructor. Offered Spring semester.*

ACC 353 3 hours

Fraud Examination

A study of how and why various types of frauds are committed and how they may be deterred. Topics studied include fraud prevention and detection, investigation, as well as the various types including employee, vendor, customer, management, consumer, e-commerce and investment. Recent public frauds will be investigated and analyzed. *Prerequisites: ACC 342 or permission of instructor.*

ACC 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

ACC 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ACC 375 3 hours

Accounting Ethics

This course develops students' knowledge of the codes of professional ethics for accountants (e.g., AICPA Professional Standards, CMA, CIA) covering various services such as audit, attestation, review, compilation, and tax. In addition, it will explore different theories of ethical behavior and development and Christian ethics. *Prerequisite: ACC 242. This course is offered through Taylor University Online (TUO).*

ACC 381 3 hours

Government and Non-profit Accounting

Introduces fund accounting and covers the theory and accounting process for state and municipal governments and non-profit organizations. *Prerequisite: ACC 342.*

ACC 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Prerequisites: 15 accounting hours and SYS 101 for majors pursuing a systems curriculum. Offered primarily during Summer.*

ACC 394 9 hours

Extended Accounting Internship

Supervised learning involving an extended first-hand experience. *Prerequisites: 15 accounting hours and SYS 101 for majors pursuing a systems curriculum. Offered primarily during Spring semester.*

ACC 405 3 hours

Auditing I (with Data Analytics)

A study of how professional auditors serve the public, stockholders, and management by impartially examining the accounting records and financial statements of enterprises. Topics to be studied include: standards, ethics of the profession, internal control procedures, risk assessment and the nature of audit evidence. The course will include the use of various data analytics tools and techniques focusing on quantitative analysis, depicting data visually, managing large volumes of data, deriving insights for risk assessment, audit planning, and documenting audit evidence. *Prerequisite: ACC 342 or permission of instructor. Offered Fall semester.*

ACC 406 3 hours

Auditing II (with Data Analytics)

A continuation of the study of how professional auditors serve the public, stockholders, and management by impartially examining the accounting records and financial statements of enterprises. Topics to be studied include standards, ethics of the profession, internal control procedures, risk assessment, and the nature of audit evidence. The course will include the use of various data analytics tools and techniques focusing on quantitative analysis, depicting data visually, managing large volumes of data, deriving insights for risk assessment, audit planning, and documenting audit evidence. *Prerequisite: ACC 405 or permission of instructor. Offered Spring semester.*

ACC 416 4 hours

Advanced Accounting

A study of the more complex issues in accounting for partnerships, consolidated financial statements and multinational and not-for-profit enterprises. This course includes interim and financial reporting and coverage of current regulations and pronouncements pertaining to the profession. *Prerequisite: ACC 342 or permission of instructor. Offered Fall semester.*

ACC 442 3 hours

Federal Taxes I

A study of the effect of federal income tax laws and regulations on individuals and businesses. This course includes discussion of current issues, tax research, tax planning and representative tax preparation software. *Prerequisite: ACC 242. Offered Fall semester.*

ACC 443 3 hours

Federal Taxes 2

In depth study of taxation of entities including the tax treatment of formation and liquidation of business entities, as well as differences between book and tax income (loss). The course also includes tax treatment of C Corporations, S Corporations, partnerships, limited liability companies, and trusts and estates. The types of tax exempt organizations will be discussed. Other topics covered include tax consolidation, payroll taxes, and international topics. *Prerequisite: ACC 442. Offered Spring semester.*

ACC 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

ACC 475 6 hours
CPA Topics and Certification
A study of the topics tested on the Uniform Certified Public Accountant examination as published by the American Institute of Certified Public Accountants in its Content Specification Outlines. The course is designed to study these topics at a deeper level than previously introduced in previous courses, and to improve research, communication and application of these topics to business situations, demonstrating critical thinking and problem-solving skills. *Prerequisites:* ACC 405, ACC 416, and ACC 442 or permission of instructor.

ACC 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

ACC 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Economics Courses

ECO 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ECO 201 3 hours
Principles of Microeconomics
An introduction to microeconomics emphasizing decision making by individual producers and consumers. Consequences of such decisions for efficiency of resource use and income distribution in a capitalistic economy are studied. *Meets foundational core civic engagement or general social science requirement. Prerequisite:* MAT 110, MAT 120, MAT 140, MAT 145, MAT 151, MAT 210, MAT 352, or SOC 355. *Offered Fall and Spring semesters.*

ECO 202 3 hours
Principles of Macroeconomics
An introduction to macroeconomics emphasizing how the U.S. economy works. Topics studied include the factors determining the size of the national economy, inflation and unemployment and fiscal and monetary policies. *Meets foundational core civic engagement or general social science requirement. Prerequisite:* ECO 201 or permission of the instructor. *Offered Fall and Spring semesters.*

ECO 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ECO 331 3 hours
Intermediate Microeconomics
Intermediate-level analysis of decision making by individuals in various types of markets. Consequences of such choices for the decision-makers, other people, and society as a whole are studied. *Prerequisites:* MAT 146 or MAT 151; and ECO 201.

ECO 332 3 hours
Intermediate Macroeconomics
Intermediate-level analysis of factors determining GDP, unemployment, inflation and interest rates in the U.S. Both open and closed economy models are used. The model divergences and policy implications of the various macroeconomic schools are examined. *Prerequisite:* ECO 202.

ECO 333 3 hours
History of Economic Thought
A study of the ideas of the great economic thinkers and the development of various schools of economic thought, including the mercantilists, Smith, Malthus, Ricardo, Mill, Marx, Marshall, and the Neo-classical and Keynesian revolutions. The origins of the more prominent twentieth century developments and schools are examined. *Prerequisites:* ECO 201 and ECO 202.

ECO 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

ECO 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ECO 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

ECO 428 3 hours
Money and Banking
A variety of practical banking topics are covered, including a review of the development of the banking system, attention to the corresponding evolution of money and the demand deposit system, and an overview of non-bank financial intermediaries and their role in the present economy. *Prerequisites:* FIN 361, ECO 201, and ECO 202. *Offered Spring semester.*

ECO 442 3 hours
Economic Development
A study of the principles of economic growth of lesser-developed countries (LDCs). Historical development patterns of more-developed countries and various theories of economic growth are considered for their relevance to LDCs. Policies encouraging growth are discussed. The problems of transforming former socialistic economies into free market economies are discussed. Each student does a major research project on one particular LDC. *Prerequisite:* ECO 202.

ECO 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

ECO 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

ECO 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Entrepreneurship Courses

ENT 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ENT 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ENT 225 3 hours
Exploring Innovation and Entrepreneurship
This is an interdisciplinary, introductory course for students interested in innovation and entrepreneurship. The course focuses on how people, ideas, and resources can be brought together to foster transformational economic, social, and spiritual impact. Topics include innovation and entrepreneurial processes, identifying barriers to new venture creation, entrepreneurial ecosystems, and networking and communication skills required for resource acquisition. The multiple lens approach facilitates student understanding that they can alter-the-future in many spheres. *Course is open to any student with 30 hours of college credit.*

ENT 310 3 hours
Creativity and Concept Development
Sometimes the most difficult part of innovation is knowing where to start or the creation of an idea. As a result of this course, students acquire skills, processes, and models for enhancing the creative process and using these, develop a plausible business or ministry concept with real-world applicability. *Offered Fall semester.*

ENT 320 3 hours
Transformational Entrepreneurship and Innovation
This course is designed to give students the context and cognitive frameworks necessary to analyze new venture ideas and implement a course of action toward creating something new. Students will gain exposure to the lifestyle and practices of the entrepreneur to determine if entrepreneurship is a desirable career path. *Offered Fall semester.*

ENT 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

ENT 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ENT 380 1 hour
Enactus: Social, Environmental, and Economic Entrepreneurship
Active leadership participation in Enactus of 3 hours a week. *Enrollment by application. One credit offered for each semester of participation for a maximum of 6 credits. Students may register to participate for 0 credit hours. Prerequisite: sophomore standing.*

ENT 381 3 hours
Global Entrepreneurship and Business as Missions
Students will travel to an international location to work with faculty mentors and nationals to deliver a program that walks participants through the stages of a small business start-up with Kingdom goals. During the semester preceding the trip, students will participate in required training sessions designed for cultural learning, and understanding of the training material. *Prerequisite: Permission of the instructor.*

ENT 386 1 hour
Founders Fellowship
Exposes students to the realities of living the life of an entrepreneur by introducing them to seasoned and successful entrepreneurs and investors, as well as the various support ecosystems and founder communities that exist. Guest speakers will be carefully selected to speak to the highs and lows of life as a founder, how to order your spiritual and personal lives to flourish in the profession, and, where possible, to speak directly to integrating a redemptive framework into your ideas and thinking. To put it simply, this course is not about developing good startups; it's about developing good entrepreneurs for a lifetime of thriving. *Requires 30 hours of college credit. May be repeated for up to 6 credits.*

ENT 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

ENT 422 3 hours
New Venture Planning
Students are exposed to and learn the best practices for starting and growing new ventures (profit or non-profit). Course requirements include the development of a product or service concept and completion of a comprehensive business plan that is worthy of presentation to potential investors/contributors. Characteristics and traits of many contemporary entrepreneurs are studied. *Offered Fall and Spring semesters.*

ENT 430 3 hours
Leadership and Stewardship
Explores the key entrepreneurial characteristics and attributes necessary to successfully innovate regardless of discipline or service activity. Students learn processes and stratagems within the context of biblical worldview to establish a culture of excellence in a variety of organizational environments. Students are exposed to stewardship principles critical to generating excellence through effective leadership, exercise innovation processes and how to leverage the entrepreneurial mindset through practical application, and appreciate their individual profile with self-assessments to create an understanding of essential entrepreneurial characteristics as well as their own entrepreneurial quotient. These truths, skills, and associations can be leveraged throughout the student's life regardless of vocation or calling. *Offered Spring semester.*

ENT 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

ENT 480 3 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

ENT 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Finance Courses

FIN 110 1 hour
Investment Research I
This course is designed to provide students with a progressive depth of understanding of finance topics. These topics are discussed to the entire investment research cohort but will require different levels of assessment by each level. Topics include investment valuations models, portfolio performance measures, risk parameters, expected returns, and financial reporting analysis. *Prerequisites: ACC 242 and at least sophomore standing.*

FIN 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

FIN 194 3 hours
Personal Finance
An overview of the personal financial planning process, including such topics as investments, insurance, taxes, credit, retirement planning, and budgeting. This course provides students with an opportunity to examine and apply scripture-based principles of money management in preparation for their entry into the workplace. *Not intended for business majors. Meets foundational core civic engagement or general social science requirement. Offered Fall semester.*

FIN 210 1 hour
Investment Research II
See FIN 110. Prerequisite: FIN 110.

FIN 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

FIN 294 3 hours
Personal Financial Planning
This course seeks to help students develop a holistic approach in financial planning by gaining a deeper understanding of the basic principles of personal finance. Students will learn how to analyze real-life personal financial challenges and apply appropriate financial tools and mechanisms to address specific situations and financial needs. *Prerequisite: ACC 241 or permission of instructor.*

FIN 310 1 hour
Investment Research III
See FIN 110. Prerequisite: FIN 210.

FIN 330 3 hours
Investments
A course designed to give the student a basic familiarity with practical investment strategies and terminology from both an institutional and individual perspective. Discussion includes stock, bond, commodity, and option markets, as well as other investment alternatives. Heavy emphasis is given to current developments. *Prerequisites: MAT 210 and ECO 202.*

FIN 340 3 hours
Real Estate
A review of real estate ownership as an investment vehicle for both individuals and institutions. Topics to be covered include valuation techniques, finance options, operations management, and related tax issues. *Prerequisites: ACC 242, FIN 361, and MGT 311. Offered periodically.*

FIN 350 3 hours
Financial Markets and Institutions
Students will develop a good understanding of the functions of financial markets and institutions in the economy including the roles played by banks, other financial intermediaries and institutions, and the markets for financial assets in raising capital and determining security prices. Students will learn to think critically about the causes of financial crises, the importance of effective regulatory oversight, and policies in maintaining market stability and their limitations in preventing market failures. *Prerequisites: ACC 241 and ECO 202.*

FIN 355 3 hours
Foundations to Financial Planning
An overview of personal financial decision-making, emphasizing each phase of life. Topics covered include career planning, budgeting, use of credit, insurance, investments, retirement planning, and income tax planning.

FIN 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

FIN 361 3 hours
Corporate Finance
A study of methods used in the evaluation of financing and investment alternatives and funds management. The course integrates basic accounting with financial analytical techniques. Areas of emphasis include sources of financing, cash flow analysis, working capital management, capital budgeting, net present value, cost of capital and long-term debt and capital structures. *Prerequisite: ACC 242. Offered Fall and Spring semesters.*

FIN 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

FIN 372 3 hours
Risk Management and Insurance
This course will give students a good understanding of the different types of risks and the importance of risk management in minimizing losses and maximizing opportunities. Students will learn how to identify, assess, and mitigate various risks against financial losses through specific insurance mechanisms. They will develop an appreciation for different insurance business models and the models' limitations in risk management. The importance of ethics (reputation risk mitigation), legal aspects, and regulatory regimes will also be considered. *Prerequisite: MAT 210.*

- FIN 374** 3 hours
Estate Planning
This course focuses on the transfer of assets from one generation to another. Students will seek to understand how control of money after death can be accomplished. *Prerequisite: FIN 294.*
- FIN 375** 3 hours
Financial Data Analysis
This course will provide students an opportunity to conduct in depth financial analysis using systems, focusing on Microsoft Excel. This course will help students integrate learning concepts from corporate finance, investments, and equity valuation courses and apply those concepts within a widely used and very influential software system, Microsoft Excel.
- FIN 390** 3 hours
Behavioral Finance
Behavioral finance has become a significant area of study both from the perspective of individual investors as well as market participants. This course seeks to give students an opportunity to explore biases that influence our actions. Students will explore this topic from a biblical perspective in an effort to realize how our human nature creates the foundation for these biases.
- FIN 393** 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*
- FIN 395** 1 hour
Professional Ethics in Finance
This course will explore the Code of Ethics and Professional Standards for both industry designations CFP/CFP. Students will engage in case studies and ethical dilemmas while exploring topics from a biblical perspective.
- FIN 410** 1 hour
Applied Investment Research
See FIN 110. Prerequisite: FIN 310.
- FIN 431** 3 hours
Security Analysis and Portfolio Management
This course introduces students to the principles of portfolio management. The class discusses the processes of equity analysis and valuation and covers common valuation methodologies and techniques used by market participants. The characteristics and valuation of two competing asset classes—fixed income securities and real estate—will also be explored. Through their course work, students will participate in the process of securities selection for Taylor University's Student Management Investment Fund. *Prerequisites: ACC 242, FIN 361, FIN 330, and FIN 350.*
- FIN 435** 3 hours
Applied Equity Valuation
The CFA Research Challenge is an annual, global competition that provides university students with hands-on mentoring and intensive training. Students work in teams to research and analyze a publicly traded company and then write a research report on their assigned company with a buy, sell, or hold recommendation. *Prerequisites: FIN 110, FIN 210, and FIN 330.*
- FIN 440** 2 hours
Securities Industry Essentials (SIE)
An in-depth examination of the securities industry from the perspective of the brokerage function, including the regulatory environment and legal liability issues, professional ethics, transaction settlement procedures, public/client relations, and investment planning strategies. This course prepares students to complete the Securities Industry Essentials exam, the precursor to the Qualification Examination for General Securities Registered Representative (Series 7 Exam), taken once employed at a sponsoring firm. *Prerequisites: FIN 330 and FIN 361. Offered Interterm of even years.*
- FIN 441** 2 hours
Series 65: Investment Advisor Representative
This course will cover the topics for the Series 65 exam (Investment Advisor Representative). Students will be expected to sit for the exam upon completion of this course. The Series 65 exam is administered in conjunction with the North American Securities Administrators Association (NASAA). Topics include economic factors and business information, investment vehicle characteristics, and investment recommendations and strategies. *Offered Interterm of odd years.*
- FIN 442** 4 hours
SIE/Series 65 Combo
This course will combine the Securities Industry Essentials (SIE) and Series 65 courses into one course offering. *See FIN 440 and FIN 441. Offered Summer online.*
- FIN 450** 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.
- FIN 451** 1 hour
Applied Portfolio Management
This course engages students in real-world portfolio management by establishing investment strategies and implementing those strategies within a portion of the university endowment. Students will engage in domestic and global equities primarily. *Prerequisite: FIN 330. May be repeated for credit.*
- FIN 453** 1 hour
Applied Portfolio Risk Management
Extending from the other applied portfolio curriculum, this course incorporates options as the primary risk management technique. Trades are proposed and analyzed as a team. Regular reports are produced to aid in the ongoing improvement of practices. *Corequisite: FIN 451. May be repeated for credit.*
- FIN 461** 3 hours
Advanced Financial Management
This covers the management of a firm's short and long term financial assets. This includes the evaluation of long-term investment decisions as well as short-term cash asset management decisions. Emphasis will be placed on the planning and budgeting process associated with the management of the firm's assets. *Prerequisite: FIN 361.*
- FIN 462** 1 hour
Applied Portfolio Annual Review
This applied portfolio management course gives students the opportunity to review, analyze, summarize, and communicate past performance to key stakeholders. The reporting and analysis skills developed are essential to investment program success and continuous improvement, especially as a capital attraction and retention mechanism. This course culminates in the deliverable of an Annual Report of the Student Managed Investment Fund performance. *May be repeated once for credit. Prerequisite: FIN 451.*
- FIN 471** 3 hours
Retirement Planning
This course provides a comprehensive overview of retirement planning needs and analysis for effective planning strategies. Topics include qualified retirement plan design, social security, Medicare, group life health and disability insurance, and non-qualified deferred compensation. *Prerequisite: FIN 355.*
- FIN 472** 3 hours
Insurance Planning
This course focuses on assessing and mitigating risk in the financial industry while integrating insurance considerations to manage both risk and return. Topics include business and personal risk, corporate investments, diversification, ownership and property, and legal liability. *Prerequisite: FIN 355.*
- FIN 475** 3 hours
Financial Planning Capstone
This course will allow the student to create a written financial plan using the knowledge acquired from previous course work in the financial planning classes. The student will use a software package to incorporate all the elements of a successful financial plan for a case study client. *Prerequisites: ACC 442, FIN 355, FIN 471, FIN 472, and FIN 374. Offered Spring semester.*
- FIN 480** 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.
- FIN 490** 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*
- FIN 494** 3 hours
Christian Financial Planning
This course provides the framework for biblical stewardship with regard to financial planning. Successful completion of this course allows students to take the Certified Kingdom Advisors (CKA®) national proctored exam.

Human Resource Management Courses

HRM 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

HRM 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

HRM 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

HRM 362 3 hours
Human Resource Management
A study of the role and functions of the human resource department of an organization, with an up-to-date examination of the principles, policies and problems of labor and management. Topics include employee relations, job analysis, compensation structures, recruitment practices, training, promotion, transfer, and management-union relationships. *Prerequisite: MGT 352. Offered Fall semester.*

HRM 365 1 hour
SHRM Student Chapter
Active leadership participation in the Taylor University Society for Human Resource Management (SHRM) Student Chapter. *One credit offered for each semester of participation for a maximum of 6 credits. Students may register to participate for 0 credit hours. Offered Fall and Spring semesters. Instructor permission required.*

HRM 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

HRM 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

HRM 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

HRM 462 3 hours
Organizational Behavior and Development
Organizational behavior is the study and application of knowledge about how and why people, as individuals and as groups, act within organizations. Organizational development is the systematic application of behavioral science knowledge at various levels—group, intergroup, and total organization—to bring about planned change. The goal is to describe, understand, predict, develop, and (to some degree) control human activity at work. This course will prompt the student to develop a cognitive framework for understanding organizational behavior combined with an integration of the Christian faith. Students develop a capacity to analyze organizational behavior situations critically and to give thoughtful answers to situations and case studies. *Prerequisites: HRM 362 and MGT 352. Offered Spring semester.*

HRM 472 3 hours
Human Resources Management Topics and Cases
Advanced human resource management course offered as part of the Human Resource Management concentration in the Management major. Current topics and relevant cases in human resource management will be discussed specifically for human resource management professionals. *Prerequisite: HRM 362. Offered Spring semester. Priority given to Management majors pursuing a concentration in Human Resource Management.*

HRM 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

HRM 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

International Business Courses

ITB 375 3 hours
International Business
An in-depth examination of business practices in other countries, leading to a better understanding of intercultural relationships with trading partners, investors, and host countries. *Prerequisite: MKT 231. Offered Fall semester.*

ITB 381 3-4 hours
International Business Study Tour
A study tour of selected international locations to focus on regional trade, economics and business topics. Issues of cultural differences, conflicts, compromises and international cooperation are examined. Throughout, the cultural dimension of international business dealings is emphasized. *Prerequisites: sophomore standing within a business school major/minor or permission of the instructor. Offered Interterm and selected Summer terms.*

Management Courses

MGT 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

MGT 201 3 hours
Introduction to Business
Students learn the foundational concepts of establishing and operating successful ventures in the highly competitive global economy. The business major as well as other disciplines are exposed to key business leadership principles, strategies, technologies, and disciplines used in the 21st Century enterprise through a combination of lecture, case analysis, group projects, and simulation exercises. *Offered Fall and Spring semesters.*

MGT 260 3 hours
Business Systems Applications
This course introduces and develops competency in various systems and technologies commonly employed in the business environment. Specific topics addressed include spreadsheet applications (formulas, functions, charts, pivot tables, formatting, customizations, and data analysis), document presentation and productivity, business presentation tools, and integrated accounting systems. *Prerequisites: COS 104 and ACC 241.*

MGT 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

MGT 311 3 hours
Business Law
An overview and summary of the basic business law topics that the majority of students will encounter in their business careers and personal lives. Topics include contracts, agencies, personal property, torts, bailments, real property, leases, estates, trusts and insurance. *Prerequisite: Junior status preferred.*

MGT 322 3 hours
Business and Missions: Philosophy and Practicality
This course examines the historical, philosophical, and scriptural foundations for the emerging Business as Missions movement. Students will wrestle with the practical challenges of maintaining effectiveness and spiritual vitality while balancing the competing demands of simultaneously leading business and ministry initiatives. *Offered periodically.*

MGT 352 3 hours
Management Analysis and Practice
A course designed to acquaint students thoroughly with the theories, principles, and practical applications of management (planning, organizing, staffing, leading and controlling). Management principles are learned in the context of a work team developing and administering a business project. Emphasizes business presentations and written reports involving current, real-life situations. *Prerequisite: sophomore status. Offered Fall and Spring semesters.*

MGT 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

MGT 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

MGT 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

MGT 403 3 hours
Operations Management
This course presents the design (quality management, process design, and statistical process control) and operations (supply chain management, forecasting, inventory management, and resource planning) of productive systems. Quality, competitiveness in a global economy, and quantitative management are emphasized throughout the course. *Offered Fall and Spring semesters. Prerequisite: MAT 210.*

MGT 431 3 hours
Project Management
 This course presents the specific concepts, techniques, and tools for managing projects effectively. The role of the project manager as team leader is examined, together with important techniques for planning, scheduling, and monitoring successful projects through the project life cycle. Lectures, case studies, and projects are combined to develop skills needed by project managers in today's environment. In addition, special emphasis is placed on managing technology related projects, leading to the potential for obtaining industry certification in project management. *This course is offered through Taylor University Online (TUO).*

MGT 442 3 hours
Business Ethics
 A course designed to analyze the ethical dilemmas described in case studies of managers in private and corporate businesses. Studies include philosophical foundations for Christian ethical model applications and the development of ethical dilemma resolution. Particular business ethics issues are studied that are realistic and relevant to many business professions. *Offered Fall semester.*

MGT 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

MGT 452 3 hours
Strategic Management
 An advanced course dealing with integrative issues in management, encompassing long-range and short-term objectives, planned and pursued in breadth and depth in an ever-changing environment. *Prerequisites: ECO 201; ACC 241; MGT 352; senior status or instructor permission. Offered Fall and Spring semesters.*

MGT 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

MGT 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Marketing Courses

MKT 170 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

MKT 231 3 hours
Principles of Marketing
 A study of the many facets involved in the field of marketing. Emphasis is given to both the modern marketing system in today's international economy and to the marketing strategies of an organization. Topics include types of markets, market segmentation methods, research methods, product and service strategies, product planning, new product development, distribution channels, sales, advertising and pricing. Special emphasis is given to applications in international service and nonprofit disciplines. *Offered Fall and Spring semesters.*

MKT 270 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

MKT 312 3 hours
Professional Selling
 A study of the discipline of the sales professional, including both sales strategies and sales management. Primary emphasis is given to business and industry sales applications. Topics include sales training, sales preparation, prospecting methods, types of presentations, handling buyer questions, closing methods, post-sales service, and sales management. Course applications include the development and presentation of actual sales demonstrations in class. *Prerequisite: MKT 231. Offered Fall semester.*

MKT 313 3 hours
Retailing and Services Marketing
 A study of the creative and challenging field of retailing and service marketing, this course takes both a practical and conceptual approach. Topics include problems commonly encountered in service business including service quality, service guarantees, internal marketing, and assessing satisfaction. Additionally, standard marketing actions including consumer behavior, promotion, merchandise planning and buying, store layout and design, pricing, personnel management and careers relative to retailing and services marketing will be addressed. *Prerequisite: MKT 231. Offered periodically.*

MKT 360 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.

MKT 370 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

MKT 380 3 hours
International Marketing
 A study of the factors involved in marketing products and services in other countries. Major geopolitical regions are analyzed and evaluated through practical assignments. Topics include: market segmentation analysis, culture, language, values, finance, transportation and distribution networks, international pricing strategies, political structures, exporting organization, promotion and selling practices. Selected research projects and strategic plans provide students with practical applications of key marketing skills. *Prerequisite: MKT 231. Offered Spring semester.*

MKT 390 3 hours
Digital Marketing
 The internet is a dynamic marketplace, and it has become imperative for a business to integrate ethical digital marketing efforts into its overall marketing strategy. Students in this course will explore the development, production, and implementation of digital-marketing methods including, but not limited to, email marketing, web-based marketing, search-engine optimization (SEO), online advertising, social media, and web analytics. The class introduces tools to appropriately measure and evaluate the effectiveness of digital-marketing campaigns that are designed to improve the experience of the consumer. *Prerequisite: MKT 231.*

MKT 393 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

MKT 410 3 hours
Marketing Research
 A course designed to provide students with a fundamental understanding of the role and methods of marketing research as a means to enhance the marketing strategies of any modern organization. Topics such as problem identification, proposal and research design, question and survey development, sampling methodology, data analysis, and report presentation are covered in both theory and application. *Prerequisites: MKT 231 and MAT 210. Offered Fall semester.*

MKT 412 3 hours
Advertising and Promotional Strategy
 A study of the strategic use of advertising and promotional strategy in today's business environment. Students examine advertising and promotional strategy and its influence in the marketplace. Topics include advertising and promotional management, effectiveness, creative design, copy development, media selection, agencies and research. Practical experience is gained through the development of advertising and promotional campaigns using various media. *Prerequisite: MKT 231. Offered Spring semester.*

MKT 445 3 hours
Best Practices in Marketing
 The dynamic business environment requires marketing professionals to continually reassess their position relative to changes in the industry. This course is intended for senior marketing majors preparing to embark on a career in marketing. It will acquaint students with the best thinking and practice currently being pursued by leading organizations. Class sessions are conducted in a workshop or seminar format where students are expected to comment on cases, solve problems, and pose questions from the reading materials. *Prerequisite: MKT 231. Senior status preferred. Offered Fall semester.*

MKT 450 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

MKT 451 3 hours
Marketing Analytics
 An experiential learning course with introduction to basic Salesforce administration skills and related tools to accomplish marketing and business process functions. This course includes cumulative training with Salesforce to learn the basics of a customer relationship management (CRM) tool and the ways to implement, problem solve, and serve business needs of any organization. Students will be positioned to prepare for Salesforce certification and gain hands-on experience in real-world data management and analysis skills. In addition to technical training, students will explore the impact and best practices of data for ethical decision-making and informed analysis. *Prerequisites: MAT 210 and MKT 231.*

MKT 460 3 hours
Consumer Behavior
 A course which examines such fundamental areas as consumer decision-making, processes, information processing, external and internal influences and business effects on consumer purchase/choice patterns. An analysis of the psychological, social, and economic influences on consumption. *Prerequisite: MKT 231. Offered Spring semester.*

MKT 480 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

MKT 490 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Sport Management Courses

SMA 115 3 hours

Introduction to Sport Management

The course is an introduction to the profession of sport management. The student will study the history and philosophies of sport and be introduced to research in the profession. The course will also clarify the requirements of the Taylor University Sport Management major, explore career opportunities in the profession, and assist the student in preparing for employment in the profession.

SMA 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

SMA 210 3 hours

Introduction to Sport Technology and Analytics

Students are introduced to a variety of general and specialized applications of technologies available to the Sport Management major. Lab opportunities are provided. *Prerequisite: COS 104. Offered Spring semester.*

SMA 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

SMA 350 3 hours

Sport Management

This course is a study of the roles, functions, and responsibilities of the person who manages sports programs. The emphasis is on how these functions can be successfully performed in various sports organizations. *Prerequisite: SMA 115. Offered Fall semester.*

SMA 351 3 hours

Sport Public Relations

This course is an introduction to the responsibilities of communicating with the public in a sports organization and the techniques and strategies that can be used to promote sports effectively. Assignments provide students with practical experiences with these techniques and strategies. *Prerequisite: SMA 115. Offered Fall semester.*

SMA 352 3 hours

Event and Facility Management

This course covers the duties that need to be performed in managing various types of sports events and different types of sports facilities. The process and features of designing new facilities and remodeling existing ones and the maintenance responsibilities of facility managers will also be studied. *Prerequisite: SMA 115 or permission of instructor. Offered Spring semester.*

SMA 354 3 hours

Sport Finance

A comprehensive analysis of financial and economic issues related to the sports industry. Topics include budgeting, capital structuring, planning processes, taxation, public funding, fundraising, and sponsorships. Also, topics of a macro perspective that affect various levels of sport and various leagues will be discussed. *Prerequisite: SMA 115 or permission of instructor. Offered Fall semester.*

SMA 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

SMA 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

SMA 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Prerequisite: Permission of BUS department.*

SMA 393A 1 hour

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Prerequisite: Permission of BUS department.*

SMA 393B 1 hour

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Prerequisite: Permission of BUS department.*

SMA 430 3 hours

Legal Issues in Sport

This course includes a review of legal concepts and terms. Students will analyze legal cases and issues in the realm of sports, study how cases/issues are solved, and develop strategies for handling them. *Prerequisite: SMA 115. Offered Fall semester.*

SMA 450 1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. *Prerequisite: Permission of instructor. Offered Spring semester.*

SMA 480 3 hours

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. *Students examine contemporary issues in sport. Case studies, guest speakers, field trips, readings, etc., may be used to critically assess issues in sport and to explore strategies for managing them. Prerequisites: SMA 115, SMA 210, SMA 350, SMA 351, SMA 352, SMA 354; or permission of the instructor. Offered Spring semester.*

SMA 490 1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

SMA 492 4 hours

Sport Management Internship

This field experience is designed to have the students apply what they have learned in their courses and to extend that learning by working in an organization that is appropriate for their major. Students work on a regular basis at the organization under the supervision of approved staff members. Students are also under the supervision of a member of Taylor University Sport Management faculty. Each student must comply with the guidelines for credit hours, clock hours, and other criteria that are specific for the internship in his or her major. To register for this internship, the student must submit a proposal and have it approved.

Education

*Chair, Assistant Professor M. Jessup
Professors J. Dormer, Q. White
Associate Professors B. Hotmire, C. Sisson
Assistant Professors S. Engle, D. McGinness, C. Moore*

Taylor University seeks to develop competent, caring, and reflective teachers prepared for world service. The belief that teachers who have experienced a vigorous professional preparation within the framework of evangelical Christian values will have a profound influence on the students they teach in public, independent, or overseas schools pervades the education program approach. A comprehensive liberal arts curriculum provides the foundation for subject matter competence as well as lifelong learning, leadership, and continued growth in the teaching profession. The Education Department cooperates with other departments to ensure the development of high-quality foundational core and major fields of study. Taylor University's teacher education program is accredited by CAEP (Council for the Accreditation of Educator Preparation) and the Indiana Department of Education. Admission to, retention in, and completion of an approved teacher education program at Taylor University is coordinated by the Director of Teacher Education.

Students seeking a teaching license may fulfill the curriculum requirements in education while earning either a Bachelor of Arts or Bachelor of Science degree. The Bachelor of Arts degree requires the completion of two years of one foreign language.

Students wishing to explore or prepare for the teaching profession should become involved in the teacher education program as early as possible in their college careers. It is advised that initial steps be taken as an entering freshman or as soon as possible after entering Taylor. Upon declaring a major area of study in elementary, all-grade, or secondary area, the student is assigned an academic advisor. This academic advisor continues to advise the student throughout the entire program. However, by use of the curriculum guide for the chosen area of study, much of the student's planning may be self-directed. Curriculum guides containing course requirements for all teacher education programs offered at Taylor may be obtained from the Education Department. The Teacher Education Program Candidate Handbook includes a 4-year program timeline and course sequence for foundational core, major, and professional education courses that assist the candidates in planning their teacher education programs.

The Indiana Department of Education has approved teacher licensure rules: Rules for Educator Preparation and Accountability 3. Interpretation of the licensure rules by the Indiana Department of Education is modified from time to time. Candidates must follow the most current curriculum guides and licensing tests as required by the Indiana Department of Education. The most current program information and licensure requirements can be obtained in the Education Department office or from the office of the Director of Teacher Licensure.

Admission to the Teacher Education Program: Step One

There is a formal admission procedure to the teacher education program. A student is admitted to the program upon completion of an official application form (initiated through the office of the Director of Teacher Licensure) and favorable action by the Teacher Education Committee. The application should be completed during the first term of a student's sophomore year. Candidates are formally admitted to the teacher education program after completing three terms of college work, one of which must have been at Taylor. The Teacher Education Committee has established standards that candidates must meet in order to be admitted to and remain in the program. Factors encompassed by these standards are scholastic performance, professional dispositions, portfolio requirements, Taylor University requirements for reading and math proficiencies, and departmental recommendation. Detailed explanations of these standards may be obtained from the department.

Admission to Supervised Internship (Student Teaching): Step Two

Subsequent to admission to the program, there is a formal admission procedure to student teaching. The application is initiated and facilitated through the Office of the Director of Student Teaching and should be prepared and ready for consideration (by the Teacher Education Committee) during the first semester of the junior year. The factors considered by the Teacher Education Committee include: (1) successful completion of prerequisite courses; (2) departmental recommendation; (3) portfolio requirements; and (4) scholastic performance. Detailed explanations of these standards may be obtained from the department.

Scholastic Performance

Teacher education program standards include students passing COM 210 or CAC 160, ENG 110, all professional education, and all major courses with grades of C- or better. Also, a grade of C- or better in education courses must be achieved as a condition for taking sequential courses for which the course is a prerequisite and for graduation.

Transfer of Credit from Other Institutions

Students seeking admission to the Taylor teacher education program through transfer from another institution must meet the standards required of regularly enrolled students. Credits are assessed by the Registrar. The Director of Teacher Licensure, after consultation with the appropriate department chair, will accept transfer credit when the courses taken are equivalent to requirements on a designated major curriculum guide.

Field Experiences and Student Teaching

Field experiences with children and youth, with strong emphasis on diverse education, are considered a vital part of teacher preparation. Beginning with the first professional education course and continuing through the senior year, such experiences are required for each prospective teacher. The culmination of these professional experiences occurs during the senior year with full-time student teaching. During this final experience, a student is expected to assume as much as possible the total responsibilities of a teacher. Student teaching is a 16-week Fall or Spring semester activity.

Opportunities are provided for student teaching abroad. After completing a 10-week experience stateside, students may teach for six or more weeks in a setting abroad. Application for student teaching abroad must be submitted during the Fall semester of the junior year. Applications are available from the Director of Student Teaching.

Junior Methods Practicum (JuMP)

All elementary education candidates will take the junior block field experience during both Fall and Spring of the junior year. Students will be placed in an all day field experience on Tuesday and Thursday.

Comprehensive Exam Requirement

All Elementary Education candidates are required to take the elementary Praxis Pedagogy licensure test and score 160 or above. Any elementary education candidate who does not successfully pass is provided opportunity to participate in a tutorial-guided instruction program under the direction of the Academic Enrichment Center or Education Department to prepare for retaking the test or a departmental exam. In secondary education, the comprehensive examination is in the major teaching field. A candidate is allowed a maximum of three attempts to pass the comprehensive examination in any single major.

Practicum

Opportunities for practicum experiences in rural, urban, and overseas settings are available. A practicum is supervised learning involving a firsthand field experience or project. Approval is needed from the supervising professor and the department chair. Under certain conditions a practicum may be required to demonstrate readiness for student teaching. In order to receive a grade, the experience or project must be supervised.

Fields of Study

Curricula that meet the licensing standards of the Indiana Department of Education are listed on the curriculum guides available to each candidate. Preparation for initial teaching Indiana licenses in the following fields is provided at Taylor.

Licensing

All teacher education programs have been designed to meet Indiana licensure requirements and have been approved by the Indiana Department of Education. Candidates who meet graduation requirements, complete an approved teacher education program, successfully complete student teaching, and meet the Indiana qualifying scores on the required Praxis and Pedagogy tests will be eligible for an Indiana license. Taylor's Teacher Licensure Office is responsible for verifying to the Indiana Department of Education that all requirements for licensure have been met and for processing all applications for licensure.

Indiana has some degree of Interstate Agreement contract with 50 states (reciprocity). However, additional requirements may need to be met in order to receive permanent licensure in these states. Those who plan to teach outside of Indiana should visit the reciprocal states link provided on our departmental webpage. Requirements often change from year to year, so candidates should verify this information and work with the Director of Teacher Licensure. Contact information for every state department of education are also available online.

Secondary Grades 5-12 and All Grades P-12

The following areas offer majors for secondary grades 5-12: Biology, Chemistry, English, Mathematics, Mathematics/Computer Science, Physics, Physics/Mathematics, Social Studies (Economics, Geographical Perspectives, Government and Citizenship, Psychology, Sociology, Historical Perspectives), and Spanish. The candidate preparing to teach in secondary schools will select a content major. The following areas offer majors for all grades P-12: Art Education and Music Education. Art Education and the secondary education majors lead to a Bachelor of Science degree, but a Bachelor of Arts degree may be granted if a candidate completes the language requirement and requests a BA degree prior to degree conferral. Music Education is awarded with the Bachelor of Music degree. Requirements for all grades P-12 and secondary grades 5-12 license include foundational core, professional education, and subject matter concentration (see *departmental curriculum guides for detailed requirements*) as well as ENG 110, PSY 340, and either CAC 160 or COM 210.

Three optional concentrations are available to all secondary and all-grade education majors: SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. SpEd Intense P-12 Licensure requires the completion of SpEd Mild-Moderate P-12 Licensure concentration.

SpEd Intense P-12 Licensure Concentration (must also complete SpEd Mild-Moderate P-12 Licensure Concentration)

SED 375	3	Low-Incidence Disabilities-Instruction and Learning	SED 390	3	Low-Incidence Disabilities-Collaboration and Individualized Programs
SED 380	3	Low-Incidence Disabilities-Independence and Self-determination			

SpEd Mild-Moderate P-12 Licensure Concentration

Licensure applicants must student teach with a licensed special education teacher.

Concentration Requirements

SED 220	3	Exceptional Children	SED 350	3	Behavior Management and Disorders
SED 330	3	Foundations of Special Education	SED 355	3	Methods of Special Education
SED 340	3	Assessment of Exceptional Learners	SED 440	3	Special Education Integrative Seminar

TESOL P-12 Licensure Concentration

Concentration Requirements

EDU 260	3	Educational Psychology	TSL 303	3	Methods of TESOL
EDU 431	17	Supervised Internship in Secondary Schools (TESOL)	TSL 305	3	Pedagogical Grammar and Applied Linguistics in TESOL
TSL 201	3	Introduction to SLA and the Field of Teaching ESOL	TSL 482	3	Seminar with Field Experience in TESOL
TSL 210	3	Teaching ELL in P-12 Classroom			

Transition to Teaching

The Transition to Teaching Program is an alternate licensure process designed for individuals who have previously graduated from college and wish to obtain an Indiana Teaching License. The elementary program prepares candidates for licensure in grades K-6, the secondary program prepares candidates for licensure in specific content areas in grades 5-12, and the all-grade program prepares candidates for licensure in specific content areas in grades P-12. The program is composed of online graduate courses. Individuals interested in the Transition to Teaching Program should view the following: <http://online.taylor.edu/transition-to-teaching/>.

Educational Studies (BA or BS)

The Bachelor of Arts or Bachelor of Science degree in Educational Studies requires 47 major hours. The Bachelor of Arts degree requires the completion of two years of one foreign language. *The Educational Studies degree does not lead to a teaching license. Students may not double major with elementary education. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Core Requirements

EDU 150	3	Education in America
EDU 260	3	Educational Psychology
EDU 371	3	Literature for Children and Adolescents
EDU 384	1	Perspectives on Diversity
EDU 450	1	Directed Research
EDU 493	3	Elementary Education Senior Capstone
SED 220	3	Exceptional Children

Select one course from the following:

EDU 306	2	Discipline and Classroom Management for Elementary Teachers
EDU 307	2	Discipline and Classroom Management for Secondary Teachers

Major Requirements

CMI 100	3	Introduction to Christian Ministries
EDU 393 [†]	3	Practicum
SOC 210	3	Contemporary Social Issues
SWK 200	3	Explorations in Social Work
TSL 201	3	Introduction to SLA and the Field of Teaching ESOL

Select two courses from the following:

ART 300	2	Art for Teachers
KIN 250	2	Elementary School Health Program
MUS 301	2	Music for Elementary Teachers

Select 3 hours from the following:

EDU 332	2	The Junior High/Middle School
EDU 385	3	Diversity in the Classroom
EDU 393 [†]	1-3	Practicum

[†]Practicums must be in different areas

Educational Studies requirements continued on next page

Additional Requirements

Choose one of the following development tracks:

Early Childhood/Elementary

EDU 200	3	Introduction to Early Childhood Programs
PSY 240	3	Child Psychology

Youth/Adolescence

PSY 340	3	Adolescent Psychology
YMI 315	3	Youth Culture and Issues

Adult/Family

PSY 250	3	Life Span Development
YMI 315	3	Youth Culture and Issues

Recommended Courses

EDU 255 ¹	3	Foundations of Literacy and Language Arts in the Elementary Classroom
EDU 280 ¹	3	Communication & Language Arts in Preschool & Kindergarten
EDU 290 ¹	3	Social Studies, Science, & Mathematics in Preschool & Kindergarten
EDU 321 ¹	2	Teaching Science in the Elementary Classroom
IAS 320 ^{1,2}	3	Cross-Cultural Outreach
PSY 315 ^{1,2}	3	Working with Orphans and Vulnerable Children
SED 330 ^{1,2}	3	Foundations of Special Education
SED 350 ^{1,2}	3	Behavior Management and Disorders
SED 355 ^{1,2}	3	Methods of Special Education
SOC 340 ^{1,2}	3	Sociology of Children and Families
SOC 381 ^{1,2}	3	Marriage and Family Systems
SWK 320 ^{1,2}	3	Unleashing the Oppressed
SWK 340 ^{1,2}	3	Trauma-informed Work with Children
TSL 210 ^{1,2}	3	Teaching ELL in P-12 Classroom
TSL 211 ^{1,2}	3	Teaching English Internationally
TSL 303 ^{1,2}	3	Methods of TESOL
TSL 304 ^{1,2}	3	Issues in Second Language Acquisition
TSL 305 ^{1,2}	3	Pedagogical Grammar and Applied Linguistics in TESOL
TSL 482 ^{1,2}	3	Seminar with Field Experience in TESOL
YMI 325 ²	3	Discipleship and Evangelism in Youth Ministry

¹Recommended for Early Childhood/Elementary track

²Recommended for Youth/Adolescence and Adult/Family tracks

Elementary Education (BA or BS)

Candidates seeking a teaching licensure may fulfill the curriculum requirements in education while earning either a Bachelor of Arts or Bachelor of Science degree. The Bachelor of Arts degree requires the completion of two years of one foreign language.

The Elementary Education (*kindergarten through 6th grade*) major requires 97-124 hours. The major also requires a concentration or one of the following minors: Applied Music, Biology, Chemistry, History, Mathematics, Music Composition, Physics, Psychology, Sociology, or Spanish. All major courses, including those in the concentration, must be completed with a grade of C- or better; the major GPA is calculated using the courses marked with an asterisk (*).

Elementary Education Core

EDU 150*	3	Education in America
EDU 200*	3	Introduction to Early Childhood Programs
EDU 255*	3	Foundations of Literacy and Language Arts in the Elementary Classroom
EDU 260*	3	Educational Psychology
EDU 306*	2	Discipline and Classroom Management for Elementary Teachers
EDU 321*	2	Teaching Science in the Elementary Classroom
EDU 351*	3	Methods and Materials for Elementary Teachers
EDU 355*	3	Early Literacy Experiences and Assessments: K-3
EDU 355L*	1	Elementary Education Junior Block Field Experience Lab
EDU 356*	3	Middle Childhood Literacy Experiences and Assessments: 4-6
EDU 356L*	1	Elementary Education Junior Block Field Experience Lab
EDU 371*	3	Literature for Children and Adolescents
EDU 384*	1	Perspectives on Diversity
EDU 385*	3	Diversity in the Classroom
MAT 205*	2	Explorations in Elementary School Mathematics
MAT 301*	3	Number Concepts for Elementary Teachers
MAT 302*	3	Geometry and Measurement for Elementary Teachers
SED 220*	3	Exceptional Children

Select one course from the following:

EDU 242*	3	Educational Technology in Elementary Education
EDU 243*	1	Technology Applications in Elementary Education

Major Requirements

ART 300	2	Art for Teachers
BIO 102	4	Biology for Educators
EDU 421	17	Supervised Internship in Elementary Schools
EDU 493	3	Elementary Education Senior Capstone
GEO 220	3	Regional Geography
KIN 250	2	Elementary School Health Program
MUS 301	2	Music for Elementary Teachers
PSY 240	3	Child Psychology

Additional Requirements

ENG 110	3	College Composition
ENG 230	3	World Literature

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Select one course from the following:

HIS 103	3	World History I
HIS 104	3	World History II

Select one course from the following:

HIS 124	3	History of the United States to 1877
HIS 125	3	History of the United States since 1877

Select at least one of the following concentrations:

Chinese K-6

CHI 101	4	Elementary Chinese I	CHI 201	3	Intermediate Chinese I
CHI 102	4	Elementary Chinese II	CHI 202	3	Intermediate Chinese II

Language Arts

ENG 110	3	College Composition	EDU 355L	1	Elementary Education Junior Block Field Experience Lab
ENG 230	3	World Literature	EDU 356	3	Middle Childhood Literacy Experiences and Assessments: 4-6
ENG 240	3	American Literature	EDU 356L	1	Elementary Education Junior Block Field Experience Lab
EDU 355	3	Early Literacy Experiences and Assessments: K-3	EDU 371	3	Literature for Children and Adolescents

Mathematics

MAT 205	2	Explorations in Elementary School Mathematics	Select <u>one</u> course from the following:		
MAT 210	4	Introduction to Statistics	MAT 120	3	Investigations in Mathematics
MAT 280	3	Mathematics for Middle School	MAT 180	3	Problem Solving
MAT 301	3	Number Concepts for Elementary Teachers			
MAT 302	3	Geometry and Measurement for Elementary Teachers			

Middle School Language Arts Licensure

EDU 332	2	The Junior High/Middle School	ENG 240	3	American Literature
ENG 211	3	Introduction to Creative Writing	ENG 305	3	Writing Theory and Grammar
ENG 212	3	Critical Approaches to Literature	JRN 255	3	Media and Society
ENG 230	3	World Literature			

Elementary Education requirements continued from previous page

Middle School Mathematics Licensure

EDU 332	2	The Junior High/Middle School			Select <u>one</u> course from the following:
MAT 205	2	Explorations in Elementary School Mathematics	MAT 120	3	Investigations in Mathematics
MAT 210	4	Introductory Statistics	MAT 180	3	Problem Solving
MAT 280	3	Mathematics in the Junior High/Middle School			Select <u>one</u> course from the following:
MAT 301	3	Number Concepts for Elementary Teachers	MAT 145	3	Introduction to Functions and Calculus
MAT 302	3	Geometry and Measurement for Elementary Teachers	MAT 151	4	Calculus I

Middle School Science Licensure

BIO 102	4	Biology for Educators			Select <u>one</u> of the following:
CHE 100	4	Chemistry for Living	SUS 200	3	Environment and Society
EDU 332	2	The Junior High/Middle School	SUS 231	4	Environmental Science, Society, and Sustainability
ENS 241	4	Physical Geology			Select <u>one</u> of the following:
			CHE 120	4	Forensic Science
			PHY 120	3	Renewable Energy Principles
			PHY 201	3-4	Introductory Astronomy
			PHY 203	4	General Physics I

Middle School Social Studies Licensure

EDU 332	2	The Junior High/Middle School			Select <u>one</u> course from the following:
GEO 220	3	Regional Geography	HIS _____	3	Additional History course
HIS 103	3	World History I	ECO 201	3	Principles of Microeconomics
HIS 104	3	World History II	SOC 220	3	Ethnic and Minority Issues
HIS 124	3	History of the United States to 1877			
HIS 125	3	History of the United States since 1877			
POS 100	3	American Politics			

Music

MUS 101	0-1	Music Theory (or competency)	MUS 135	2	Introduction to Music Education
MUS 105	2	Applied Lesson (Primary Instrument)	MUS 201	1	Computers, Technology, and Music
MUS 112P	0-1	Piano (or competency)	MUS 301	2	Music for Elementary Teachers
MUS 124	3	Music Theory and Harmony I	MUS 361	3	Conducting I
MUS 124L	1	Music Theory and Harmony I Lab	HUM 230	4	Art as Experience

Science

BIO 102	4	Biology for Educators			Select <u>one</u> of the following:
CHE 100	4	Chemistry for Living	CHE 120	4	Forensic Science
EDU 321	2	Teaching Science in Elementary Classroom	ENS 241	4	Physical Geology
			PHY 120	3	Renewable Energy Principles
			PHY 201	3-4	Introductory Astronomy
			PHY 203	4	General Physics

Social Studies

GEO 220	3	Regional Geography			Select <u>one</u> of the following:
HIS 103	3	World History I	HIS* _____	3	History* Course
HIS 104	3	World History II	POS 100	3	American Politics
HIS 124	3	History of the United States to 1877	PSY 100	3	Introductory Psychology
HIS 125	3	History of the United States since 1877	SOC 220	3	Ethnic and Minority Issues

**HIS 103, 104, 124, 125 cannot be used to meet the concentration elective.*

Spanish

SPA 101	4	Elementary Spanish I	SPA 305	3	Communication in Spanish
SPA 102	4	Elementary Spanish II	SPA _____	3	Spanish Elective
SPA 201	3	Intermediate Spanish I	SPA _____	3	Spanish Elective
SPA 202	3	Intermediate Spanish II			

TESOL P-12 Licensure

TSL 201	3	Introduction to SLA and the Field of Teaching ESOL	TSL 305	3	Pedagogical Grammar and Applied Linguistics in TESOL
TSL 210	3	Teaching ELL in P-12 Classroom	TSL 482	3	Seminar with Field Experience in TESOL
TSL 303	3	Methods of TESOL			

SpEd Intense P-12 Licensure (must also complete SpEd Mild-Moderate P-12 Licensure Concentration)

SED 375	3	Low-Incidence Disabilities-Instruction and Learning
SED 380	3	Low-Incidence Disabilities-Independence and Self-determination
SED 390	3	Low-Incidence Disabilities-Collaboration and Individualized Programs

SpEd Mild-Moderate P-12 Licensure

Licensure applicants must student teach with a licensed special education teacher.

SED 220	3	Exceptional Children	SED 350	3	Behavior Management and Disorders
SED 330	3	Foundations of Special Education	SED 355	3	Methods of Special Education
SED 340	3	Assessment of Exceptional Learners	SED 440	3	Special Education Integrative Seminar

Elementary Education requirements continued on next page

Visual Arts

ART 101	3	Drawing I	Select <u>5</u> credit hours from the following:
ART 151	3	Two-Dimensional Drawing	
ART 300	2	Art for Teachers	
HUM 230	4	Art as Experience	
HUM 250_	1	Participation in the Arts	
ART 154	1	Digital Tools: Illustrator	
ART 156	1	Digital Tools: Photoshop	
ART 210	3	Introduction to Art Education	
ART 221	3	Painting I	
ART 253	3	Foundations of Photography	
ART 271	3	Three-Dimensional Design	
ART 272	3	Sculpture: Casting	
ART 281	3	Ceramics: Handbuilt Forms	
ART 309	2	Secondary Art Methods	
ART 322	3	Water-Based Media	
ART 380	3	Ceramics: Wheel Throwing	
ART ____	3	Any Art History course	

TESOL Program

In addition to the TESOL licensure for education majors, the TESOL Program offers two additional options. The TESOL minor and Certificate prepare students to work both domestically with immigrants, and internationally with people learning English for international communication.

Teaching English to Speakers of Other Languages (TESOL) Minor

Open to all majors, the TESOL minor requires 18 hours and provides training to those interested in teaching English in international or non-public education contexts. The minor also provides cross-cultural and pedagogical training. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

TSL 201	3	Introduction to SLA and the Field of Teaching ESOL
TSL 303	3	Methods of TESOL
TSL 305	3	Pedagogical Grammar and Applied Linguistics in TESOL
TSL 310	3	Teaching the Skill Areas in TESOL
TSL 482	3	Seminar with Field Experience in TESOL

Select one course from the following:

TSL 210	3	Teaching ELL in P-12 Classroom
TSL 211	3	Teaching English Internationally
TSL 304	3	Issues in Second Language Acquisition

Certificate in Teaching English to Speakers of Other Languages (TESOL)

Requiring the completion of 12 credit hours, the department offers a Teaching English to Speakers of Other Languages (TESOL) certificate for all students who want to more effectively teach students for whom English is a second or foreign language. The TESOL certificate exists to provide a broad base to anyone interested in TESOL, introduces students to the ELT field in North America and worldwide, and provides basic understanding of cross-cultural relations and TESOL theory, methods, and materials.

The student will be responsible for demonstrating his or her completion of the certificate requirements by submitting a completed application along with a copy of his or her transcript to the program director. Work in progress will be accepted. This certificate is awarded by the Education Department and does not include a transcript entry.

Certificate Requirements

TSL 201	3	Introduction to SLA and the Field of Teaching ESOL
TSL 303	3	Methods of TESOL
TSL 305	3	Pedagogical Grammar and Applied Linguistics in TESOL
TSL 482	3	Seminar with Field Experience in TESOL

Education Courses

EDU 150 **3 hours**
Education in America

A study of the historical, philosophical, and sociological foundations of education. The organization and role of the public school, P-12, in a multicultural society are examined. An analysis of teaching is made, including implications of some court cases related to teaching, concepts of teaching, and leadership roles. The course includes a study of multicultural and ethnic differences among students and the resulting effect on the teacher's role. Includes a field experience lab.

EDU 151 **1 hour**
Introduction to the Teacher Education Program

This course is designed to assist students who wish to transfer the equivalent of EDU 150 Education in America, but have unmet requirements. In this course, students will complete outstanding requirements for EDU 150 and become familiar with requirements for the teacher education program at Taylor University. A field experience may be required.

EDU 170 **1-4 hours**

Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

EDU 200 **3 hours**
Introduction to Early Childhood Programs

This course deals with the history of early childhood education and also takes an in-depth look at the qualities needed to become an effective early childhood teacher. Students study the professional aspects of developing appropriate curriculum and physical settings for the preschool and kindergarten classroom. Methods that meet the physical, emotional, social, mental, and spiritual developmental growth of young children are explored. Includes weekly observation of and participation with children in preschool, kindergarten, and Headstart programs. *Prerequisite: EDU 150.*

EDU 222 **2 hours**
Reading in the Content Area for Secondary Teachers
Designed to provide practical procedures for developing effective reading skills at the junior high, middle, and secondary school levels. Attention centers on understanding the relationships between the processes of reading and the learning of content. Suggestions on how to meet the total range of student reading needs in the classroom are addressed. Methods and materials to enhance advanced comprehension and study skills of adolescents in a multicultural society are presented. Includes a field experience lab. *Required for all secondary/all-grade majors seeking licensure. Prerequisite: EDU 150.*

EDU 242 **3 hours**
Educational Technology in Elementary Education
Students develop skills in using presentational software, video conferencing, smart boards, portable devices, and video editing and discover their application to classroom instruction. Students will understand the International Society for Technology in Education (ISTE) standards. Ethical and fair use issues regarding educational technology and media will also be addressed. *Meets the foundational core computation requirement.*

EDU 243 **1 hour**
Technology Applications in Elementary Education
The course examines the pedagogical value of technology in the elementary school. Students will learn how to apply technology to classroom instruction. Ethical and fair use issues regarding educational technology and media will also be addressed. *Prerequisite: COS 104 or equivalent. Offered Spring semester only.*

EDU 255 **3 hours**
Foundations of Literacy and Language Arts in the Elementary Classroom
Course explores fundamental concepts concerning the development of children's language and literacy and the teacher's role in this process including the selection of appropriate instructional materials and strategies to meet the literacy needs of children. This course also investigates the techniques and methods necessary for integrating language arts in the elementary classroom. Topics include core literacy issues, emergent literacy, word identification and recognition, phonological awareness, and methods for language arts instruction. *Required for all elementary majors seeking licensure. Prerequisite: EDU 150.*

EDU 260 **3 hours**
Educational Psychology
The course focuses on the study and application of learning theories and psychological concepts and principles to the teaching-learning process. Developmental stages, age-level characteristics of students, gender differences, learning styles, contemporary views of intelligence, effects of ethnicity and social class on teaching and learning, principles of multicultural education, the teacher's role in accommodating special needs in the regular classroom, learning theories, various instructional approaches, theories of motivation, and various types of assessment, including standardized and high-stakes tests, are examined. *Prerequisite: EDU 150.*

EDU 270 **1-4 hours**
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

EDU 306 **2 hours**
Discipline and Classroom Management for Elementary Teachers
This course is designed to assist students preparing for the elementary classroom in developing practical skills and techniques for organizing the classroom and maintaining effective discipline. Students develop a plan for discipline and classroom management which utilizes a proactive approach based on positive ethical practices consistent with Christian and democratic principles. Several widely accepted discipline theories along with the study of legal implications for teachers are used in conjunction with observations and case studies to assist students in developing effective discipline plans. *Prerequisite: EDU 150. Elementary Education majors only.*

EDU 307 **2 hours**
Discipline and Classroom Management for Secondary Teachers
This course is designed to assist students preparing for the secondary or all grade classroom in developing practical skills and techniques for organizing the classroom and maintaining effective discipline. Students develop a plan for discipline and classroom management which utilizes a proactive approach based on positive ethical practices consistent with Christian and democratic principles. Several widely accepted discipline theories along with the study of legal implications for teachers are used in conjunction with observations and case studies to assist students in developing effective discipline plans. *Prerequisite: EDU 150. Secondary/all grade education majors only.*

EDU 309 **1 hour**
Methods of Instruction and Assessment in Secondary Education
A junior level course that focuses upon pedagogical methods including assessment, instructional strategies, and culturally responsive teaching practices. The majority of the course includes a placement in a secondary school for a laboratory field experience. *Prerequisites: EDU 150, EDU 222, EDU 260, and approval into the teacher education program. Offered Fall semester.*

EDU 315 **1 hour**
An Exploration of Young Adult Literature
The course will explore the genre of young adult literature. Students will critically evaluate the strengths and weaknesses of young adult literature. Students will recognize current themes and topics of young adult literature.

EDU 321 **2 hours**
Teaching Science in the Elementary Classroom
This course is designed to introduce students to hands-on, inquiry based methods of teaching science in the elementary classroom. Content from physical sciences, life sciences, and earth/space sciences will be included. Course will include objectives and lesson plans linked to national and state standards; integration of reading, writing, and other content areas to science; and using a variety of assessment strategies. *JuMP field experience. Prerequisites: EDU 150 and approval into the teacher education program.*

EDU 332 **2 hours**
The Junior High/Middle School
A study of the philosophy, development, and organization of middle schools and junior high schools. Examines through readings, seminars, field experiences, and classroom investigations the purpose, curriculum, and instructional strategies, including the use of appropriate media and technology, for effective teaching in junior high/middle schools. This course provides prospective teachers with knowledge and understanding of the adolescent, the school, and practical teaching activities. Includes a field experience lab. *Must be completed prior to student teaching. Prerequisites: EDU 150 and EDU 260.*

EDU 344 **1 hour**
Educational Technology in Secondary Education
This course addresses fundamental principles related to the appropriate, responsible, and ethical use of the Internet and relevant technology as integrated in the secondary education classroom. Through understanding and applying the International Society for Technology in Education (ISTE) standards, students will develop a philosophy for effectively integrating technology into the secondary classroom and will practice these principles through the creation of content specific instructional models and learning activities. Students will investigate the potential for technology to expand research opportunities, increase skill development, and encourage the curating of content knowledge. *Required for secondary education majors seeking teacher licensure. Corequisite: EDU 332.*

EDU 351 **3 hours**
Methods and Materials for Elementary Teachers
An integrative approach of utilizing a variety of effective instructional methods and resources with content areas, including science and social studies, appropriate for elementary children. Strategies for working with diverse student populations and incorporating current educational technology competencies are included. *JuMP field experience. Prerequisites: EDU 150, EDU 260, and approval into the teacher education program. Offered Fall semester.*

EDU 355 **3 hours**
Early Literacy Experiences and Assessments: K-3
Course focuses upon the teaching and assessment of literacy in the early classroom. Topics include emergent literacy, word identification and recognition, fluency, and assessments. *JuMP field experience. Prerequisites: EDU 150, EDU 260, and approval into the teacher education program. Corequisites: EDU 355L and EDU 371. Offered Fall semester.*

EDU 355L **1 hour**
Elementary Education Junior Block Field Experience Lab
This lab experience is to be taken concurrently with elementary education junior block methods classes. *Corequisite with EDU 355. Offered Fall semester.*

EDU 356 **3 hours**
Middle Childhood Literacy Experiences and Assessments: 4-6
Course focuses upon the teaching and assessment of literacy in the middle childhood classroom. Topics include vocabulary, comprehension, study skills, content area literacy, and assessments. *JuMP field experience. Prerequisites: EDU 150, EDU 260, EDU 355, and approval into the teacher education program. Corequisite: EDU 351 and EDU 356L. Offered Spring semester.*

EDU 356L **1 hour**
Elementary Education Junior Block Field Experience Lab
This lab experience is to be taken concurrently with elementary education junior block methods classes. *Corequisite with EDU 356. Offered Spring semester.*

EDU 360 **1-4 hours**
Independent Study
An individualized, directed study involving a specified topic.

EDU 370 **1-4 hours**
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

EDU 371 **3 hours**
Literature for Children and Adolescents
The various genres of children's literature and young adult literature are explored. Course focuses upon new literacy, multicultural literature, special needs, and other appropriate literature. Materials range from emergent books to young adult literature. *JuMP field experience.* Prerequisites: EDU 150, EDU 260, and approval into the teacher education program. Corequisite: EDU 355. Offered Fall semester.

EDU 384 **1 hour**
Perspectives on Diversity
This seminar focuses on education in diverse settings. Emphasis is given to the impact of learning of social class, race/ethnicity, and English language proficiency through readings and discussions. The roles of local, state, and federal agencies in relationship to public educational policy are discussed and analyzed. Field-trip exploration of various schools and organizations serving diverse populations is a key component of the course. A class fee is necessary to cover field trip expenses. Prerequisite: EDU 150. Meets foundational core civic engagement requirement. Offered Fall and Spring semesters.

EDU 385 **3 hours**
Diversity in the Classroom
This course provides a pre-student teaching experience working in either an urban public school or overseas in a school with English as the medium of instruction. Placements are in diverse settings. Emphasis is given to application of and written reflection on issues explored in EDU 384. Observation, participation, and a limited amount of supervised classroom teaching are expected. Prerequisites: EDU 260 and EDU 384. Meets foundational core cross-cultural (CC) requirement. Offered January interterm.

EDU 393 **1-4 hours**
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Offered primarily during Summer.

EDU 421 **17 hours**
Supervised Internship in Elementary Schools
Full-time teaching experiences for the intern at two grade levels under the supervision of public and private school and college personnel. Multicultural/multiethnic education placement is required in one of the experiences. Prerequisites: (a) approval by the Teacher Education Committee; (b) EDU 150, 255, 260, 306, 351, 355, and 356. Credit only.

EDU 431 **17 hours**
Supervised Internship in Secondary Schools
Full-time teaching experiences for the intern at two grade levels under the supervision of public school and college personnel. Prerequisites: (a) approval of the Teacher Education Committee; (b) EDU 150, 222, 260, 307, 309. See individual majors for additional prerequisite courses. Credit only.

EDU 450 **1-4 hours**
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

EDU 480 **1-4 hours**
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

EDU 490 **1-2 hours**
Honors
Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.

EDU 493 **3 hours**
Elementary Education Senior Capstone
Students address current and future issues related to education through lectures, readings, school visits, and discussion. The integration of Christian philosophical concerns with the current role and responsibilities of teachers and schools are emphasized. Required overnight, multiple-day field trip. Fee required. Prerequisite: Approval into the teacher education program. Offered January interterm only.

Special Education Courses

SED 220 **3 hours**
Exceptional Children
This course is designed to prepare the teacher for the challenge of meeting the needs of exceptional children in the regular classroom. A general study of exceptional children focuses on mainstreamed and included special education students. Various topics included are identification of exceptional children, their characteristics and special needs, delivery of services, instructional methods and techniques, and evaluation.

SED 330 **3 hours**
Foundations of Special Education
A study of the profession of special education, this course deals with the philosophical, historical, ethical, and legal foundations of special education. The responsibilities and rights of students, their parents, all involved educators and other professionals are studied as they relate to meeting the needs of exceptional learners. Prerequisite: SED 220. Offered Spring.

SED 340 **3 hours**
Assessment of Exceptional Learners
This course focuses on formal and informal assessments used to identify, plan for, and teach students with exceptional needs, including the use of that information to develop individual education plans. Communication of that information with students, parents, and other professionals is discussed. Includes a field experience lab. Prerequisites: SED 220 and SED 330. Offered Fall semester.

SED 350 **3 hours**
Behavior Management and Disorders
Managing the learning environment of students with special needs is the focus of this course. Topics covered include behavioral assessments and their use in developing behavior intervention plans for exceptional students, as well as the legal implications of laws and regulations regarding the implementation of these plans in various learning environments. *JuMP field experience.* Prerequisites: SED 220, SED 330, and approval into the teacher education program. Offered Spring semester.

SED 355 **3 hours**
Methods of Special Education
Methods and materials used in the intervention of exceptional learners are presented in this course. Strategies of instruction in the least restrictive environment, modification of curriculum, and collaboration and consultation across the spectrum of services are presented in conjunction with the daily teaching and planning required of students' individual education plans. Includes a field experience lab. *JuMP field experience.* Prerequisites: SED 220, SED 330, and approval into the teacher education program. Offered Fall semester.

SED 375 **3 hours**
Low-Incidence Disabilities-Instruction and Learning
A study of the curriculum principles related to the design of systematic instruction for individuals with intense disabilities. The focus is on research-based strategies for promoting academic and social-emotional success for students from preschool through adolescence. The roles and types of technologies in the teaching and learning process are included. To apply knowledge of systematic instruction with assessment, candidates will gain understanding of the history, legal, characteristics, and etiological background of children and adolescence with intense disabilities. Includes a field experience teaching students with intense disabilities. Prerequisites: SED 350 and SED 355.

SED 380 **3 hours**
Low-Incidence Disabilities-Independence and Self-determination
This course provides candidates with the skills to understand and interpret the instructional needs of students with intense disabilities related to independence and self-determination. The student, family, and diagnostic procedures to inform decision-making is the focus. Theories and principles related to the development of skills for independence and self-determination are used to integrate daily living, job and community, and behavior self-management into individualized programs for students. This course includes a field experience teaching students with intense disabilities. Prerequisites: SED 350 and SED 355.

SED 390 **3 hours**
Low-Incidence Disabilities-Collaboration and Individualized Programs
The course focuses on the strategies of effective communication and collaboration for promoting the success of children and adolescents with intense disabilities. The consultative and collaborative skills and roles of special education teachers will be studied to advance the learning experiences and outcomes for students. Content includes the functions and roles of various professionals, settings, programs, and services. Culturally competent services, parent involvement, and the role of students with intense disabilities are addressed. This course includes a field experience teaching students with intense disabilities. Prerequisites: SED 350 and SED 355.

SED 440 **3 hours**
Special Education Integrative Seminar
This special education capstone course provides students with the opportunity to approach the field of special education holistically, examining contemporary and critical issues in special education as these issues are examined through a theological lens. Prerequisites: SED 220, SED 330, SED 340, SED 350, and SED 355. Offered Spring semester.

Teaching English to Speakers of Other Languages (TESOL) Courses

TSL 170

1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

TSL 201

3 hours

Introduction to SLA and the Field of Teaching ESOL

This course discusses the role of the English language in the contemporary world and how language and culture shape human interactions. It provides an introductory understanding of the field of second language acquisition, from the perspective of both learning and teaching a new language. It also explores the teaching of English in ministry in U.S. and international contexts. *Includes 5 hours of TESOL/cross cultural experience.*

TSL 202

1 hour

Introduction to the ESOL classroom

Geared towards non-education majors, this course introduces elements of effective English language instruction in an ESOL (English for Speakers of Other Languages) classroom. Includes 3 hours of practical TESOL experience. *Must be taken concurrently with TSL 201. Offered Fall and Spring semesters.*

TSL 203

1 hour

Introduction to ESOL in American Public Schools

Geared towards future teachers in American public schools, this course introduces elements of effective English language instruction in the P-12 classroom. It presents effective ways of scaffolding and making accommodations for English language learners in content- and standards-based instruction. Includes 3 hours of practical TESOL experience. *Must be taken concurrently with TSL 201. Offered Fall and Spring semesters.*

TSL 210

3 hours

Teaching ELL in P-12 Classroom

Intended for future US public school ESOL professionals, this course addresses English language learners (ELLs) in P-12 classrooms. Investigates TESOL-related legislation and its effect on schools, students, and teachers, as well as types of ESOL programs used in U.S. schools and their effectiveness. Studies effective advocacy, strategies for collaboration with families and non-ESOL colleagues and paraprofessionals, and helpful resources and services. *Prerequisites: EDU 150 and TSL 201. Offered Spring semester.*

TSL 211

3 hours

Teaching English Internationally

This course provides an analysis of background issues in teaching English to speakers of other languages outside the U.S. Primary focus will be on covering non-pedagogical aspects of preparing for an English teaching position overseas. This will include better understanding the cultural and classroom challenges of teaching English internationally as well as helping students more effectively assess prospective teaching opportunities. *Offered Fall semester of even years.*

TSL 212

1 hour

Adult ESL Literacy Development

Examines aspects of teaching literacy skills to adult ESL students such as refugees or immigrants with limited or interrupted education. *Prerequisites: TSL 201; and TSL 202 or TSL 203. Offered Fall semester of odd years.*

TSL 240

3 hours

Introduction to Linguistics

Linguistics is the scientific study of spoken or signed human Language. This course introduces the core areas of linguistics (i.e., phonology, morphology, syntax, semantics, pragmatics) that are common to all human languages. The goal is to understand the basic structure of Language, and develop the analytical skills to observe and describe any human language. It will also explore how languages are learned, and how language is tied to a sense of identity.

TSL 270

1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

TSL 302

3 hours

Language and Culture

Introductory course providing brief overview of phonology, morphology, syntax, semantics and pragmatics. Examines areas of phonetics and language variations (such as language and power, socioeconomic status, regionalisms, ethnicity, bilingualism, multilingualism, globalization) in more depth. *Prerequisites: TSL 201; and TSL 202 or TSL 203.*

TSL 303

3 hours

Methods and Assessment in TESOL

This course develops understanding and skill in classroom instruction of English learners including lesson planning, teaching, and assessment. Topics covered include teaching methods and techniques for all aspects of English language development, educational technology, curricular planning, and formative assessment. *Includes a 20-hour field experience lab. Prerequisite: TSL 201.*

TSL 304

3 hours

Issues in Second Language Acquisition

This course offers a review of second language acquisition theory and research and introduces current issues in second language acquisition. *Prerequisites: TSL 201, TSL 305, and TSL 303.*

TSL 305

3 hours

Pedagogical Grammar and Applied Linguistics in TESOL

This course introduces applied linguistics and its practical implications in language teaching. It provides study of English grammar and how English structures are taught and explained to English learners. *Prerequisite: TSL 201.*

TSL 310

3 hours

Teaching the Skill Areas in TESOL

This course develops understanding and skill in classroom instruction of English learners in the skill areas of reading, writing, speaking, and listening. Students will apply their growing knowledge of how English learners develop these language skills to their own current or intended teaching context and age group. *Prerequisites: TSL 201, TSL 303, and TSL 305.*

TSL 360

1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

TSL 370

1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

TSL 393

1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

TSL 450

1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

TSL 480

1-4 hours

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

TSL 482

3 hours

Seminar with Field Experience in TESOL

This course is comprised of a supervised ESOL field experience totaling a minimum of 40 hours, plus accompanying seminar sessions focused on reflection, development of teaching skill, and TESOL professionalization. *Prerequisites: TSL 201, TSL 303, and TSL 305. This course has a minimum 40-hour field experience.*

TSL 490

1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

Psychology

Chair, Associate Professor L. Edwards
Professor V. Maloney
Associate Professors D. Dungan, S. Edwards, L. Gerig, L. McClelland
Assistant Professor K. Kelley

Psychology involves the systematic study of human behavior and the mental and physiological processes that underlie it. Each course seeks to integrate psychological data with major biblical beliefs. The aim of the department is to train Christian psychology students who upon graduation are prepared for further academic studies or professional responsibilities.

The Bachelor of Arts degree requires proficiency of two years of one foreign language; an optional concentration in Pre-Medicine is available. The Bachelor of Science degree must be combined with curriculum requirements in systems analysis. Psychology may also be selected as a concentration in the Social Studies Education major; for detailed curriculum, refer to **History, Global, and Political Studies** section in this catalog.

Pre-Art Therapy (BA or BS)

Pre-Art Therapy is an interdisciplinary major offered jointly by the Psychology Department and the Art, Film, and Media Department. For program details, refer to **Art, Film, and Media** section in this catalog.

Psychology (BA)

The Bachelor of Arts degree with a major in Psychology requires two years of one foreign language and 43-93 major hours. An optional Pre-Medicine concentration is available. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

PSY 100	3	Introductory Psychology
PSY 105	3	Foundations and Applications of Psychology
PSY 250	3	Life Span Development
PSY 272	3	Research Methods in Psychology
PSY 275	3	Introductory Statistics
PSY 325	1	Career and Vocational Issues Seminar
PSY 495	3	Integration of Psychology and Christianity

Select one personal course from the following:

PSY 300	3	Abnormal Psychology
PSY 305	3	Behavior Problems of Child and Adolescence
PSY 400	3	Theories of Personality

Select one biological course from the following:

PSY 382	3	Sensation and Perception
PSY 395	3	Health Psychology
PSY 441	3	Physiological Psychology

Select one cognition or learning course from the following:

PSY 410	3	Motivation
PSY 411	3	Learning: Theory and Application
PSY 420	3	Cognition

Select one sociocultural course from the following:

PSY 320	3	Multicultural Psychology
PSY 321	3	Social Psychology

Select one applied course from the following:

PSY 281	3	Applied Behavior Analysis and Autism Treatments
PSY 422	3	Psychological Testing
PSY 425	3	Industrial-Organizational Psychology
PSY 461	3	Fundamentals of Counseling

Select 3 credit hours from the following:

PSY 393	3	Practicum
PSY 450	3	Directed Research

Electives

Select two psychology courses totaling at least 6 hours

Concentration—Students may select an optional concentration:

Pre-Medicine

Biology Courses

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 203	4	Principles of Genetics
BIO 312	4	Cellular and Molecular

Select one course from the following:

BIO 331	4	Comparative Anatomy
BIO 452	4	Animal Physiology

Chemistry Courses

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II

Math Courses

MAT 230	4	Calculus II
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Select one option from the following:

MAT 151	4	Calculus I
MAT 145 [†]	3	Introduction to Functions and Calculus
and		
MAT 146 [†]	3	Functions and Calculus

[†]MAT 145 & 146 count as one option.

Physics Courses

PHY 203	4	General Physics I
PHY 204	4	General Physics II

Psychology/Systems (BS)

The Bachelor of Science degree with a major in Psychology/Systems requires the 43-hour major and curriculum requirements in information systems and analytics. All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Curriculum Requirements

COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course¹ from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course¹ from the following:

PSY 393	3-4	Practicum
SYS 393	3-4	Practicum

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

COS 121	4	Foundations of Computer Science
ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce

¹Selection may depend on major.

Autism Studies and Intervention Minor

A minor in Autism Studies and Intervention requires 21 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PSY 280	3	Introduction to Autism Spectrum Disorders
PSY 281	3	Applied Behavior Analysis and Autism Treatments
PSY 380	3	Ethical and Professional Issues in Autism Intervention Seminar
PSY 393	3	Practicum

Select one course¹ from the following:

PSY 381	3	Single Subject Research and Behavioral Assessment
PSY 422	3	Psychological Testing
SED 340	3	Assessment of Exceptional Learners

Select one course¹ from the following:

PSY 300	3	Abnormal Psychology
PSY 305	3	Behavior Problems of Child and Adolescence
SED 220	3	Exceptional Children

Select one course¹ from the following:

PSY 382	3	Sensation and Perception
PSY 441	3	Physiological Psychology
SED 330	3	Foundations of Special Education

Counseling Minor

A minor in Counseling requires 20-21 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PSY 100	3	Introductory Psychology
PSY 205	3	Psychology of Adjustment
PSY 300	3	Abnormal Psychology
PSY 393	3	Practicum
PSY 461	3	Fundamentals of Counseling
PSY 462	3	Counseling Skills

Select one course from the following:

NAS 230	2	Health Education for Behavior Change
PSY 375	3	Loss and Bereavement
PSY 395	3	Health Psychology

Health and Wellness Minor

A minor in Health and Wellness requires 20-21 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PSY 100	3	Introductory Psychology
PSY 205	3	Psychology of Adjustment
PSY 250	3	Life Span Development
PSY 393	3	Practicum
PSY 395	3	Health Psychology

Select two courses from the following:

EXS 217	3	Health Promotion Program Planning
KIN 221	3	Exercise as Medicine
NAS 230	2	Health Education for Behavior Change
PBH 100	3	Introduction to Public Health
PSY 300	3	Abnormal Psychology
PSY 370 [‡]	3	Selected Topics [‡]
PSY 400	3	Theories of Personality

[‡]Must be Positive Psychology course.

Industrial-Organizational Minor

A minor in Industrial-Organizational requires 21 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PSY 100	3	Introductory Psychology
PSY 272	3	Research Methods in Psychology
PSY 275	3	Introductory Statistics
PSY 425	3	Industrial-Organizational Psychology
PSY 450	3	Directed Research

Select 6 credits from the following:

ENT 430	3	Leadership and Stewardship
MGT 352	3	Management Analysis and Practice
PSY 320	3	Multicultural Psychology
PSY 400	3	Theories of Personality
PSY 422	3	Psychological Testing

Intercultural Psychology Minor

A minor in Intercultural Psychology requires 22 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

CAC 340	3	Intercultural Communication
ENG 444	3	Contemporary Literature
PSY 100	3	Introductory Psychology
PSY 320	3	Multicultural Psychology
PSY 321	3	Social Psychology
PSY 393	3	Practicum†
PSY 480	1	Seminar

Select 3 credits from the following:

ENG 373	3	Literature of Diverse Cultures
PSY 280	3	Introduction to Autism Spectrum Disorders
PSY 375	3	Loss and Bereavement
PSY 450	3	Directed Research
SOC 220	3	Ethnic and Minority Issues
SOC 381	3	Marriage and Family Systems
SWK 320	3	Unleashing the Oppressed

†Must be Intercultural Psychology

Neuroscience Minor

A minor in Neuroscience requires 21-23 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

BIO ____	3-4	Any Biology course
CHE ____	3-4	Any Chemistry course
PSY 100	3	Introductory Psychology
PSY 341	3	Neuroscience and the Soul
PSY 395	3	Health Psychology
PSY 441	3	Physiological Psychology

Select one course¹ from the following:

PSY 382	3	Sensation and Perception
PSY 420	3	Cognition

Psychology Minor

A minor in Psychology requires 18 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PSY 100	3	Introductory Psychology
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Electives

Select an additional 15 hours* of psychology electives.

*Only one developmental class may be taken for the minor (PSY 240, 250, 340, or 350).

Psychology Courses

PSY 100 3 hours

Introductory Psychology

An introduction to the subject matter and methods of psychology. Topics on human development, personality, learning, sensation, perception, motivation, emotion, mental health and social psychology are considered. Meets foundational core general social science requirement.

PSY 105 3 hours

Foundations and Applications of Psychology

An exploration of worldviews and philosophical views in psychology, current perspectives and ethical issues in psychology, and models of integration of psychology and Christianity. Self-reflection and development of a sense of calling/vocation in psychology are explored as the breadth and depth of the field are introduced. Does not meet a foundational core requirement. Prerequisite: PSY 100 or instructor's permission.

PSY 125 2 hours

Intrapersonal Psychology

The study of how to process the emotional dynamics of anger, guilt, anxiety, and grief while becoming mature, emotionally integrated social beings.

PSY 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

PSY 205 3 hours

Psychology of Adjustment

This course is designed to provide students with the background and resources necessary to investigate the psychological and social variables that contribute to the dynamics of human adjustment. The desired outcome is for students to use this knowledge to actively take charge of their own lives, effectively adjusting to an ever-changing world. Further, students will be encouraged to use the concepts and information presented in this class to develop a fuller understanding of the self, along with greater awareness of personal and social relationships.

PSY 210 2 hours

Ethics in Psychology

A study of various models of ethics, with a desire to develop a Christian model. The Christian model is then applied to various issues in counseling, psychopathology, research, human development, law, and educational psychology. Prerequisite: PSY 100.

PSY 220 3 hours

Sport Psychology

This course investigates the interpersonal, societal, and cultural variables that surround athletics and sports in our contemporary culture. Topics include personality variables of the successful athlete; anxiety and arousal in sports, as well as strategies to assist in the control of these states; motivation; casual attributions for success and failure in athletes and coaches; the role of the direct and indirect contexts of sports and competition; and exercise psychology. Prerequisite: PSY 100.

- PSY 240** **3 hours**
Child Psychology
 This course deals with the subject matter of developmental psychology (cognitive, physical, and socio-emotional development) and applies the subject matter to those actively working with children, including parents, teachers, coaches, etc. *Meets foundational core general social science requirement.*
- PSY 250** **3 hours**
Life Span Development
 This course is designed to provide a general overview of the developmental process in humans from conception through death and dying. Included is attention to the physical, cognitive psychosocial and spiritual developments. *Meets foundational core general social science requirement.*
- PSY 251** **1 hour**
Life Span Development: Adolescence, Adulthood, and Aging
 This course is designed to provide a general overview of the developmental processes in humans from adolescence through, adulthood, aging and the dying process. Included is attention to the physical, cognitive, psychosocial, and spiritual developments. *Intended for majors and non-majors (e.g., Social Work, Christian Ministries, Exercise Science) who have taken Child Psychology (PSY 240) or Child and Adolescent Psychology (PSY 350) but need a life span perspective as required by their program or as recommended for their future graduate school plans. The class meets with PSY 250 for the second half of the semester. Does not meet a foundational core requirement. Prerequisite: PSY 240 or PSY 350.*
- PSY 260** **3 hours**
Applied Psychology
 An introduction to practical uses and applications of psychology. Topics cover a variety of fields of psychology (e.g., industrial/organizational psychology, educational psychology, clinical/counseling psychology) and applications within each field with different psychological degrees, developing a career identity that intersects with values and beliefs.
- PSY 270** **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- PSY 272** **3 hours**
Research Methods in Psychology
 Research methods in psychology are studied and critiqued. Students are involved in practical research and writing assignments. *Prerequisite: PSY 100.*
- PSY 275** **3 hours**
Introductory Statistics
 An introduction to descriptive and inferential statistics used in research. Students will be involved in the computation, application, and interpretation of various elementary statistics.
- PSY 280** **3 hours**
Introduction to Autism Spectrum Disorders
 This course will help students develop an understanding of the social, behavioral, and developmental issues for individuals with ASD across the life span. After the course, students will know and understand the etiology, symptoms, and diagnostic criteria of Autism Spectrum Disorder.
- PSY 281** **3 hours**
Applied Behavior Analysis and Autism Treatments
 The course focuses on understanding autism spectrum disorders through the life span. Diagnostic criteria, identification, assessment, and the variety of treatment and interventions used with individuals with autism spectrum disorders are reviewed.
- PSY 300** **3 hours**
Abnormal Psychology
 A study of the nature, causes, and treatment of maladaptive behavior, with special consideration given to the symptoms and dynamics of psychological disorders. *Prerequisite: PSY 100 or instructor's permission.*
- PSY 305** **3 hours**
Behavior Problems of Children and Adolescents
 A study of major behavioral disorders, with emphasis on empirical research and clinical description, relative to etiology, assessment, prognosis, and treatment. Cultural influences on child and adolescent behavioral disorders will also be explored. *Prerequisite: PSY 240 or PSY 250 or PSY 350.*
- PSY 313** **3 hours**
Statistics for Behavioral Sciences
 The major concepts covered in the class will be descriptive statistics, basic probability theory, and inferential statistics. Demonstrations of Microsoft Excel competency will be assigned for each segment of the class. *This course is offered through Taylor University Online (TUO).*
- PSY 317** **3 hours**
Psychology of Learning
 In this course, students will become acquainted with the major theories of the psychology of learning, along with basic biblical principles about humanity. Through personal investigation, observation, and basic research, students will learn to recognize and apply the theories of psychology of learning to their own lives as well as in the lives of others. *This course is offered through Taylor University Online (TUO).*
- PSY 320** **3 hours**
Multicultural Psychology
 An introduction to the psychological development of differences in worldviews, cultural identity development, discrimination and racism, acculturation processes, and building multicultural skills and competence. The course provides students an opportunity to begin to build knowledge, skill, and awareness in serving, working, and/or being with individuals of different ethnic and cultural groups from a psychological and Christian worldview. The goal of this course is to facilitate self-reflection and self-growth among participants, preparing them to more critically, actively, and effectively participate in a diverse environment. *Prerequisites: PSY 100 and PSY 272 or instructor's permission.*
- PSY 321** **3 hours**
Social Psychology
 A study of how the thought, feeling, or behavior of individuals is influenced by the actual, imagined, or implied presence of others. Topics include social perception, conformity prejudice, aggression, attitudes and their change, affiliation, and altruism. *Prerequisites: PSY 100 and PSY 272 or instructor's permission.*
- PSY 325** **1 hour**
Career and Vocational Issues Seminar
 A career and vocational seminar with an emphasis on reading and discussion. *Prerequisites: PSY 100 and PSY 272; junior standing required.*
- PSY 331** **3 hours**
Biblical Psychology
 A survey of biblical teaching on the nature of the person, its relationship to emotional and behavioral problems, and solutions to those problems.
- PSY 340** **3 hours**
Adolescent Psychology
 This course deals with the problems of adolescent development and resulting issues, including peer pressure and conformity, adult-adolescent conflicts, cognitive changes, adjustments to physical changes, struggles with identity, etc. Contemporary issues, including drug and alcohol use, eating disorders, and teen sexuality are also discussed. The focus is on a practical application of research literature with an integration of biblical principles. *Meets foundational core general social science requirement.*
- PSY 341** **3 hours**
Neuroscience and the Soul
 This course is a study of the human brain and the question of the existence of a soul or immaterial mind. Content to be studied will include areas of the brain related to this question of the existence of the soul. The course will study leading researchers in neuroscience as well as key experiments examining the issue. Parallel to this search on neuroscience, the class will also examine some philosophy, theology, and the biblical content in order to keep the larger question of the immortal soul in view.
- PSY 345** **3 hours**
Applied Research
 This lab experience allows students to apply their research and statistical skills on meaningful service learning projects. *Prerequisite: PSY 272; Prerequisite or Corequisite: PSY 275.*
- PSY 350** **3 hours**
Child and Adolescent Psychology
 This course surveys the characteristics of growth and development of children through adolescence, including physical, psychological, social, cognitive, and emotional aspects. School-related contemporary issues such as child abuse, drug and alcohol use, peer pressure, and teenage sexuality are discussed. *Meets foundational core general social science requirement.*
- PSY 357** **3 hours**
Peace, Reconciliation, and Justice
 This course provides a basic introduction to the role of psychology in helping to establish peaceful societies around the world. It will seek to integrate a Christian worldview with current trends in peacemaking, including topics such as forgiveness, reconciliation, and social justice. Attention will be given to ethnopolitical conflicts from a multi-disciplinary perspective. *Prerequisites: PSY 100 and PSY 272 or instructor's permission.*
- PSY 360** **1-4 hours**
Independent Study
 An individualized, directed study involving a specified topic.

PSY 370 Selected Topics	1-4 hours	
A course offered on a subject of interest but not listed as a regular course offering.		
PSY 375 Loss and Bereavement	3 hours	
This course examines the journey through loss and grief and includes not only death-related bereavement but also psychological, physical, developmental, and situational losses that occur throughout the life. While the course is designed with a systemic perspective, a more general grieving paradigm is also presented through current theories and research. Students have the opportunity to practice helpful responses to loss and learn how to facilitate healthy adaptation to change. The role of culture in the experience of loss and grief is explored. <i>Prerequisite: PSY 100 or instructor's permission.</i>		
PSY 380 Ethical and Professional Issues in Autism Intervention Seminar	3 hours	
This course covers specific issues related to work in autism related fields. Students are exposed to legislation, rights, and ethical issues related to working with individuals with autism across the life span. At the completion of the course, all students must pass the RBT exam to be certified as a Registered Behavior Technician. <i>Prerequisites: PSY 280 and PSY 281.</i>		
PSY 381 Single Subject Research and Behavioral Assessment	3 hours	
This course will introduce students to methods of conducting single subject designs for behavioral intervention. Students will also learn the salient features of common single subject designs as well as the advantages and disadvantages of these methodologies. Students will learn to visually inspect data and make treatment decisions regarding intervention effectiveness. Additionally, students will learn how to review published research based on single subject methods and will have opportunities to explore how these methods can be used to answer applied and basic science research questions and how results inform therapeutic intervention choices.		
PSY 382 Sensation and Perception	3 hours	
Examination of how observers perceive their environment through sensory information; emphasis on major sensory systems including vision, audition, spatial orientation, touch, taste, and olfaction. In addition, the integration of these sensory systems and subjective experience will be explored.		
PSY 390 Christian Marriage	3 hours	
A practical and applied course that integrates psychological literature and biblical teaching in the subject areas of the marriage relationship. These areas include marriage foundations, dating and engagement, premarital sexual behavior, singleness, mate selection, marriage success and satisfaction, love and infatuation, marriage roles, communication and conflict and divorce.		
PSY 393 Practicum	1-4 hours	
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during Summer.</i>		
PSY 395 Health Psychology	3 hours	
This course provides an overview of the research and practice of psychology as applied to health and health systems. Topics include the biopsychosocial model, personality and psychological issues related to health behaviors, stress and coping, patient-provider relationships, use of health services, pain management, chronic illness, advancing and terminal illness, heart disease, hypertension, stroke, diabetes, psychoneuroimmunology, aids, cancer, and arthritis. Students also explore psychological issues related to personal health behavior change.		
PSY 400 Theories of Personality	3 hours	
A study of the major current systematic psychological theories of personality. Consideration is given to their underlying assumptions and usefulness for research and therapeutic practice. <i>Prerequisites: PSY 100 and three additional hours in psychology or social work.</i>		
PSY 410 Motivation	3 hours	
This course is designed to provide a theoretical, Christian, practical understanding of motivation. Motivation is addressed by looking at its historical development and models of volition, affection, intellect, and biology. <i>Prerequisites: PSY 100 and six additional hours in psychology or instructor's permission.</i>		
PSY 411 Learning: Theory and Application	3 hours	
The study of major learning theories and their application to advertising, education, counseling, and daily problems of life. <i>Prerequisite: PSY 100.</i>		
PSY 420 Cognition	3 hours	
The scientific study of the cognitive functions of memory, attention, perception, learning styles, imagery, decision making, problem solving, and metacognition, with application for implementing this information. <i>Prerequisites: PSY 100 and six additional hours in psychology.</i>		
PSY 422 Psychological Testing	3 hours	
A study of the principles of psychological testing, considering both the theoretical and practical foundations underlying the construction, use, and interpretation of various psychometric instruments. The student is given opportunity to administer, score, and interpret selected instruments. <i>Prerequisites: PSY 100 and PSY 275.</i>		
PSY 425 Industrial-Organizational Psychology	3 hours	
This course is designed to provide an introduction to applying psychological principles, theory, and research to the work environment. Topics include hiring, job fit, performance, assessment, training, motivation, stress, leadership, teams, and interpersonal relationships. Students will complete an applied project examining and evaluating the hiring process and performance evaluation of an organizational job. <i>Prerequisite: PSY 100 or instructor's permission.</i>		
PSY 435 Applied Advanced Psychological Statistics	3 hours	
The course provides students with knowledge of statistical methods, how to effectively use them in real world settings doing meaningful projects and when to use the methods based on the data and research design that is utilized. The SPSS statistical package is integrated into the structure of the course content that includes Repeating Measures ANOVA; multiple comparison tests; Two-Way and Three-Way ANOVA Independent groups; One-Way and Two-Way ANCOVA; Simple and Multiple Regression; One-Way, Two-Way, and Mixed factors MANOVA; Point Biserial Correlation; statistics for validity and reliability; Path Analysis; and effect sizes that these statistics tests. <i>Prerequisite: PSY 275.</i>		
PSY 441 Physiological Psychology	3 hours	
A study of the neurophysiology underlying human behavior. Emphasis is given to central nervous system mechanisms that mediate sensation, consciousness, learning, motivation, and emotional behavior.		
PSY 450 Directed Research	1-4 hours	
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. <i>Prerequisites: PSY 100 and PSY 272.</i>		
PSY 461 Fundamentals of Counseling	3 hours	
An analysis of the major theories and approaches to counseling, correlating them with counterpart theories of personality and learning. Each major theory is dealt with in the light of biblical revelation. As a result, the student is encouraged to formulate a tentative theory of counseling consistent with biblical truth. <i>Prerequisite: PSY 100 or instructor's permission.</i>		
PSY 462 Counseling Skills	3 hours	
This course introduces and provides foundational communication and interpersonal counseling skills from therapeutic listening and empathy to interviewing skills. It is experiential and aimed at helping students develop a foundation of strong, effective therapeutic people helping skills. <i>Prerequisite: PSY 461.</i>		
PSY 480 Seminar	1-4 hours	
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. <i>The content of the readings and discussions will focus on integrative material in the discipline, as well as contemporary issues confronting not only professional psychologists, but lay persons as well.</i>		
PSY 490 Honors	1-2 hours	
Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>		
PSY 495 Integration of Psychology and Christianity	3 hours	
An examination of the relationship between psychology and Christian beliefs about human nature. Topics involve the presuppositions of modern psychology, the Christian view of the person, and tension areas between psychology and theology. <i>Prerequisites: PSY 100 and completion of 38 total hours in the major.</i>		

Sociology and Social Work

Chair, Assistant Professor D. Stiles
Professors S. Bird, M. Jessup
Assistant Professor C. Thompson

Sociology

Sociology offers important and distinct ways of seeing the world that enhances the skills of the intellect. Sociology helps students be aware of the impact of social experiences, conditions, and opportunities by incorporating a consciousness of history, the significance of culture, and the impact of the social structure or institutions on social life. Sociology enables students to acknowledge the social forces and factors affecting their own private lives and enhances a better understanding of complex social and cultural issues. Sociology encourages efforts to minister the redemptive grace of Christ by recognizing the complexities of international, national, and local issues and situations, and recognize how culture and the social structure affect the way people live and understand the gospel. Moreover, sociology encourage students to engage in action that promotes global responsibility, fosters healing, and restores human dignity.

The undergraduate degree provides a strong liberal arts preparation for entry-level positions, including business, social/human services, archaeology, cultural resource management, historic preservation, community development, human rights/social justice advocacy, tourism/heritage, missions/missiology, non-profits/NGOs, and government/public service careers. Moreover, many students choose sociology because they see it as a broad liberal arts base for professions such as law, education, medicine, social work, counseling, and missiology/missions.

Sociology (BA)

The Bachelor of Arts degree with a major in Sociology requires two years of one foreign language and 41 hours in the major. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

SOC 100	3	Introduction to Sociology
SOC 110	3	Introduction to Global Societies
SOC 250	2	Principles of Research and Analysis
SOC 361	3	History of Social Thought
SOC 365	3	Contemporary Social Thought
SOC 493	2	Sociology Integrative Seminar
SOC 498	1	Sociology Senior Thesis

Select one course from the following:

SOC 350	3	Social Research Methods
SOC 355	3	Applied Social Statistics

Electives

Select an additional 21 credits from the following courses. A minimum of 15 credits must be upper-division (300/400).

ANT 200	3	Cultural Anthropology
SOC 210	3	Contemporary Social Issues
SOC 220	3	Ethnic and Minority Issues
SOC 310	3	Religion and Society
SOC 315	3	Social Inequality and Stratification
SOC 360	1-4	Independent Study
SOC 370	3	Selected Topics
SOC 381	3	Marriage and Family Systems
SOC 393	1-4	Practicum
SOC 410	3	Community and Urban Affairs
SOC 420	3	Organizational Policies and Programs
SOC 450	1-4	Directed Research
SWK 225	3	Diversity and the Disenfranchised
SWK 320	3	Unleashing the Oppressed
SWK 340	3	Trauma-informed Work with Children
SWK 355	3	Helping Troubled Families

Sociology (BS)

The Bachelor of Science degree with a major in Sociology requires 50 hours in the major. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

SOC 100	3	Introduction to Sociology
SOC 110	3	Introduction to Global Societies
SOC 250	2	Principles of Research and Analysis
SOC 350	3	Social Research Methods
SOC 355	3	Applied Social Statistics
SOC 361	3	History of Social Thought
SOC 365	3	Contemporary Social Thought
SOC 493	2	Sociology Integrative Seminar
SOC 498	1	Sociology Senior Thesis

Electives

Select an additional 27 credits from the following courses. A minimum of 21 credits must be upper-division (300/400).

ANT 200	3	Cultural Anthropology
SOC 210	3	Contemporary Social Issues
SOC 220	3	Ethnic and Minority Issues
SOC 310	3	Religion and Society
SOC 315	3	Social Inequality and Stratification
SOC 360	1-4	Independent Study
SOC 370	3	Selected Topics
SOC 381	3	Marriage and Family Systems
SOC 393	1-4	Practicum
SOC 410	3	Community and Urban Affairs
SOC 420	3	Organizational Policies and Programs
SOC 450	1-4	Directed Research
SWK 225	3	Diversity and the Disenfranchised
SWK 320	3	Unleashing the Oppressed
SWK 340	3	Trauma-informed Work with Children
SWK 355	3	Helping Troubled Families

Sociology Minor

The Sociology minor requires 20 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

SOC 100	3	Introduction to Sociology
SOC 250	2	Principles of Research and Analysis

Select one course from the following:

SOC 361	3	History of Social Thought
SOC 365	3	Contemporary Social Thought

Electives

Select 12 hours of sociology electives.

Social Work

Social work is one of the major human service professions focused on enhancing the social functioning of individuals, families, groups, organizations, and communities. Services are provided to all people with particular emphasis on disadvantaged populations. A variety of practice settings, including hospitals, family and children's service agencies, schools, residential facilities, healthcare facilities, home-based services, business and industry, mental health agencies, and developmental disabilities agencies are used as service learning experiences.

The goals of the Taylor Social Work program are to: (1) prepare baccalaureate level social workers for beginning-level generalist practice including formal and informal lifelong learning; (2) integrate Christian values with professional values to challenge worldviews, personal beliefs and societal constructs; and (3) to globalize student perspectives and sensitize circles of influence to issues and experiences of diverse, vulnerable, and marginalized population groups in an effort to advance social justice. The Social Work curriculum includes five content areas: human behavior and the social environment, practice, policy, research, and field instruction.

Taylor's Social Work program is accredited by the Council on Social Work Education (CSWE) and offers a Bachelor of Arts (includes language requirement) or Bachelor of Science degree in Social Work. Graduates are prepared to apply for state credentialing (licensure, certification, or registration) as a beginning-level social work practitioner in most states.

The formal admission process occurs as a part of the junior evaluation. This is a process in which faculty and each student sit down for a formal interview to discuss the level of learning as well as fit into the profession of social work and understanding of self. Students will be in progress or have completed:

- 30 volunteer hours
- SWK 200: Explorations in Social Work
- SWK 225: Diversity and the Disenfranchised
- SWK 351: Social Work Process and Practice I
- SWK 393: Junior Practicum or SWK 395: International Practicum

Attainment of a minimum 2.50 major GPA is required for the Social Work major.

Social Work (BA or BS)

The Bachelor of Arts and Bachelor of Science degrees are offered in Social Work. Students considering work in areas that are bilingual are encouraged to take appropriate language courses. The Bachelor of Arts degree requires two years of one foreign language. Students in the Social Work major are expected to complete a minimum of 75 major hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

PSY 100	3	Introductory Psychology
PSY 250	3	Life Span Development
PSY 300	3	Abnormal Psychology
SOC 250	2	Principles of Research and Analysis
SOC 350	3	Social Research Methods
SOC 355	3	Applied Social Statistics
SWK 200	3	Explorations in Social Work
SWK 225	3	Diversity and the Disenfranchised
SWK 351	3	Social Work Process and Practice I
SWK 354	3	Social Work Process and Practice II
SWK 355	3	Helping Troubled Families
SWK 362	3	Social Policy
SWK 441	3	Human Behavior and the Social Environment
SWK 451	3	Social Work Process and Practice III
SWK 452	3	Advanced Social Work Practice
SWK 482	2	Integrative Social Work Seminar
SWK 492	12	Senior Practicum

Select one course from the following:

SWK 393	4	Junior Practicum
SWK 395	4	International Practicum

Select one course from the following:

BIO 106	4	Human Biology
BIO 310	4	Human Anatomy and Physiology I

Select one course from the following:

ANT 200	3	Cultural Anthropology
SOC 100	3	Introduction to Sociology
SOC 210	3	Contemporary Social Issues

Select one course from the following:

SOC 110	3	Introduction to Global Societies
SOC 220	3	Ethnic and Minority Issues

Electives

Select one social work elective from:

SWK 320	3	Unleashing the Oppressed
SWK 340	3	Trauma-informed Work with Children
SWK 380	3	Understanding Suffering, Grief, and Loss

Complete and document 30 hours of volunteer experience by the end of sophomore year.

Social Work Minor

The Social Work minor requires 21 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

SWK 200	3	Explorations in Social Work
SWK 225	3	Diversity and the Disenfranchised
SWK 355	3	Helping Troubled Families
SWK 362	3	Social Policy
SWK 370	3	Selected Topics*

Select one course from the following:

SOC 210	3	Contemporary Social Issues
SOC 220	3	Ethnic and Minority Issues

Select one course from the following:

SWK 320	3	Unleashing the Oppressed
SWK 340	3	Trauma-informed Work with Children
SWK 380	3	Understanding Suffering, Grief, and Loss

*Course must be Affecting Change in Neighborhoods and Communities

Complete and document 15 hours of volunteer experience by the end of sophomore year.

Human Services (AA) – Taylor University Online

The Associate of Arts with a major in Human Services requires 17 hours in the major and 48 hours in foundational core. This degree blends the disciplines of social work and psychology. Upon completion, students may apply to Taylor University residential program to seamlessly transition to campus to complete a Bachelor of Science degree in Social Work in two additional years. All major courses must be completed with a grade of C- or better and are included in the major GPA. This program is only offered through Taylor University Online and residential students are not eligible.

Curriculum Requirements

ANT 200	3	Cultural Anthropology
ART 172	2	Art Appreciation
BIB 110	3	Biblical Literature I
BIB 210	3	Biblical Literature II
BIO 106	4	Human Biology
COS 101	2	Information Technology Concepts
ENG 110	3	College Composition
IAS 102	1	Orientation to Distance Learning
IAS 110	4	Foundations of the Christian Liberal Arts
KIN 100	2	Living Well
KIN 2001	1	Individualized Physical Education
MUS 149	2	Music Appreciation
PHI 413	3	Contemporary Christian Belief
REL 313	3	Historic Christian Belief
SWK 320	3	Helping Troubled Families

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Select one course from the following:

ENG 240	3	American Literature
ENG 250	3	British Literature

Select one history course of at least 3 credits.

Major Requirements

PSY 100	3	Introductory Psychology
PSY 300	3	Abnormal Psychology
SOC 250	2	Principles of Research and Analysis
SWK 200	3	Explorations in Social Work
SWK 225	3	Diversity and the Disenfranchised
SWK 355	3	Helping Troubled Families

Anthropology Courses

ANT 200 3 hours Cultural Anthropology

An introduction to the principles of cultural anthropology, including the analysis of major anthropological theories and concepts and an examination of social institutional arrangements in small-scale societies. Meets foundational core civic engagement or general social science requirement.

ANT 280 3 hours Anthropology of Study Abroad, Short-term Mission, and Tourism

The recent explosion of global travel for relatively short periods brings travelers into transient contact with people in different places. Such travel may have educational, recreational, religious, or service goals. Through anthropological readings, this course examines the nature of the intercultural encounters experienced on these trips, the motivations and outcomes of these trips for both travelers and hosts, and considers a wide variety of related dynamics. Students will be coached in engaging in research on course-related themes or in conducting research in preparation for their own upcoming global trip. Meets foundational core cross-cultural requirement; and civic engagement or general social science requirement.

Criminal Justice Courses

JUS 100 3 hours Introduction to Criminal Justice

A survey of the organization, administration, and function of law enforcement, the courts, and corrections in an historical, legal, and contemporary context. An emphasis is placed on both offenses and offenders at each stage of the process. This course is offered through Taylor University Online (TUO).

JUS 347 3 hours Courts

This course will examine the American court system and the components of the legal system that feed cases into the system, in both the civil and criminal legal process. Students will learn about the many elements of the court system and their interlocking relationships to the judicial process. Jurisdictional issues between state, local, and federal courts will be examined, as well as the trial and appellate process. Students will have the opportunity to do a paper on a high profile case and review the social impact of decisions. Emphasis will be on the criminal justice system since criminal cases make up the majority of court cases. This course is offered through Taylor University Online (TUO).

Social Work Courses

SWK 170 1-4 hours Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

SWK 200 3 hours Explorations in Social Work

This course intends to assist the prospective social worker in gaining awareness and understanding of basic tenets of the social work profession, Code of Ethics, guiding principles and values, and of practice settings. Throughout the course, students are given the opportunity to explore their interest in and potential for a career in social work. The course will also assist students in understanding social welfare systems and their development, and how social welfare policy affects people across the globe. As students learn about the various social issues that social workers help to change, students will explore how their Christian faith commands their reflection and action in tackling these issues. Meets foundational core civic engagement or general social science requirement.

SWK 225 3 hours Diversity and the Disenfranchised

A hybrid course integrating theory and application of concepts through case study dealing with issues related to diversity, oppression, discrimination, human rights, and social justice. Dimensions related to women's issues, immigration and acculturation, religion and spirituality, social class, and sexual orientation will be explored.

SWK 231 3 hours Social Welfare: Historical Perspectives and Development

This course follows the development of social welfare efforts from early civilizations to the present time. The course focuses on the emergence of the profession of social work and explores the question "Am I my brother's keeper?" in the light of biblical principles. This course is offered through Taylor University Online (TUO).

- SWK 270** 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.
- SWK 320** 3 hours
Unleashing the Oppressed
This course is designed to provide the student with the necessary knowledge, values and skills to empower people who fall into "at-risk population" groups. Those groups who are at-risk for prejudice and discrimination typically include mental disability, developmental disability, sexual orientation, women, elderly, and religious diversity. Service-learning component provides interaction with a variety of community-based agencies. *Meets foundational core civic engagement or general social science requirement. Open to all students.*
- SWK 340** 3 hours
Trauma-informed Work with Children
This course is a social work elective that is designed to provide an overview of the broad field of child welfare. Topics include the role of the family in the care of children, the history and current state of care of children, current problems such as child abuse and neglect, the impact of poverty and diversity in the well-being of children, and responses to children in need such as foster care, adoption, residential programs, the courts and school-based services. Application is made through readings, experiential activities, agency visits, and guest speakers. A service learning component provides interaction with community-based agencies. *Open to all students. Offered Fall semester of odd years.*
- SWK 351** 3 hours
Social Work Process and Practice I
First in a 4-course practice sequence designed to provide the student with the necessary knowledge, values for ethical decision making and skills for successful practice with individuals at the generalist social work practitioner level. Develops understanding of the nature and process of social work practice, principles and techniques of the planned change process. Develops students' ability for self-awareness and for understanding the nature of clienthood. *Prerequisites: PSY 100; SWK 200; SWK 225; COM 210 or COM 320; ANT 200 or SOC 100 or SOC 210. Offered Fall semester.*
- SWK 354** 3 hours
Social Work Process and Practice II
Second in the 4-course practice sequence. Enables further development of generalist social work skills with various client systems. Areas of group dynamics, ethical issues, developmental levels and diversity are emphasized. Participation in a group experience is required. *Prerequisite: SWK 351. Offered Spring semester.*
- SWK 355** 3 hours
Helping Troubled Families
Introduces family systems theory, as well as the history and development of family interventions. Presents the major approaches of working with families and provides the opportunity to role play application of these approaches. *Open to all students. Offered Fall semester.*
- SWK 360** 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.
- SWK 362** 3 hours
Social Policy
Discusses topics related to social welfare history, public policy, and social welfare policies that exist in today's society and how they impact those most dependent on social programs. Examines social programs in light of the problems they address, the service they provide, and their effectiveness. Addresses contemporary social issues in light of public funding decisions.
- SWK 370** 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.
- SWK 380** 3 hours
Understanding Suffering, Grief, and Loss
Provides a basic introduction to crucial issues related to suffering and affliction, both self-imposed and those related to the human condition. Bereavement, grief and loss across the life span will be explored. Contemporary issues related to death and dying and the roles of social institutions and services to persons affected by suffering, death and loss will be covered. Issues will be examined based on difference in gender, culture, ethnicity and religion and in light of historic and contemporary Christian faith. *Open to all students. Offered Spring semester of odd years.*
- SWK 393** 4 hours
Junior Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Students spend time in a social work setting learning how an agency functions, how professional social work practice is implemented, and how the professional interacts within an agency. Pass/fail only. Practicum course credit requires 140 hours of observation and practice. Prerequisites: SWK 351, junior status, and approval of the Junior Practicum Coordinator. Offered January interterm.*
- SWK 395** 4 hours
International Practicum
During the January interterm of the junior or senior year, students would spend time in an international social work setting gaining knowledge of social work in a different country. They learn how an agency functions, how social work practice is implemented abroad, and specific needs within another culture. This practicum opportunity provides 140 hours of field lab work. *Class fee assessed to cover travel and in country experience. Prerequisites: SWK 351 and permission of Director of Social Work. Pass/fail only.*
- SWK 441** 3 hours
Human Behavior and the Social Environment
This course serves as a capstone course for the human behavior in the social environment sequence in the social work major. The primary purpose of this course is explore the question, "Why do people behave as they do?" This question will be explored from a multi-dimensional systems social work perspective. It is designed to prepare students for multi-dimensional assessments that will be required for the senior field placement and generalist practice after graduation. *Prerequisites: PSY 250; SWK 362; SWK 354; BIO 106 or 310. Offered Fall semester.*
- SWK 450** 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.
- SWK 451** 3 hours
Social Work Process and Practice III
The third in the 4-course generalist social work practice sequence. This course integrates social work practice, intervention and professional skills with regards to intervention and assessment at the organizational and community level. The course also focuses on macro social work practice, community organizing and development. Students will also participate in a grant writing project as they begin to develop grant writing and fundraising know-how and skills. As in the other courses in the practice sequence in our social work program, there will be a focus on the integration of micro, mezzo, and macro skills to empower students for effective generalist social work practice. *Prerequisite: SWK 354. Offered Fall semester.*
- SWK 452** 3 hours
Advanced Social Work Practice
Last in the 4-course sequence for developing generalist practice skills. The professional helping relationship and interview process are emphasized. Simulated client-worker situations provide opportunities to practice skills. Employment interviews and strategies are also discussed. Beginning-level professional writing skills are developed through documentation exercises. *Prerequisite: SWK 354. Offered Fall semester.*
- SWK 480** 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.
- SWK 482** 2 hours
Integrative Social Work Seminar
A seminar class taken by all social work majors during interterm of the senior year. The focus is holistic integration of: (1) faith and the social work profession; (2) self and the social work profession; (3) liberal arts education and the knowledge and practice of social work; (4) self- and civic-mindedness; and (5) self as global citizen. Students begin to develop the CSWE content portion of their professional portfolio. Focused presentations are conducted with regard to stress and time management and burnout prevention. *Pass/fail only.*
- SWK 490** 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*
- SWK 492** 12 hours
Senior Practicum
A professional semester of supervised field practicum in a social work setting; 480 hours are required. *Prerequisite: Completion of all required courses in the social work major. Offered Spring semester.*

Sociology Courses

- SOC 100** 3 hours
Introduction to Sociology
 A study of the principles and concepts of sociology in the context of present day social systems. Attention is given to major contemporary analyses of social events, processes, and institutions. *Meets foundational core civic engagement or general social science requirement. Offered Fall semester.*
- SOC 110** 3 hours
Introduction to Global Societies
 This course explores the nature of contemporary societies around the world by considering societal stages and development, cultural and social structural aspects of societies, international inequality, and globalization. *Meets foundational core civic engagement or general social science requirement. Offered Spring semester.*
- SOC 170** 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- SOC 210** 3 hours
Contemporary Social Issues
 An introduction to the study of social problems from several perspectives. Problems in areas such as drug abuse, crime, education, and the family are examined in the light of basic principles of sociology. *Meets foundational core civic engagement or general social science requirement. Offered Fall semester.*
- SOC 220** 3 hours
Ethnic and Minority Issues
 An analysis of inter-group relations in the United States. Topics include a consideration of the mechanisms of group interaction between dominant and subordinate groups and the experiences and histories of the primary minority groups in the United States. *Meets foundational core civic engagement or general social science requirement. Offered Spring semester.*
- SOC 250** 2 hours
Principles of Research and Analysis
 Intended to prepare students to effectively make sense of the bewildering variety of numbers available in contemporary societies about people, organizations, and social outcomes, this course is an introduction to the key principles of social measurement and basic ways numbers are used to represent patterns in the social world. *Offered Fall semester.*
- SOC 270** 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- SOC 310** 3 hours
Religion and Society
 An examination of the cultural and structural influences that guide the forms religion takes in society and the processes through which religious ideas, behaviors, and institutions are constructed. Attention is given to the sociological theory and research that underlies religious behavior. *Meets foundational core general social science requirement. Offered periodically.*
- SOC 313** 3 hours
Statistics for Behavioral Science
 The major concepts covered in the class will be descriptive statistics, basic probability theory, and inferential statistics. Demonstrations of Microsoft Excel competency will be assigned for each segment of the class. *This course is offered through Taylor University Online (TUO).*
- SOC 315** 3 hours
Social Inequality and Stratification
 This course examines the social systems (cultural and structural) that determine outcomes in wealth, power and social prestige. The primary focus is on class systems. *Meets foundational core civic engagement or general social science requirement. Offered Spring semester.*
- SOC 330** 3 hours
Social Change and Social Movements
 This course focuses on the basic premises of social change including the evolutionary, conflict and cyclical theories of social change, and the organized activities of collective behavior and social movements that encourage or discourage social change. Special attention is given to the theoretical contributions of the structural strain, resource mobilization and social constructionists' perspectives. *Meets foundational core general social science requirement. Offered periodically.*
- SOC 340** 3 hours
Sociology of Children and Families
 This course examines the sociological foundations of childhood including family formation, childhood socialization and the changing cultural significance of children. This course also examines the divergent roles, styles and functions of parenting. *Offered Fall semester of every other year (alternates with SOC 381).*
- SOC 350** 3 hours
Social Research Methods
 An exploration of the primary methods of social research and data collection. Topics include defining a research question and design, and data collection from operationalization to data entry. *Prerequisite: SOC 250. Offered Fall semester.*
- SOC 355** 3 hours
Applied Social Statistics
 An introduction to statistical analysis for social research issues. The course focuses on the uses of statistics, choosing appropriate statistics for a given problem and interpreting statistical output. *Meets foundational core mathematics requirement. Prerequisite: SOC 250. Offered Spring semester.*
- SOC 360** 1-4 hours
Independent Study
 An individualized, directed study involving a specified topic.
- SOC 361** 3 hours
History of Social Thought
 Primary emphasis is placed upon the contributions of sociologists since the time of Comte. The writings and concepts of leading sociologists in both Europe and America are studied. *Meets foundational core general social science requirement. Offered Fall semester of every other year (alternates with SOC 365).*
- SOC 365** 3 hours
Contemporary Social Thought
 An analysis of social theory as it is practiced today. Building on the classical works of Marx, Durkheim, Weber, Simmel and Mead, this course focuses on how modern sociologists have incorporated the classical writers to explain social developments. Special attention is given to postmodernists, social constructionists, functionalists, neo-Marxists, neo-Weberians and leading feminist thinkers. *Meets foundational core general social science requirement. Offered Fall semester of every other year (alternates with SOC 361).*
- SOC 370** 1-4 hours
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.
- SOC 381** 3 hours
Marriage and Family Systems
 A study of the changing state of family systems in America. The course also examines how work, social class, ethnicity and gender affect family structure and function. *Meets foundational core general social science requirement. Offered Fall semester of every other year (alternates with SOC 340).*
- SOC 393** 1-4 hours
Practicum
 Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*
- SOC 410** 3 hours
Community and Urban Affairs
 Consideration of problems relating to community structure, development and process, beginning with a historical overview of the development of cities. Special emphasis is placed upon the interrelationships of various groupings within communities, particularly within the urban scene. A field trip to a major urban center provides "hands-on" learning. *Meets foundational core civic engagement or general social science requirement. Offered Spring semester.*
- SOC 420** 3 hours
Organizational Policies and Programs
 A study of the social dynamics that guide and shape organizations in modern societies. The class prepares students to see and work with the structures of organizations like the church, government agencies, for-profit companies and nonprofits. The focus is on the application of organizational theories to organizational settings and includes projects on the development of organizational programs. *Offered periodically.*
- SOC 450** 1-4 hours
Directed Research
 Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.
- SOC 480** 1-4 hours
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.
- SOC 490** 1-2 hours
Honors
 Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*
- SOC 493** 2 hours
Sociology Integrative Seminar
 This course provides students with the opportunity to approach the field of sociology holistically and integrate faith and sociological insight. *Offered Spring semester.*
- SOC 498** 1 hour
Sociology Senior Thesis
 Students will complete a senior thesis that demonstrates an ability to apply sociological perspective through a theoretical or methodological analysis of a sociological topic they have chosen. *Offered Spring semester.*



TAYLOR
UNIVERSITY

School of Natural
and Applied Sciences

GRACE JU MILLER, PHD, DEAN

**BIOLOGY, ENVIRONMENTAL SCIENCE,
PUBLIC HEALTH, AND SUSTAINABLE DEVELOPMENT**

CHEMISTRY AND BIOCHEMISTRY

COMPUTER SCIENCE AND ENGINEERING

KINESIOLOGY

MATHEMATICS

PHYSICS AND ENGINEERING

Biology, Environmental Science, Public Health, and Sustainable Development

Co-Chairs, Professor M. Guebert, Associate Professor B. Dewar

Professors G. Miller, J. Reber

Associate Professor J. Baker

Assistant Professors P. Grabowski, E. Hasenmyer, L. Lu, R. Reber, L. Woodward

Visiting Professor D. Sas

The Department of Biology, Environmental Science, Public Health, and Sustainable Development equips and mentors students with practical scientific knowledge, ethical grounding, and professional skills to effectively minister to a world in need. The department offers majors in Biology Health Science, Biology Investigations and Applications, Biology Science Education, Environmental Science, Public Health, and Sustainable Development and minors in Biology, Environmental Science, Public Health, and Sustainability, all of which involve a deep concern for God's human and non-human creation.

Our programs include a deep understanding of the Christian foundation beneath a faith-based pursuit of knowledge and application in our courses. This approach, both inside and outside the classroom, is fundamental to our offering of foundational core courses for students completing other majors in the liberal arts as well as to students majoring in our department. Students pursuing one of the Biology majors are trained to model Christ to His created world as they engage in biology investigation and practice. Students majoring in Environmental Science, Public Health, and Sustainable Development are trained to live out their faith through integrating environmental stewardship, social justice, and sustainable living. All majors are required to complete a senior comprehensive requirement; Biology majors meet this requirement by passing the Biology Major Field Test during the Fall semester of their senior year.

Biology

The Biology program is a dynamic community of learning, leadership, and service. We equip and mentor students through faith-integrated scholarship and research in the exploration of diversity and processes of life. Students are prepared to model Christ to His created world as they engage in biology investigation and practice, and healthcare and science education professions. Biology graduates are prepared to enter diverse careers, such as biology research, healthcare (e.g., physicians, dentists, nurses, physical therapists, physician assistants), and science teaching. All majors are required to complete a senior comprehensive requirement; Biology majors meet this requirement by passing the biology Major Field Test taken during their senior year.

Biology Health Science (BA or BS)

The Biology Health Science major requires 83-90 hours in the major. A Bachelor of Arts degree requires two years of one foreign language. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Foundational Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 202	4	Biology II: Organisms and Diversity
BIO 203	4	Principles of Genetics
BIO 493	4	Biology Senior Capstone
ENS 204	4	Principles of Ecology

Major Requirements

BIO 185	1	Biology Major Orientation
BIO 285	1	Biology Colloquium I
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
BIO 385	1	Biology Colloquium II
BIO 485	1	Biology Colloquium III
KIN 221	3	Exercise as Medicine

Concentrations – Students must select one of the following concentrations:

Pre-Allied Health Careers

BIO 210	3	Medical Terminology
BIO 471	4	Microbiology and Immunology
CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 311	4	Organic Chemistry I
MAT 210	4	Introductory Statistics

Select one course from the following:

PSY 100	3	Introductory Psychology
PSY 250	3	Life Span Development

Select one course from the following:

SOC 100	3	Introduction to Sociology
SOC 210	3	Contemporary Social Issues
SOC 220	3	Ethnic and Minority Issues

Select at least 6 hours from the following:

BIO 306	3	Introduction to Bioinformatics
BIO 312	4	Cellular and Molecular Biology
BIO 393	2-4	Practicum
BIO 432	4	Developmental Biology
BIO 450	2-4	Directed Research
BIO 462	4	Molecular Genetics
BIO 472	4	Histology

Select at least an additional 6 hours from the following:

BIO 306	3	Introduction to Bioinformatics
BIO 312	4	Cellular and Molecular Biology
BIO 345	3	Evolution and the Nature of Science
BIO 393	2-4	Practicum
BIO 432	4	Developmental Biology
BIO 450	2-4	Directed Research
BIO 462	4	Molecular Genetics
BIO 472	4	Histology
EXS 306	3	Physiology of Exercise
EXS 316	3	Applied Nutrition
EXS 381	3	Kinesiology
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
HPH 320	3	Neuromuscular Physiology and Chronic Disease
PBH 100	3	Introduction to Public Health
PBH 335	4	Environmental Health
PHI 311	3	Medical Ethics
SUS 315	4	Sustainable Food Systems and Health

Select an additional 8 hours from the following:

CHE 312	4	Organic Chemistry II
CHE 411	3	Biochemistry I
NAS 230	2	Health Education for Behavior Change
NAS_70	1	Special Topics (advisor approval)
PHY 203	4	General Physics I
PHY 204	4	General Physics II

Biology Health Science requirements continued on next page

Pre-Dental

CHE 211	4	College Chemistry I			
CHE 212	4	College Chemistry II			
CHE 311	4	Organic Chemistry I			
CHE 312	4	Organic Chemistry II			
CHE 411	3	Biochemistry I			
MAT 210	4	Introductory Statistics			
PHY 203	4	General Physics I			
PHY 204	4	General Physics II			
<i>Select one course from the following:</i>					
PSY 100	3	Introductory Psychology			
PSY 250	3	Life Span Development			
<i>Select one course from the following:</i>					
SOC 100	3	Introduction to Sociology			
SOC 210	3	Contemporary Social Issues			
SOC 220	3	Ethnic and Minority Issues			
<i>Select three courses from the following:</i>					
BIO 306	3	Introduction to Bioinformatics			
BIO 312	4	Cellular and Molecular Biology			
BIO 432	4	Developmental Biology			
BIO 462	4	Molecular Genetics			
BIO 471	4	Microbiology and Immunology			
BIO 472	4	Histology			
					<i>Select at least an additional 6 hours from the following:</i>
			BIO 306	3	Introduction to Bioinformatics
			BIO 312	4	Cellular and Molecular Biology
			BIO 345	3	Evolution and the Nature of Science
			BIO 393	2-4	Practicum
			BIO 432	4	Developmental Biology
			BIO 450	2-4	Directed Research
			BIO 462	4	Molecular Genetics
			BIO 471	4	Microbiology and Immunology
			BIO 472	4	Histology
			EXS 306	3	Physiology of Exercise
			EXS 316	3	Applied Nutrition
			EXS 381	3	Kinesiology
			HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
			HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
			HPH 320	3	Neuromuscular Physiology and Chronic Disease
			PBH 100	3	Introduction to Public Health
			PBH 335	4	Environmental Health
			PHI 311	3	Medical Ethics
			SUS 315	4	Sustainable Food Systems and Health
<i>Recommended Courses</i>					
			BIO 210	3	Medical Terminology
			NAS 230	2	Health Education for Behavior Change
			NAS_70	1	Special Topics (advisor approval)

Pre-Medicine

CHE 211	4	College Chemistry I			
CHE 212	4	College Chemistry II			
CHE 311	4	Organic Chemistry I			
CHE 312	4	Organic Chemistry II			
CHE 411	3	Biochemistry I			
MAT 210	4	Introductory Statistics			
PHY 203	4	General Physics I			
PHY 204	4	General Physics II			
<i>Select one course from the following:</i>					
PSY 100	3	Introductory Psychology			
PSY 250	3	Life Span Development			
<i>Select one course from the following:</i>					
SOC 100	3	Introduction to Sociology			
SOC 210	3	Contemporary Social Issues			
SOC 220	3	Ethnic and Minority Issues			
<i>Select three courses from the following:</i>					
BIO 306	3	Introduction to Bioinformatics			
BIO 312	4	Cellular and Molecular Biology			
BIO 432	4	Developmental Biology			
BIO 462	4	Molecular Genetics			
BIO 471	4	Microbiology and Immunology			
BIO 472	4	Histology			
					<i>Select at least an additional 6 hours from the following:</i>
			BIO 306	3	Introduction to Bioinformatics
			BIO 312	4	Cellular and Molecular Biology
			BIO 345	3	Evolution and the Nature of Science
			BIO 393	2-4	Practicum
			BIO 432	4	Developmental Biology
			BIO 450	2-4	Directed Research
			BIO 462	4	Molecular Genetics
			BIO 471	4	Microbiology and Immunology
			BIO 472	4	Histology
			EXS 306	3	Physiology of Exercise
			EXS 316	3	Applied Nutrition
			EXS 381	3	Kinesiology
			HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
			HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
			HPH 320	3	Neuromuscular Physiology and Chronic Disease
			PBH 100	3	Introduction to Public Health
			PBH 335	4	Environmental Health
			PHI 311	3	Medical Ethics
			SUS 315	4	Sustainable Food Systems and Health
<i>Recommended Courses</i>					
			BIO 210	3	Medical Terminology
			NAS 230	2	Health Education for Behavior Change
			NAS_70	1	Special Topics (advisor approval)

Pre-Optometry

BIO 210	3	Medical Terminology			
BIO 471	4	Microbiology and Immunology			
CHE 211	4	College Chemistry I			
CHE 212	4	College Chemistry II			
CHE 311	4	Organic Chemistry I			
CHE 411	3	Biochemistry I			
MAT 210	4	Introductory Statistics			
PHY 203	4	General Physics I			
PHY 204	4	General Physics II			
PSY 100	3	Introductory Psychology			
<i>Select one course from the following:</i>					
SOC 100	3	Introduction to Sociology			
SOC 210	3	Contemporary Social Issues			
SOC 220	3	Ethnic and Minority Issues			
<i>Select at least 6 hours from the following:</i>					
BIO 306	3	Introduction to Bioinformatics			
BIO 312	4	Cellular and Molecular Biology			
BIO 393	2-4	Practicum			
BIO 432	4	Developmental Biology			
BIO 450	2-4	Directed Research			
BIO 462	4	Molecular Genetics			
BIO 472	4	Histology			
					<i>Select at least an additional 6 hours from the following:</i>
			BIO 306	3	Introduction to Bioinformatics
			BIO 312	4	Cellular and Molecular Biology
			BIO 345	3	Evolution and the Nature of Science
			BIO 393	2-4	Practicum
			BIO 432	4	Developmental Biology
			BIO 450	2-4	Directed Research
			BIO 462	4	Molecular Genetics
			BIO 472	4	Histology
			EXS 306	3	Physiology of Exercise
			EXS 316	3	Applied Nutrition
			EXS 381	3	Kinesiology
			HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
			HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
			HPH 320	3	Neuromuscular Physiology and Chronic Disease
			PBH 100	3	Introduction to Public Health
			PBH 335	4	Environmental Health
			PHI 311	3	Medical Ethics
			SUS 315	4	Sustainable Food Systems and Health
<i>Recommended Courses</i>					
			CHE 312	4	Organic Chemistry II
			NAS 230	2	Health Education for Behavior Change
			NAS_70	1	Special Topics (advisor approval)

Pre-Physician Assistant

BIO 210	3	Medical Terminology		
BIO 471	4	Microbiology and Immunology		
CHE 211	4	College Chemistry I		
CHE 212	4	College Chemistry II		
CHE 311	4	Organic Chemistry I		
CHE 312	4	Organic Chemistry II		
CHE 411	3	Biochemistry I		
MAT 210	4	Introductory Statistics		
PSY 250	3	Life Span Development		
<i>Select one course from the following:</i>				
SOC 100	3	Introduction to Sociology		
SOC 210	3	Contemporary Social Issues		
SOC 220	3	Ethnic and Minority Issues		
<i>Select at least 6 hours from the following:</i>				
BIO 306	3	Introduction to Bioinformatics		
BIO 312	4	Cellular and Molecular Biology		
BIO 393	2-4	Practicum		
BIO 432	4	Developmental Biology		
BIO 450	2-4	Directed Research		
BIO 462	4	Molecular Genetics		
BIO 472	4	Histology		
			<i>Select at least an additional 6 hours from the following:</i>	
BIO 306	3	Introduction to Bioinformatics		
BIO 312	4	Cellular and Molecular Biology		
BIO 345	3	Evolution and the Nature of Science		
BIO 393	2-4	Practicum		
BIO 432	4	Developmental Biology		
BIO 450	2-4	Directed Research		
BIO 462	4	Molecular Genetics		
BIO 472	4	Histology		
EXS 306	3	Physiology of Exercise		
EXS 316	3	Applied Nutrition		
EXS 381	3	Kinesiology		
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease		
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases		
HPH 320	3	Neuromuscular Physiology and Chronic Disease		
PBH 100	3	Introduction to Public Health		
PBH 335	4	Environmental Health		
PHI 311	3	Medical Ethics		
SUS 315	4	Sustainable Food Systems and Health		
<i>Recommended Courses</i>				
NAS 230	2	Health Education for Behavior Change		
NAS_70	1	Special Topics (advisor approval)		
PHY 203	4	General Physics I		

Biology Investigations and Applications (BA or BS)

The Biology Investigations and Applications major requires 70 hours in the major. A Bachelor of Arts degree requires two years of one foreign language. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Foundational Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 202	4	Biology II: Organisms and Diversity
BIO 203	4	Principles of Genetics
BIO 493	4	Biology Senior Capstone
ENS 204	4	Principles of Ecology

Major Requirements

BIO 185	1	Biology Major Orientation
BIO 285	1	Biology Colloquium I
BIO 381	3	Research Methods
BIO 385	1	Biology Colloquium II
BIO 440	1	Research Proposal
BIO 450	5	Directed Research
BIO 460	1	Research Communication
BIO 485	1	Biology Colloquium III

Additional Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
MAT 210	4	Introductory Statistics

Select 8 credits¹ from the following:

CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
ENS 383	4	Environmental Ethics
MAT 311	3	Introduction to Data Science
MAT 382	3	Advanced Statistical Methods
NAS 370	1	Selected Topics*
NAS 480	1	Seminar
PHI 311	3	Medical Ethics
PHY 203	4	General Physics I
PHY 204	4	General Physics II
SUS 231	4	Environmental Science, Society, and Sustainability

¹Any additional course under the General Biology concentration not otherwise counting toward the major or concentration may count toward the 8 credits.

*Must be a course in Perspectives in Scientific Reasoning.

Concentrations – Students must select one of the following concentrations:

Anatomy and Physiology

BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II

Select 8 credits from the following:

BIO 312	4	Cellular and Molecular Biology
BIO 331	4	Comparative Anatomy
BIO 360	1-4	Independent Study (approved by advisor)
BIO 370	1-4	Selected Topics (approved by advisor)
BIO 452	4	Animal Physiology
BIO 472	4	Histology
EXS 316	3	Applied Nutrition
EXS 381	3	Kinesiology

Cellular and Molecular Biology

Select 12 credits from the following:

BIO 312	4	Cellular and Molecular Biology
BIO 360	1-4	Independent Study (approved by advisor)
BIO 370	1-4	Selected Topics (approved by advisor)
BIO 432	4	Developmental Biology
BIO 462	4	Molecular Genetics
BIO 471	4	Microbiology and Immunology
CHE 410L	2	Biochemistry Lab
CHE 411	3	Biochemistry I
CHE 412	3	Biochemistry II

Select 4 additional credits from any additional upper-division Biology course not otherwise counting toward major or concentration.

General Biology

Select 16 credits from the following:

BIO 301	4	Taxonomy of Vascular Plants
BIO 304	4	Field Natural History of the Black Hills
BIO 307	4	Vertebrate Natural History
BIO 310 [‡]	4	Human Anatomy and Physiology I
BIO 311 [‡]	4	Human Anatomy and Physiology II
BIO 312	4	Cellular and Molecular Biology
BIO 331 [‡]	4	Comparative Anatomy
BIO 345	3	Evolution and the Nature of Science
BIO 360	1-4	Independent Study (approved by advisor)
BIO 370	1-4	Selected Topics (approved by advisor)
BIO 432	4	Developmental Biology
BIO 452 [‡]	4	Animal Physiology
BIO 462	4	Molecular Genetics
BIO 471	4	Microbiology and Immunology
BIO 472	4	Histology
CHE 410L	2	Biochemistry Lab
CHE 411	3	Biochemistry I
CHE 412	3	Biochemistry II
ENS 375	4	Systems Ecology

[‡]A maximum of two courses may be taken from BIO 310, 311, 331, 452.

Biology Investigations and Applications requirements continued from previous page

Organisms and Systems Biology/Pre-Veterinary Medicine

Select 12 credits from the following:

BIO 301	4	Taxonomy of Vascular Plants
BIO 304	4	Field Natural History of the Black Hills
BIO 307	4	Vertebrate Natural History
BIO 331	4	Comparative Anatomy
BIO 345	3	Evolution and the Nature of Science
BIO 360	1-4	Independent Study (approved by advisor)
BIO 370	1-4	Selected Topics (approved by advisor)
BIO 452	4	Animal Physiology
ENS 375	4	Systems Ecology

Select 4 additional credits from any additional upper-division Biology course not otherwise counting toward major or concentration.

Biology Science Education (BA/BS)

The Biology Science Education major requires 61-65 hours plus education courses. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 344	1	Educational Technology in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
NAS 309	2	Science Education Methods
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Foundational Requirements

BIO 185	1	Biology Major Orientation
BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 202	4	Biology II: Organisms and Diversity
BIO 203	4	Principles of Genetics
BIO 345	3	Evolution and the Nature of Science
BIO 493	4	Biology Senior Capstone
ENS 204	4	Principles of Ecology

Science Core Courses

Select one of the following chemistry course combinations:

CHE 201	4	General, Organic, and Biochemistry I
CHE 202	4	General, Organic, and Biochemistry II

or

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II

Select one course from the following:

PHY 203	4	General Physics I
PHY 211	4	University Physics I

Select one course from the following:

ENS 240	3	Introduction to Geology
ENS 241	4	Physical Geology
ENS 242	3	Geology of Indiana
PHY 204	4	General Physics II
PHY 212	5	University Physics II

Biology Electives

Select 4 hours in the summer field studies program[‡] from:

BIO 304	4	Field Natural History of the Black Hills
BIO 370	4	Selected Topics (approved by advisor)

[‡]Additional courses from Au Sable Institute may count toward this requirement with departmental approval. Courses from other institutions may count with departmental approval. See www.ausable.org or Dr. Regier for details.

Select one cell and molecular course from the following:

BIO 312	4	Cellular and Molecular Biology
BIO 432	4	Developmental Biology
BIO 462	4	Molecular Genetics
BIO 471	4	Microbiology and Immunology

Select two organismal biology courses from the following:

BIO 307	4	Vertebrate Natural History
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
BIO 331	4	Comparative Anatomy
BIO 452	4	Animal Physiology

Select one biology experience course from the following:

BIO 381	3	Research Methods
BIO 450	2-4	Directed Research

Select an additional 4 credits from a 300/400-level biology course*

*BIO 370, 393, and 450 may not meet this requirement.

Biology Minor

A minor in Biology requires 26 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
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Select an additional 14 credits of 200-, 300-, and 400-level biology courses. A minimum of 6 credits must be upper-division (300/400).

Additional Minor Requirements

Select one course from the following:

MAT 151	4	Calculus I
MAT 210	4	Introductory Statistics
MAT 230	4	Calculus II

Select one course from the following:

CHE 201	4	General, Organic, and Biochemistry I
CHE 211	4	College Chemistry I

Environmental Science

In this major, students gain knowledge in natural sciences, principles of environmental ethics, law, and stewardship, and practical skills in problem-solving. With concentrations in Biology and Geology, students may focus on deep conceptual knowledge in the natural sciences which prepares them for a variety of environmental careers in government agencies, private consulting, non-profit organizations, and education institutions.

A mid-level, field-intensive course, Field Natural History of the Black Hills (in South Dakota) is required usually in Sophomore summer and is a favorite among students. To build professional skills and experience, a practicum is required, usually in the summer following the Sophomore or Junior year. Faculty-mentored student research is encouraged to build capacity for graduate school. As a result of this powerful combination of relevant theory and field experience, nearly 100% of our graduates find placement in either graduate programs or the workplace.

Environmental Science (BS)

The Bachelor of Science degree with a major in Environmental Science requires 77 hours. *Students may not double major with Sustainable Development. All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.*

Core Requirements

BIO 304	4	Field Natural History of the Black Hills
ENS 302	4	Environmental Law and Policy
ENS 383	4	Environmental Ethics
ENS 393	2	Practicum
ENS 493	2	Environmental Science Capstone
MAT 210	4	Introductory Statistics
SUS 120	1	Environmental Stewardship and Sustainable Living
SUS 231	4	Environmental Science, Society, and Sustainability

Biology Requirements

BIO 202	4	Biology II: Organisms and Diversity
ENS 204	4	Principles of Ecology

Select two of the following courses:

BIO 301	4	Taxonomy of Vascular Plants
BIO 307	4	Vertebrate Natural History
ENS 375	4	Systems Ecology

Chemistry Requirements

CHE 201	4	General, Organic, and Biochemistry I
CHE 202	4	General, Organic, and Biochemistry II
CHE 320	4	Environmental Pollution and Toxicology

Geology Requirements

ENS 241	4	Physical Geology
ENS 355	4	Geospatial Analysis

Select two of the following courses:

ENS 319	4	Principles of Soil Science
ENS 361	4	Geomorphology
ENS 362	4	Hydrogeology

Concentrations

Select one of the following concentrations:

Biology

Select two courses not previously used from the following:

BIO 301	4	Taxonomy of Vascular Plants
BIO 307	4	Vertebrate Natural History
BIO 331	4	Comparative Anatomy
BIO 471	4	Microbiology and Immunology
ENS 375	4	Systems Ecology
SUS 315	4	Sustainable Food Systems and Health
SUS 325	4	Sustainable Development in Practice

Geology

Select two courses not previously used from the following:

ENS 319	4	Principles of Soil Science
ENS 341	4	Earth Materials
ENS 361	4	Geomorphology
ENS 362	4	Hydrogeology
ENS 364	4	Water Resources and Appropriate Technology

Environmental Science Minor

The minor in Environmental Science requires 18-20 hours. *Minor not open to Environmental Science, Sustainable Development, or Integrated majors. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Minor Requirements

ENS 383	4	Environmental Ethics
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Select one course from the following:

SUS 200	3	Environment and Society
SUS 231	4	Environmental Science, Society, and Sustainability

Select one course from the following:

ENS 240	3	Introduction to Geology
ENS 241	4	Physical Geology

Select one course from the following:

ENS 302	4	Environmental Law and Policy
SUS 315	4	Sustainable Food Systems and Health

Select one course from the following:

ENS 204	4	Principles of Ecology
ENS 319	4	Principles of Soil Science
ENS 341	4	Earth Materials
ENS 355	4	Geospatial Analysis
ENS 361	4	Geomorphology
ENS 362	4	Hydrogeology
ENS 364	4	Water Resources and Appropriate Technology
ENS 375	4	Systems Ecology
SUS 325	4	Sustainable Development in Practice

Public Health

The Public Health majors reflect the broad and interdisciplinary nature of the profession and prepare students to serve effectively to a world in need. While uncommon at the undergraduate level, there is a growing national appreciation for the value of teaching public health in liberal arts institutions, where students can be challenged to consider physical, social, economic, cultural, and biologic factors that impact the health of populations.

These majors offer a strong set of core courses along with great flexibility to focus elective courses in specific sub-areas of public health. Coursework is designed to be relevant, participatory, experiential, and grounded in a Biblical worldview with a commitment to joining in Christ's redemptive work for all of creation. Students complete a practicum experience that engages them with ongoing public health and community health development work in either the U.S. or abroad in communities experiencing public health problems. Innovative dual majors are encouraged.

Students will be prepared to compete for entrance into graduate programs in public health and related fields, and to effectively work in partnership with communities to address those conditions that produce poor health in populations. A minor in Public Health is also offered.

Public Health (BA)

The Bachelor of Arts degree with a major in Public Health requires two years of one foreign language and 53-55 hours in the major. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 106	4	Human Biology
PBH 100	3	Introduction to Public Health
PBH 110	3	Global Health
PBH 210	3	Human Diseases
PBH 320	4	Epidemiology
PBH 330	3	Assessment for Program Planning
PBH 330L	1	Service Learning in Community Assessment
PBH 335	4	Environmental Health
PBH 350	3	Determinants of Health and Health Equity
PBH 393	2	Practicum
PBH 493	2	Public Health Senior Capstone
POS 331	3	Public Policy

Select one course from the following:

SUS 200	3	Environment and Society
SUS 231	4	Environmental Science, Society, and Sustainability

Select one course from the following:

MAT 210	4	Introductory Statistics
PSY 275	3	Introductory Statistics
SOC 355	3	Applied Social Statistics

Electives

Select 12 hours from any of the following courses. At least 2 hours must be upper-division (300/400 level).

Christian Ministries

CAC 340	3	Intercultural Communications
CMI 100	3	Introduction to Christian Educational Ministries
CMI 262	3	Personal Foundations of Ministry
REL 311	3	Foundations of Christian World Mission
REL 391	3	Preparation and Strategy for Christian World Mission
REL 432	3	World Missions Area Studies

Natural and Applied Science

BIO 203	4	Principles of Genetics
BIO 300	4	Human Medical Physiology
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
BIO 331	4	Comparative Anatomy
BIO 410	3	Bioethics
BIO 452	4	Animal Physiology
BIO 471	4	Microbiology and Immunology
CHE 201/211	4	General, Organic, and Biochemistry I/College Chemistry I
CHE 202/212	4	General, Organic, and Biochemistry II/College Chemistry II
CHE 320	4	Environmental Pollution and Toxicology
ENS 204	4	Principles of Ecology
ENS 355	4	Geospatial Analysis
ENS 364	4	Water Resources and Technology
ENS 383	4	Environmental Ethics
EXS 214	3	Health and Sexuality
EXS 215	2	Health, Exercise, and Aging
EXS 217	3	Health Promotion Program Planning
EXS 316	3	Applied Nutrition
KIN 355	3	Research Methods
PBH 213	2	Substance Education
PBH 340	4	Community Health Development in Practice
PBH 346	3	Community Health Education
SYS 101	3	Introduction to Systems

Economics, Management, and Policy

ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
ECO 442	3	Economic Development
MGT 352	3	Management Analysis and Practice
MGT 442	3	Business Ethics
PPE 213	3	International Political Economics

Social and Behavioral Science

ANT 200	3	Cultural Anthropology
PSY 250	3	Life Span Development
PSY 272	3	Research Methods in Psychology
PSY 321	3	Social Psychology
PSY 340	3	Adolescent Psychology
PSY 357	3	Peace, Reconciliation, and Justice
PSY 395	3	Health Psychology
PSY 410	3	Motivation
SOC 220	3	Ethnic and Minority Issues
SOC 250	2	Principles of Research and Analysis
SOC 315	3	Social Inequality and Stratification
SOC 350	3	Social Research Methods
SOC 410	3	Community and Urban Affairs
SWK 320	3	Unleashing the Oppressed

Public Health (BS)

The Bachelor of Science degree with a major in Public Health requires 59-62 hours in the major. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 106	4	Human Biology
OVC 329	3	Monitoring and Evaluation 1: Data Collection
OVC 429	3	Monitoring and Evaluation 2: Data Analysis
PBH 100	3	Introduction to Public Health
PBH 110	3	Global Health
PBH 210	3	Human Diseases
PBH 320	4	Epidemiology
PBH 330	3	Assessment for Program Planning
PBH 330L	1	Service Learning in Community Assessment
PBH 335	4	Environmental Health
PBH 350	3	Determinants of Health and Health Equity
PBH 393	2	Practicum
PBH 493	2	Public Health Senior Capstone
POS 331	3	Public Policy

Select one course from the following:

SUS 200	3	Environment and Society
SUS 231	4	Environmental Science, Society, and Sustainability

Select one course from the following:

MAT 210	4	Introductory Statistics
PSY 275	3	Introductory Statistics
SOC 355	3	Applied Social Statistics

Select one course from the following:

BIO 410	3	Bioethics
ENS 383	4	Environmental Ethics
MGT 442	3	Business Ethics
PHI 311	3	Medical Ethics

Public Health requirements continued on next page

Public Health requirements continued from previous page

Electives

Select 2 credits from one of the following categories. Select an additional 3 credits from any category below.

Economics, Management, and Policy Electives

ECO 201	3	Principles of Microeconomics
ECO 202	3	Principles of Macroeconomics
ECO 442	3	Economic Development
MGT 352	3	Management Analysis and Practice
PPE 213	3	International Political Economics

Social and Behavioral Science Electives

ANT 200	3	Cultural Anthropology
PSY 250	3	Life Span Development
PSY 272	3	Research Methods in Psychology
PSY 321	3	Social Psychology
PSY 340	3	Adolescent Psychology
PSY 357	3	Peace, Reconciliation, and Justice
PSY 395	3	Health Psychology
PSY 410	3	Motivation
SOC 220	3	Ethnic and Minority Issues
SOC 250	2	Principles of Research and Analysis
SOC 315	3	Social Inequality and Stratification
SOC 350	3	Social Research Methods
SOC 410	3	Community and Urban Affairs
SWK 320	3	Unleashing the Oppressed

Natural and Applied Science Electives

BIO 203	4	Principles of Genetics
BIO 300	4	Human Medical Physiology
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
BIO 331	4	Comparative Anatomy
BIO 452	4	Animal Physiology
BIO 471	4	Microbiology and Immunology
CHE 201/211	4	General, Organic, and Biochemistry I/College Chemistry I
CHE 202/212	4	General, Organic, and Biochemistry II/College Chemistry II
CHE 320	4	Environmental Pollution and Toxicology
ENS 355	4	Geospatial Analysis
ENS 362	4	Hydrogeology
ENS 364	4	Water Resources and Technology
EXS 214	3	Health and Sexuality
EXS 215	2	Health, Exercise, and Aging
EXS 217	3	Health Promotion Program Planning
EXS 316	3	Applied Nutrition
KIN 355	3	Research Methods
PBH 213	2	Substance Education
PBH 340	4	Community Health Development in Practice
PBH 346	3	Community Health Education
SUS 435	4	Environmental and Sustainability Planning and Assessment

Public Health Minor

A minor in Public Health consists of 25-27 hours. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

PBH 100	3	Introduction to Public Health
PBH 110	3	Global Health
PBH 210	3	Human Diseases
PBH 320	4	Epidemiology
PBH 330	3	Assessment for Program Planning
POS 331	3	Public Policy

Select one course from the following:

SUS 200	3	Environment and Society
SUS 231	4	Environmental Science, Society, and Sustainability

Select one course from the following:

MAT 210	4	Introductory Statistics
PSY 275	3	Introductory Statistics
SOC 355	3	Applied Social Statistics

Sustainable Development

Sustainable Development, established in 2015, provides interdisciplinary training for solving global sustainability problems in U.S. and international settings. Students build a broad foundational understanding of the interactions of the three spheres of sustainability—environment, economics, and society. By studying at the nexus of these subjects, students develop a holistic understanding of key issues facing humanity and the environment.

In this program, students take core courses in sustainability, environmental science, sociology, public health, and economics and gain depth in a specific area by choosing elective courses that connect their passion for studies with their desire to help people. An international, field-based course during January interterm enables students to experience and apply what they have been learning. Near the end of the curriculum each student participates in a field-based development project through a required practicum and a senior capstone experience involving a research project on a local, real-world issue.

Sustainable Development (BS)

The Bachelor of Science degree with a major in Sustainable Development requires 66 hours. Students may not double major with Environmental Science. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Core Requirements

ANT 200	3	Cultural Anthropology
ECO 201	3	Principle of Microeconomics
ENS 204	4	Principles of Ecology
ENS 241	4	Physical Geology
ENS 302	4	Environmental Law and Policy
ENS 355	4	Geospatial Analysis
ENS 383	4	Environmental Ethics
OVC 329	3	Monitoring and Evaluation I: Data Collection
PBH 110	3	Global Health
PBH 330	3	Assessment for Program Planning
PBH 330L	1	Service Learning in Community Assessment
SUS 120	1	Environmental Stewardship and Sustainable Living
SUS 231	4	Environmental Science, Society, and Sustainability
SUS 310	3	Poverty and Sustainable Development
SUS 310L	1	Poverty and Sustainable Development Lab
SUS 325	4	Sustainable Development in Practice
SUS 393	2	Practicum
SUS 493	2	Sustainable Development Capstone

Select one of the following:

SOC 100	3	Introduction to Sociology
SOC 110	3	Introduction to Global Societies (recommended)

Electives

Select 10 additional credits from the following:

Public and Environmental Health

PBH 320	4	Epidemiology
PBH 335	4	Environmental Health
PBH 350	3	Determinants of Health and Health Equity

Sustainable Agriculture

BIO 301	4	Taxonomy of Vascular Plants
ENS 319	4	Principles of Soil Science
SUS 211	4	Crops and Society
SUS 315	4	Sustainable Food Systems and Health

Urban Sustainability

PBH 335	4	Environmental Health
SOC 220	3	Ethnic and Minority Issues
SOC 410	3	Community and Urban Affairs

Water Resources

ENS 362	4	Hydrogeology
ENS 364	4	Water Resources and Appropriate Technology

Additional Electives

CAC 340	3	Intercultural Communication
ENT 381	3	Global Entrepreneurship and Business as Missions
IAS 310	3	Philanthropy and Grant-Writing
ITB 375	3	International Business
POS 327	3	International Law and Justice
REL 311	3	Foundations of Christian World Mission
REL 391	3	Preparation and Strategy for Christian World Mission

Sustainability Minor

The minor in Sustainability requires 20-23 hours. *Minor not open to Environmental Science or Public Health majors. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Minor Requirements

SUS 120	1	Environmental Stewardship and Sustainable Living
SUS 310	3	Poverty and Sustainable Development
SUS 310L	1	Poverty and Sustainable Development Lab

Select one of the following:

SUS 200	3	Environment and Society
SUS 231	4	Environmental Science, Society, and Sustainability

Select one of the following:

ENS 302	4	Environmental Law and Policy
ENS 383	4	Environmental Ethics
PBH 335	4	Environmental Health
PBH 345	3	International Humanitarian Response
SUS 315	4	Sustainable Food Systems and Health

Select one of the following:

ENS 355	4	Geospatial Analysis
OVC 329	3	Monitoring and Evaluation I: Data Collection
PBH 320	4	Epidemiology
PBH 330	3	Assessment for Program Planning
PBH 340	4	Community Health Development in Practice
SUS 325	4	Sustainable Development in Practice

Electives

Select an additional two courses from two areas.

Business and Economics

ECO _____	3	Any 200/300/400-level elective
ENT _____	3	Any 200/300/400-level elective
FIN _____	3	Any 200/300/400-level elective
MGT _____	3	Any 200/300/400-level elective
MKT _____	3	Any 200/300/400-level elective

Public Health

PBH _____	3	Any 100-level elective
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Social Sciences

GBS _____	3	Any 200/300/400-level elective
OVC _____	3	Any 200/300/400-level elective
POS _____	3	Any 200/300/400-level elective
SOC _____	3	Any 200/300/400-level elective
SWK _____	3	Any 200/300/400-level elective

Biology Courses

BIO 100 4 hours

General Biology

Concepts and principles are studied to provide basic knowledge that assists students to meet the obligations of an informed citizen. The Spring semester of General Biology is intended for elementary education majors as a content course that emphasizes instructional methodologies in science education. *Three hours of lecture and two hours of laboratory per week. Meets foundational core life science requirement; not available to biology majors.*

BIO 102 4 hours

Biology for Educators

Introductory principles of biology taught with materials appropriate for future teachers. Topics include cell biology, inheritance, diversity, evolution, and ecology. *Three hours of lecture and two hours of laboratory per week. Meets foundational core life science requirement; not available to biology majors.*

BIO 104 3 hours

Animal Biology

A foundational core course designed to provide a broad look at life science through the study of the Kingdom Animalia. Includes a consideration of tissues, anatomy, ecology, natural history, and human interaction with representative vertebrates and invertebrates. *Two hours lecture and two hours laboratory per week. Meets foundational core life science requirement. Offered Fall semester of even years.*

BIO 106 4 hours

Human Biology

This course is designed as a one semester anatomy and physiology course covering all body organ systems and the interrelatedness of human health and lifestyle, environment, etc. *Three hours lecture and two hours of laboratory per week. Meets foundational core life science requirements. Offered Fall semester. Preference given to Social Work majors.*

BIO 107 4 hours

Introduction to Wildlife

This course looks at the wide range of adaptations, behavior, life history, and geographical distribution of vertebrates from fishes to mammals. Labs focus on observation (and sometimes capture) of vertebrates in their natural habitat and involve several outdoor sessions. *Three hours of lecture and two to three hours of lab per week. Meets foundational core life science requirement. Not available to biology majors. Offered Spring semester.*

BIO 112 3 hours

Topics in Biology

A study of some areas of biology most relevant to today's students with an emphasis on concepts and principles that will best assist students to meet the obligations of an informed citizen. Topics to be considered include process of science, structure and function of plants and animals, the relationship of organisms to one another and their environment, genetics, microbiology, biotechnology, bioethics, and evolution. *Two hours of lecture and two hours of laboratory per week. Meets foundational core life science requirement.*

BIO 113 3 hours

Botany for Beginners

An introductory course designed for the non-science major to provide a basic understanding of the processes through which plants function, the role of plants in the environment, and to equip students with skills that will allow them to continue to enjoy plants long after the course is over. Topics covered will range from subcellular processes to ecological roles. Plant adaptation, diversity, ecological interactions, basic plant identification, plant propagation, and plants of economic importance are included. *Two hours of lecture and two hours of laboratory per week. Meets foundational core life science requirements.*

BIO 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

BIO 185 1 hour

Biology Major Orientation

This course is required for all new biology majors and will provide students with the opportunity to explore the field of biology and begin to develop their professional portfolio. Information will be shared through guest, faculty and student presentations, discussions, and writing assignments. *Open to biology majors only. Offered second half of Fall semester.*

BIO 201 4 hours

Biology I: Foundations of Cell Biology and Genetics

Study of cellular structures and metabolism emphasizing form and function on structure; the cellular pathways of energy and matter transformation; the information flow, exchange, and storage; and the molecular, mitotic, and meiotic mechanism of inheritance. *Three hours of lecture and two hours of laboratory per week. Meets foundational core life science requirement. Open to Biology majors only in the Fall; open to all majors and minors requiring BIO 201 in the Spring.*

BIO 202 4 hours

Biology II: Organisms and Diversity

This course is the second of the two-course sequence for freshman biology majors. In this course we will examine the diversity of organisms, including algae, protozoa, fungi, plants, and animals, as they appear through the fossil record from the Paleozoic Era to the present time. *Majors/Minors only. Prerequisite: BIO 201.*

BIO 203 4 hours

Principles of Genetics

Fundamental principles of Mendelian inheritance, introduction to molecular genetics, along with quantitative and evolutionary genetics will be examined. *Three hours of lecture and two hours of laboratory per week. Meets foundational core life science requirement. Prerequisite: BIO 201.*

BIO 210 3 hours

Medical Terminology

This course is designed to assist students in learning medical terminology, as well as to provide instruction in word-building skills so that words can be identified by their parts. It provides a solid vocabulary foundation for those individuals who anticipate taking the MCAT or plan to enter an area of allied health studies.

BIO 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

BIO 285 1 hour

Biology Colloquium I

This course is for sophomore biology majors and will provide students with the opportunity to explore the field of biology, to begin developing professional skills, and to add artifacts to their professional portfolio. The course will be delivered via seminar format with guest, faculty and student presentations, class discussions, and writing assignments. *Prerequisite: BIO 185. Offered first half of Fall semester.*

BIO 300 4 hours

Human Medical Physiology

Human Medical Physiology is an advanced study of human physiology as it examines the functional processes of the organ systems. The course covers human physiology in a clinical setting as well as laboratory experiences. Class is approached from a pathology problems based curriculum with laboratories in the university hospital. *The course is part of the Global Engagement Centre program.*

- BIO 301** 4 hours
Taxonomy of Vascular Plants
Identification, classification, and systematics of vascular plants are studied. Topics include basic population genetics, the process of speciation, phylogeny reconstruction, and molecular patterns of diversification. Laboratory emphasis is on local flora, plant family characteristics, and modern systematic techniques. *Two hours of lecture and four hours of laboratory per week. Prerequisite: BIO 202; BIO 203 is recommended. Offered Fall semester of odd years.*
- BIO 304** 4 hours
Field Natural History of the Black Hills
Field Course: Introduction to basic field and lab methods used in field natural history. Includes basic nomenclature of spring flora and fauna in terrestrial as well as aquatic systems. Examines the principles of geology/paleontology, ecosystems, communities, and wildlife as exhibited in the Black Hills region of South Dakota, including Mt. Rushmore, Badlands National Park, Custer State Park, Devils Tower National Monument, the Black Hills National Forest, and Yellowstone and Grand Teton National Parks. *Prerequisites: BIO 202 and ENS 204 or permission of instructor. Offered Summer at the Wheaton College Science Station, Black Hills South Dakota.*
- BIO 306** 3 hours
Introduction to Bioinformatics
This course is designed to introduce students to concepts of bioinformatics, as well as basic bioinformatics skills, using the R programming language. The course will explore methods and datasets spanning from the level of DNA (genomics) up to the organismal and ecosystem level. Bioinformatics is an interdisciplinary field combining concepts of biology, computer science, and statistics to analyze and interpret biological datasets and solve complex questions. *Two hours of lecture and one hour of one hour of coding/data analysis in a computer lab per week. Prerequisite: BIO 203 or instructor permission. Offered Fall semester of even years.*
- BIO 307** 4 hours
Vertebrate Natural History
This course looks at the adaptive anatomy, feeding relationships, behavior, life history, and geographical distribution of vertebrates from fishes to mammals. Labs focus on methods currently employed for study and observation of vertebrates in the field and involve several outdoor sessions. *Three hours of lecture and three hours of lab per week. Prerequisite: BIO 202 or permission of the instructor; ENS 204 is recommended. Offered Spring semester.*
- BIO 309** 4 hours
Directed Field Experience
Investigative learning involving closely directed field research or field experience. *Instructor permission required.*
- BIO 310** 4 hours
Human Anatomy and Physiology I
The lecture portion focuses on structure and function of the skeletal, muscular, nervous and endocrine systems, and examines core concept of homeostasis and feedback loops. The lab portion of the course consists of detailed laboratory dissections of the dogfish shark and domestic cat, serving as models of human anatomy, coupled to computer aided examination of human anatomy and some histology. *Three hours lecture and three hours of laboratory per week. Meets foundational core life science requirement. Prerequisites: BIO 201 or CHE 201 or CHE 211. Offered Fall semester.*
- BIO 311** 4 hours
Human Anatomy and Physiology II
A continuation of BIO 310, the lecture focuses on the respiratory, cardiovascular, urinary, and digestive systems, and examines several core concepts demonstrated by these systems. The lab portion of the course focuses on common experimental techniques and physiological measures relevant to respiratory, cardiovascular, and urinary systems. *Three hours of lecture and two hours of lab per week. Prerequisite: BIO 310. Offered Spring semester.*
- BIO 312** 4 hours
Cellular and Molecular Biology
Analysis of the eukaryotic cell with regard to its molecular and biochemical characteristics, including bioenergetics, protein kinesin, cell signaling, cell-division cycle, cell junctions and extracellular matrix, cancer, stem cells and tissue renewal, and the adaptive immune system. *Three hours lecture and three hours of lab per week. Prerequisites: BIO 201; BIO 203; CHE 201 or CHE 211; CHE 202 or CHE 212; and minimum junior status or permission of the instructor.*
- BIO 331** 4 hours
Comparative Anatomy
Classification, characteristics, and comparison of typical chordate animals with emphasis on the vertebrates. Lab contains detailed dissection of representative vertebrates. *Three hours of lecture and three hours laboratory per week. Prerequisite: BIO 202 or permission of instructor. Offered Fall semester of odd years and Summer at discretion of faculty.*
- BIO 345** 3 hours
Evolution and the Nature of Science
This course introduces the conceptual and theoretical foundations of evolution and the nature of science. Students will be introduced to the longer-term processes of change. Evaluation of theories of species dynamics will be understood within the framework of the nature of science. *Prerequisite: Junior standing as a biology major or instructor permission.*
- BIO 360** 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.
- BIO 370** 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.
- BIO 381** 3 hours
Research Methods
Research Methods will introduce students to essential components of experimental design and the research process in Biology. The goal is to prepare students to critically interpret the research of others and to undertake research projects in course-based labs, through independent or summer research projects, and post-graduation research programs. Class topics will include defining a research question, hypothesis formulation, experimental design (correlation vs. necessity or sufficiency), controls, power and the role of statistics, interpreting results, and presenting and publishing results. The course will also include a series of instructor and student led seminars on articles and techniques relevant to a targeted research field. *Prerequisites: BIO 201; and BIO 202 or BIO 203.*
- BIO 385** 1 hour
Biology Colloquium II
This course is for junior biology majors. Students will have the opportunity to prepare for employment and graduate school, to continue developing professional skills, and to add artifacts to their professional portfolio. The course will be delivered via seminar format with guest, faculty and student presentations, class discussions, and writing assignments. *Prerequisite: BIO 285. Offered Spring semester.*
- BIO 393** 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*
- BIO 410** 3 hours
Bioethics
An introduction to bioethics, comprising an overview of ethical theory, uniquely Christian contributions to ethical theory, and a consideration of specific bioethical problems. The interaction of bioethics in the worlds of ideologies, politics, and economics, and the unique contribution a Christian bioethical perspective brings to the public square, will also be foci of the course. Designed for upper level biology students, but open to any upper division student willing and able to acquire the necessary biological competence to knowledgeably deal with the biology of the course material.
- BIO 432** 4 hours
Developmental Biology
A study of development at the molecular, cellular, and organismal levels. The class sessions focus on current concepts in developmental biology. The lab utilizes living model organisms (e.g. urchin, fly, chick) to conduct inquiry-based projects. *Three hours of lecture and three hours of laboratory per week. Prerequisites: BIO 201; BIO 203; and BIO 312 or BIO 462 recommended. Offered Fall semester.*
- BIO 440** 1 hour
Research Proposal
Research Proposal prepares students to complete their research project by guiding them through the literature review and research proposal process. Students will work with the course instructor and intended research supervisor to prepare a written research proposal. *Prerequisite: BIO 381.*
- BIO 450** 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. *The student must accumulate 42 hours of experience (e.g., research, class/group meetings, assignments) per credit hour earned. Departmental approval required.*
- BIO 455** 0 hours
Supervised Summer Research
This course is a student-initiated alternative to BIO 450 Directed Research, to be completed during the summer months. The research project, approved in advance by the department and supervised by a formal research advisor (eg. a professor on- or off-campus), must include applied, hands-on learning and must involve a minimum of 300 documented hours. *Prerequisite: BIO 381. Prerequisite or Corequisite: BIO 440.*
- BIO 452** 4 hours
Animal Physiology
A study of the physiological nature of living organisms with special consideration of the functions of vertebrate organ systems. Practical experience is given in working with live animals and the instrumentation used to examine the functional processes of various systems. *Three hours of lecture and three hours of laboratory per week. Prerequisites: BIO 331; CHE 201 or CHE 211; and CHE 202 or CHE 212. Offered Spring semester.*
- BIO 460** 1 hour
Research Communication
Research Communication will be taken following the student's research experience (BIO 450 or BIO 455). Each student will use the semester to write a formal report of his or her research findings and prepare a poster or oral presentation of his or her research. Students will present their research to the class and possibly in an on- or off-campus venue. *Prerequisites: BIO 440; and BIO 450 or BIO 455; or instructor permission.*

BIO 462 4 hours
Molecular Genetics
The current understanding of what a gene is, how it functions, and how it is regulated, particularly from a molecular perspective, is the essence of this course. Viral, prokaryotic, and eukaryotic systems are studied. Current scientific literature as well as a published textbook serve as sources. *Three hours lecture and one four-hour laboratory per week. Prerequisites: BIO 201, BIO 203, and two courses in chemistry; BIO 471 is recommended. Offered Fall semester of even years.*

BIO 471 4 hours
Microbiology and Immunology
An introduction to general microbiology and to the human immune response. Included are microbial growth and control, diversity and taxonomy, the ecological role of microorganisms, and medical microbiology. The laboratory provides basic bacterial culture techniques, including the identification of unknowns. *Three hours lecture and three hours of laboratory per week. Prerequisites: BIO 201 and BIO 203. Two courses in chemistry are recommended. Offered Spring semester.*

BIO 472 4 hours
Histology
The study of minute structure, composition, and function of tissue. Lectures and laboratories help expose students to both the normal tissue formation found in animal tissues (chiefly mammalian) and many of the abnormal tissue developments associated with pathological dysfunctions. *Prerequisites: Completion of the biology core courses before enrolling or permission of the instructor.*

BIO 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

BIO 485 1 hour
Biology Colloquium III
This course is for junior biology majors. Students will have the opportunity to prepare for employment and graduate school, to continue developing professional skills, and to add artifacts to their professional portfolio. The course will be delivered via seminar format with guest, faculty and student presentations, class discussions, and writing assignments. *Prerequisite: BIO 385. Offered Spring semester.*

BIO 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

BIO 493 4 hours
Biology Senior Capstone
An integrative, senior-level course in which major themes from within the biology major and from the Taylor foundational core program are intentionally revisited at a depth appropriate to college seniors. Such themes include the nature of biology as a natural science, the historical and philosophical foundations of the natural sciences, and the interaction and integration of biology with the Christian faith. Students will also actively engage in the process of doing current biological science, as well as consider several ethical issues that arise from current biology. *Prerequisite: Senior standing as a biology major. Offered January interterm.*

Environmental Science Courses

ENS 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ENS 201 4 hours
Introduction to Geology in the Field
Introduction to earth's materials, processes, and history as discovered through field observations of minerals, rocks, fossils, strata, caves, rivers, canyons, and mountains. Emphasis is placed on field experiences and observations, complemented by study of maps, laboratory work, and discussions. *Offered during select Summers at the Black Hills Science Station near Rapid City, South Dakota.*

ENS 204 4 hours
Principles of Ecology
An introduction to the relationships existing between organisms and their environment. Lectures focus on the structural and functional aspects of populations, communities, and ecosystems in the context of the major North American biomes. *Three hours lecture and two hours laboratory per week. Meets foundational core life science requirement. Prerequisite: Four hours of BIO or ENS or permission of the instructor.*

ENS 240 3 hours
Introduction to Geology
Basic course dealing with the fundamental concepts of physical and historical geology. Three hours of lecture and two hours of lab per week. *Meets the foundational core earth science requirement.*

ENS 241 4 hours
Physical Geology
A general introduction to the earth's internal and external physical, dynamic systems. Topics include occurrence and formation of minerals and rocks, processes that shape the earth's surface, and the internal structure and dynamics that lead to plate tectonics and crustal deformation. Special emphasis is placed on the environmental aspects of humans' interaction with the earth. *Three hours of lecture and two hours of lab per week. Meets foundational core earth science requirement.*

ENS 242 3 hours
Geology of Indiana
An introduction to the concepts of physical and historical geology in the context of Indiana. Topics include rocks, fossils, structure, landforms, and earth and environmental resources of the state. Offered during Summer session and includes a required field trip to several regions of Indiana for field observation and collection of mineral, rock, and fossil specimens. *Meets foundational core earth science requirement.*

ENS 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ENS 302 4 hours
Environmental Law and Policy
Lectures introduce the major elements of U.S. environmental law: NEPA, EIS, CAA, CWA, RCRA, CERCLA, TSCA, FIFRA and CRTK. The administrative process, cost/benefit analysis and the role of litigation in enforcement are also discussed. Presentation techniques and debate skills are introduced. *Three hours of lecture and a discussion section per week. Prerequisite: Senior environmental science majors and minors or permission from the instructor.*

ENS 319 4 hours
Principles of Soil Science
An introduction to soil science with an emphasis on soil formation and taxonomy in the context of the landscape. Soil physical properties, water relations, and chemistry and biological properties will be the central focus. Special emphasis is placed on human interaction with the soil resource. Agricultural and current environmental issues as they relate to the soil resource are addressed. Lab exercises focus on the analysis of basic soil physical and chemical properties. Soil fertility and conservation are additional lab topics. *Prerequisite: SUS 200 or SUS 231.*

ENS 341 4 hours
Earth Materials
Basic principles of mineralogy and petrology, with emphasis placed on description, identification, classification, and interpretation of rock-forming minerals and the igneous, sedimentary, and metamorphic rocks they comprise. Also includes origin and occurrence of earth materials and their uses in economic and environmental contexts. Lab emphasizes observation of hand specimens and some thin-sections. *Three hours of lecture and the equivalent of two hours of lab per week, including field trips to selected locations throughout the state. Prerequisite: ENS 241 or permission from the instructor.*

ENS 355 4 hours
Geospatial Analysis
An introduction to methods of collection, management and analysis of geospatial data. Topics include basic map properties, preparation and interpretation of thematic and topographic maps, analysis of aerial photographs, surveying by traditional and global positioning systems (GPS) techniques, and acquisition of remotely-sensed satellite data. Special emphasis is placed on methods and applications of geographic information systems (GIS) in geospatial analysis. *Prerequisite: ENS 241 or SUS 200 or SUS 231.*

ENS 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

ENS 361 4 hours
Geomorphology
An applied approach to the study of earth surface processes and the landforms they produce. Topics include processes and landforms associated with weathering, mass wasting, rivers, karst, tectonics, glaciers, shorelines, and wind. Emphasis placed on environmental and land-use applications. Field and lab assignments include qualitative descriptions and quantitative measurements from fieldwork, topographic and geologic maps, and aerial photographs. *Three hours of lecture and three hours of lab per week. Prerequisite: ENS 241 or permission from the instructor.*

ENS 362 4 hours
Hydrogeology
Basic processes and measurement of the hydrologic cycle, including precipitation, evaporation, surface runoff, stream flow, soil moisture, and groundwater. Emphasis placed on groundwater, including aquifer characteristics, principles of flow, conceptual models of regional flow, geology of occurrence, well hydraulics, chemistry and quality, detection of pollutants, contaminant transport and remediation, and resource development. *Three hours of lecture and three hours of lab per week. Prerequisite: ENS 241 or permission from the instructor.*

ENS 364 4 hours
Water Resources and Appropriate Technology
Concepts and practices of water resource development and appropriate technology in the context of environmental resources in a developing country. Students participate in a service-learning project of design and implementation of water resource related appropriate technology (such as well-drilling, water quality protection, hygiene training, and sanitation system design) as part of a holistic ministry toward transformational development. Students develop a perspective on the role of appropriate technology in the responsibility of individuals in cross-cultural service, in issues of cross-cultural communication and interactions, and in God's purposes in missions and the worldwide church. *Prerequisite: IAS 120.*

ENS 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

ENS 375 4 hours
Systems Ecology
The principles of systems theory are introduced in an integrated study of the development, dynamics, and disruption of natural ecosystems. Theoretical, analytical, and experimental aspects of ecosystems are explored. Students are introduced to the use of microcomputers as a tool in ecosystem modeling. *Prerequisites: ENS 204 and one course in college-level mathematics or computer science.*

ENS 383 4 hours
Environmental Ethics
An in-depth discussion of the ethical implications of major environmental problems, such as world population and food supply, inequities in land and resource distribution, animal rights, materialism and personal life styles, and exploitation versus stewardship of the environment. *Three hours of lecture and a discussion section per week. Prerequisite: Junior or senior standing as an environmental science major or permission from the instructor.*

Public Health Courses

PBH 100 3 hours
Introduction to Public Health
This course is a foundational course for the major and an elective for students wishing only to be introduced to the field. The course is built upon a population perspective and ecological perspective on disease causation and prevention. As a general overview of the field, Introduction to Public Health provides an historical perspective on the role that public health has played in improving the health status of populations, both in the US and globally. Moving beyond the biologic mechanisms of disease causation, students will gain an understanding of the environmental, social and behavioral determinants of health for populations, and factors that contribute to disparities in health between subpopulations. Students will be introduced to the core functions and essential services of public health in the US and how these are met in less economically developed societies. The core disciplines of public health will be defined and described, including epidemiology, biostatistics, environmental health, policy and administration, and the social and behavioral sciences. Students will examine current public health challenges in the US and globally.

PBH 110 3 hours
Global Health
This course provides an overview of the determinants of health, burden of disease, risk factors, health systems, and key measures to address the burden of disease in populations for both industrialized and less developed nations. The course will have a global perspective, paying particular attention to links between health and development, environment, human rights, and culture.

PBH 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

PBH 210 3 hours
Human Diseases
Introduction to biomedical concepts associated with human diseases. Emphasis is on understanding the etiology, pathogenesis, diagnosis, treatment, and risk factors of diseases affecting public health and how this impacts the prevention and control of those diseases. *Offered Fall semester. Prerequisites: PBH 100 or PBH 110.*

PBH 213 2 hours
Substance Education
The course is designed to prepare professionals for drug education. The scope of the course is wide and includes the following basic areas: drug terminology, pharmacology, psychodynamics, legal and law enforcement perspectives, social and cultural determinants, ethical and moral alternatives, behavioral aspects, and educational strategies. A strong emphasis is placed on developing guidelines for decision making in our society. The purpose is to exchange the best amount of information on drug use, misuse, and abuse available. *Offered Spring semester of even years.*

ENS 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

ENS 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

ENS 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

ENS 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

ENS 493 2 hours
Environmental Science Capstone
An integrative, junior/senior-level course in which major themes from within the environmental science major and from the Taylor foundational core curriculum are intentionally revisited at a depth appropriate to college seniors. *Offered in the Fall semester of every other year. Prerequisite: Junior or senior standing as an environmental science major.*

PBH 224 2 hours
Healthy Aging
This course will provide an overview of issues related to public health and aging. Topics such as demography and epidemiology of aging, perceptions of aging as viewed in society today, myths and stereotypes of aging, and challenges faced by elders will be addressed. The course will support health promotion for older adults and highlight the roles played by families, government, health care providers, and advocates.

PBH 244 3 hours
Health and Human Sexuality
The course examines the basic foundations of human sexuality and incorporates topical issues of interest and importance. In addition to the dissemination of cognitive information, a strong emphasis of the course is placed on the psychosocial aspects of human sexuality and its impact on individuals and society. Students are encouraged to develop and maintain a personal philosophy concerning sexual decision-making and behavior. The broad goals of the course include an increased knowledge of the biological, developmental, and scientific aspects of human sexuality, in addition to developing a greater awareness of self and others.

PBH 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

PBH 320 4 hours
Epidemiology
Study of the distribution and determinants of disease occurrence, including core concepts such as incidence, prevalence, risk, risk factors, relative risk, attributable risk, sensitivity, specificity, and different types of epidemiologic study designs. Students will use data from epidemiologic case studies to calculate odds ratios, relative risk, and confidence intervals as well as calculate sensitivity and specificity of screening tests. *Offered Spring semester. Prerequisites: PBH 100; MAT 210 or SOC 355 or PSY 275.*

PBH 330 3 hours
Assessment for Program Planning
This course will examine intervention approaches in public health for the prevention of infectious disease, chronic disease, injury and disability, and the promotion of community health and wellbeing. Intervention approaches through environmental change, policy and systems change, social change, and behavioral change approaches will be studied. Case studies of interventions will be examined. *Offered Fall semester. Prerequisites: PBH 100.*

PBH 330L 1 hour
Service Learning in Community Assessment
Students will participate in a neighborhood assessment and mapping project in a local community in partnership with a community organization. This will include neighborhood observations, neighborhood survey interviews, and participation in neighborhood events. *Offered Fall semester. Prerequisite: PBH 100.*

PBH 335 4 hours
Environmental Health
This course will explore how both the natural and built environment affect human health by looking at the impact of physical, chemical, biological, and socioeconomic factors external to humans. Environmental health is an interdisciplinary field that focuses on the theory and practice of recognizing, assessing, controlling, and preventing environmental and occupational hazards that may adversely affect the health of the present and future generations. *Prerequisites: PBH 100; SUS 200 or SUS 231.*

PBH 340 4 hours
Community Health Development in Practice
The course will examine the theory and practice of community health development as it is practiced by organizations doing this work internationally. The course will be offered in partnership with a non-governmental organization doing transformational development in one of the countries where they are working. The course will include a service component and discussions of those experiences will emphasize intercultural competencies. *Offered Interterm of odd years. Prerequisites: PBH 100 or PBH 110; PBH 330.*

PBH 345 3 hours
International Humanitarian Response
This course examines the international humanitarian response to disasters from a Christian and public health perspective. Current crises from around the world will be discussed, including causes; effects on population health; problems associated with population displacement; public health responses; and challenges to international collaboration between governments, international organizations, and non-governmental organizations.

PBH 346 3 hours
Community Health Education
This course illustrates how the health of populations is promoted and protected by organized public health practice. Students are acquainted with current evolving concepts and performance of these practices and are introduced to essential public health services. The problem-solving approach is emphasized through small-group interaction, case-study method, and critical thinking skills. *Meets foundational core civic engagement or general social science requirement. Offered Spring semester.*

PBH 347 3 hours
Health Policy and Law in National and Global Contexts
The course will provide a framework for understanding and analyzing a range of health policy issues in domestic and global contexts. The course will focus on the U.S. policy-making and legal system in the domestic context. It will provide additional focus on global law and policy as it relates to vulnerable populations of refugees, displaced populations, and populations living in poverty. The course will consider essential issues in health policy and law including health insurance, health economics, individual rights in health care, gender equity, and health care access and quality.

PBH 350 3 hours
Determinants of Health and Health Equity
The focus of this course will be on examining the broad range of environmental, social, cultural, and policy factors that contribute to disparate outcomes between population groups. This course will introduce students to the literature and methods of social epidemiology. Structured in a seminar format, with readings and case studies, students will examine specific cases of disparate health outcomes within communities including an analysis of the determinants of those disparities. Approaches to health equity will be discussed. *Offered Spring semester. Prerequisites: PBH 100 and PBH 320; MAT 210 or SOC 355 or PSY 275.*

PBH 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

PBH 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

PBH 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer following junior year or Fall of senior year. Prerequisites: PBH 100, PBH 110, PBH 210, PBH 320, PBH 330, PBH 340, and PBH 350.*

PBH 425 1 hour
CHES Preparation Seminar
This course provides a detailed review of the analysis and application of the Seven Areas of Responsibilities and Competencies. Focus is on helping increase knowledge of the concepts and successfully pass the Certified Health Education Specialist (CHES) examination in either the Fall or Spring semester of the senior year. It is designed to review the health educator responsibilities, competencies, and sub-competencies and also provide an overview of the national certification examination. Additional work will be required by the student to maximize success on the exam. *Prerequisite: Senior in Public Health major or permission of instructor. Pass/fail only.*

PBH 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

PBH 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

PBH 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

PBH 493 2 hours
Public Health Senior Capstone
This course will be structured as a seminar, pulling together the experiences of all the students into a broad public health framework. Major challenges faced during practicum will be discussed. Readings, videos, guest lectures, and optional workshops will support the discussions that take place in class. An integrative senior paper will provide the structure for students to integrate their faith, public health coursework, and practicum experiences. Part of the comprehensive exam, paper, or project required for graduation will be completed during the practicum. *Offered Spring semester. Prerequisites: PBH 100, PBH 110, PBH 210, PBH 320, PBH 330, PBH 393; and PBH 340 or PBH 350.*

Sustainable Development Courses

SUS 120 1 hour
Environmental Stewardship and Sustainable Living
Key topics related to stewardship and sustainable living are presented in a weekly seminar. Guest lecturers and discussions are focused on aspects of ecological and social sustainability and its application in daily life and on campus.

SUS 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SUS 200 3 hours
Environment and Society
Introduction to ecological principles and human impacts on the environment. Issues studied include population dynamics, natural resources, pollution problems, and environmental ethics. Lab exercises focus on experimental ecology and the basic techniques used to describe and measure environmental quality. *Meets the foundational core life science requirement. Environmental science majors should elect SUS 231 rather than SUS 200.*

SUS 211 4 hours
Crops and Society
This course will study the contribution of crops to society and society's development. The course will cover cereal crops, legumes, herbs, spice, fibers, medicinal plants, and tropical and temperate fruits and nuts. Soil and water conservation will be covered. Emphasis will be on agriculture in developing nations and development policies that affect agriculture, stewardship, the poor, and malnourished.

SUS 231 4 hours
Environmental Science, Society, and Sustainability
An introduction to environmental science, including a discussion of ecological principles and their application, energy systems, pollution problems, environmental policy and decision making, and the scientific and ethical implications of human impacts on the environment. Lab exercises focus on experimental ecology and the basic techniques used to describe and measure environmental quality. This course serves three functions: (1) it is the entry level course for environmental science majors; (2) it may be taken for foundational core lab science credit; and (3) biology majors may count it as a 200-level biology course when calculating course hour requirements in biology. *Three hours of lecture and two hours of lab per week. Meets the foundational core life science requirement.*

SUS 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SUS 310 3 hours
Poverty and Sustainable Development
An exploration of the key ideas and debates in development theory with an emphasis on evaluating whether and how global poverty can be alleviated without irreparably damaging the environment. Case studies feature interdisciplinary approaches to sustainable and transformational development drawn from agroecology, sociology, public health, holistic missions, and political economy.

SUS 310L **1 hour**
Poverty and Sustainable Development Lab
Labs feature community-based skills and interdisciplinary analytical approaches to sustainable and transformational development applied to service-learning projects to understand poverty in surrounding communities. *Corequisite: SUS 310.*

SUS 315 **4 hours**
Sustainable Food Systems and Health
This course focuses on understanding agriculture and food systems from a sustainability perspective and connecting that with human health. Students learn the principles of agro-ecology and how to apply them to various types of agriculture. They also critically evaluate global and local food systems, becoming familiar with strategies that have been tried to improve the equitable distribution of food and the environmental sustainability of food systems. Students also learn about the connection between food and chronic disease with specific skills in preparing food to help reduce the risk of diabetes and cardiovascular disease.

SUS 325 **4 hours**
Sustainable Development in Practice
This field-based course explores contemporary trends in international development through the lens of sustainable community development. The social, ecological, and economic sustainability of development are assessed through a case-study approach. The course will be offered in partnership with a non-governmental organization doing transformational development in one of the countries where they are working. The course will include a service component and discussions of those experiences will emphasize intercultural competencies. *Offered Interterm of odd calendar years. Prerequisite: SUS 231.*

SUS 330L **1 hour**
Assessment and Planning Lab for Sustainability
Students will participate in a community-based sustainability assessment and mapping project. This will include direct observations, carrying out interviews, and gathering secondary data related to sustainability. *Offered Fall semester of every other year. Prerequisite: SUS 231.*

SUS 360 **1-4 hours**
Independent Study
An individualized, directed study involving a specified topic.

SUS 370 **1-4 hours**
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SUS 393 **1-4 hours**
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

SUS 435 **4 hours**
Environmental and Sustainability Planning and Assessment
A culminating course involving application of interdisciplinary principles of environmental and sustainability planning, monitoring, and evaluation involving community-based projects and case studies.

SUS 450 **1-4 hours**
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

SUS 480 **1-4 hours**
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

SUS 490 **1-2 hours**
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

SUS 493 **2 hours**
Sustainable Development Capstone
An integrative, junior/senior-level course in which major themes from within the sustainable development major and from the Taylor foundational core curriculum are intentionally revisited at a depth appropriate to college seniors. *Offered Fall semester of every other year. Prerequisite: Junior or senior standing as a sustainable development major.*

Notes

Chemistry and Biochemistry

Chair, Professor D. King
Associate Professors D. Kaluka, V. Sichula, P. Stan
Assistant Professor M. Bowman

The Department of Chemistry and Biochemistry provides high-quality training in chemistry and biochemistry while providing opportunities for meaningful spiritual and interpersonal experiences that will enable students to move successfully into the next phase of their professional training or the career of their choice. Chemistry is an excellent starting point for careers in research within the physical and life sciences, medicine, veterinary medicine, dentistry, pharmacy, environmental science, forensic science, education, industry, food science, and many others.

Biochemistry (BS)

The Bachelor of Science degree with a major in Biochemistry requires 70-72 hours. This program prepares students for a career in biochemistry, medicine, molecular biology, and other related fields. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

During their sophomore year, students interested in medicine should check out the medical school admissions requirements for the school(s) to which they plan to apply. The Medical School Admission Requirements guide published annually by AAMC is the best resource for this information. It is important to meet the specific entrance requirements of the medical school(s) chosen.

Maintaining at least an A- average and scoring well on the MCAT test (usually taken in the Spring of the junior year) are common prerequisites for acceptance to a medical school. Assistance is available in preparing for the MCAT examinations.

Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 302	4	Analytical Chemistry II
CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II
CHE 330	4	Advanced Inorganic Chemistry
CHE 411	3	Biochemistry I
CHE 411L	1	Biochemistry I Lab
CHE 412	3	Biochemistry II
CHE 412L	1	Biochemistry II Lab
CHE 420	1	Chemistry Thesis
CHE 431	4	Physical Chemistry I

Select 3 hours of advanced biochemistry or directed research.

Additional Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
MAT 151	4	Calculus I
MAT 230	4	Calculus II
PHY 211	4-5	University Physics I

Select one of the following:

PHY 204	4	General Physics II
PHY 212	5	University Physics II

Electives

Select two additional upper-division biology courses totaling at least 6 hours. BIO 203 may also count as an elective.

Recommended Biology Courses

BIO 203	4	Principles of Genetics
BIO 462	4	Molecular Genetics
BIO 471	4	Microbiology and Immunology
CHE 320	4	Environmental Pollution and Toxicology

Chemistry (BA)

The Bachelor of Arts degree with a major in Chemistry requires two years of one foreign language and 57-59 hours in the major. This program is suitable for students wishing to enter either graduate school or the chemical industry. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 302	4	Analytical Chemistry II
CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II
CHE 330	4	Advanced Inorganic Chemistry
CHE 411	3	Biochemistry I
CHE 411L	1	Biochemistry I Lab
CHE 420	1	Chemistry Thesis
CHE 431	4	Physical Chemistry I
CHE 432	4	Physical Chemistry II

Additional Major Requirements

MAT 151	4	Calculus I
MAT 230	4	Calculus II
PHY 211	4-5	University Physics I

Select one of the following:

PHY 204	4	General Physics II
PHY 212	5	University Physics II

Recommended Courses

CHE 320	4	Environmental Pollution and Toxicology
CHE 412	3	Biochemistry II
CHE 412L	1	Biochemistry II Lab
COS ____	1-4	Any Computer Science course
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 352	4	Mathematical Statistics

NAS 480 is recommended in the junior or senior year.

Chemistry (BS)

The Bachelor of Science degree with a major in Chemistry requires 67-69 hours in the major. This program is especially attractive to students planning to enter either graduate school or the chemical industry. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 302	4	Analytical Chemistry II
CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II
CHE 330	4	Advanced Inorganic Chemistry
CHE 411	3	Biochemistry I
CHE 411L	1	Biochemistry I Lab
CHE 412	3	Biochemistry II
CHE 412L	1	Biochemistry II Lab
CHE 420	1	Chemistry Thesis
CHE 431	4	Physical Chemistry I
CHE 432	4	Physical Chemistry II
CHE 450*	6	Directed Research

*A minimum of 3 credits must be completed on campus

Additional Requirements

MAT 151	4	Calculus I
MAT 230	4	Calculus II
PHY 211	4-5	University Physics I

Select one of the following:

PHY 204	4	General Physics II
PHY 212	5	University Physics II

Recommended Courses

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
CHE 320	4	Environmental Pollution and Toxicology
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 352	4	Mathematical Statistics

Chemistry Education (BA/BS)

The Chemistry Education major requires 44-47 hours in addition to education courses. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. *All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Chemistry Courses

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 302	4	Analytical Chemistry II
CHE 311	4	Organic Chemistry I
CHE 420	1	Chemistry Thesis
CHE 431	4	Physical Chemistry I

Select at least one course from:

CHE 312	4	Organic Chemistry II
CHE 320	4	Environmental Pollution and Toxicology
CHE 330	4	Advanced Inorganic Chemistry
CHE 411	3	Biochemistry I

Additional Major Requirements

MAT 151	4	Calculus I
MAT 230	4	Calculus II
PHY 211	4-5	University Physics I

Select one of the following:

PHY 204	4	General Physics II
PHY 212	5	University Physics II

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 344	1	Educational Technology in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
NAS 309	2	Science Education Methods
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Chemistry-Environmental Science (BS)

This integrated major has a strong emphasis on the physical aspects of environmental studies. It is appropriate for students planning careers in environmental research or industrial or municipal environmental monitoring and control. The Bachelor of Science degree with a major in Chemistry-Environmental Science requires 91 major hours. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Chemistry Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 302	4	Analytical Chemistry II
CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II
CHE 330	4	Advanced Inorganic Chemistry
CHE 411	3	Biochemistry I
CHE 411L	1	Biochemistry I Lab
CHE 420	1	Chemistry Thesis
CHE 431	4	Physical Chemistry I
CHE 432	4	Physical Chemistry II

Physics Requirements

PHY 211	4-5	University Physics I
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Select one of the following:

PHY 204	4	General Physics II
PHY 212	5	University Physics II

Environmental Science Requirements

CHE 320	4	Environmental Pollution and Toxicology
CHE 450	3	Directed Research
ENS 204	4	Principles of Ecology
ENS 302	4	Environmental Law and Policy
ENS 383	4	Environmental Ethics
SUS 231	4	Environmental Science, Society, and Sustainability

Mathematics Requirements

MAT 151	4	Calculus I
MAT 230	4	Calculus II

Electives (to complete a minimum of 91 major hours)

CHE 412	3	Biochemistry II
CHE 412L	1	Biochemistry II Lab
ENS 241	4	Physical Geology
MAT 210	4	Introductory Statistics

Chemistry/Pre-Medicine Concentration (BA)

The Bachelor of Arts degree with a major in Chemistry and a pre-professional concentration in Pre-Medicine requires two years, sequential study of one foreign language and 65-67 major hours.

Students interested in the pre-medicine curriculum should check out during their sophomore year the medical school admissions requirements for the school(s) to which they plan to apply. The Medical School Admission Requirements guide published annually by AAMC is the best resource for this information. It is important to meet the specific entrance requirements of the medical school(s) chosen.

Maintaining at least an A- average and scoring well on the MCAT test (usually taken in the Spring of the junior year) are common prerequisites for acceptance to a medical school. Assistance is available in preparing for the MCAT examinations. *All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 302	4	Analytical Chemistry II
CHE 311	4	Organic Chemistry I
CHE 312	4	Organic Chemistry II
CHE 330	4	Advanced Inorganic Chemistry
CHE 411	3	Biochemistry I
CHE 411L	1	Biochemistry I Lab
CHE 420	1	Chemistry Thesis
CHE 431	4	Physical Chemistry I

Additional Major Requirements

MAT 151	4	Calculus I
MAT 230	4	Calculus II
PHY 211	4-5	University Physics I

Select one of the following:

PHY 204	4	General Physics II
PHY 212	5	University Physics II

Select three biology courses from the following:

BIO 201*	4	Biology I: Foundations of Cell Biology and Genetics
BIO 202	4	Biology II: Organisms and Diversity
BIO 203*	4	Principles of Genetics
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
BIO 312	4	Cellular and Molecular Biology
BIO 331	4	Comparative Anatomy
BIO 432	4	Developmental Biology
BIO 452	4	Animal Physiology
BIO 471	4	Microbiology and Immunology

*BIO 201, 203, 310, and 311 are highly recommended.

Recommended Courses

CHE 320	4	Environmental Pollution and Toxicology
CHE 412	3	Biochemistry II
CHE 412L	1	Biochemistry II Lab
PSY ____	__	Any Psychology course
SOC ____	__	Any Sociology course

Chemistry Minor

The Chemistry minor requires a minimum of 22-24 hours and includes at least four semesters of core chemistry lab courses. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
CHE 301	4	Analytical Chemistry I
CHE 311	4	Organic Chemistry I

Electives

Select at least two additional, 3-4 credit hour upper-division (300/400-level) chemistry courses.

Chemistry Courses

CHE 100 4 hours

Chemistry for Living

A course designed for students who have little or no background in chemistry. Basic principles of chemistry are applied in a social context. Three hours of lecture and one two-hour lab per week. *Meets foundational core physical science requirement. No prerequisite, although high school algebra is recommended.*

CHE 120 4 hours

Forensic Science

This course is a one semester introduction to forensic science which will focus on the application of physical and life sciences to criminal investigation. Topics include the crime scene, physical evidence, fingerprints, forensic toxicology, forensic serology, as well as many others. *There are no prerequisites. Based upon the course section selected, will meet either a life or physical science foundational core requirement.*

CHE 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

CHE 201 4 hours

General, Organic, and Biochemistry I

This is the first semester of a two-semester sequence designed for students with minimal backgrounds in chemistry yet need a solid foundation in chemistry for their major. These students do not typically take other chemistry courses beyond this sequence. The two semesters are a comprehensive overview of general chemistry, organic chemistry, and biochemistry. The first semester focuses on general chemistry with an introduction to organic chemistry. *Three hours of lecture and three hours of lab per week. Meets foundational core physical science requirement. No college level prerequisites, but high school algebra and chemistry are strongly recommended.*

CHE 202 4 hours

General, Organic, and Biochemistry II

This is the continuation of CHE 201 (see CHE 201 description). The second semester continues with the introduction to organic chemistry and includes an overview of biochemistry. *Three hours of lecture and three hours of lab per week. Prerequisite: CHE 201.*

CHE 211 College Chemistry I	4 hours		CHE 370 Selected Topics	1-4 hours	
This is a general chemistry course for those intending to take later coursework in chemistry, such as organic, inorganic, analytical, or environmental chemistries. The course thoroughly explores the basic concepts and theories of chemistry, using quantitative skills to predict and characterize chemical properties and changes. The nature of atomic structure and chemical bonding and the properties of solids, liquids, and gases are all presented and studied using lectures, demonstrations, and computer-assisted teaching and testing methods. Chemical change is studied in terms of reaction classes, energy flows, and kinetic theories. <i>Three hours of lecture and three hours of lab per week. Meets the foundational core physical science requirement. High school algebra and chemistry are strongly recommended.</i>			A course offered on a subject of interest but not listed as a regular course offering.		
CHE 212 College Chemistry II	4 hours		CHE 393 Practicum	1-4 hours	
The second general chemistry course for those intending to take later coursework in chemistry, such as organic, inorganic, analytical, or environmental chemistries. This course thoroughly explores the basic concepts and theories of chemistry using quantitative skills to predict and characterize chemical properties and changes. The nature of organic chemistry, complexes, equilibria, electrochemistry, and advanced acid-base properties are all presented and studied using lectures, demonstrations, and computer-assisted teaching and testing methods. Chemical change is studied in terms of entropy, free energy, and kinetic theories. <i>Three hours of lecture and three hours of lab per week. Prerequisite: CHE 211.</i>			Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during Summer.</i>		
CHE 270 Selected Topics	1-4 hours		CHE 411 Biochemistry I	3 hours	
A course offered on a subject of interest but not listed as a regular course offering.			An introduction to the fundamental principles of biochemistry focusing on the structure and function of biomolecules such as carbohydrates, lipids, proteins, and nucleic acids. The relation between structure and function is explored in such topics as enzyme kinetics, the chemistry of major metabolic pathways, and their regulation. This course is designed for chemistry, biology, and Pre-Med related majors with a background in organic chemistry. <i>Prerequisite: CHE 311. BIO 201 and CHE 312 are strongly recommended.</i>		
CHE 301 Analytical Chemistry I	4 hours		CHE 411L Biochemistry I Lab	1 hour	
Introduction to modern theories and methods used in separations and quantitative determinations. Topics include basic statistics and treatment of data, gravimetry, titrations, and spectroscopy. Topics correlate with the lab. Lab includes gravimetric, titrations, and spectroscopy. Some instrumentation is used including AA and GCMS. <i>Three hours of lecture and three hours of lab per week. Prerequisite: CHE 212 or permission of instructor.</i>			This project-based laboratory class is designed for Biochemistry I (CHE 411) students. The students will utilize science fundamentals to participate in a broad research topic. Students will employ various biochemical investigative tools, including but not limited to molecular modeling, protein expression, chromatography, DNA manipulation, spectroscopy, and enzyme assays, to study structure-function relationships in major biomolecules. <i>This course is designed for chemistry and biology majors with a background in organic chemistry. Prerequisite: CHE 311. Corequisite: CHE 411. BIO 201 is strongly recommended.</i>		
CHE 302 Analytical Chemistry II	4 hours		CHE 412 Biochemistry II	3 hours	
A continuation of CHE 301 in which instrumental methods of analysis are emphasized. A survey of instrumental methods used in modern analytical chemistry. Topics include the general principles of basic instrument components and their integration into the wide variety of modern instrumentation. Students will gain hands-on experience with a variety of spectroscopic (UV, VIS, AA), spectrometric (MS), electrochemical, chromatographic (HPLC, GC, IC), and hybrid (GC/MS, LC/MS) analytical instrumentations. <i>Three hours of lecture and three hours of lab per week. Prerequisite: CHE 301 or permission of instructor.</i>			This course is a continuation of CHE 411 with emphasis on metabolism of major biomolecules (i.e., carbohydrates, lipids, proteins, and nucleic acid). Example topics include synthesis and degradation of glycogen and nitrogen-containing (e.g., amino acids, DNA and RNA bases) compounds, protein synthesis, and metabolic integration. <i>Prerequisite: CHE 411. BIO 201 is strongly recommended.</i>		
CHE 311 Organic Chemistry I	4 hours		CHE 412L Biochemistry II Lab	1 hour	
The study of covalent carbon compounds. Nomenclature, properties, and reactions (including reaction mechanisms) of all classes of hydrocarbons, alcohols, ethers, halides, and organometallic substances are studied. NMR, IR, and MS spectroscopic methods are learned and applied. The lab includes development of advanced lab skills and study of the kinetics and properties of organic substances in reactions. <i>Three hours of lecture and three hours of lab per week. Prerequisite: CHE 212.</i>			This project-based laboratory class is designed for Biochemistry II (CHE 412) students. The students will utilize science fundamentals to participate in a broad research topic. Students will employ various biochemical investigative tools, including but not limited to molecular modeling, protein expression, chromatography, DNA manipulation, spectroscopy, and enzyme assays, to study structure-function relationships in major biomolecules. <i>This course is designed for chemistry and biology majors with a background in organic chemistry. Prerequisite: CHE 411 and CHE 411L. Corequisite: CHE 412. BIO 201 is strongly recommended.</i>		
CHE 312 Organic Chemistry II	4 hours		CHE 420 Chemistry Thesis	1 hour	
Continuation of CHE 311. Focuses on carbonyl and carboxylate compounds and their derivatives, amines, and polyfunctional compounds, including biomolecules. Lab work includes study of the properties of aromatic compounds, qualitative organic analysis, and small group original research projects. <i>Three hours of lecture and three hours of lab per week. Prerequisite: CHE 311.</i>			Students write a major paper, receive coaching and feedback, modify their paper if necessary, and give an oral presentation. <i>Prerequisite: Successful completion of Fall term paper writing workshop. Required of all chemistry seniors.</i>		
CHE 320 Environmental Pollution and Toxicology	4 hours		CHE 431 Physical Chemistry I	4 hours	
A course that emphasizes principles and analysis of pollution sources, movement, distribution, and toxic effects in natural and biological environments. The principles of toxicology related to industry and the environment, including dose response, mechanisms of toxicity, hazard evaluation will be explored. The laboratory work will provide experience in sampling and analysis of water, as well as common toxicology techniques. <i>Three hours of lecture and three hours of lab per week. One year of general chemistry is recommended.</i>			An introduction to the principles of thermodynamics, kinetic-molecular theory of gases, and chemical kinetics. The lab includes vacuum techniques, calorimetry, electrochemistry, physical characterization of solutions, and optical techniques. <i>Three hours of lecture and three hours of lab per week. Prerequisites: CHE 211; CHE 212; PHY 211; PHY 204 or PHY 212; MAT 151; and MAT 230.</i>		
CHE 330 Advanced Inorganic Chemistry	4 hours		CHE 432 Physical Chemistry II	4 hours	
Coverage of the bonding and properties of the main group and especially transition metal elements with a focus on their coordination and solid-state chemistry. Molecular symmetry principles, spectroscopy, materials science and catalytic applications of these substances are discussed in lecture and studied in lab. <i>Three hours of lecture and three hours of lab per week. Prerequisite: CHE 311.</i>			Emphasis on elementary principles of quantum mechanics, molecular structure, spectroscopy, and photochemistry. The lab focuses on computational chemistry, mathematical modeling, and spectroscopy. <i>Three hours of lecture and three hours of lab per week. Prerequisites: CHE 211; CHE 212; PHY 211; PHY 204 or PHY 212; MAT 151; and MAT 230.</i>		
CHE 360 Independent Study	1-4 hours		CHE 450 Directed Research	1-4 hours	
An individualized, directed study involving a specified topic.			Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.		
			CHE 480 Seminar	1-4 hours	
			A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.		
			CHE 490 Honors	1-2 hours	
			Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>		

Computer Science and Engineering

**Co-Chairs, Professor S. Brandle, Associate Professor J. Denning
Professor A. White
Associate Professor D. Read
Assistant Professors O. Ayano, J. Mikels**

In support of the overall Taylor University mission, the mission of Computer Science and Engineering is to:

- Honor God in all we do
- Pursue excellence
- Help students become
 - Outstanding computer scientists
 - Exceptional systems analysts
 - Committed Christians
 - Highly motivated to serve

Baccalaureate majors are offered by the department:

- **Computer Science (BA)**
- **Computer Science (BS)**
- **Computer Science/Systems (BS)**
Systems requirements in addition to the Computer Science (BA) curriculum.
- **Computer Science—Cybersecurity (BS)**
The Computer Science—Cybersecurity major has been patterned around the curricular learning outcomes set by the Association for Computing Machinery and the National Center of Academic Excellence in Cyber Defense Education.
- **Computer Science—Digital Media (BA)**
Computer Science core with courses from Computer Science; Communication; and Art, Film, and Media emphasizing media use and computation.
- **Computer Science—Digital Media/Systems (BS)**
Systems requirements in addition to the Computer Science-New Media (BA) curriculum.
- **Computer Engineering (BS)**
Combination of fundamental engineering, computer science, and electronics curricula. Program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012; telephone (410) 347-7700.

Each year the Department of Computer Science and Engineering offers at least ten sanctioned events such as special lectures, workshops, or colloquiums. All majors are required to participate in at least 21 sanctioned events before completing COS 491.

Information Systems and Analytics for Bachelor of Science Degree

The information systems and analytics program is offered by the Computer Science and Engineering Department. For a description of the program and requirements for majors outside of the department, refer to **Academic Programs and Requirements** and **Academic Departments and Courses** sections of this catalog.

Computer Engineering (BS)

Intimate knowledge of both physics and computer science is the foundation of the design and development of powerful and efficient embedded computer systems. The Computer Engineering major is offered jointly by the Computer Science and Engineering and the Physics and Engineering Departments and focuses on the theoretical and applied operation of computer hardware and software.

The computer engineering program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012; telephone (410) 347-7700.

Program Objectives:

1. Prepare our graduates to serve others dependably, most importantly their employer, customers, and community.
2. Prepare our graduates to practice technical competence, producing reliable engineering designs.
3. Prepare our graduates to exercise creativity in their work, fostering innovative solutions.
4. Prepare our graduates to pursue growth in their faith, social understanding, and technical competence so that they can adapt to meet the needs of an ever-changing world.

The Bachelor of Science degree with a major in Computer Engineering requires 98 hours. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. This examination includes a major design and implementation project (COS 493, 494, 495), written and oral presentation of this work, and a written examination over coursework in the major field. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Physics and Engineering Requirements

PHY 211	4	University Physics I
PHY 212	5	University Physics II
ENP 104	3	Introduction to Engineering and Software Tools
ENP 231	4	Introduction to Electric Circuits
ENP 253	4	Electrical Circuits II
ENP 261	3	Digital Systems Design
ENP 332	4	Control Systems
ENP 341	4	Microcomputer Interfacing
ENP 392	3	Junior Engineering Project
ENP 405	1	Engineering Ethics
ENP 431	4	Advanced Electronics and Microcircuits

Mathematics Requirements

MAT 151	4	Calculus I
MAT 215	3	Discrete Mathematics for Computer Science
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 352	4	Mathematical Statistics

Computer Engineering requirements continued on next page

Computer Science Requirements

COS 103	1	Computer Science and Engineering: New Majors Orientation
COS 121	4	Foundations of Computer Science
COS 130	3	Computational Problem Solving for Engineers
COS 265	4	Data Structures and Algorithms
COS 284	3	Introduction to Computer Systems
COS 331	3	Data Communications
COS 340	3	Software Engineering
COS 381	3	Computer Architecture
COS 393	2	Practicum
COS 421	3	Operating Systems
COS 491	1	Computer Science Senior Capstone
COS 493	2	Engineering Senior Capstone I
COS 494	3	Engineering Senior Capstone II
COS 495	1	Engineering Senior Capstone II

Computer Science (BA)

The Bachelor of Arts degree with a major in Computer Science requires the completion of two years of one foreign language and 64 hours in the major. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. This examination includes an implementation project, written and oral presentation of this work, and a written examination over coursework in the major field. The project and presentation portions of this examination are included in COS 492 Senior Project. Courses may not be used to fulfill more than one requirement: core or elective. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Core Requirements

COS 102	3	Fundamentals of Systems and Computing
COS 103	1	Computer Science and Engineering: New Majors Orientation
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 232	3	Computer and Network Security I
COS 243	3	Multi-tier Web Application Development
COS 265	4	Data Structures and Algorithms
COS 284	3	Introduction to Computer Systems
COS 491	1	Computer Science Senior Capstone
COS 492	3	Senior Project
MAT 151	4	Calculus I
MAT 215	3	Discrete Mathematics for Computer Science

Select one course from the following:

COS 311	3	Ethics in Computer Science
COS 321H	3	Ethics and Technology

Select one course from the following:

COS 320	3	Algorithm Design
COS 382	3	Language Structures
COS 435	3	Theory of Computation

Select 3 credits from the following:

COS 393	3	Practicum
COS 394	3	Advanced Projects
COS 450	3	Directed Research

Select one course from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Electives

Select additional electives to complete the 64-hour requirement from the following:

COS 1__	1-16	Any 100-level COS course
COS 2__	1-16	Any 200-level COS course
COS 3__	1-16	Any 300-level COS course
COS 4__	1-16	Any 400-level COS course
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 345	4	Linear Algebra
MGT 403	3	Operations Management
NAS 480	1	Seminar
SYS 214	3	Principles of Human Computer Interaction
SYS 352	3	Knowledge Based Systems
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation
SYS 411	3	Machine Learning

Computer Science/Systems (BS)

The Bachelor of Science degree with a major in Computer Science/Systems consists of the 64-hour BA major requirement and curriculum requirements in information systems and analytics. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. This examination may include an implementation project, written and oral presentation of this work, and a written examination over coursework in the major field. The project and presentation portions of this examination are included in COS 492 Senior Project. Courses may not be used to fulfill more than one requirement: core or elective. *All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Information Systems and Analytics Curriculum Requirements

COS 326	3	Data Visualization
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation
SYS 411	3	Machine Learning

Electives

Select at least 3 hours of electives, in addition to those required in the major or systems:

ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 214	3	Principles of Human Computer Interaction
SYS 310	3	E-Commerce
SYS 352	3	Knowledge Based Systems

*Course may not be used as both a systems requirement and systems elective.

Computer Science (BS)

The Bachelor of Science degree with a major in Computer Science requires the completion of 80 hours in the major. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. This examination includes an implementation project, written, and oral presentation of this work, and a written examination over coursework in the major field. The project and presentation portions of this examination are included in COS 453 Research II. Courses may not be used to fulfill more than one requirement: core or elective. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Core Requirements

COS 102	3	Fundamentals of Systems and Computing
COS 103	1	Computer Science and Engineering: New Majors Orientation
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 232	3	Computer and Network Security I
COS 243	3	Multi-tier Web Application Development
COS 265	4	Data Structures and Algorithms
COS 284	3	Introduction to Computer Systems
COS 310	1	Current Literature Survey
COS 320	3	Algorithm Design
COS 382	3	Language Structures
COS 435	3	Theory of Computation
COS 452	3	Research I
COS 453	3	Research II
COS 491	1	Computer Science Senior Capstone
MAT 151	4	Calculus I
MAT 215	3	Discrete Mathematics for Computer Science

Select one course from the following:

COS 311	3	Ethics in Computer Science
COS 321H	3	Ethics and Technology

Select two courses from the following:

COS 381	3	Computer Architecture
COS 421	3	Operating Systems
COS 436	3	Distributed Processing

Select one course from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Electives

Select additional electives to complete the 80-hour requirement from the following:

COS 1__	1-16	Any 100-level COS course
COS 2__	1-16	Any 200-level COS course
COS 3__	1-16	Any 300-level COS course
COS 4__	1-16	Any 400-level COS course
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 345	4	Linear Algebra
MGT 403	3	Operations Management
NAS 480	1	Seminar
SYS 214	3	Principles of Human Computer Interaction
SYS 352	3	Knowledge Based Systems
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation
SYS 411	3	Machine Learning

Computer Science—Cybersecurity (BS)

The Bachelor of Science degree with a major in Computer Science—Cybersecurity requires the completion of 77 hours in the major. Courses may not be used to fulfill more than one requirement: core or elective. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Core Requirements

COS 103	1	Computer Science and Engineering: New Majors Orientation
COS 109	3	Computer and Network Operations
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 232	3	Computer and Network Security I
COS 243	3	Multi-tier Web Application Development
COS 265	4	Data Structures and Algorithms
COS 284	3	Introduction to Computer Systems
COS 323	3	Computer and Network Security II
COS 331	3	Data Communications
COS 343	3	Database Systems
COS 393	3	Practicum
COS 411	3	Digital Forensics
COS 421	3	Operating Systems
COS 432	3	Software Reverse Engineering and Analysis
COS 491	1	Computer Science Senior Capstone
COS 492	3	Senior Project
MAT 151	4	Calculus I
MAT 210	4	Introductory Statistics
MAT 215	3	Discrete Mathematics for Computer Science
POS 350	3	International Security

Select one course from the following:

COS 311	3	Ethics in Computer Science
COS 321H	3	Ethics and Technology

Electives

Select two courses from the following:

COS 280	3	Introduction to Artificial Intelligence
COS 320	3	Algorithm Design
COS 381	3	Computer Architecture
COS 382	3	Language Structures
COS 435	3	Theory of Computation
COS 436	3	Parallel and Distributed Computing

Select additional electives to complete the 77-hour requirement from the following:

COS 230	3	Missions Technology
COS 280	3	Introduction to Artificial Intelligence
COS 3__	1-4	Any 300-level COS course
COS 4__	1-4	Any 400-level COS course
NAS 480	1	Seminar

Computer Science–Digital Media (BA)

The Bachelor of Arts degree with a major in Computer Science–Digital Media consists of two years of one foreign language and 59 hours in the major. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. This examination includes an implementation project, written and oral presentation of this work, and an examination over coursework in the major field. The project and presentation portions of this examination are included in COS 492 Senior Project. Courses may not be used to fulfill more than one requirement: core or elective. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Core Requirements

ART 152	3	Visual Communication
ART 154	1	Digital Tools: Illustrator
ART 156	1	Digital Tools: Photoshop
ART 253	3	Foundations of Photography
ART 456	4	Web Animation
COS 103	1	Computer Science and Engineering: New Majors Orientation
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 243	3	Multi-tier Web Application Development
COS 265	4	Data Structures and Algorithms
COS 350	3	Computer Graphics
COS 393	3	Practicum
COS 491	1	Computer Science Senior Capstone
COS 492	3	Senior Project
FMA 215	3	Audio Production
FMA 220	3	Film and Video Production
SYS 214	3	Principles of Human Computer Interaction

Select one course from the following:

COS 311	3	Ethics in Computer Science
COS 321H	3	Ethics and Technology

Select one course from the following:

COS 232	3	Computer and Network Security I
COS 331	3	Data Communications
COS 351	3	Computer Vision
COS 424	3	Surfaces and Modeling
SYS 310	3	E-Commerce

Select one course from the following:

ART 151	3	Two Dimensional Design
ART 251	3	Typography
ART 353	3	Commercial Photography
CAC 345	3	Social Media Strategy
FMA 230	3	Scriptwriting

Computer Science–Digital Media/Systems (BS)

The Bachelor of Science degree with a major in Computer Science–Digital Media/Systems consists of the 59-hour major requirement and curriculum requirements in information systems and analytics. Majors are required to attend 21 sanctioned events. Majors are also required to complete a comprehensive examination during their senior year. This examination includes an implementation project, written and oral presentation of this work, and an oral examination over coursework in the major field. The project and presentation portions of this examination are included in COS 492 Senior Project. *All major courses, including information systems and analytics curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Curriculum Requirements

COS 102	3	Fundamentals of Systems and Computing
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 382	3	Advanced Statistical Methods
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course¹ from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course¹ from the following:

MAT 311	3	Introduction to Data Science
SYS 401	3	Operations Research
SYS 402	3	Modeling and Simulation

Select one course¹ from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Electives

Select at least 3 additional hours of electives¹, in addition to those required in the major:

ENT 422	3	New Venture Planning
MGT 201	3	Introduction to Business
MGT 403	3	Operations Management
SYS 310	3	E-Commerce
SYS 411	3	Machine Learning

¹Selection may depend on major.

Computer Science Minor

A Computer Science minor requires 25 hours. Courses may not meet both a requirement and elective. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

COS 102	3	Fundamentals of Systems and Computing
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development

Select one course from the following:

COS 311	3	Ethics in Computer Science
COS 321H	3	Ethics and Technology

Electives

Select additional electives to complete the 25-hour requirement from any of the following:

COS 1__	1-16	Any 100-level COS course
COS 2__	1-16	Any 200-level COS course
COS 3__	1-16	Any 300-level COS course
COS 4__	1-16	Any 400-level COS course
MAT 215	3	Discrete Mathematics for Computer Science
SYS 214	3	Principles of Human Computer Interaction
SYS 352	3	Knowledge Based Systems
SYS 411	3	Machine Learning

Cybersecurity Minor

A Cybersecurity minor requires 26 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

COS 109	3	Computer and Network Operations
COS 121	4	Foundations of Computer Science
COS 232	3	Computer and Network Security I
COS 311	3	Ethics in Computer Science
COS 323	3	Computer and Network Security II
COS 331	3	Data Communications

Select one course from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

COS 393	3	Practicum
COS 450	3	Directed Research

Information Systems Minor

An Information Systems minor requires 26-27 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA. Minor is not available to students completing the information systems and analytics curriculum included within a major.

Minor Requirements

COS 143	3	Interactive Webpage Development
SYS 214	3	Principles of Human Computer Interaction
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design

Select one course from the following:

COS 102	3	Fundamentals of Systems and Computing
SYS 101	3	Introduction to Systems

Select one course from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

PSY 425	3	Industrial-Organizational Psychology
SYS 330	3	Human Relations in Organizations

Select one course from the following:

___ 393	3-4	Practicum
SYS 393	3-4	Practicum

Computer Science Courses

COS 101 2 hours

Information Technology Concepts

The course focuses on practical understanding and application of computing technology in educational, small business, or organizational environments. Specific topics include an overview of operating systems, application software, computing hardware, telecommunications, networking, and information management systems and analysis. In addition, it heavily emphasizes the impact of technology on modern society and the ethical issues related to use of information and communication systems. This course is offered through Taylor University Online (TUI) and does not count toward any major, minor, or foundational core curriculum requirement for residential students.

COS 102 3 hours

Fundamentals of Systems and Computing

An introduction to the basic concepts of "system" and "process" with particular emphasis on computing systems. Major topics include systems thinking, quality, problem solving, and design. Computing-specific topics include algorithms, networks, computer hardware, and basic relational database concepts. The learning experience features field trips and guest lectures. Offered Fall semester.

COS 103 1 hour

Computer Science and Engineering: New Majors Orientation

Provides an introduction to the Computer Science and Engineering majors focusing on the habits, mindset, and requirements for success in the major. The course includes an overview of the discipline with an exploration of various career paths in computing (e.g., industry, missions, graduate school). A significant portion of the course involves a weekend retreat with faculty, staff, and graduating seniors. Lastly, students are introduced to integrating faith and computing. Offered Fall semester.

COS 104 2 hours

Computing and Culture – Applications and Context

An introduction to the ideas of computational technology including the use of applications, ethical foundations and the understanding of the context of technology in our world. Analysis from a Christian perspective is emphasized. Topics discussed include algorithmic thinking, organization of data with spreadsheets and databases, internet and security, hardware, software, and the history of computers. Important skills covered in the course include web design, spreadsheet and database applications, video and photo manipulation, information literacy, and an introduction to the process of programming. Meets foundational core computation requirement.

COS 105 1 hour

Ethics, Computing, and Society

As computing technology becomes more complex and less visible, we understand less about how the world functions. Our worldview is impacted by technology in ways that are not recognized and, therefore, not critically evaluated, particularly with a Christian understanding. This course is designed to introduce students to the context of computation in their world. Through writing, discussions, and class assignments, students will gain an understanding of computing technology that goes beyond its use and explores the impact of technology on our world view. The context provided includes an introduction to the issues in our society associated with ethics and technology. Main topics addressed include applying major ethical theories, intellectual property, privacy, and putting technology into context with a Christian perspective. This course is available only to transfer students who have credit in an acceptable computer competency course and will meet the foundational core computation requirement for such students.

COS 109 3 hours

Computer and Network Operations

A study of the concepts, principles, tools, and constraints related to computer and network operations, including the following topics: shell scripting, information technology system components, systems policy and governance, operating systems management, network devices, and virtual machines. Students will install and configure commodity operating systems, manage users, analyze system logs, write scripts to automate systems administration, review and write information technology policies, and related activities.

COS 120 4 hours

Introduction to Computational Problem Solving

Approaches to computing solutions for problems from a variety of subject areas are examined and provide motivation for the study of the development of algorithms and their implementation. Programming concepts are introduced incrementally in order to solve increasingly complex problems. Good algorithm design and program structure are emphasized. Introductory data structures and software engineering principles are stressed. An introduction to object-oriented programming is included. Three hours of lecture and two hours of lab per week. Meets foundation core computation requirement.

COS 121 4 hours

Foundations of Computer Science

This course builds on COS 120 by emphasizing object-oriented programming and including concepts of computer science such as computational complexity simulation and recursion. The use and implementation of data structures such as lists, stacks, queues, and trees are introduced as they are needed in developing algorithms for problems studied. Additional topics include the Linux operating system and tools, source code versioning, unit testing, and code refactoring. Three hours of lecture and two hours of lab per week. Prerequisite: COS 120 or COS 130 or SYS 120.

COS 130 3 hours

Computational Problem Solving for Engineers

This introductory programming course will take a similar approach to solving problems as COS 120. The differences will be an accelerated pace and using computational tools (emphasis on the C language) expected to be used in the various fields of engineering. Meets foundation core computation requirement.

COS 143 3 hours

Interactive Webpage Development

A study of how to deliver interactive webpages through a web browser. Students will learn to represent the data structurally with HTML, the presentation with CSS, and the functionality with Javascript. Students will explore good design strategies that promote useful webpages. In order to deliver interactive sites, the students will utilize remote scripting (AJAX) to connect with existing server functionality to receive XML or JSON data for page updates. Modern web technologies including HTML5, CSS3, DOM manipulation, etc. will be explored. Prerequisite: COS 120 or COS 130 or SYS 120.

COS 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

COS 360 Independent Study	1-4 hours	A individualized, directed study involving a specified topic.
COS 370 Selected Topics	1-4 hours	A course offered on a subject of interest but not listed as a regular course offering.
COS 380 Natural Language Processing	3 hours	A study of the automation of human communication abilities, covering both textual and vocal aspects. Major topics include language parsing, understanding, representation, enhancement, generation, translation, and speaker/author recognition. <i>Prerequisite: COS 280.</i>
COS 381 Computer Architecture	3 hours	A study of the hardware structure of computer systems, including arithmetic/logic units, memory organization, control unit design, pipelining, and instruction set design. A brief introduction to advanced topics, such as out-of-order execution, branch prediction, multi-core systems, and parallel processing cache coherency will prepare the student for graduate level courses in architecture. <i>Prerequisite: COS 284.</i>
COS 382 Language Structures	3 hours	A study of the features and implementation issues of programming languages, including a survey of language paradigms. Grammars, syntax, semantics, translation, lexical analysis, and parsing are introduced. <i>Prerequisite: COS 265.</i>
COS 393 Practicum	1-4 hours	Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Grade only. Practicum course credit requires a minimum of 320 hours of work experience. Offered primarily during Summer.</i>
COS 394 Advanced Project	1-4 hours	Students complete an open-ended software development project or laboratory experiment project. The individual project depends on students and faculty interest. Specific learning outcomes vary depending on faculty, student, and project selected. Independent or small group projects are possible. <i>May be taken by any Computer Science major with instructor permission. May be taken multiple times for credit.</i>
COS 411 Digital Forensics	3 hours	A study of the concepts, tools, methodologies, and analysis techniques used for host, media, and network forensic investigations. Students will learn how to capture, decipher, reconstruct, and analyze digital data. <i>Prerequisite: COS 331.</i>
COS 421 Operating Systems	3 hours	A study of the design considerations of computer operating systems and their interaction with hardware features. Topics covered include process management, storage management, protection and security, file systems, and concurrency. <i>Prerequisites: COS 265 and COS 284.</i>
COS 424 Surfaces and Modeling	3 hours	An advanced graphics course with emphasis on curve and surface representation and geometric modeling. Mathematics and algorithms are studied. Topics include Bezier and B-spline curves and surfaces and geometric modeling techniques. <i>Prerequisite: COS 350.</i>
COS 425 Animation	3 hours	An advanced graphics course with emphasis on techniques for rendering and animation. Mathematics and algorithms are studied. Topics include light and illumination models, ray tracing, methods to enhance realism, and standard animation techniques. A professional software package will be used to create a significant animation. <i>Prerequisite: COS 350.</i>
COS 432 Software Reverse Engineering and Analysis	3 hours	A study of defensive programming techniques, platform security, secure software engineering, software reverse engineering, and vulnerability analysis. Students will perform static and dynamic software analysis, identify and analyze malicious software, and apply tools and techniques for identifying software vulnerabilities. <i>Prerequisite: COS 284.</i>
COS 433 Missions Computing Senior Project	3 hours	Combining computer science and service to the missions community, students travel to an international location during Interterm to undertake software development and systems analysis for a missions partner. Students design, construct, test, document, and deploy a non-trivial software system that meets the partner's requirements. Students experience the local culture and participate in direct ministry as opportunities arise. Students share their experience on campus in a formal paper, presentation, and poster. Satisfies the senior project requirement. <i>Meets foundational core cross-cultural requirement. Prerequisites: senior standing and instructor permission.</i>
COS 435 Theory of Computation	3 hours	A theoretical treatment of what can be computed and how efficiently computation can be done. Topics include models of computation and automata, deterministic and non-deterministic computations, and formal language theory. <i>Prerequisite: COS 265.</i>
COS 436 Parallel and Distributed Computing	3 hours	A study of concepts and models of distributed and parallel computing, including concurrency, synchronization, algorithms, hardware organization, and common programming environments. Implementation of parallel algorithms on multicore CPUs and many-core GPUs. <i>Prerequisites: COS 265 and COS 284.</i>
COS 450 Directed Research	1-4 hours	Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. <i>Independent or small group projects. May be taken by any COS major with instructor approval. May be taken multiple times for credit.</i>
COS 452 Research I	3 hours	Participation in a research project under faculty direction. <i>Prerequisite: COS 310 or instructor permission.</i>
COS 453 Research II	3 hours	Participation in a research project under faculty direction. A formal presentation of results is required. <i>Prerequisite: COS 452 or instructor permission.</i>
COS 480 Seminar	1-4 hours	A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.
COS 490 Honors	1-2 hours	Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>
COS 491 Computer Science Senior Capstone	1 hour	A survey of topics useful for graduates of the department, but not covered by other courses. The emphasis is on non-technical issues such as making a budget, finding a church, balancing career and family, etc. The course is conducted as a trip off-campus to further strengthen relationships with the department. <i>Prerequisite: Senior status.</i>
COS 492 Senior Project	3-4 hours	Designed to exercise each senior's technical analysis, design, and development skills and showcase his/her documentation and presentation skills. The student develops a project through multiple phases of the software lifecycle frequently beginning at the design stage. The project is typically chosen to reflect the student's area of concentration. <i>Prerequisite: Senior status.</i>
COS 493 Engineering Senior Capstone I	2 hours	The first of a three course culminating experience preparing students for engineering practice through a major design and implementation project. <i>Prerequisite: senior status, CEN major. Offered Fall semester.</i>
COS 494 Engineering Senior Capstone II	3 hours	The second in a three course culminating experience preparing students for engineering practice through a major design and implementation project. <i>Prerequisite: COS 493. Offered January interterm.</i>
COS 495 Engineering Senior Capstone III	1 hour	The third of a three course culminating experience preparing students for engineering practice through a major design and implementation project. It includes the Engineering poster session for assessment of the project. <i>Prerequisite: COS 494. Offered Spring semester.</i>

Systems Courses

SYS 101 3 hours
Introduction to Systems
An introduction to the basic concepts of “system” and “process”. Systems thinking, quality, and problem solving are major topics. Because almost every modern system uses database to control processes, basic relational database concepts and structured query language (SQL) are taught. Field trips and guest lectures are featured in the learning experience.

SYS 120 4 hours
Introduction to Problem Solving
An introduction to problem solving strategies applied to problems from numerous domains, resulting in the development of algorithms that are programmed in Python. The basic control structures, functions and parameter passing, and the concept of abstraction are all emphasized. Simple data structures (e.g., lists and dictionaries) and basic file processing are introduced. Incremental construction of large programs is practiced. Three hours of lecture and two hours of lab per week.

SYS 125 2 hours
Introduction to Object Oriented Programming
This course is an introduction to object oriented design and programming. Students will apply problem solving strategies to devise OOD descriptions of problems formerly solved via procedural coding methods. Implementation of increasingly complex OOD solutions will be carried out in the Python programming language. *Prerequisite: COS 120 or SYS 120.*

SYS 170 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SYS 214 3 hours
Principles of Human Computer Interaction
This course discusses the analysis, design, development, and evaluation of interfaces allowing humans to interact with computers and the presentation of information in formats designed for human understanding. People-centered design is emphasized through prototyping and information visualization are also discussed.

SYS 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SYS 310 3 hours
E-Commerce
Examines the development of and future prospects for electronic commerce. It focuses on the use of electronic transmissions to engage in exchange of products and services. Students will consider the emerging changes in business as well as the new opportunities for entrepreneurship brought on by e-commerce. They will explore the dynamics of technical innovations as well as the organizational and societal consequences of moving commerce electronically. They will also evaluate the operations of a variety of web-based businesses. Guest speakers from industry will lecture regarding the technical, economic, and political/regulatory aspects of e-commerce. *Prerequisites: COS 120 or COS 130 or COS 143 or SYS 120; and COS 102 or SYS 101.*

SYS 330 3 hours
Human Relations in Organizations
The necessity of constructive conflict in organizations and the inevitability of destructive personal conflict are the reasons for studying human relations. Five books, some classics like Carnegie’s *How to Win Friends and Influence People*, some near classics like Covey’s *The Seven Habits of Effective People*, and possible future classics like Sande’s *The Peacemaker*, are read and discussed. The goal is to improve understanding of conflict: That constructive conflict is healthy and necessary, how creative conflict can degenerate into destructive personal conflict, the causes of team dysfunction, how to achieve team synergy, and personal techniques for engaging in constructive conflict, avoiding destructive conflict and redeeming it should it happen. The Bible is used as a discussion resource. The pre-supposition of the course is that evangelical Christian culture encourages conflict avoidance within the culture and often without. Some strive to be “meek and mild” like Jesus, an aspiration that belies an incomplete understanding of Jesus’ character and behavior. This is a writing course with a strong emphasis on discussion. *Meets foundational core social science requirement.*

SYS 352 3 hours
Knowledge Based Systems
Prominent knowledge-based system approaches are introduced including crisp production rule systems and fuzzy logic systems. Principles of knowledge acquisition are taught and applied. Various forms of knowledge representation are experienced, including rules, nets, frames, and predicate logic. Programming is primarily in CLIPS. *Prerequisites: COS 121; and COS 102 or SYS 101.*

SYS 360 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.

SYS 370 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

SYS 390 3 hours
Information Systems Analysis
A study of the knowledge and skills needed to conduct the definition and analysis phases of an information system project. Central concepts are quality management and business process reengineering. Problem definition, information gathering, user experience modeling, data and process modeling, and specification of logical system requirements using a business event methodology are emphasized. Learning is by doing: a major project is begun in this course and completed in SYS 394. *Prerequisites: Junior standing; COS 120 or COS 130 or COS 143 or SYS 120; and COS 102 or SYS 101.*

SYS 393 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

SYS 394 4 hours
Information Systems Design
A study of the knowledge and skills needed to conduct the design and construction of an information system project. Central concepts are translating requirements into a physical design, project management, and deployment of information systems architectures. Students will learn and use application technologies empowering modern business systems. Learning is by doing; the major project defined and analyzed in SYS 390 will be designed and built. *Prerequisites: COS 120 or COS 130 or SYS 120; COS 121 or COS 143; and SYS 390.*

SYS 401 3 hours
Operations Research
An introduction to operations research (management science), which is quantitative decision making. Emphasis is on linear programming and its application to financial decisions, distribution problems, project scheduling, and other network problems. Decision analysis with probabilities and multi-goal decisions are discussed as well. *Prerequisites: COS 102 or SYS 101; COS 121 or COS 143; MAT 210 or MAT 352; MAT 151.*

SYS 402 3 hours
Modeling and Simulation
A study of mathematical modeling and simulation methods, focusing on discrete systems. Simul and ppsym are used in hands on exercises. Many applications are surveyed and group term projects are carried out. *Prerequisites: COS 121 or COS 143; MAT 210 or MAT 352; MAT 151.*

SYS 411 3 hours
Machine Learning
Classification learning systems of various types are explored. These include statistical pattern recognition, neural networks, genetic algorithms, and methods for inducing decision trees and production rules induction. Existing systems are reviewed. Group term projects allow development of and experimentation with a system of interest. *Prerequisites: COS 121; MAT 210 or MAT 352.*

SYS 450 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

SYS 480 1-4 hours
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

SYS 490 1-2 hours
Honors
Individualized study or research of an advanced topic within a student’s major. *Open to students with at least a 3.00 GPA in the major field.*

Kinesiology

Co-Chairs, Professor M. Renfrow, Assistant Professor B. Dykstra
Professor E. Hayes
Assistant Professors S. Fenstermacher, B. Kendall
Instructor G. Wolfe

The Kinesiology Department has two major purposes: (1) to prepare competent, caring, and reflective Christian leaders for world service in exercise science; and (2) to help students acquire the skills and attitudes for lifetime wellness, as well as wholesome and active use of their leisure time.

Baccalaureate degrees are offered with a major in Exercise Science or Human Physiology and Preventive Medicine. Candidates for the Bachelor of Arts degree must complete two years of a foreign language.

The three credits required in the foundational core curriculum are typically met by taking KIN 100 plus KIN 200 or one of the following to substitute for KIN 200: KIN 250, 300, 302, 333, 334, or EXS 280. Exercise Science majors complete this requirement by taking EXS 111, 316, and 318. Pre-Med, Public Health, and allied health students who are not Exercise Science majors are recommended to take KIN 221 to fulfill the three credits required for the foundational core curriculum. The Elementary Education major requires KIN 250, which along with KIN 100 will fulfill the foundational core requirement.

One aspect of professors' work at a Christian liberal arts university is to build relationships with students to participate in God's work of preparing students for a well-lived and meaningful life. The Kinesiology Department aims to fulfill this educational calling through a whole-person focused curriculum. The Living Well course will provide specific instruction in the more technical aspects of caring for the human body as part of the created order including rest/shalom, nutrition, and activity. As such, this course will serve as the foundation for an understanding of basic principles of a well-lived embodied life. The connections between mind, body, and spirit will be explored knowing that we are living, breathing, touchable souls made by a mysterious union of the sacred dust of God and the sacred breath of God.

Exercise Science

Our mission is to develop Christ-like servant-leaders who possess the wisdom, technical skills, and relational abilities to lead others towards holistic health.

Exercise Science (BA)

The Bachelor of Arts degree with a major in Exercise Science requires two years of sequential study in one foreign language and 47 hours in the major. Students must complete the senior comprehensive requirement by completing 4 credits of directed research or internship. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics	<i>Select <u>one</u> course from the following:</i>		
BIO 310	4	Human Anatomy and Physiology I	EXS 450	4	Directed Research
BIO 311	4	Human Anatomy and Physiology II	KIN 492	4	Internship
EXS 111	3	Foundations of Exercise Science	<i>Select <u>one</u> course from the following:</i>		
EXS 274	1	Introduction to Exercise Testing	PSY 395	3	Health Psychology
EXS 290	3	Principles of Strength Training and Conditioning	PSY 410	3	Motivation
EXS 306	3	Physiology of Exercise			
EXS 316	3	Applied Nutrition			
EXS 318	3	Therapeutic Exercise and Pharmacotherapy			
EXS 353	3	Physical Fitness Assessment			
EXS 381	3	Kinesiology			
EXS 453	3	Physical Fitness Prescription			
KIN 355	3	Research Methods			

Suggested Courses for Areas of Specialization

BIO 203	4	Principles of Genetics	MAT 140	3	Fundamental Calculus for Applications
BIO 210	3	Medical Terminology	MAT 145	3	Introduction to Functions and Calculus
BIO 331	4	Comparative Anatomy	MAT 146	3	Functions and Calculus
BIO 471	4	Microbiology and Immunology	MAT 151	4	Calculus I
CHE 201/211	4	General, Organic, & Biochemistry I/College Chemistry I	MAT 210	4	Introductory Statistics
CHE 202/212	4	General, Organic, & Biochemistry II/College Chemistry II	PBH 100	3	Introduction to Public Health
CHE 311	4	Organic Chemistry I	PBH 213	2	Substance Education
CHE 312	4	Organic Chemistry II	PBH 346	3	Community Health Education
CHE 411	3	Biochemistry I	PHI 201	3	Logic
CHE 412	3	Biochemistry II	PHI 311	3	Medical Ethics
EXS 217	3	Health Promotion Program Planning	PHY 203/211	4	General Physics I/ University Physics I
EXS 273	1	Introduction to Exercise Science Research	PHY 204/212	4-5	General Physics II/University Physics II
EXS 317	2	EKG and Stress Testing	PSY 100	3	Introductory Psychology
EXS 393	1	Practicum	PSY 220	3	Sport Psychology
EXS 482	3	Lifespan and Environmental Physiology	PSY 250	3	Life Span Development
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease	PSY 275	3	Introductory Statistics
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases	PSY 300	3	Abnormal Psychology
HPH 320	3	Neuromuscular Physiology and Chronic Disease	PSY 395	3	Health Psychology
KIN 223	3	Emergency Health Care	PSY 410	3	Motivation
KIN 324	2	Motor Learning	PSY 441	3	Physiological Psychology
KIN 360	1-4	Independent Study (<i>approved by advisor</i>)	SMA 351	3	Sport Public Relations
KIN 370	1-4	Selected Topics (<i>approved by advisor</i>)	SMA 352	3	Event and Facility Management

Exercise Science (BS)

The Bachelor of Science degree with a major in Exercise Science requires 65 hours in the major. Students must complete the senior comprehensive requirement by completing 4 credits of directed research or internship. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics	EXS 453	3	Physical Fitness Prescription
BIO 310	4	Human Anatomy and Physiology I	KIN 355	3	Research Methods
BIO 311	4	Human Anatomy and Physiology II	<i>Select one course from the following:</i>		
EXS 111	3	Foundations of Exercise Science	EXS 450	4	Directed Research
EXS 274	1	Introduction to Exercise Testing	KIN 492	4	Internship
EXS 290	3	Principles of Strength Training and Conditioning	<i>Select one course from the following:</i>		
EXS 306	3	Physiology of Exercise	PSY 395	3	Health Psychology
EXS 316	3	Applied Nutrition	PSY 410	3	Motivation
EXS 318	3	Therapeutic Exercise and Pharmacotherapy			
EXS 353	3	Physical Fitness Assessment			
EXS 381	3	Kinesiology			

Electives

<i>Select at least 18 hours from:</i>					
BIO 203	4	Principles of Genetics	MAT 140	3	Fundamental Calculus for Applications
BIO 210	3	Medical Terminology	MAT 145	3	Introduction to Functions and Calculus
BIO 331	4	Comparative Anatomy	MAT 146	3	Functions and Calculus
BIO 471	4	Microbiology and Immunology	MAT 151	4	Calculus I
CHE 201/211	4	General, Organic, & Biochemistry I/College Chemistry I	MAT 210*	4	Introductory Statistics
CHE 202/212	4	General, Organic, & Biochemistry II/College Chemistry II	PBH 100	3	Introduction to Public Health
CHE 311	4	Organic Chemistry I	PBH 213	2	Substance Education
CHE 312	4	Organic Chemistry II	PBH 346	3	Community Health Education
CHE 411	3	Biochemistry I	PHI 201	3	Logic
CHE 412	3	Biochemistry II	PHI 311	3	Medical Ethics
EXS 217	3	Health Promotion Program Planning	PHY 203/211	4	General Physics I/ University Physics I
EXS 273	1	Introduction to Exercise Science Research	PHY 204/212	4-5	General Physics II/University Physics II
EXS 317	2	EKG and Stress Testing	PSY 100	3	Introductory Psychology
EXS 393	1	Practicum	PSY 220	3	Sport Psychology
EXS 482	3	Lifespan and Environmental Physiology	PSY 250	3	Life Span Development
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease	PSY 275*	3	Introductory Statistics
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases	PSY 300	3	Abnormal Psychology
HPH 320	3	Neuromuscular Physiology and Chronic Disease	PSY 395 [‡]	3	Health Psychology
KIN 223	3	Emergency Health Care	PSY 410 [‡]	3	Motivation
KIN 324	2	Motor Learning	PSY 441	3	Physiological Psychology
KIN 360	1-4	Independent Study (<i>approved by advisor</i>)	SMA 351	3	Sport Public Relations
KIN 370	1-4	Selected Topics (<i>approved by advisor</i>)	SMA 352	3	Event and Facility Management

*A maximum of 4 credits from these courses may count toward elective hours.

[‡]Course may not double-count as requirement and elective.

Coaching Minor

The department offers a 18-19-hour Coaching minor for any student interested in preparing for the coaching profession. Students from any major are eligible for this course of study. The minor helps prepare students for opportunities in coaching, leading camps, youth athletic ministry, and recreational leadership. *All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

EXS 290	3	Principles of Strength Training and Conditioning	<i>Select one course from the following:</i>		
KIN 220	3	Principles of Coaching	KIN 472	2	Psychology of Coaching
KIN 223	3	Emergency Health Care	PSY 220	3	Sport Psychology
KIN 367	3	Coaching Methods			
KIN 393	4	Practicum (<i>approved by advisor—Coaching</i>)			

Human Physiology and Preventive Medicine

Erik Hayes and Brian Dewar, Advisors

Human Physiology and Preventive Medicine is designed specifically for students seeking to enter into professional schools related to health care (e.g., medical school, physician assistant, physical therapist, occupational therapist, nursing). It first explores a basic foundation of human anatomy, physiology, cellular biology, and chemistry followed by more in depth physiology courses related specifically to physiological systems, the pathophysiology of chronic disease of those systems, and the scientific evidence and mechanism for prevention of disease through lifestyle modification. Students will gain a basic background in human nutrition, health psychology, and public health preparing them for work as health educators in our local medical clinic working to help members of the community prevent and treat chronic disease. The major is intentionally small enough to allow students space to meet all the prerequisite requirements for professional school entrance exams and professional school admission requirements. In addition, students will have room to pursue semester abroad experiences, faculty mentored research, and clinical internships.

Students wishing to follow more traditional paths to professional schools in medicine and health care (e.g., biology or chemistry) or choosing majors that would not typically be associated directly with health care but are nonetheless related to human health and flourishing (e.g., social work, music therapy, missions) may choose to complete a minor in Preventive Medicine.

Human Physiology and Preventive Medicine (BS)

The Bachelor of Science degree with a major in Human Physiology and Preventive Medicine 55-56 major hours. *Students must also complete at least 160 clinical hours as approved and verified by the department. All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
EXS 316	3	Applied Nutrition
HPH 493	3	Human Physiology Capstone
KIN 221	3	Exercise as Medicine
NAS 230	2	Health Education for Behavior Change
PBH 100	3	Introduction to Public Health
PHI 311	3	Medical Ethics
PSY 100	3	Introductory Psychology
PSY 395	3	Health Psychology

Select one of the following chemistry course combinations:

CHE 201	4	General, Organic, and Biochemistry I
CHE 202	4	General, Organic, and Biochemistry II
or		
CHE 211 ^{††}	4	College Chemistry I
CHE 212 ^{††}	4	College Chemistry II

Select one course from the following:

BIO 381	3	Research Methods
KIN 355	3	Research Methods

Select two courses from the following:

HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
HPH 320	3	Neuromuscular Physiology and Chronic Disease

Select one additional course from the following:

BIO 300	4	Human Medical Physiology
EXS 482	3	Lifespan and Environmental Physiology
HPH 310	3	Cardiorespiratory Physiology and Chronic Disease
HPH 315	3	Pathophysiology of Immunological and Metabolic Chronic Diseases
HPH 320	3	Neuromuscular Physiology and Chronic Disease
PSY 441	3	Physiological Psychology

Recommended Courses

Students may choose to select any of the following courses based upon consultation with advisor and contact with specific graduate or professional school to ensure all entrance requirements are met; recommended courses are not counted toward major requirements nor major GPA.

BIO 203 ^{††}	4	Principles of Genetics
BIO 210 [†]	3	Medical Terminology
BIO 312 ^{††}	4	Cellular and Molecular Biology
BIO 471 [†]	4	Microbiology and Immunology
CHE 311 ^{††}	4	Organic Chemistry I
CHE 312 [†]	4	Organic Chemistry II
CHE 411 [†]	3	Biochemistry I
IAS 210 [†]	3	Medical Terminology
MAT 210 ^{††}	4	Introductory Statistics
PHY 203 [†]	4	General Physics I
PHY 204 [†]	4	General Physics II
PSY 250	3	Life Span Development
PSY 275	3	Introductory Statistics
PSY 300	3	Abnormal Psychology
SOC 100 [†]	3	Introduction to Sociology
SOC/ANT	3-4	Sociology or Anthropology Course

[†]Recommended for Medical School

^{††}Recommended for Physician Assistant

Preventive Medicine Minor

A minor in Preventive Medicine requires 20 hours. *Students must also complete two semesters of 80 clinical hours each semester as approved and verified by department. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.*

Minor Requirements

EXS 316	3	Applied Nutrition
KIN 221	3	Exercise as Medicine
NAS 230	2	Health Education for Behavior Change
PBH 100	3	Introduction to Public Health
PHI 311	3	Medical Ethics
PSY 100	3	Introductory Psychology
PSY 395	3	Health Psychology

Exercise Science Courses

EXS 111 3 hours

Foundations of Exercise Science

This course is an introduction to the field of exercise science. The content includes definitions, objectives, and philosophies of the field; basic content of components of exercise science, contemporary issues and research, and potential career options. This introduction to the field of exercise science will have a foundation of the Christian perspective of vocational gifting, calling, preparation and service to humankind. Offered Fall and Spring semesters.

EXS 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

EXS 214 3 hours

Health and Sexuality

This course is designed to prepare future health educators to teach the relationship between health and human sexuality. The class activities will include lectures/discussions, peer teaching, development of an abstinence-based curriculum, and lectures by outside resource personnel.

EXS 215 2 hours

Health, Exercise, and Aging

The course is designed to examine common health-related physiological changes, current issues, and concerns as they pertain to the aging individual. Prerequisite: EXS 111 or permission of instructor.

EXS 217 3 hours

Health Promotion Program Planning

This course is a study of the philosophy, goals, objectives, organization, content, and methods of wellness programs. Characteristics of various clientele and how programs can be developed to meet their specific needs will be studied. Prerequisite: EXS 111. Offered Fall semester of odd years.

EXS 270 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

EXS 273 1 hour

Introduction to Exercise Science Research

Students will gain a basic introduction to research through a field experience in an exercise science research project. Students will help with data collection, data entry, and data analysis portions of the study. May be repeated once for credit. By permission of instructor only.

EXS 274 1 hour

Introduction to Exercise Testing

This course will introduce students to the basic skills of cardiovascular disease risk assessment, anthropometric measures, basic muscle strength and endurance assessment, EKG preparation, and data collection.

EXS 280 1 hour

Exercise Techniques for Physical Fitness

A course designed to teach various motor skills needed to effectively improve physical fitness such as proper running mechanics, basic lifting techniques, and common stretches. Students will also develop presentation and group exercise leadership skills. Meets foundational core stewardship of the body requirement beyond KIN 100. Exercise Science majors and Coaching minors only.

EXS 290 3 hours

Principles of Strength Training and Conditioning

This course is the study of the essentials of strength training and conditioning for practitioners and prepares students for certification with the National Strength and Conditioning Association (NSCA). The course will cover the following: biomechanics of exercise, rehabilitation, bioenergetics of training, aerobic exercise prescription, resistance training, and speed and plyometric training. Prerequisites: EXS 111 or permission of instructor. Offered Spring semester of even years.

EXS 306 3 hours

Physiology of Exercise

A study of how the body adapts and responds to acute and chronic exercise. Attention is given to skeletal muscle structure and function, neurological control of movement, metabolic systems, and cardiovascular and pulmonary systems. Prerequisite: BIO 310 or permission of instructor. Offered Spring semester.

EXS 316 3 hours

Applied Nutrition

This course is a study of basic principles of human nutrition including fundamentals of digestion, absorption, and metabolism; nutrients and their roles for the lifespan; eating disorders; and nutrition for performance. Exercise Science, Health Science, and Human Physiology and Preventative Medicine majors only or by permission of instructor. Offered Fall and Spring semesters.

EXS 317 2 hours

EKG and Stress Testing

This course is designed to provide the undergraduate exercise science student with the basic knowledge and skills needed to interpret resting and exercise EKG's. Emphasis will be placed on 1) learning normal vs. abnormal EKG patterns at rest and during exercise; and, 2) the effects of cardiovascular medication on the resting or exercise EKG and various physiologic responses to exercise testing. An additional purpose of the course is to introduce the undergraduate exercise student to selected cardiac assessment techniques. Prerequisite: EXS 306 or permission of instructor.

EXS 318 3 hours

Therapeutic Exercise and Pharmacotherapy

A detailed study of the role exercise plays in preventing and treating chronic diseases and conditions including metabolic diseases, obesity, cardiovascular conditions, systemic inflammatory diseases, neurological diseases, cancer, orthopedic conditions, and aging. Prerequisite: EXS 306 or permission of instructor. Offered January interterm.

EXS 320 3 hours

Community Health Promotion

This course introduces students to health promotion in a community setting. The content explores the theoretical and practical issues of the field of community health that enable students to identify and apply health education principles to health challenges facing individuals, groups, and communities. Local cultures will be explored throughout the trip and students will be expected to reflect on their experience. Meets foundational core cross-cultural requirement. Offered: January interterm of even years. Prerequisite: Permission of instructor.

EXS 353 3 hours

Physical Fitness Assessment

This course will provide a comprehensive study of the components of physical fitness and methods of assessing fitness levels within each component. Health assessment and risk analysis instruments will also be examined. The course consists of classroom work, practical assessment projects, and some field experiences. Each student will participate in "hands-on" fitness assessments of various population groups. Prerequisites: EXS 111, EXS 274, and EXS 306; or permission of instructor. Offered Fall and Spring semesters.

EXS 360 1-4 hours

Independent Study

An individualized, directed study involving a specified topic.

EXS 370 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

EXS 381 3 hours

Kinesiology

An analysis of human movement based on anatomic and mechanical principles. Emphasis is given to the application of these principles to the understanding of athletic performance. Prerequisites: BIO 310 or permission of instructor. Offered Fall semester.

EXS 393 1-4 hours

Practicum

Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Prerequisite: Permission of KIN department.

EXS 450 1-4 hours

Directed Research

Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. Prerequisite: Permission of instructor.

EXS 453 3 hours

Physical Fitness Prescription

This course provides a study of the prescription and development of appropriate exercise programs based on accurate assessment of each component. Appropriate programs for various populations groups will be considered. The course will consist of classroom work, practical prescription projects, and some field experiences. Each student will participate in "hands-on" prescription and program development for a variety of individuals. Prerequisite: EXS 306. Offered Spring semester.

EXS 480 2 hours

Seminar

A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

EXS 482 3 hours

Lifespan and Environmental Physiology

This is a seminar-style course which will examine the differences in pediatric physiology and geriatric physiology as well as address physiological adaptations to different natural environments. A variety of topics related to pediatric and geriatric physiology will be explored including growth, maturation and aging, underlying mechanisms for changes in fitness in children and older adults, and specific health challenges facing these populations. Topics relevant to environmental physiology that will be explored include adaptations related to hot, humid, and hypoxic environments. Prerequisite: EXS 306. Offered Fall semester.

EXS 490 1-2 hours

Honors

Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.

Human Physiology Courses

HPH 310

3 hours

Cardiorespiratory Physiology and Chronic Disease

This course explores the physiology of the cardiac, respiratory, and vascular systems, pathophysiology of the most common cardiorespiratory diseases, and current evidence and mechanisms for disease prevention through lifestyle modification. *Prerequisites:* BIO 201; BIO 310; BIO 311; and CHE 202 or CHE 212. Offered Spring semester.

HPH 315

3 hours

Pathophysiology of Immunological & Metabolic Chronic Diseases

This course explores the pathophysiology of immunological and metabolic chronic diseases with specific emphasis on cancer, hyperlipidemia, diabetes, obesity, and frailty, as well as the major organ systems most commonly impacted by those diseases and current evidence and mechanisms for disease prevention through lifestyle modification. *Prerequisites:* BIO 201; BIO 310; BIO 311; and CHE 202 or CHE 212.

HPH 320

3 hours

Neuromuscular Physiology and Chronic Disease

This course explores the physiology of the central and peripheral nervous system with specific emphasis on neuromuscular control, the pathophysiology of the most common neurological and neuromuscular diseases (e.g., stroke, Parkinson's, Alzheimer's, mental illness), and the current evidence and mechanisms for disease prevention through lifestyle modification. *Prerequisites:* BIO 201; BIO 310; BIO 311; and CHE 202 or CHE 212. Offered Fall semester.

HPH 493

3 hours

Human Physiology Capstone

This course will revisit and add to the theological and philosophical underpinnings of human health and medicine that were initially explored in KIN 221 Exercise as Medicine. Students will review their reflective writings from their freshmen year and develop an updated philosophy of human health and flourishing and the practice of medicine. In addition, students will be required to research a specific chronic disease and present an in depth presentation of the current scientific evidence for disease prevention. This course will culminate in a multi-day retreat where students will give their presentations and engage their peers and faculty in discussions centered around their philosophy papers. *Must be a graduating senior to enroll.* Offered Interterm.

Kinesiology Courses

KIN 100

2 hours

Living Well

This course will assist students in developing an understanding of human flourishing founded on biblical principles and scientific evidence in the areas of sleep, stress and time management, nutrition, and various aspects of physical fitness. Students will engage in various assignments and physical activities related to these areas with the purpose of providing the abilities to make healthy lifestyle and behavior choices. *This course satisfies two of the three hours of foundational core requirements for stewardship of the body.*

KIN 150

3 hours

Faith and the Embodied Life

The main objective of this course is to aid students in understanding how their faith intersects with an embodied existence. Throughout the course, students will engage in physical (cloister walks, etc.), mental, and spiritual exercises to assist them in the formation of their personal health philosophies. Students will gain a better understanding of how care (or lack thereof) for our bodies has spiritual ramifications and that we may worship the One who created our bodies through proper care and respect of them.

KIN 170

1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

KIN 200I

1 hour

Individualized Physical Education

The individualized physical education course is designed for students who fit into one of the following categories: (1) the student has a physical problem that prohibits completion of another KIN 200 course; (2) the student would like to do an activity that is not offered as a KIN 200 course; or (3) the student is near graduation and cannot schedule another KIN 200 course. Students design a program with the instructor's supervision and then engage in that program throughout the semester. Physical fitness assessments may be included as well as cognitive assignments. Students must apply for acceptance into the class and be approved by the instructor in order to register for the course. *Prerequisite:* EXS 111, KIN 100, or KIN 221.

KIN 200Z

1 hour

Athletic Participation

The athletic participation course is designed for students who compete on an NAIA intercollegiate athletic team. *Students must be approved by the athletic department to receive academic credit for this course. Credit is awarded only during the sport season and credit will not be granted retroactively for athletic participation from a previous season.*

KIN 200

1 hour

General Physical Education Activity Courses

These courses encourage students to adopt an active physical lifestyle and maintain physical fitness and wellness throughout their lives. Students learn about activities and develop skills for participation in lifetime activities. *One KIN 200 course is taken after KIN 100 to meet the three-hour foundational core requirement. Prerequisite:* EXS 111, KIN 100, or KIN 221.

KIN 200A	Aerobic Conditioning
KIN 200AV	Aerobic Walking
KIN 200B	Badminton
KIN 200C	Weight Control and Fitness
KIN 200CC	Camping and Canoeing
KIN 200D	Square Dance
KIN 200F	Softball
KIN 200FD	Folk Dances of Other Cultures
KIN 200FF	Fly Fishing
KIN 200FN	Functional Fitness
KIN 200G	Golf
KIN 200H	Beginning Horsemanship
KIN 200J	Acting
KIN 200JG	Jogging
KIN 200K	Basketball
KIN 200KT	Karate
KIN 200L	Bowling
KIN 200M	Challenge Adventures
KIN 200N	Total Fitness
KIN 200P	Personal Fitness
KIN 200PB	Pickleball
KIN 200Q	Outdoor Activities
KIN 200R	Racquetball
KIN 200RU	Running
KIN 200S	Soccer
KIN 200SB	Beginning Swimming
KIN 200SF	Fitness Swimming
KIN 200T	Tennis
KIN 200U	Circuit Training
KIN 200V	Volleyball
KIN 200W	Weight Training
KIN 200WA	Well Aerobics
KIN 200Y	Cycling

KIN 220 Principles of Coaching	3 hours	KIN 334 Lifeguard Training Instructor	1 hour
This course is a study of the duties and responsibilities of coaches and the potential problems and issues they may face. The content will include the four major areas of coaching certification programs: medical aspects, physiological aspects, psychological aspects, and organizational and administrative aspects. Methods and strategies of handling the responsibilities and the problems will be studied.		Acquisition of the skills, terminology, and progressions for teaching American Red Cross Lifeguard Instructor Training. The course includes both knowledge of the skills and physical performance of the skills. Successful completion of the American Red Cross requirements leads to certification as a Red Cross LGI. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisites: <i>KIN 302 and permission of instructor.</i>	
KIN 221 Exercise as Medicine	3 hours	KIN 355 Research Methods	3 hours
This class examines the impact of physical activity, exercise, nutrition, and lifestyle related factors on health and the prevention and treatment of chronic disease. Students will learn the physiological basis of cardiorespiratory and musculoskeletal fitness, how these are influenced by exercise and physical activity, and their relation to health and disease. The therapeutic effect of exercise will be compared to traditional pharmacological treatment approaches where applicable. In addition students will be challenged to consider the personal, spiritual, and social responsibilities of maintaining an optimal level of fitness as they apply course content to their own life. Meets the <i>3 hour foundational core stewardship of the body requirement</i> . Open to Pre-Med students and Public Health, Pre-Nursing, and Human Physiology and Preventative Medicine majors only or by permission of instructor.		An exploration of the basic methods of research and data collection in the realms of sport management, physical education, and exercise science in a lecture format. Topics include defining a research question, reviewing and analyzing past research, designing a research project, collecting and analyzing data, and interpreting results. Students will also learn basic statistics and Excel and PowerPoint table and figure making skills. Prerequisite: <i>EXS 111 or KIN 221. Exercise Science, Health Science, and Human Physiology and Preventative Medicine majors only. Offered Fall and Spring semesters.</i>	
KIN 223 Emergency Health Care	3 hours	KIN 360 Independent Study	1-4 hours
Prevention, treatment, and emergency care of various health problems and injuries will be examined. Skills will be obtained in CPR, AED, first aid, blood and airborne pathogens, and use of PPEs according to guidelines of the Emergency Care and Safety Institute and American Red Cross. Offered <i>Spring semester</i> .		An individualized, directed study involving a specified topic.	
KIN 231 Officiating Sports	2 hours	KIN 367 Coaching Methods	3 hours
A study of the officiating skills and techniques needed for various sports. The opportunity to earn official's rating is provided.		This course will assist the student in learning how to teach the skills and strategies of selected sports and how to utilize that information to be an effective coach. The content includes basic sport skills, types of offenses and defenses, special situation strategies, and other strategies specific to selected sports. The student will learn correct techniques of skills and skill progressions as well as drills to teach skills and strategies.	
KIN 250 Elementary School Health Program	2 hours	KIN 370 Selected Topics	1-4 hours
A course designed to equip the elementary education student with a basic understanding of teaching concepts associated with physical education activities and appropriate health and safety practices. Fundamental content of the areas of physical education, health, and safety, as well as teaching methods, are explored. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisite: <i>KIN 100</i> . Open to Elementary Education and Public Health majors only or permission of instructor.		A course offered on a subject of interest but not listed as a regular course offering.	
KIN 270 Selected Topics	1-4 hours	KIN 393 Practicum	1-4 hours
A course offered on a subject of interest but not listed as a regular course offering.		Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. Prerequisite: <i>Permission of KIN department.</i>	
KIN 271 CPR for Healthcare Providers	1 hour	KIN 450 Directed Research	1-4 hours
Successful completion of this course will certify participants in the techniques of CPR and AED use for adults, children, and infants; foreign body obstruction; and cardiac emergency management according to American Red Cross standards. <i>Priority registration for this course is given to students in the KIN majors.</i>		Investigative learning involving closely directed research and the use of such facilities as the library or laboratory. Prerequisite: <i>Permission of instructor.</i>	
KIN 300 Basic Swimming Skills	1 hour	KIN 472 Psychology of Coaching	2 hours
For KIN majors who have satisfactorily completed a basic swimming, intermediate swimming, or emergency water safety course at another institution. Students will receive credit for basic proficiency in swimming skills and water safety upon submission of official transcript. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> .		This course is a study of the role of psychology in coaching and how coaches can use psychology to enhance the performance of athletes and teams. Topics include psychology, philosophy of sport, motivation, self-confidence, goal setting, attention/concentration, imagery, arousal, self-talk, stress management, and mental skill methods/training. An application of appropriate mental skills will be addressed for each topic. Biblical principles of psychology will be integrated into topics.	
KIN 302 Lifeguard Training	2 hours	KIN 480 Seminar	2 hours
This course is designed to train an individual in the proper methods for rescue, water safety, first aid, CPR, and other skills necessary for lifeguarding. Meets <i>foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisite: <i>KIN 100</i> .		A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. <i>Students examine contemporary issues in sport.</i>	
KIN 324 Motor Learning	2 hours	KIN 490 Honors	1-2 hours
A study of the theories and research of the processes of learning motor skills. The application of appropriate methods of teaching motor skills is studied and practiced to enable the students to understand how they can be used effectively. Prerequisite: <i>EXS 111 or permission of instructor.</i>		Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.	
KIN 333 Water Safety Instructor	2 hours	KIN 492 Internship	4 hours
Instruction in the skills, terminology, and progressions of teaching swimming strokes and water safety. The course includes knowledge of the skills, physical performance of the skills, and teaching skills. Successful completion of the American Red Cross requirements leads to certification in Red Cross WSI. <i>Advanced swimming skills are necessary. Meets foundational core stewardship of the body requirement beyond KIN 100</i> . Prerequisites: <i>KIN 100 and permission of instructor.</i>		This field experience is designed to have the students apply what they have learned in their courses and to extend that learning by working in an organization that is appropriate for their major. Students work on a regular basis at the organization under the supervision of approved staff members. Students are also under the supervision of a member of the Taylor University Department of Kinesiology. <i>Each student must comply with the guidelines for credit hours, clock hours, and other criteria that are specific for the internship in his/her major. To register for this internship, the student must submit a proposal for the internship and have it approved by the KIN department and the internship organization. Prerequisites: All designated prerequisites for the internship in that major.</i>	

Mathematics

Chair, Professor D. Thompson
Professors J. Case, M. Colgan, P. Eggleton, M. Maxwell
Associate Professor D. Rodman
Visiting Assistant Professor S. Lippold

The major purposes of the Mathematics Department are to help students increase their knowledge and understanding of mathematical concepts, develop their reasoning ability and problem-solving skills, and improve their ability to apply mathematics in a variety of areas. The department prepares students to become teachers of mathematics; to enter careers in actuarial science, business, industry, and government; and to pursue graduate study in mathematics and related areas.

The student expecting to major in Mathematics should have four years of high school mathematics, including two years of high school algebra, geometry, trigonometry and preferably calculus. In the freshman year, students planning to major in mathematics and those preparing for scientific work, including engineering, should be qualified to begin with MAT 151 or MAT 230.

The department offers five majors: Data Science; Mathematics; Mathematics/Computer Science Education; Mathematics Education; and Mathematics-Interdisciplinary.

Students interested in actuarial science should consider the Actuarial Science certificate and major in Mathematics-Interdisciplinary with a minor in Accounting, Economics, or Finance, or they should major in Data Science. They should take MAT 352, MAT 382, and MAT 385 as preparation for the first two actuarial exams. Students can also receive VEE credit (Validation by Educational Experience) from the Society of Actuaries with grades of B- or higher in ECO 201, ECO 202, FIN 361, and MAT 382. See the guidelines from the Society of Actuaries webpage for further details.

Each semester, the Mathematics Department offers at least four sanctioned events such as special lectures or colloquiums. All majors are required to attend at least 15 sanctioned events for graduation and at least 12 sanctioned events before taking the MAT 493 course.

Data Science (BS)

The Bachelor of Science degree with a major in Data Science requires a minimum of 76-83 hours including a concentration and attendance at 15 sanctioned events. *All major courses, including concentration courses, must be completed with a grade of C- or better and are included in the major GPA.*

Computer Science Core Requirements

COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 265	4	Data Structures and Algorithms
COS 280	3	Introduction to Artificial Intelligence
COS 326	3	Data Visualization
COS 343	3	Database Systems
SYS 411	3	Machine Learning

Mathematics Core Requirements

MAT 180	3	Problem Solving
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 255	3	Justifications in Mathematics
MAT 311	3	Introduction to Data Science
MAT 345	4	Linear Algebra
MAT 352	4	Mathematical Statistics
MAT 382	3	Advanced Statistical Methods
MAT 392	1	Mathematics Seminar
MAT 393	3	Practicum
MAT 493	3	Senior Capstone

Select one course from the following:

COS 243	3	Multi-tier Web Application Development
COS 380	3	Natural Language Processing
MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 340	4	Advanced Calculus
MAT 455	3	Abstract Algebra

Concentrations – Students must select one of the following concentrations:

Biology

BIO 203	4	Principles of Genetics
BIO 306	3	Introduction to Bioinformatics
ENS 204	4	Principles of Ecology

Chemistry

Select one course from the following:

CHE 201	4	General, Organic, and Biochemistry I
CHE 211	4	College Chemistry I

Select one course from the following:

CHE 202	4	General, Organic, and Biochemistry II
CHE 212	4	College Chemistry II

Select one course from the following:

CHE 301	4	Analytical Chemistry I
CHE 431	4	Physical Chemistry I

Select one course from the following:

CHE 302	4	Analytical Chemistry II
CHE 432	4	Physical Chemistry II

Physics

PHY 211	5	University Physics I
PHY 212	5	University Physics II

Select one course from the following:

PHY 310	3	Modern Physics
PHY 311	4	Modern Physics

Select one course from the following:

PHY 321	3	Electricity and Magnetism
PHY 412	3	Quantum Mechanics

Political Science

POS 100	3	American Politics
POS 245	3	Research in Political Studies
POS 331	3	Public Policy
POS 344	3	Campaigns and Elections

Psychology

PSY 100	3	Introductory Psychology
PSY 272	3	Research Methods in Psychology
PSY 425	3	Industrial-Organizational Psychology

Select one course from the following:

PSY 321	3	Social Psychology
PSY 422	3	Psychological Testing

Public Health

BIO 306	3	Introduction to Bioinformatics
PBH 100	3	Introduction to Public Health
PBH 320	4	Epidemiology
<i>Select one course from the following:</i>		
PBH 210	3	Human Diseases
PBH 335	4	Environmental Health
PBH 350	3	Determinants of Health and Health Equity
SUS 200	3	Environment and Society

Sociology

SOC 210	3	Contemporary Social Issues
SOC 250	2	Principles of Research and Analysis
SOC 315	3	Social Inequality and Stratification
SOC 350	3	Social Research Methods
<i>Select one course from the following:</i>		
SOC 100	3	Introduction to Sociology
SOC 110	3	Introduction to Global Societies

Sport Management

SMA 115	3	Introduction to Sport Management
SMA 210	3	Introduction to Sport Technology and Analytics
SMA 352	3	Event and Facility Management
SMA 354	3	Sport Finance

Systems

SYS 101	3	Introduction to Systems
SYS 390	3	Information Systems Analysis
SYS 394	4	Information Systems Design
SYS 401	3	Operations Research

Data Science Minor

A Data Science minor requires a minimum of 31-32 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 326	3	Data Visualization
MAT 151	4	Calculus I
MAT 311	3	Introduction to Data Science
MAT 382	3	Advanced Statistical Methods

Select one course from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Select one course from the following:

COS 120	4	Introduction to Computational Problem Solving
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

COS 265	4	Data Structures and Algorithms
COS 343	3	Database Systems
SYS 411	3	Machine Learning

Mathematics (BA)

The Bachelor of Arts degree with a major in Mathematics requires two years of one foreign language and 46-47 hours (42-43 math hours), attendance at 15 sanctioned events, and is designed for students planning to attend graduate school. All major courses must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

MAT 180	3	Problem Solving
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 255	3	Justifications in Mathematics
MAT 340	4	Advanced Calculus
MAT 345	4	Linear Algebra
MAT 352	4	Mathematical Statistics
MAT 392	1	Mathematics Seminar
MAT 455	3	Abstract Algebra
MAT 461	3	Real Analysis
MAT 493	3	Senior Capstone

Select one course from the following:

MAT 251	4	Differential Equations
MAT 306	3	Introduction to Bioinformatics
MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 311	3	Introduction to Data Science
MAT 382	3	Advanced Statistical Methods
MAT 385	3	Mathematics of Finance

Electives

Select 3 hours of mathematics electives—MAT 216 or higher, excluding MAT 301, 302, 309

Additional Major Requirements

Select one course in biology, chemistry, or physics from:

BIO 203	4	Principles of Genetics
CHE 201	4	General, Organic, and Biochemistry I
CHE 211	4	College Chemistry I
PHY 211	4	University Physics I

Mathematics/Computer Science Education (BA/BS)

The Bachelor of Science degree with a major in Mathematics/Computer Science Education requires 60 hours in addition to education courses and attendance at least 18 Mathematics or Computer Science and Engineering sanctioned events. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Mathematics Core

MAT 180	3	Problem Solving
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 255	3	Justifications in Mathematics
MAT 280	3	Mathematics in the Junior High/Middle School
MAT 312	4	College Geometry
MAT 345	4	Linear Algebra
MAT 352	4	Mathematical Statistics
MAT 392	1	Mathematics Seminar
MAT 493	3	Senior Capstone

Computer Science Core

COS 102	3	Fundamentals of Systems and Computing
COS 109	3	Computer and Network Operations
COS 120	4	Introduction to Computational Problem Solving
COS 121	4	Foundations of Computer Science
COS 143	3	Interactive Webpage Development
COS 265	4	Data Structures and Algorithms
COS 326	3	Data Visualization
COS 343	3	Database Systems

Professional Education

EDU 150	3	Education in America
EDU 222	3	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
MAT 285	3	Technology for Mathematics Education
MAT 309	2	Teaching Math in Secondary Schools
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology
Select <u>one</u> course from the following:		
CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Mathematics—Interdisciplinary (BS)

The Bachelor of Science degree with a major in Mathematics—Interdisciplinary requires a minimum of 51-55 hours, attendance at 15 sanctioned events, and the completion of a minor (or major) in Accounting, Biology, Chemistry, Computer Engineering, Computer Science, Cybersecurity, Economics, Engineering, Environmental Science, Finance, Information Systems, or Physics. Minor (or major) requirements are listed under the offering department. The practicum may be in a supporting area (major or minor) instead of mathematics. *All major courses must be completed with a grade of C- or better and are included in the major GPA; additional courses from other major (or minor) are not included in this major GPA unless also required for this major.*

Major Requirements

MAT 180	3	Problem Solving
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 255	3	Justifications in Mathematics
MAT 345	4	Linear Algebra
MAT 352	4	Mathematical Statistics
MAT 382	3	Advanced Statistical Methods
MAT 392	1	Mathematics Seminar
MAT 393	2-4	Practicum
MAT 493	3	Senior Capstone

Select one course from the following:

MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 311	3	Introduction to Data Science

Select one course from the following:

MAT 340	4	Advanced Calculus
MAT 455	3	Abstract Algebra

Additional Major Requirements

Select one course from the following:

COS 120	4	Introduction to Computational Problem Solving
COS 130	3	Computational Problem Solving for Engineers
SYS 120	4	Introduction to Problem Solving

Electives

Select 3 hours of mathematics electives—MAT 216 or higher, excluding MAT 301, 302, 309

Select one of the following biology, chemistry, or physics courses:

BIO 203	4	Principles of Genetics
CHE 201	4	General, Organic, and Biochemistry I
CHE 211	4	College Chemistry I
PHY 211	4	University Physics I

Mathematics Education (BA/BS)

The Bachelor of Science degree in Mathematics Education requires 50-51 hours in addition to education courses and attendance at 15 sanctioned events. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. *All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.*

Mathematics Requirements

MAT 180	3	Problem Solving
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 255	3	Justifications in Mathematics
MAT 280	3	Mathematics in the Junior High/Middle School
MAT 312	4	College Geometry
MAT 340	4	Advanced Calculus
MAT 345	4	Linear Algebra
MAT 352	4	Mathematical Statistics
MAT 392	1	Mathematics Seminar
MAT 455	3	Abstract Algebra
MAT 493	3	Senior Capstone

Additional Major Requirements

Select one course from the following:

COS 120	4	Introduction to Computational Problem Solving
MAT 251	4	Differential Equations
MAT 285	3	Technology for Mathematics Education
MAT 306	3	Introduction to Bioinformatics
MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 311	3	Introduction to Data Science
MAT 370	3	Selected Topics (approved by advisor)
MAT 385	3	Mathematics of Finance
PHY 341	3	Math Methods in Physics and Engineering
SYS 120	4	Introduction to Problem Solving

Select 3 hours of mathematics electives—MAT 216 or higher, excluding MAT 301, 302, 309

Select one of the following biology, chemistry, or physics courses:

BIO 203	4	Principles of Genetics
CHE 201	4	General, Organic, and Biochemistry I
CHE 211	4	College Chemistry I
PHY 211	4	University Physics I

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
MAT 309	2	Teaching Math in Secondary Schools
SED 220	3	Exceptional Children

Select one course from the following:

EDU 344	1	Educational Technology in Secondary Education
MAT 285	3	Technology for Mathematics Education

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Mathematics Minor

A Mathematics minor requires a minimum of 23-25 hours. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

MAT 230 4 Calculus II

Select one option from the following:

MAT 151 4 Calculus I

MAT 145ⁱ 3 Introduction to Functions and Calculus
and

MAT 146ⁱ 3 Functions and Calculus

ⁱMAT 145 & 146 count as one option

Select an additional 15 hours of mathematics elective hours above MAT 151—MAT 205, 301, 302, and 309 do not count toward the minor.

Certificate in Actuarial Science

The department awards a certificate in Actuarial Science to students in any baccalaureate major. Students are required to complete 37 hours and pass at least one actuary exam. Students must complete an application and demonstrate passing a Society of Actuaries Exam no less than 30 days prior to graduation. Work in progress will be accepted. This certificate is awarded by the department and does not include a transcript entry.

Certificate Requirements

ACC 241 3 Accounting Principles I
ACC 242 3 Accounting Principles II
ECO 201 3 Principles of Microeconomics
ECO 202 3 Principles of Macroeconomics
FIN 361 3 Corporate Finance
MAT 151 4 Calculus I
MAT 230 4 Calculus II
MAT 240 4 Calculus III
MAT 352 4 Mathematical Statistics
MAT 382 3 Advanced Statistical Methods
MAT 385 3 Mathematics of Finance

Recommended Courses

MAT 353 I Actuarial Exam Preparation (P1)
MAT 386 I Actuarial Exam Preparation (FM1)

Mathematics Courses

MAT 100 1 hour

Mathematics Fundamentals

A study of the basic arithmetic operations, exponents, ratios, linear and quadratic equations, graphs, and story problems. This course is specifically designed to assist those students who need help for the mathematics proficiency examination. *Pass/fail only. Does not count toward a mathematics major or minor.*

NOTE: MAT 100 or proficiency by an approved exam is a prerequisite to all other Mathematics courses.

MAT 110 3 hours

Finite Mathematics

A study of selected topics from set theory, matrices, systems of linear equations and inequalities, linear programming, counting and probability, statistics, and mathematics of finance. *Prerequisite: A good understanding of algebra. Does not count toward a mathematics major or minor. Meets foundational core mathematics requirement.*

MAT 120 3 hours

Investigations in Mathematics

A course designed to engage students in relevant college-level mathematics and its connection to the Christian faith and everyday life. Students will experience interesting questions and real-life applications of mathematics from a variety of contexts while using appropriate technology. Emphasis will be on thinking, reasoning, and exploring patterns as well as communicating mathematical ideas. Topics will be chosen from data analysis, modeling, probability, statistics, mathematics of finance, logic, infinity, geometric applications, and fundamentals of problem solving. *Does not count toward a mathematics major or minor. Meets foundational core mathematics requirement.*

MAT 130 4 hours

Strategies for Calculus

Topics include rational, exponential, logarithmic, and trigonometric functions. Study of these functions include algebraic manipulation, graphing, applications, and trigonometric identities. Function concepts such as asymptotes, zeroes, domain, range, continuity, and function composition are also studied. *This course is only intended for students who need further preparation before taking MAT 151 Calculus I. Does not count toward a mathematics major or minor. Does not meet a foundational core requirement. Prerequisite: MAT 100 or equivalent proficiency. Online only.*

MAT 140 3 hours

Fundamental Calculus for Applications

An introductory study of derivatives, series, and integrals with a wide range of applications, including maximum and minimum problems. *Prerequisite: A good understanding of algebra. Does not count toward a mathematics major or minor. Meets foundational core mathematics requirement.*

MAT 145 3 hours

Introduction to Functions and Calculus

The MAT 145-146 sequence aims to provide a deep understanding of topics from precalculus and calculus as well as a strong sense of their usefulness. Fundamental ideas of calculus, specifically rates of change, are introduced early and used to provide a framework for the study of mathematical modeling involving algebraic, exponential, and logarithmic functions. Applications to business, economics, and science are emphasized. *Meets foundational core mathematics requirement. MAT 145-146 may be taken as a two-semester substitute for MAT 151.*

MAT 146 3 hours

Functions and Calculus

MAT 146 is the second of a two-course sequence which begins with MAT 145, and continues the investigation of functions, including trigonometric functions, and their rate of change. Students are introduced to integrals and methods of integrations with applications. Further topics, such as infinite series and differential equations are included. *Prerequisite: MAT 145. MAT 145-146 may be taken as a two-semester substitute for MAT 151.*

MAT 151 4 hours

Calculus I

A study of functions, including algebraic and trigonometric functions. An introduction to the algebraic, numerical, and graphical approaches to calculus, including limits, continuity, derivatives, integrals, and applications. *Prerequisite: A good understanding of algebra and trigonometry. Meets foundational core mathematics requirement. MAT 145 and MAT 146 may be taken as a two-semester substitute for MAT 151.*

MAT 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

MAT 180 3 hours

Problem Solving

An introduction to the mathematical sciences through the study of problem solving. An overview of various methods of problem solving to discover patterns, construct and modify conjectures and develop proofs of those conjectures. There will be an emphasis on developing creativity, confidence, and concentration. Content areas studied will include algebra, combinatorics, number theory and calculus, all from a problem-solving point of view. *Prerequisite: MAT 151 or one semester of high school calculus. Meets foundational core mathematics requirement.*

MAT 205 2 hours

Explorations in Elementary School Mathematics

An introductory math course for elementary education majors that focuses on helping prospective teachers develop an understanding of the topics of algebra, probability, and data analysis as they relate to the elementary school curriculum. *Two hours of lecture and one hour of lab.*

MAT 210 4 hours
Introductory Statistics
A study of basic statistical methods with a focus on applied data analysis in a group setting using statistical software. Develops proficiency in the use of descriptive methods, sampling, linear regression and correlation, probability theory and distributions, statistical inference techniques for estimation and hypothesis testing and experimental design. *Meets foundational core mathematics requirement.*

MAT 215 3 hours
Discrete Mathematics for Computer Science
Discrete mathematics concepts are studied that are foundational for further study in computer science. Topics include propositional logic and quantifiers, proofs with emphasis on induction, relations and functions on sets, graph theory, solution of certain classes of recurrence and equivalence relations, combinatorics, and discrete probability. *Prerequisites: COS 120 or COS 130 or SYS 120; and MAT 146 or MAT 151.*

MAT 220 4 hours
Ways of Knowing
Topics studied include number, logic, Euclidean and non-Euclidean geometry, algebraic structures, dimension, and infinity. A study is made of the deductive method in mathematics and its relationship to ways of knowing in other areas. There is an emphasis on the beauty of mathematics and the relationship of mathematics to science and other forms of culture including the arts and religion. *Course is offered within the Honors Guild. Meets foundational core mathematics requirement. Offered Spring semester of even years.*

MAT 230 4 hours
Calculus II
A study of analytic geometry, functions, limits and derivatives, differentiation and integration of algebraic functions and elementary transcendental functions, applications of the integral, the definite integral, sequences, series, Taylor's formula, and special techniques of integration. *Prerequisite: MAT 146 or MAT 151.*

MAT 240 4 hours
Calculus III
This is the final course in the three-course sequence that is the standard complete introduction to the concepts and methods of calculus. The emphasis is on concepts and solving problems rather than on theory and proof. The course presents the concepts of calculus from three points of view: geometric, numeric, and algebraic. Topics typically include multivariable functions; contour diagrams and cross-sections; vectors; the dot product and the cross product; vector projection; partial derivatives; the gradient; directional derivatives; local linearity; local extrema and critical points; double integrals in Cartesian and polar coordinates; triple integrals in Cartesian, cylindrical, and spherical coordinates; parametric curves; vector fields; line integrals; gradient fields, path-independence, and the Fundamental Theorem of Calculus for Line Integrals; Green's Theorem; flux integrals; and the Divergence Theorem and Stokes' Theorem. *Prerequisite: MAT 230.*

MAT 251 4 hours
Differential Equations
This course is about analytic, graphical, and numerical techniques for solving ordinary differential equations and systems of ordinary differential equations. Students will also study "real world" phenomena using ordinary differential equations. Topics typically include separation of variables; slope fields; linear first-order equations and the method of integrating factors; Euler's method for both first- and second-order autonomous equations; phase lines; methods for solving second-order linear equations with constant coefficients having exponential, polynomial, or sinusoidal forcing functions, including the method of undetermined coefficients, the method of integrating factors, and the method of finding series solutions; spring-mass systems; linear systems of equations of the form $x' = Ax$; the trace-determinant plane; Laplace transforms; and existence and uniqueness theorems for various families of equations. *Prerequisite: MAT 240. Offered Spring semester.*

MAT 255 3 hours
Justifications in Mathematics
The purpose of this course is for students to acquire the ability to create and express mathematical arguments through the exploration of mathematical ideas. In addition to gaining an understanding and appreciation for important and interesting mathematics, students will develop an ability to think creatively, to analyze critically, and to communicate clearly and correctly using mathematical reasoning and argumentation. Students are introduced to logic, number theory, sets, functions, infinity, graph theory, and abstract algebra, with an emphasis on proof techniques throughout. *Prerequisite: MAT 151. Offered Fall semester.*

MAT 261 1 hour
Special Problems
Selected topics in mathematics. *Prerequisite: Consent of the department chair.*

MAT 270 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

MAT 280 3 hours
Mathematics in the Junior High/Middle School
An integrated content-methods course for middle school and introductory high school preparation. This course includes the mathematical strands of reasoning and algebra, rational numbers, geometry/measurement, and data analysis and probability, interwoven with the connections to appropriate pedagogical strategies for middle grades' teaching and learning. Should be taken with an education course with a field-based teaching lab component (e.g. JuMP, EDU 222, EDU 332). *Mathematics and elementary education majors only or permission of the instructor. Offered Spring semester of even years.*

MAT 285 3 hours
Technology for Mathematics Education
The course will cover effective use of technology in a mathematics classroom and the inextricable connection between technology, pedagogy, and content knowledge. Students will also explore and think critically about how technology use relates to their faith. The course will focus on free, web-based technologies and pedagogical principles that are relevant regardless of the technology used. All student artifacts (e.g., homework, lesson plans, and personal statement of technology) will be collected into a digital portfolio for future use. *Meets foundation core computation requirement. Prerequisites: MAT 151 and EDU 150; or permission of instructor.*

MAT 301 3 hours
Number Concepts for Elementary Teachers
A junior-level integrated content-methods course for elementary teacher preparation. The course includes a study of number systems and operations with emphasis on current standards and research-based pedagogical practices which focus on communication, reasoning, and representation standards. Each student will also participate in corresponding field experience (JuMP practicum). *Prerequisite: Approval into the teacher education program. Does not count toward a mathematics major or minor. Open to majors in elementary education. The MAT 301-302 sequence meets the mathematics foundational core requirement.*

MAT 302 3 hours
Geometry and Measurement for Elementary Teachers
A junior-level integrated content-methods course for elementary teacher preparation. The course utilizes a problem-solving approach to the study of geometry and measurement with emphasis on current standards and research-based pedagogical practices which focus on communication, reasoning, and representation. Each student will also participate in a corresponding field experience (JuMP practicum). *Prerequisite: approval into the teacher education program and MAT 301. Does not count toward a mathematics major or minor. Open to majors in elementary education. The MAT 301-302 sequence meets the mathematics foundational core requirement.*

MAT 306 3 hours
Introduction to Bioinformatics
This course is designed to introduce students to concepts of bioinformatics, as well as basic bioinformatics skills, using the R programming language. The course will explore methods and datasets spanning from the level of DNA (genomics) up to the organismal and ecosystem level. Bioinformatics is an interdisciplinary field combining concepts of biology, computer science, and statistics to analyze and interpret biological datasets and solve complex questions. *Two hours of lecture and one hour of one hour of coding/data analysis in a computer lab per week. Prerequisites: BIO 203 or instructor permission. Offered Fall semester of even years.*

MAT 309 2 hours
Teaching Math in Secondary Schools
This course is designed to assist teacher candidates in developing their pedagogical content knowledge in the area of mathematics. It addresses such topics as lesson planning, higher-order thinking, professional development, content-appropriate teaching strategies, standards-based instruction, assessment of student learning, educational technology, motivational techniques, and instructional resources. National and state math standards are examined as a basis for reflective teaching and best practices. Should be taken with an education course that has a field-based teaching lab component (e.g., EDU 222 or EDU 332). *Prerequisites: EDU 150 and EDU 260. Offered Spring semester of odd years.*

MAT 310 3 hours
Mathematical Modeling with Numerical Analysis
An introduction to modeling and the methods, techniques, and pitfalls in scientific computing and numerical analysis. The course will emphasize projects, writing, technology, and applications. Topics include iterative and algorithmic processes, error analysis, numerical integration and differentiation, curve fitting, and numerical solutions to different equations. *Prerequisites: COS 120 or COS 130 or SYS 120; and MAT 240. Offered Fall semester of even years.*

MAT 311 3 hours
Introduction to Data Science
Provides a practical foundation to data science through the data analysis cycle of data acquisition, cleaning, transforming, modeling, and interpretation. An introduction to data wrangling and management with real world applications. The statistical program R will be introduced. *Prerequisites: MAT 210 or MAT 240; COS 120 or SYS 120.*

MAT 312 College Geometry	4 hours	MAT 386 Actuarial Exam Preparation (FMI)	1 hour
Advanced Euclidean plane geometry with a brief survey of some of the non-Euclidean geometries and vector and transformational geometry. <i>Prerequisites: MAT 180 or MAT 345. Offered Spring semester of odd years.</i>		The focus of the course is to prepare students to take the Society of Actuaries Exam FM in Financial Mathematics. Topics include the fundamental concepts of financial mathematics, calculating present and accumulated values for various streams of cash flows. Sitting for the Society of Actuaries Exam FM is required for successful completion of the course. <i>Corequisite: MAT 385 or equivalent.</i>	
MAT 340 Advanced Calculus	4 hours	MAT 392 Mathematics Seminar	1 hour
An introduction to a rigorous development of the fundamental concepts of calculus. The real numbers and their standard topology, sequences, series, limits, differentiation, and integration are developed rigorously. <i>Prerequisites: MAT 240; MAT 180 or MAT 255. Offered Spring semester of even years.</i>		Each student in the seminar researches a mathematical topic and makes a presentation to the entire group. <i>Prerequisite: MAT 240. Offered Fall semester.</i>	
MAT 345 Linear Algebra	4 hours	MAT 393 Practicum	1-4 hours
A course on matrix theory, linear equations and linear dependence, vector spaces and linear transformations, characteristic equation, quadratic forms, and the singular value decomposition. <i>Prerequisite: MAT 240. Offered Spring semester.</i>		Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during the Summer.</i>	
MAT 352 Mathematical Statistics	4 hours	MAT 450 Directed Research	1-4 hours
A theoretical, as well as applied, study of counting outcomes, probability, probability distributions, sampling distributions, confidence intervals, tests of hypotheses, linear regression, and correlation. <i>Prerequisite: MAT 240. Offered Fall semester.</i>		Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.	
MAT 353 Actuarial Exam Preparation (PI)	1 hour	MAT 455 Abstract Algebra	3 hours
The focus of the course is to prepare students to take the Society of Actuaries Exam P in probability. Topics include applications of calculus, probability, and statistics to risk management. Sitting for the Society of Actuaries Exam P is required for successful completion of the course. <i>Prerequisite: MAT 352 or equivalent.</i>		The development of the postulates of group theory, rings, integral domains, and fields. Applications to cryptography. <i>Prerequisites: MAT 180 and MAT 240. Offered Spring semester of odd years.</i>	
MAT 360 Independent Study	1-4 hours	MAT 456 Advanced Algebra	3 hours
An individualized, directed study involving a specified topic.		A continued study of Abstract and Linear Algebra. Topics include Galois Theory, cryptography, and field extensions. <i>Prerequisite: MAT 455.</i>	
MAT 370 Selected Topics	1-4 hours	MAT 461 Real Analysis	3 hours
A course offered on a subject of interest but not listed as a regular course offering.		A study of the Lebesgue integral and its consequences, including convergence theorems, function spaces, and introductions to measure theory and operator theory. Metric spaces, uniform convergence of functions, and topological approaches to continuity are also considered. <i>Prerequisite: MAT 340. Offered Fall semester of even years.</i>	
MAT 382 Advanced Statistical Methods	3 hours	MAT 480 Seminar	1-4 hours
Introduction to a variety of topics including nonparametric statistical methods linear models, with simple linear regression, multiple regression, and analysis of variance as special cases of the linear model. The emphasis will be on translating applied questions into an appropriate statistical model, checking model assumptions, and interpreting analyses in applied contexts. A brief introduction to time series is included. <i>Prerequisites: MAT 210 or MAT 352; and MAT 146 or MAT 151.</i>		A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.	
MAT 385 Mathematics of Finance	3 hours	MAT 490 Honors	1-2 hours
This course is an introduction to the mathematical models used in finance and economics with a focus on interest theory (discrete and continuous). The goal is to provide an understanding of the fundamental concepts of financial mathematics and how those concepts are applied in calculating present and accumulated values for various streams of cash flows. Topics include the mathematical foundations of interest theory, annuities, loans, stocks, financial markets, arbitrage, and financial derivatives. The course can be used as a foundation for the FM actuarial exam. <i>Prerequisite or corequisite: MAT 230. Offered Fall semester of odd years.</i>		Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>	
		MAT 493 Senior Capstone	3 hours
		An overview of mathematics with an emphasis on the integration of all areas in undergraduate mathematics with an exploration of the relationship between mathematics and the Christian faith. <i>Open to senior status mathematics majors only. Offered during January interterm.</i>	

Natural Science

Science Research Training Program

The purpose of the Science Research Training Program is to stimulate students beyond “normal education” with hands-on practical experiences, promote real-world industrial relationships (careers), and prepare future graduate students. As faculty, students and staff, our goal is to pursue excellence (world leadership in selected research areas) and thereby stay on the cutting edge of scientific research and thought.

We encourage scholarly research and crossover interactions between various disciplines, and we promote publications in professional journals by Taylor University faculty and students. Where possible, we relate science with society and apply science and technology to various mission field needs. Research activities are carried on quietly and often on a long-range basis, but are essential to leadership and progress. During the summer months, when faculty and students can devote more time to independent research, student stipends are available for research one-on-one with a faculty member. These projects include the areas of biology, chemistry, computer science, engineering, environmental science, mathematics, and physics.

Natural Science Courses

NAS 125 Preparing for a Career as a Health Professional This course is designed to introduce beginning pre-medical students to the variety of careers available within the medical sciences. Speakers from different medical disciplines will discuss their careers, the types of opportunities available within these careers, and how to prepare for a career in their discipline. <i>This class does not meet any foundational core requirement and is not required for any major. It is recommended for freshman students taking the Pre-Medical options.</i>	1 hour	NAS 309 Science Education Methods This is a junior-level science education methods course for biology, chemistry, and physics majors obtaining certification in secondary education. This course covers the philosophy of science, science educational psychology, the science standards (both national and state), science curriculum development, classroom management and assessment, laboratory management and development, and technology and professional development in the sciences. <i>Prerequisites: EDU 150 and EDU 260.</i>	2 hours
NAS 170 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	NAS 325 Medical Career Admissions Preparation The purpose of this course is to prepare students for the application and interview processes you will go through in pursuing a career in the medical professions. There are four tracks to the course, each focused on a specific career: medical school, dental school, optometry, and careers that require the GRE (e.g., veterinary, physical therapy).	1 hour
NAS 201 Nature of Science A lecture and seminar based introduction to the nature of science in three main areas: life sciences, physical sciences, and earth and space sciences. The course will examine the scientific paradigm, the nature of science, and the characteristics of good science applied in these three main areas. The course will have three laboratory projects examining the nature of science in each area. <i>Offered Fall or Spring semesters. Meets any foundational core lab science requirement.</i>	3 hours	NAS 360 Independent Study An individualized, directed study involving a specified topic.	1-4 hours
NAS 220 Natural Science Research Methods To introduce general science research in the fields of biology, chemistry, computer science, engineering environmental science, mathematics, and physics. An overview of selected representative research topics, problem solving approaches, instrumentation, and analysis techniques. The lab emphasizes the use of scientific instrumentation and advanced computer software tools. <i>For students enrolled in pre-college summer experience. Meets any foundational core lab science requirement.</i>	4 hours	NAS 370 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours
NAS 230 Health Education for Behavior Change This course prepares students interested in various health care careers to perform health education in community settings. Topics include disease prevention, principles of exercise and movement, nutrition, helping skills, and behavior change theories. After successful completion of course, students are able to work in the Invitation Diabetes Prevention Program.	2 hours	NAS 393 Practicum Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. <i>Offered primarily during Summer.</i>	1-4 hours
NAS 270 Selected Topics A course offered on a subject of interest but not listed as a regular course offering.	1-4 hours	NAS 450 Directed Research Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.	1-4 hours
		NAS 480 Seminar A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion. <i>Seminar focuses on the integration of topics from contemporary science with an emphasis on recent research reports of interdisciplinary interest. Guest lecturers, faculty, and student reports serve as the method of instruction. Offered Fall semester.</i>	1 hour
		NAS 490 Honors Individualized study or research of an advanced topic within a student's major. <i>Open to students with at least a 3.00 GPA in the major field.</i>	1-2 hours

Physics and Engineering

Chair, Assistant Professor D. Nobles-Lookingbill
Professors R. Davis, K. Kiers
Associate Professor P. Staritz
Assistant Professor A. Roth

The purpose of the Physics and Engineering Department is to provide an educational experience within a Christian context that equips students with the ability to obtain knowledge and understanding about the physical world for use in research, graduate studies, and careers and to positively impact society. The Physics and Engineering Department offers instruction in physics, engineering, astronomy, and physical science. Theoretical high-energy physics, advanced engineering instrumentation, smart grid technologies, power electronics, advanced heat exchange manufacturing technology, thermal management systems, and microelectronics provide the major research interests in the department.

Departmental majors include Engineering, Mechanical Engineering, Physics, Physics Science Education, and Physics/Mathematics Education.

Physics (BA)

The Bachelor of Arts degree with a major in Physics requires two years of one foreign language, 78-80 hours in the major, and participation in a weekend retreat for students in the department. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

PHY 211	5	University Physics I
PHY 212	5	University Physics II
PHY 311	4	Modern Physics
PHY 321	3	Electricity and Magnetism
PHY 322	4	Waves and Physical Optics
PHY 330	2	Advanced Lab
PHY 341	3	Math Methods in Physics and Engineering
PHY 342	3	Analytical Mechanics
PHY 350	4	Thermodynamics and Statistical Mechanics
PHY 412	3	Quantum Mechanics
PHY 493	3	Physics Senior Capstone

Electives

Select 8 hours from the following:

ENP 200-499	1-8	Engineering Physics Electives
MAT 345	4	Linear Algebra
PHY 201‡	4	Introductory Astronomy
PHY 313	2	Nuclear Radiation Experimental Methods
PHY 370	1-4	Selected Topics (<i>approved by advisor</i>)
PHY 393	2	Practicum
PHY 413	2	Quantum Mechanics II
PHY 441	3	Advanced Mathematical Methods in Physics
PHY 450	1-4	Directed Research
PHY 491	1	Preparation for the Physics GRE

Additional Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
ENP 104	3	Introduction to Engineering and Software Tools
MAT 151	4	Calculus I
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations

Select one course from the following:

COS 130	3	Computational Problem Solving for Engineers
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

NAS 480	1	Seminar
IAS 231H	2	Issues in Science and Religion (<i>Honors</i>)

‡Special lab section required. Please see the catalog course description for more details.

Physics (BS)

The Bachelor of Science degree with a major in Physics requires 91-95 hours in the major and participation in a weekend retreat for students in the department. *All major courses must be completed with a grade of C- or better and are included in the major GPA.*

Major Requirements

PHY 211	5	University Physics I
PHY 212	5	University Physics II
PHY 311	4	Modern Physics
PHY 321	3	Electricity and Magnetism
PHY 322	4	Waves and Physical Optics
PHY 330	2	Advanced Lab
PHY 341	3	Math Methods in Physics and Engineering
PHY 342	3	Analytical Mechanics
PHY 350	4	Thermodynamics and Statistical Mechanics
PHY 412	3	Quantum Mechanics
PHY 413	2	Quantum Mechanics II
PHY 441	3	Advanced Mathematical Methods in Physics
PHY 491	1	Preparation for the Physics GRE
PHY 493	3	Physics Senior Capstone

Select one course from the following:

PHY 393	2	Practicum
PHY 450	2-4	Directed Research

Technical Electives

Select at least 2 additional hours from the following:

CHE 431	4	Physical Chemistry I
CHE 432	4	Physical Chemistry II
COS 121	4	Foundations of Computer Science
ENP 200-499	1-9	Engineering Physics Electives
MAT 310	3	Mathematical Modeling with Numerical Analysis
MAT 340	4	Advanced Calculus
MAT 352	4	Mathematical Statistics
MAT 382	3	Advanced Statistical Methods
MAT 455	3	Abstract Algebra
MAT 456	3	Advanced Algebra
MAT 461	3	Real Analysis
PHY 201‡	4	Introductory Astronomy
PHY 300-499	1-9	Physics Electives

Additional Major Requirements

CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II
ENP 104	3	Introduction to Engineering and Software Tools
MAT 151	4	Calculus I
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 345	4	Linear Algebra

Select one course from the following:

COS 130	3	Computational Problem Solving for Engineers
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

IAS 231H	2	Issues in Science and Religion (<i>Honors</i>)
NAS 480	1	Seminar

‡Special lab section required. Please see the catalog course description for more details.

Physics/Mathematics Education (BA/BS)

The Physics/Mathematics Education major requires 61 hours in addition to education courses and participation in a weekend retreat for students in the department. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Physics Core

ENP 231	4	Introduction to Electric Circuits
NAS 480	1	Seminar
PHY 211	4	University Physics I
PHY 212	5	University Physics II
PHY 311	4	Modern Physics
SYS 120	4	Introduction to Problem Solving

Select one course from the following:

PHY 493	3	Physics Senior Capstone
MAT 493	3	Mathematics Senior Capstone

Mathematics Core

MAT 151	4	Calculus I
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
MAT 280	3	Mathematics in the Junior High/Middle School
MAT 312	4	College Geometry
MAT 345	4	Linear Algebra
MAT 352	4	Mathematical Statistics

Electives

Select 2 hours of electives from the following:

ENP 252	4	Principles of Engineering
ENP 300-/400-level courses		
PHY 300-/400-level courses		

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 344	1	Educational Technology in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
SED 220	3	Exceptional Children

Select one course from the following:

NAS 309	2	Science Education Methods
MAT 309	2	Teaching Math in Secondary Schools

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Physics Science Education (BA/BS)

The Physics Science Education major requires 56 hours in addition to education courses and participation in a weekend retreat for students in the department. Optional concentrations are available in SpEd Mild-Moderate P-12 Licensure, SpEd Intense P-12 Licensure, and TESOL P-12 Licensure. The Bachelor of Arts degree requires two years of one foreign language. All major courses, including education curriculum courses, must be completed with a grade of C- or better and are included in the major GPA.

Major Requirements

CHE 211	4	College Chemistry I
ENP 231	4	Introduction to Electric Circuits
NAS 480	1	Seminar
SYS 120	4	Introduction to Problem Solving

Additional Major Requirements

MAT 151	4	Calculus I
MAT 230	4	Calculus II
MAT 240	4	Calculus III
PHY 211	4	University Physics I
PHY 212	5	University Physics II
PHY 311	4	Modern Physics
PHY 330	2	Advanced Lab
PHY 493	3	Physics Senior Capstone

Electives

Select 13 hours of electives from the following:

ENP 252	4	Principles of Engineering
ENP 300-/400-level courses		
PHY 300-/400-level courses		

Professional Education

EDU 150	3	Education in America
EDU 222	2	Reading in the Content Area for Secondary Teachers
EDU 260	3	Educational Psychology
EDU 307	2	Discipline and Classroom Management for Secondary Teachers
EDU 309	1	Methods of Instruction and Assessment in Secondary Education
EDU 332	2	The Junior High/Middle School
EDU 344	1	Educational Technology in Secondary Education
EDU 384	1	Perspectives on Diversity
EDU 431	17	Supervised Internship in Secondary Schools
NAS 309	2	Science Education Methods
SED 220	3	Exceptional Children

Additional Education Requirements

ENG 110	3	College Composition
PSY 340	3	Adolescent Psychology

Select one course from the following:

CAC 160	3	Integrative Communication
COM 210	3	Public Speaking

Applied Physics Minor

A minor in Applied Physics consists of 20 hours. This minor may not be awarded with any Physics or Engineering major or minor. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PHY 211	4-5	University Physics I
PHY 212	5	University Physics II

Electives

Select 6 hours from the following:

ENP ____	1-6	Any Engineering course
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Select enough elective credit hours of engineering courses or upper-division (300- or 400-level) physics courses to reach 20 credit hours.

Physics Minor

A minor in Physics consists of 20 hours. This minor may not be awarded with a major or minor from within the department. All minor courses must be completed with a grade of C- or better and are included in the minor GPA.

Minor Requirements

PHY 211	4-5	University Physics I
PHY 212	5	University Physics II

Electives

Select enough elective credit hours of upper-division (300- or 400-level) physics courses to reach 20 credit hours.

Engineering (BS)

The Bachelor of Science degree with a major in Engineering requires the completion of 103-105 hours and participation in a weekend retreat for students in the department. It is a general engineering degree which prepares students for industry practice and/or graduate study in a variety of engineering disciplines. Students select one or two* of four concentrations to align with individual interests and career goals. This program is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>. Courses may not be used to fulfill more than one major requirement: core, concentration, elective. *Engineering students may elect any double concentration, provided (1) they meet the requirements of both concentrations, (2) neither of the concentrations is General engineering, and (3) the total number of concentration credits (non-core) is at least 32 (34 if Physics is one concentration). These restrictions mean that any double concentration will require at least 8 Tier B credit hours beyond the credit hours required for a single concentration. All major courses, including those in the concentration(s), must be completed with a grade of C- or better and are included in the major GPA.

Program Objectives:

1. Prepare our graduates to serve others dependably, most importantly their employer, customers, and community.
2. Prepare our graduates to practice technical competence, producing trustworthy engineering designs.
3. Prepare our graduates to exercise creativity in their work, fostering innovative solutions.
4. Prepare our graduates to pursue growth in their faith, social understanding, and technical competence so that they can adapt to meet the needs of an ever-changing world.

Engineering Core Requirements (36)

COS 130	3	Computational Problem Solving for Engineers
ENP 104	3	Introduction to Engineering and Software Tools
ENP 231	4	Introduction to Electric Circuits
ENP 301	3	Statics
ENP 332	4	Control Systems
ENP 351	3	Engineering Thermodynamics
ENP 352	3	Materials Science
ENP 392	3	Junior Engineering Project
ENP 393	2	Practicum
ENP 405	1	Engineering Ethics
ENP 491	1	Review of the Fundamentals of Engineering
ENP 493	2	Engineering Senior Capstone I
ENP 494	3	Engineering Senior Capstone II
ENP 495	1	Engineering Senior Capstone III

Science and Math Core Requirements (37)

CHE 211	4	College Chemistry I
MAT 151	4	Calculus I
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
PHY 211	5	University Physics I
PHY 212	5	University Physics II
PHY 341	3	Math Methods in Physics and Engineering

Select one course from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Additional Core Requirements (6)

ECO 201	3	Principles of Microeconomics
SYS 330	3	Human Relations in Organizations

Select one or two* concentration areas: **Electrical, General, Mechanical, Physics**

Electrical (24)

ENP 253	4	Electrical Circuits II
ENP 261	3	Digital Systems Design
ENP 321	2	Applied Electromagnetics
ENP 341	4	Microcomputer Interfacing
ENP 431	4	Advanced Electronics and Microcircuits
PHY 311	4	Modern Physics
PHY 321	3	Electricity and Magnetism

General (24)

Select one course from the following:

ENP 252	4	Engineering Systems
ENP 253	4	Electrical Circuits II

Select 1-5 additional hours from Tier A: Engineering Electives

Select 2 additional hours from Tier B: Engineering, Mathematics, and Science Electives

Tier A: Engineering Electives

COS 121	4	Foundations of Computer Science
ENP 261	3	Digital Systems Design
ENP 302	3	Mechanics of Materials
ENP 303	3	Dynamics
ENP 321	2	Applied Electromagnetics
ENP 341	4	Microcomputer Interfacing
ENP 355	3	Fluid Mechanics and Water Flow
ENP 357	3	Heat Transfer
ENP 359	2	Mechanical Engineering Laboratory
ENP 394	1-4	Advanced Engineering Project
ENP 431	4	Advanced Electronics and Microcircuits

Mechanical (24)

ENP 252	4	Engineering Systems
ENP 302	3	Mechanics of Materials
ENP 303	3	Dynamics
ENP 355	3	Fluid Mechanics and Water Flow
ENP 357	3	Heat Transfer
ENP 359	2	Mechanical Engineering Laboratory

Select 6 additional hours from Tier B: Engineering, Mathematics, and Science Electives

Physics (26)

ENP 253	4	Electrical Circuits II
PHY 311	4	Modern Physics
PHY 321	3	Electricity and Magnetism
PHY 322	4	Waves and Physical Optics
PHY 412	3	Quantum Mechanics I

Select 8 additional hours from Tier A: Engineering Electives

Tier B: Engineering, Mathematics, and Science Electives

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 203	4	Principles of Genetics
CHE 212	4	College Chemistry II
COS 121	4	Foundations of Computer Science
COS 230	3	Missions Technology
ENP 261	3	Digital Systems Design
ENP 360	1-4	Independent Study
ENP 370	1-4	Selected Topics
ENP 386	3	Shop Machining and Fabrication
ENP 450	1-4	Directed Research
ENS 241	4	Physical Geology
MAT 345	4	Linear Algebra
BIO ____	1-10	Any 300/400 electives not used in major
CHE ____	1-10	Any 300/400 electives not used in major
COS ____	1-10	Any 300/400 electives not used in major
ENP ____	1-10	Any 300/400 electives not used in major
ENS ____	1-10	Any 300/400 electives not used in major
MAT ____	1-10	Any 300/400 electives not used in major
PHY ____	1-10	Any 300/400 electives not used in major
SYS ____	1-10	Any 300/400 electives not used in major

¹Excluding MAT 301, 302, 309

Mechanical Engineering (BS)

The Bachelor of Science degree with a major in Mechanical Engineering requires the completion of 103 hours and participation in a weekend retreat for students in the department. Courses may not be used to fulfill more than one major requirement: core, concentration, elective. *All major courses, including those in the concentration(s), must be completed with a grade of C- or better and are included in the major GPA.*

Program Objectives:

1. Prepare our graduates to serve others dependably, most importantly their employer, customers, and community.
2. Prepare our graduates to practice technical competence, producing trustworthy engineering designs.
3. Prepare our graduates to exercise creativity in their work, fostering innovative solutions.
4. Prepare our graduates to pursue growth in their faith, social understanding, and technical competence so that they can adapt to meet the needs of an ever-changing world.

Engineering Core Requirements

COS 130	3	Computational Problem Solving for Engineers
ENP 104	3	Introduction to Engineering and Software Tools
ENP 231	4	Introduction to Electric Circuits
ENP 301	3	Statics
ENP 332	4	Control Systems
ENP 351	3	Engineering Thermodynamics
ENP 352	3	Materials Science
ENP 392	3	Junior Engineering Project
ENP 393	2	Practicum
ENP 405	1	Engineering Ethics
ENP 491	1	Review of the Fundamentals of Engineering
ENP 493	2	Engineering Senior Capstone I
ENP 494	3	Engineering Senior Capstone II
ENP 495	1	Engineering Senior Capstone III

Mechanical Engineering Requirements

ENP 252	4	Engineering Systems
ENP 302	3	Mechanics of Materials
ENP 303	3	Dynamics
ENP 355	3	Fluid Mechanics and Water Flow
ENP 357	3	Heat Transfer
ENP 359	2	Mechanical Engineering Laboratory

Select 6 additional hours from Tier B: Engineering, Mathematics, and Science Electives listed under Engineering major.

Science and Math Core Requirements

CHE 211	4	College Chemistry I
MAT 151	4	Calculus I
MAT 230	4	Calculus II
MAT 240	4	Calculus III
MAT 251	4	Differential Equations
PHY 211	5	University Physics I
PHY 212	5	University Physics II
PHY 341	3	Math Methods in Physics and Engineering

Select one course from the following:

MAT 210	4	Introductory Statistics
MAT 352	4	Mathematical Statistics

Additional Core Requirements

ECO 201	3	Principles of Microeconomics
SYS 330	3	Human Relations in Organizations

Computer Engineering

Computer Engineering is an interdisciplinary major offered jointly by the Physics and Engineering and the Computer Science and Engineering Departments. For program details, refer to the **Computer Science and Engineering** section of this catalog.

Engineering Courses

ENP 104 3 hours

Introduction to Engineering and Software Tools

This course introduces the students to the engineering discipline, providing a hands-on overview of the tools they will acquire and use over the course of their major. These tools include process and methodology tools, analytical tools, software tools, and hardware tools. A goal of the course is to provide the students with a framework for their engineering studies along with a practical 'hands-on' example of what engineering might "look like." This framework should help the student better understand the role, need, and benefit of each successive course in their major. A group hardware project will be carried out as part of the course, helping to engage the students' learning and interest, and re-enforcing the concepts taught in class. *One hour of lecture and three hours of lab. Offered January interterm. Prerequisite: PHY 211.*

ENP 170 1-4 hours

Selected Topics

A course offered on a subject of interest but not listed as a regular course offering.

ENP 231 4 hours

Introduction to Electric Circuits

First course in electric circuits, where DC, time-dependent, and AC circuits are each introduced. Network analysis, network reduction techniques, time-domain solutions to simple 1st and 2nd order circuits, and steady-state analysis of sinusoidally excited circuits are each developed. Weekly lab introduces breadboarding, debugging, and testing of basic electric and electronic circuits using common test equipment. An introduction and use of basic electronic devices such as op-amps, the Shockley diode and BJT or MOSFET transistors is also included. An emphasis is placed on SPICE circuit simulation throughout the semester. A course project introduces students to ECAD software, where they create, build, and test a custom printed circuit board (PCB) circuit. *Prerequisites: PHY 212 and ENP 104, or permission of instructor. Offered Fall semester.*

ENP 252 4 hours

Principles of Engineering

This course focuses on the mathematical modeling and analysis of lumped-element physical systems—translational and rotational mechanical systems, electrical systems, heat transfer systems, and fluid systems. Unifying concepts of flow, effort, and impedance are emphasized, along with the use of transfer function descriptions, frequency domain analysis, and Laplace Transform analysis. The laboratory component focuses on modeling and simulation, design of experiments with a directed design process, and software skill development, including MATLAB and Simulink. This course includes a major project component. A formal presentation of technical work including research, analysis, critical thinking, and original thought is required. *Prerequisite: ENP 231. Corequisite: MAT 251. Offered Spring semester. Offered Spring semester.*

ENP 253 4 hours

Electrical Circuits II

Building on the foundations of electric circuits, this second course focuses on topics including operational amplifiers (ideal and non-ideal), transient responses of circuits, frequency response of operational amplifiers, frequency domain analysis, transfer functions, filters, Bode plots, and Laplace Transform analysis. The laboratory component focuses on modeling and simulation, design of experiments with a directed design process, and software skill development, including MATLAB and Simulink. This course includes a major project component. A formal presentation of technical work including research, analysis, critical thinking, and original thought is required. *Prerequisite: ENP 231. Corequisite: MAT 251. Offered Spring semester.*

ENP 261 3 hours

Digital Systems Design

Digital Systems are explored, including combinational (e.g., multiplexors and decoders) and sequential (e.g., flip-flops and registers) logic. Circuit minimization techniques such as Boolean algebra and Karnaugh maps are examined. Mealy and Moore finite state machines will be developed to model systems. Designs will culminate in projects that simulate circuits with a hardware description language and then synthesized on an FPGA. *Offered Spring semester of even years.*

- ENP 270** 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.
- ENP 301** 3 hours
Statics
This course is a one-semester introduction to the statics of particles and rigid bodies. Topics include forces, moments, equilibrium, and structures in equilibrium. Course makes applications to engineering and uses software tools for engineering mechanics. *Prerequisites: PHY 211 and MAT 230. Offered Fall semester.*
- ENP 302** 3 hours
Mechanics of Materials
Course investigates the fundamentals of the mechanics and strength of materials. Topics covered include stress-strain relationships, Mohr's circle, axial loading, torsion, beam loading, and linear buckling. *Prerequisite: ENP 301. Offered Spring semester of even years.*
- ENP 303** 3 hours
Dynamics
This course covers the basic principles of dynamic mechanical systems, as derived from Newtonian mechanics. The main topics covered include kinematics of particles, kinetics of particles (using both force and energy/momentum methods), kinetics of systems of particles, kinematics of rigid bodies, and 2-D kinetics (plane motion) of rigid bodies (using both force and energy/momentum methods). *Prerequisite: ENP 301. Offered Spring semester of odd years.*
- ENP 321** 2 hours
Applied Electromagnetics
The course considers the application and technology of electromagnetic field theory to computing and communications systems. Topics may include wave propagation, transmission lines, fiber optics, high frequency communication networks, antennas, and satellite communications. *Prerequisites: ENP 252, MAT 251, and ENP 231. Offered Spring semester of odd years.*
- ENP 332** 4 hours
Control Systems
This is an introductory course in Signals, Systems and Controls. A selection of topics is chosen from a conventional two-course sequence of "Signals and Systems" and "Automatic Control". Mathematical tools for studying linear time invariant (LTI) continuous time systems are developed. These include describing and analyzing LTI systems according to their 1) differential equation, 2) impulse response, 3) state-space representation, and 4) frequency response representation. Transform methods including Fourier series, Fourier Transform, and Laplace Transform are also developed as needed. The Controls portion of the course includes time-domain transient response, steady-state response, and stability tests. Frequency domain analysis such as root-locus and Nyquist stability are also introduced. *Prerequisites: ENP 252 and MAT 251. Offered Spring semester of odd years.*
- ENP 341** 4 hours
Microcomputer Interfacing
Course develops the student's ability to design, build and test embedded systems. Hardware architecture and software programming of microcontrollers and other embedded system devices are studied. Operation and use of LCDs, A to D and D to A converters, keypads and other interface devices are investigated. Serial communication through I2C, OneWire, USB, and RS232 are used. In addition, networking and RF techniques and protocols are studied. *Prerequisite: ENP 231 or permission of instructor. Offered Fall semester of even years.*
- ENP 351** 3 hours
Engineering Thermodynamics
Course develops engineering thermodynamics including use of the first and second law, phase diagrams, properties, heat transfer, second law consequences, power and refrigeration cycles as well as other selected topics. *Prerequisites: ENP 252, MAT 251, and PHY 212. Offered Fall semester.*
- ENP 352** 3 hours
Materials Science
The structure, processing, and properties of engineering materials are studied with an emphasis on metallic systems. This includes crystal structure, defects, diffusion, phase transformations, deformation mechanisms, strength, and fracture toughness. Also covered are material selection, linear elastic fracture mechanics, and dislocation theory. *Prerequisite: ENP 252. Offered Fall semester of odd years.*
- ENP 355** 3 hours
Fluid Mechanics and Water Flow
An introduction to the basic properties of fluids in motion. Topics include Differential fluid equations, streamlines, continuity, energy and linear angular momentum, incompressible viscous flow, potential flow, Navier-Stokes equations, open channel flow, pipe flow, laminar and turbulent boundary layers. *Prerequisite: ENP 252. Corequisite: MAT 251. Offered Fall semester.*
- ENP 357** 3 hours
Heat Transfer
Course investigates the fundamentals of heat transfer and applies those fundamentals to engineering applications. Topics covered include modeling of conduction, convection, radiation, and mixed mode heat transfer problems. Course covers both steady state and transient response. *Prerequisites: ENP 252, ENP 351, and ENP 355. Offered Spring semester.*
- ENP 359** 2 hours
Mechanical Engineering Laboratory
In this course, laboratory experiments reinforce key concepts encountered in mechanical engineering. Topics include materials science, fluid mechanics, thermodynamics, heat transfer, dynamics, and mechanics of materials. Students actively participate in the configuration of sensors and build data acquisition programs as they develop familiarity with various aspects of experimental measurements. Laboratory exercises include elements of data analysis, assessment of experimental uncertainty, and technical writing. *Prerequisite: ENP 252. Offered Fall semester of even years.*
- ENP 360** 1-4 hours
Independent Study
An individualized, directed study involving a specified topic.
- ENP 370** 1-4 hours
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.
- ENP 386** 3 hours
Shop Machining and Fabrication
Through hands-on engineering projects and instruction, this course provides skills and knowledge in machining, metal fabrication techniques, and proper safety and PPE practices. Students learn and use machines such as a metal lathe, knee mill, CNC mill, MIG, TIG, and stick welders, and a CNC plasma cutter. *Prerequisite: ENP 104 and an Engineering major or instructor approval. Offered Fall semester.*
- ENP 392** 2-4 hours
Junior Engineering Project
In the context of completing an engineering project, students learn and practice: elements of the design process, the ability to be innovative and think creatively, the ability to acquire new knowledge and skills, the ability to solve engineering problems, the application of analytical and software tools to engineering problems, and the ability to communicate effectively. Focus on the "thoughtful design process" is particularly emphasized. *Prerequisite: ENP 252. Offered Spring semesters.*
- ENP 393** 1-4 hours
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Practicum must involve significant engineering work experience and preference is given to an experience away from the Taylor campus. Offered primarily during Summer. Prerequisite: ENP 252 and junior or senior status.*
- ENP 394** 1-4 hours
Advanced Engineering Project
Students complete an open-ended project, laboratory experiment or research project. The individual project depends on student and faculty interest. Many projects are externally funded. Specific learning outcomes vary depending on faculty, student, and project selected. *Prerequisite: ENP 252.*
- ENP 405** 1 hour
Engineering Ethics
Course introduces students to the ethical requirements of the engineering profession and the ethical issues associated with living in a technological intense digital society. Through the course, students should: appreciate the ethical use of computers and dangers of computer misuses, have knowledge of professional codes of ethics, be aware of the impact of technology on society, have an appreciation for the needs of society and how engineering can meet those needs, and begin developing an understanding of how their Christian faith integrates with their engineering practice. *Prerequisite: ENP 493 or COS 493. Offered Spring semester.*
- ENP 431** 4 hours
Advanced Electronics and Microcircuits
Modeling and analysis of basic electronic devices—primarily diodes and transistors. Applications are made to various analog and digital circuits, including single and multi-stage amplifiers. *Prerequisites: ENP 231 and ENP 252. Offered Fall semester of odd years.*
- ENP 450** 1-4 hours
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

ENP 470 **2-4 hours**
Advanced Special Topics in Engineering
 This course provides advanced engineering topics and coursework to all engineering majors. The topics serve to better equip students for specific engineering fields or are designed to provide advanced technical knowledge. *This course may be repeated with different advanced topics.*

ENP 480 **1-4 hours**
Seminar
 A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

ENP 490 **1-2 hours**
Honors
 Individualized study or research of an advanced topic within a student's major. Open to students with at least a 3.00 GPA in the major field.

ENP 491 **1 hour**
Review of the Fundamentals of Engineering
 Course reviews the fundamentals of engineering and prepares students to enter the engineering profession. Depending on students' incoming ability, the course will review subjects from chemistry, computers, dynamics, electric circuits, engineering economics, ethics, fluid mechanics, materials science, mathematics, mechanics of materials, statics, and thermodynamics. *Prerequisite: Senior status. Offered Spring semester.*

ENP 493 **2 hours**
Engineering Senior Capstone I
 The first of a three-course culminating experience, this course prepares students for engineering practice through a major design experience based on knowledge and skills acquired in earlier course work. Incorporating engineering standards and realistic constraints, this course places value on economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political considerations. *Prerequisite: Senior Engineering major. Offered Fall semester.*

ENP 494 **3 hours**
Engineering Senior Capstone II
 The second of a three-course culminating experience, this course prepares students for engineering practice through a major design experience based on knowledge and skills acquired in earlier course work. Incorporating engineering standards and realistic constraints, this course places value on economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political considerations. This course also prepares students to serve God and humanity through active service to their family, church, employer, and global community. *Prerequisite: ENP 493. Offered January interterm.*

ENP 495 **1 hour**
Engineering Senior Capstone III
 The third of a three-course culminating experience, this course prepares students for engineering practice through a major design experience based on knowledge and skills acquired in earlier course work. Incorporating engineering standards and realistic constraints, this course places value on economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political considerations. In this third course of the sequence, the focus is on technical documentation and presentation of work completed in the first two courses of the capstone experience. A formal presentation of technical work including research, analysis, critical thinking, and original thought is required. *Prerequisite: ENP 494. Offered Spring semester.*

Physics Courses

PHY 120 **4 hours**
Renewable Energy Principles
 Intended for non-science majors. The continuum of energy use drives society to consider renewable and sustainable resource models based on physical principles, chemistry, and Earth science while connecting to theology and the "big picture" of the universe. *Three hours of lecture and two hours of lab (focusing on renewable energy) each week. Meets foundational core physical science requirements.*

PHY 170 **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

PHY 201 **3-4 hours**
Introductory Astronomy
 A descriptive course about the solar system, stars and stellar evolution, galaxies, and the universe. Recent findings of space exploration and radio astronomy are included. Telescopes are provided for viewing sessions. Two or three hours of lecture and two hours of lab. *Physics majors wishing to take PHY 201 for elective credit must take the "majors-only" lab section that is offered intermittently. Students interested in this option should consult with the department chair to determine availability of this special lab section. Students taking PHY 201 for elective credit should also check to ensure that they maintain the required minimum number of upper-division credit hours. Meets foundational core earth science requirement.*

PHY 203 **4 hours**
General Physics I
 A study of mechanics, thermodynamics, waves and sound, electricity, magnetism, and optics. Assumes mathematics at the algebra-trigonometry level. For majors that do not require a calculus-based treatment of physics. *Meets foundational core physical science requirement. Three hours of lecture and two hours of lab. Offered annually.*

PHY 204 **4 hours**
General Physics II
 See PHY 203.

PHY 211 **4-5 hours**
University Physics I
 A calculus-based study of mechanics, waves and sound, electricity and magnetism, optics, fluids, and the structure of matter. *The 4 hour course consists of four hours of lecture (for three-quarters of the term) and two hours of lab (for the entire term). The five-hour version also incorporates the study of thermodynamics and consists of four hours of lectures and two hours of lab. Meets foundational core physical science requirement. Corequisite: MAT 146 or MAT 151. Offered annually.*

PHY 212 **5 hours**
University Physics II
 Four hours of lecture and two hours of lab. See PHY 211. *Prerequisite: PHY 211. Corequisite: MAT 230.*

PHY 270 **1-4 hours**
Selected Topics
 A course offered on a subject of interest but not listed as a regular course offering.

PHY 310 **3 hours**
Modern Physics
 An introduction to modern physics, including special relativity, quantum effects of radiation and particles, and elementary particles. *Three hours of lecture per week. Prerequisites: PHY 211 and PHY 212. Offered Fall semester.*

PHY 311 **4 hours**
Modern Physics
 An introduction to modern physics, including special relativity, quantum effects of radiation and particles, atomic structure, and elementary particles. *Three hours of lecture and two hours of lab per week. Prerequisites: PHY 211 and PHY 212. Offered Fall semester.*

PHY 313 **2 hours**
Nuclear Radiation Experimental Methods
 A study of nuclear radiation and detection and experimental methods of measuring nuclear radiation. *One hour of lecture and two hours of lab per week. Prerequisites: PHY 211 and PHY 212. Offered intermittently.*

PHY 321 **3 hours**
Electricity and Magnetism
 The vector field approach to electromagnetic theory. Includes electrostatics, magnetostatics, induction, dielectric and magnetic materials, and Maxwell's equations. *Co-requisites: MAT 251 and PHY 341. Prerequisites: PHY 211 and PHY 212. Offered Fall semester of even years.*

PHY 322 **4 hours**
Waves and Physical Optics
 Applications of Maxwell's equations, including electromagnetic waves, wave guides, diffraction, and Fourier optics. *Three hours of lecture and three hours of lab per week. Prerequisites: PHY 211, PHY 212, and PHY 321. Offered Spring semester of odd years.*

PHY 330 **1-2 hours**
Advanced Lab
 Students complete an open-ended project, laboratory experiment or research project. The individual project depends on student and faculty interests. Specific learning outcomes vary depending on faculty, student and project selected. *Prerequisites: ENP 252 or ENP 301 or PHY 311 and junior classification. Offered as needed for physics and engineering physics majors.*

PHY 341 **3 hours**
Math Methods in Physics and Engineering
 An application of analytical and computational methods to various mathematical topics, including linear algebra, matrices, eigenequations, vector field theory, partial differential equations, Fourier series and transforms, orthogonal functions, and complex analysis. Use of a computer application such as MATLAB is required. *Prerequisite: PHY 212. Corequisite: MAT 251. Offered Spring semester.*

PHY 342 **3 hours**
Analytical Mechanics
A formal treatment of mechanics covering harmonic motion, the translation and rotation of rigid bodies, non-inertial reference frames, and gravitation. The course concludes with the Hamiltonian and Lagrangian formulations of mechanics. *Prerequisites: PHY 211, PHY 212, and PHY 341. Offered Spring semester of even years.*

PHY 350 **4 hours**
Thermodynamics and Statistical Mechanics
Develops thermal physics and statistical mechanics, with application to solid state physics. In the thermal physics portion of the course, the three laws of thermodynamics are developed and applied to problems. In the statistical mechanics portion, the development of the partition function is accomplished through the microcanonical formalism. The partition function is then applied to various problems, such as: Bose-Einstein and Fermi-Dirac statistics, Bose-Einstein condensation, blackbody radiation, and the behavior of electrons and phonons in solid materials. *Prerequisite: PHY 341.*

PHY 360 **1-4 hours**
Independent Study
An individualized, directed study involving a specified topic.

PHY 370 **1-4 hours**
Selected Topics
A course offered on a subject of interest but not listed as a regular course offering.

PHY 393 **1-4 hours**
Practicum
Supervised learning involving a first-hand field experience or a project. Generally, one hour of credit is awarded for a minimum of 40 hours of practicum experience. *Offered primarily during Summer.*

PHY 412 **3 hours**
Quantum Mechanics
A quantum mechanical treatment of the free particle, harmonic oscillator, and hydrogen atom. Includes creation and annihilation operators and an introduction to angular momentum. *Prerequisites: PHY 211, PHY 212, PHY 311, and PHY 341. Offered Spring semester of odd years.*

PHY 413 **2 hours**
Quantum Mechanics II
An in-depth treatment of several advanced topics in quantum mechanics. Topics covered include spin, angular momentum, three-dimensional problems, matrix mechanics, the density matrix, and perturbation theory. *Prerequisite: PHY 412. Offered Fall semester of odd years.*

PHY 441 **3 hours**
Advanced Mathematical Methods in Physics
Application of analytical and computational methods to various advanced mathematical topics in physics, such as: group theory, complex analysis, partial differential equations, Green's functions, the Gamma function, Bessel functions, Legendre functions, and Fourier analysis. *Prerequisite: PHY 341. Offered Fall semester of even years.*

PHY 450 **1-4 hours**
Directed Research
Investigative learning involving closely directed research and the use of such facilities as the library or laboratory.

PHY 480 **1-4 hours**
Seminar
A limited-enrollment course designed especially for upper-class majors with emphasis on directed readings and discussion.

PHY 490 **1-2 hours**
Honors
Individualized study or research of an advanced topic within a student's major. *Open to students with at least a 3.00 GPA in the major field.*

PHY 491 **1 hour**
Preparation for the Physics GRE
A review of topics covered in the undergraduate physics curriculum. The purpose of the course is to help students prepare for the GRE Subject Test in Physics. Topics reviewed include Classical Mechanics (including the Lagrangian formalism), Modern Physics (including Quantum Mechanics and Special Relativity), Electricity and Magnetism, Optics, Thermodynamics, and Electronics. *Prerequisite: junior or senior status.*

PHY 493 **3 hours**
Physics Senior Capstone
A capstone course in which each senior's technical, analytical, and laboratory skills, along with coursework knowledge, are applied to an intensive physics or engineering project. Three weeks are devoted to the completion of the project, and the remainder of the term is spent off-campus, strengthening interpersonal relationships, integrating faith and learning, and examining topics critical to post-baccalaureate life. *Prerequisite: Senior status.*

Notes



TAYLOR
UNIVERSITY

**School of
Nursing**

KAREN ELSEA, EDD, DEAN

NURSING

Nursing

Pre-Nursing

Erik Hayes, Advisor

While preparation for graduate work in medicine or allied health fields can be done through any major available at Taylor, if necessary preparatory courses are taken, majors in these areas offer concentrations designed specifically for this purpose. The Pre-Nursing major includes a dual degree program leading to an undergraduate degree in Nursing.

A major in Pre-Nursing is offered with an optional concentration in Public Health. Upon successful completion of the three years of required curriculum at Taylor University, students must then complete an approved Transition to Nursing/BSN program. Following the receipt of an official transcript verifying the satisfactory completion of the Bachelor of Science in Nursing (BSN) program, the student is awarded a Bachelor of Science degree by Taylor University.

Careful planning should allow opportunity for study in affiliated programs, including health science and public health courses in Ecuador.

All Taylor University degree requirements are applicable with the following exception: 22 of the final 30 credit hours completed through Taylor. Normally, students complete all applicable requirements within three years, including at least 101 credits from a minimum of 43 major hours, foundational core curriculum, and general electives. A minimum of 64 earned credit hours must be through Taylor.

Taylor University currently maintains a preferred admissions agreement with Indiana Wesleyan University's 14 month accelerated nursing program, but cannot guarantee acceptance into this BSN program for any individual student.

Pre-Nursing (BS)

The Bachelor of Science degree with a major in Pre-Nursing requires 42-65 hours with an optional concentration in Public Health in addition to the successful completion of an approved BSN program from an accredited school. Taylor University cannot guarantee acceptance into a BSN program. *All major courses, including those in the concentration, must be completed with a grade of C- or better and are included in the major GPA; only courses taken through Taylor count toward the major and cumulative GPA.*

Major Requirements

BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
BIO 310	4	Human Anatomy and Physiology I
BIO 311	4	Human Anatomy and Physiology II
BIO 370*	3-4	Special Topics (<i>advisor approval</i>)
EXS 316	3	Applied Nutrition
KIN 221	3	Exercise as Medicine
KIN 355	3	Research Methods
MAT 210	4	Introductory Statistics
PBH 100	3	Introduction to Public Health
PSY 395	3	Health Psychology

Select one of the following chemistry course combinations:

CHE 201	4	General, Organic, and Biochemistry I
CHE 202	4	General, Organic, and Biochemistry II
<i>or</i>		
CHE 211	4	College Chemistry I
CHE 212	4	College Chemistry II

Successful completion of an approved BSN program from an accredited school.

*Must be an approved Microbiology for Nursing course.

An optional concentration may be added:

Public Health

PBH 110	3	Global Health
PBH 320	4	Epidemiology
PBH 330	3	Assessment for Program Planning
PBH 350	3	Determinants of Health and Health Equity
<i>Select 2 credits from the following courses:</i>		
EXS 217	3	Health Promotion Program Planning
PBH 340	4	Community Health Development in Practice
PBH 346	3	Public and Community Health
PBH 393	3	Practicum