THIEL
COLLEGE

2022 – 2023
Degree Requirements

Core Requirements

Associate of Arts and Associate of Science Degree

The College currently offers five associate degrees. All require a minimum of 60 credit hours (CH) including core and specified credit hours in the area of study, with at least a 2.0 cumulative grade point average (GPA):

- **Associate of Arts, Liberal Studies**, includes broad preparation in foundational skills and knowledge and five electives in the student's prospective area of study (typically a minor).
- **Associate of Arts, Accounting**, includes broad preparation in foundational skills and knowledge and 27 specified credit hours in Accounting.
- **Associate of Arts, Business Administration**, includes broad preparation in foundational skills and knowledge and 30 specified credit hours in Business Administration.
- **Associate of Arts, Criminal Justice Studies**, includes broad preparation in foundational skills and knowledge and 27 specified credit hours in Criminal Justice.
- **Associate of Science, Information Systems**, includes broad preparation in foundational skills and knowledge and 20 specified credit hours in Information Systems.

When core (below) and disciplinary requirements are met, additional credit hours may be elected by the student, with approval by the student's advisor. Successful completion of the program provides students the opportunity to complete a baccalaureate degree or enter the professional workforce.

1. **SEMS 110: Introduction to Seminar Series (3 CH)**
    - This seminar, taken during the student's first year at Thiel College, is the first seminar within the core series. It is designed to introduce students to seminar style learning in a disciplinary context. SEMS 110 must be completed with a C- or higher to meet graduation requirements.
2. **Composition (3 CH)**
    - Successfully complete ENG 101: College Writing (C- or higher required).
3. **Presentation (3 CH)**
    - Successfully complete INDS 101: Introduction to Presentational Literacy (C- or higher required).
4. **Quantitative and Scientific Reasoning (10-11 CH)**
    - **Quantitative Reasoning**
        - Students must earn a grade of C- or higher in MATH 125
    - **Scientific Reasoning**
        - Successfully complete one natural or physical science laboratory course.
    - **Additional Quantitative / Scientific Reasoning Course**
        - Successfully complete one additional course satisfying either Quantitative or Scientific Reasoning: computer science, mathematics, natural or physical science course—biology, chemistry, computer science, environmental science, geology, neuroscience, mathematics, or physics. PSY/SOC 233, Statistics for Social Sciences, will also fulfill this requirement. Courses with the CIS and IS prefix will not satisfy this requirement.

5. **Creative and Humanistic (9-11 CH)**
    - **Creative (3-4 CH)**
        - Successfully complete a course (or earn at least 3 CH) in art, music or theatre excluding THAR 101: Theatre Practicum.
    - **Humanistic (6-7 CH)**
        - Students must successfully complete REL 120, 121, 122 or 123 and one additional course in English, history, languages, philosophy or religion.
6. **Socio-Political (3-4 CH)**
    - Successfully complete one course in economics, geography, political science, psychology, sociology or criminal justice studies. Courses with the prefix ACCT, BADM, EDUC, ECE, SPED, and SECED will not satisfy this requirement.
7. **Concern for Physical Well-Being (2-3 CH)**
    - Thiel College hopes to engage our students in activities that build their appreciation for and participation in healthy activity. These courses are designed to promote an intellectual understanding of physical well-being and development to provide the opportunity for students to apply theory in a variety of structured options.
    - Students will successfully complete two or three credit hours of theory courses such as AH 105 Taking Care of your Health, AH 115 Food Patterns and Health, AH 125 Nutrition, HPED 198 Slimnastics, or HPED 199 Fitness for Life and Wellness.

Accounting

Associate of Arts Degree

1. A minimum of 64 credit hours with at least a 2.0 cumulative and major GPA is required.
2. Core requirements for the A.A. degree are detailed under Academic Information.
3. Last 30 credit hours must be completed at Thiel College.
4. Courses required for associate of arts degree in accounting:

ACCT 113	Principles of Accounting I	3 CH
ACCT 123	Principles of Accounting II	3 CH
ACCT 213	Intermediate Accounting I	3 CH
ACCT 223	Intermediate Accounting II	3 CH
ACCT 313	Cost Accounting	3 CH
ACCT 323 *or* ACCT 333	Taxation–Personal Taxation–Corporate	3 CH
ACCT 423	Auditing	3 CH
BADM 355	Business Law I	3 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 122	Advanced Spreadsheet Apps	1 CH

Business Administration

Associate of Arts Degree

1. A minimum of 60 credit hours with at least a 2.0 cumulative and major GPA is required.
2. Core requirements for the A.A. degree are detailed under Academic Information.
3. Last 30 credit hours must be completed at Thiel College.

Major Requirements

BADM 100	Introduction to Business	3 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 113 or CIS 122	Data Management Applications Advanced Spreadsheet Applications	1 CH
ECON 211	Macroeconomics	3 CH
ECON 221	Microeconomics	3 CH
BADM 374	Principles of Management	3 CH
BADM 384	Business Communication	3 CH
Any three of the following:		
ACCT 323	Personal Tax	3 CH
BADM 324	Advertising	3 CH
BADM 334	Risk Management and Insurance	3 CH
BADM 364	Business Ethics	3 CH
BADM 376	International Business	3 CH

Criminal Justice Studies

Associates of Arts Degree

The Associate of Arts Degree in Criminal Justice Studies requires a minimum of 60 credit hours with at least a 2.0 cumulative GPA overall and a 2.0 average in criminal justice studies major courses.

SEMS 110	Introduction to Seminar Series	3 CH
ENG 101	College Writing	3 CH
INDS 101	Presentational Literacy	3 CH
MATH 125	Quantitative Reasoning	3 CH
One laboratory class in natural or physical sciences		4 CH
REL 12X	Religion course satisfying Thiel College Core	3 CH
Complete from three of the below areas:		
	Fine arts	3-4 CH
	Humanities	3-4 CH
	Social Science	3-4 CH
	CSCI/Math/Physical/Natural Science	3-4 CH

Major courses required for the Associate of Arts in criminal justice studies:

CJS 101	Introduction to Criminal Justice Studies	3 CH
SOC 121 *or* SOC 141	Microsociology Macrosociology	3 CH
CJS 221	Corrections in America	3 CH
CJS 230	Law Enforcement in America	3 CH
CJS 301 *or* CJS 305	Juvenile Justice Studies Victimology	3 CH
SOC 321 *or* SOC 331	Deviance Criminology	3 CH
CJS/POSC 438 *or* POSC 439 *or* POSC 445	Due Process Rights Criminal Law The Great American Trial	3 CH

Two elective courses (6 CH) must be selected from the list of elective courses for the major in criminal justice studies.

Dietrich Honors Institute

DHI Graduation Requirements

DHI students complete a four-year, sequenced, Core curriculum taken in place of the general College Core. To graduate as a Dietrich Honors Institute Scholar students must complete the following:

Foreign Language Competency

Six credits of introductory level college coursework in the same language or three credits of intermediate level language. Exemption possible through the Department of Language examination.

Mathematics Competency

Earn a grade of C- or higher in Math 142 (or higher) or PSY 215/SOC 233, Statistics for the Social Sciences.

Scientific Reasoning Competency

Successfully complete one natural or physical science laboratory course (as determined in the general College Core).

DHI Core Courses

Pass all of the following courses:

HONS 109	Becoming Human: Love, Power, Justice	3 CH
HONS 113	Communicating Effectively: Grammar, Dialectic, Rhetoric	3 CH
HONS 114	Creating Culture: Ancient, Medieval, Modern	3 CH
HONS 128	Interpreting Scriptures: Jewish, Christian, Islamic	3 CH
HONS 126	Composing Contextually: Enlightenment, Romanticism, Postmodernism	3 CH
HONS 250	Global Perspectives	3 CH
HONS 330	Creative Practices: Art, Research, and Problem-Solving	3 CH
HONS 340	Contributing Culturally: Researching, Creating, Presenting	3 CH

DHI Elective Course

The DHI Elective is meant to encourage students to follow their curiosity and challenge themselves. The DHI Elective must be a 3- or 4-credit course

At the 300- or 400-level, outside the student's major department
OR
Any level ART course.

Classes that are required to satisfy the major, but which are not in the major department, qualify for the DHI Elective. (E.g., PHIL 387 Medical Ethics satisfies requirements for a B.S. in Neuroscience; since it is outside the major department as a non-Neuroscience course, it can count as a DHI Elective.) The DHI Elective can be taken in satisfaction of requirements for a minor. Students may petition the DHI Director for exemptions to these guidelines. Students must submit their DHI Elective selection to the DHI Office via the electronic DHI Elective Form.

DHI Thesis

All Dietrich students must satisfactorily complete and present an approved honors thesis.

Good Standing in the DHI

To remain in good standing in the DHI, students must

- Maintain a 3.0 GPA, both cumulatively and semester-by-semester;
- Abide by the Thiel Honor Code and Academic Integrity policies as outlined in the Thiel College Student Handbook;
- Make timely progress in DHI coursework;
- Be good ambassadors of Thiel College and the DHI, especially while participating in special events and trips.

Failure to meet these requirements may result in probationary status or dismissal from the DHI. Further details about DHI programs and policies are found in the DHI Student Handbook (click here).

Core Requirements

The College offers two parallel core pathways to fulfill the All-College Learning Goals: The general core curriculum and the Dietrich Honors Institute (DHI) core.

Bachelor of Arts and Bachelor of Science Degree

Credit Hours

- 124 credit hours of successfully completed course work shall be required for the Bachelor of Arts degree.
- The 124 credit hours shall be distributed approximately as follows:
    - 25 to 30 percent for the Core Curriculum Requirement
    - 30 to 45 percent for the major
    - 25 to 45 percent for electives

1. **Literacy Series**
    - **Composition (3 CH)**
        - Successfully complete ENG 101: College Writing (C- or higher required)
    - **Presentation (3 CH)**
        - Successfully complete INDS 101: Introduction to Presentational Literacy (C- or higher required)
    - **Quantitative and Scientific Reasoning (10-12 CH)**
        - **Quantitative Reasoning**
            - B.A. Programs: Students must earn a grade of C- or higher in MATH 125, MATH211, or higher.
            - B.S. Programs: Students must earn a grade of C- or higher in MATH 142 or any calculus course.
        - **Scientific Reasoning**
            - Successfully complete one natural or physical science laboratory course.
        - **Additional Quantitative / Scientific Reasoning Course**
            - Successfully complete one additional course satisfying either Quantitative or Scientific Reasoning: computer science, mathematics, natural or physical science course—biology, chemistry, computer science, environmental science, geology, neuroscience, mathematics, or physics. PSY/SOC 233, Statistics for Social Sciences, will also fulfill this requirement. Courses with the CIS and IS prefix will not satisfy this requirement.
    - **Creative and Humanistic (12 CH)**
        - **Creative (3 CH)**
            - Successfully complete a course (or earn at least 3 CH) in art, music or theatre, excluding THAR 101: Theatre Practicum.
        - **Humanistic (6 CH)**

        - Students must successfully complete REL 120, 121, 122 or 123 and one additional course in English, history, languages, philosophy or religion.
    - **Additional Creative and Humanistic Course (3 CH)**
        - Students must successfully complete an additional course satisfying either Creative or Humanistic: art, music, theatre, history, English, philosophy, religion or a Spanish culture course (250 for example). This course must be outside the student's major (i.e. cannot be a course with the same department prefix as the major).
    - **Socio-Political (3-4 CH)**
        - Successfully complete one course in economics, geography, political science, psychology, sociology or criminal justice studies. Courses with the prefix ACCT, BADM, EDUC, ECE, SPED, and SECED will not satisfy this requirement.
    - **Foreign Language (0-6 CH)**
        - The foreign language requirement may be satisfied in one of the following ways:
            - Earn a final grade of C- or better in two years of the same foreign language in high school;
            - Take the placement test and test out of a class or the requirement altogether;
            - Complete (C- or better) two semesters of a foreign language at the introductory level;
            - Complete (C- or better) one semester of a foreign language at the intermediate level.

2. **Seminar Series (9 CH)**

   The Seminar Series at Thiel College is designed to introduce students to engaged, participatory learning. This series of three courses is intended to be the centerpiece of the core curriculum, emphasizing student-centered learning and investigation of big ideas, the interconnected nature of the disciplines, as well as creative and team-based problem solving.

    - **SEMS 110: Introduction to Seminar Series (3 CH)**
        - This seminar, taken during the student's first year at Thiel College, is the first seminar within the core series. It is designed to introduce students to seminar style learning in a disciplinary context. SEMS 110 must be completed with a C- or higher to meet graduation requirements.
    - **SEMS 250: World Cultures (3 CH)**
        - This seminar is to be taken during the student's second, third, or fourth semester. By the end of this seminar, students will have the resources to develop into mature, informed, critically thinking citizens through the exploration of similarities and differences between cultures. This seminar will be cross-listed with pre- approved courses that are discipline-specific. Cannot be used to concurrently satisfy another core requirement in the Literacy Series. (P: SEMS 110)

- **SEMS 400: Global Issues (3 CH)**
  - This is the final seminar in the core seminar series. The topic will be determined by the instructor and the consulting faculty. The purpose of the course is for the class to give an in-depth analysis of an issue of current global importance. Students will be expected to bring their own experience from the previous seminars as well as their expertise from their own major to bear on the issue at hand. Cannot be used to concurrently satisfy another core requirement in the Literacy Series. (Recommended P: junior or senior standing and SEMS 110 and 250)

3. **Concern for Physical Well-Being (2-3 CH)**

   Thiel College hopes to engage our students in activities that build their appreciation for and participation in healthy activity. These courses are designed to promote an intellectual understanding of physical well-being and development to provide the opportunity for students to apply theory in a variety of structured options.

   Students will successfully complete two or three credit hours of theory courses such as AH 105 Taking Care of your Health, AH 115 Food Patterns and Health, AH 125 Nutrition, HPED 198 Slimnastics, or HPED 199 Fitness for Life and Wellness.

Accounting

Bachelor of Arts Degree

The objective of the accounting program is to develop a solid foundation for public accounting, governmental accounting and corporate accounting. Public accounting is a field for independent accountants who review and report on the propriety of management's measurements and communications of financial information; the corporate accountant accumulates, interprets and reports to management the financial results of the organization's activities. With this preparation, one may structure a studies program toward either immediate employment or graduate school.

A student who graduates from Thiel College with a major in accounting will demonstrate:

- an understanding of generally accepted accounting principles and the ability to prepare accurate and informative financial statements.
- a working knowledge of the importance and function of independent audits and generally accepted auditing standards.
- a basic understanding of the Internal Revenue Code and the impact of taxes on business decisions.
- competency in data analysis techniques, including spreadsheets and databases.
- facility in understanding and resolving ethical dilemmas faced by accountants and auditors.
- interpersonal and team membership skills.
- the ability to communicate effectively in oral and written form.

Major Requirements

ACCT 113	Principles of Accounting I	3 CH
ACCT 123	Principles of Accounting II	3 CH
ACCT 213	Intermediate Accounting I	3 CH
ACCT 223	Intermediate Accounting II	3 CH
ECON 211	Principles of Macroeconomics	3 CH
ECON 221	Principles of Microeconomics	3 CH
MATH 211	Elementary Statistics	4 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 122	Advanced Spreadsheet Apps	1 CH
CIS 129	Fundamentals of Info Systems	3 CH
CSCI 120	Introduction to Data Analytics	3 CH

BADM 355	Business Law I	3 CH
BADM 356	Business Law II	3 CH
BADM 384	Business Communication	3 CH
ACCT 313	Cost Accounting	3 CH
ACCT 323	Taxation-Personal	3 CH
ACCT 333	Taxation-Corporate	3 CH
ACCT 423	Auditing	3 CH
Upper Level (4 required)		
ACCT 253	Payroll Accounting	3 CH
ACCT 343	Governmental and Non-Profit Accounting	3 CH
ACCT 412	Accounting Information Systems	3 CH
ACCT 413	Advanced Accounting	3 CH
ACCT 433	Accounting Theory	3 CH
ACCT 493	CPA – Preparing for the Profession	3 CH
ACCT 455	Cooperative Education	CH var.

Transfer students are required to complete at Thiel College a minimum of four upper-level courses required for the major.

Biology

Bachelor of Arts Degree

A student who graduates from Thiel College with a major in biology will:

- understand biological principles and their implications including: Evolution; Structure and Function; Information flow, exchange, and storage; Pathways and transformation of energy and matter; and Biological Systems.
- study, analyze experimentally and interpret biological problems, including: a. modeling and simulation b. quantitative reasoning c. generation of lab reports that reflect methodology.
- be able to effectively communicate about biological matters in both oral and written form.
- be prepared for discipline-related employment (including secondary education in Pennsylvania) or admission into a discipline-related graduate or professional program.

I. Foundational Courses		
BIO 145	Foundations of Biology	4 CH
And one of the following four systematics courses:		
BIO 262	Animal Systematics	4 CH
BIO 222	Entomology	4 CH
BIO 263	Plant Systematics	4 CH
BIO 212	Microbiology	4 CH

II. Breadth in the Discipline of Biology		
Students must take all five courses.		
BIO 290	Cell Biology: A Molecular Approach	4 CH
BIO 322	Genetics	4 CH
BIO 342	Biostatistics and Research Methods	4 CH
BIO 392	General Ecology	4 CH
One elective from any 4 CH, 200 or 300 level BIO lab course, except BIO 350—Principles of Immunology. Students may also choose from NCSI 202, 209 or 315.		

Note: Courses applied as foundational courses may not also be applied as breadth in the discipline courses.

III. Senior Capstone Experience in Biology

A completed research project under the supervision of a biology department faculty member is required of the student majoring in biology. The project is culminated with a formal scientific research paper and a formal oral presentation. See the biology chair for specific requirements of the research project.

Students must take both:

BIO 395	Junior Research Seminar	1 CH
BIO 462	Senior Seminar	2 CH
And one of the following two courses:		
BIO 452	Advanced Biology	2 CH
BIO 482	Independent Study	2 CH

IV. Related Math and Science Courses

MATH 142	Precalculus (minimum requirement)	3 CH
And one of the following three pairings:		
CHEM 140	General Chemistry I	4 CH
CHEM 160	General Chemistry II	4 CH
OR		
PHYS 154	Physics I (non-calc based)	4 CH
PHYS 164	Physics II (non-calc based)	4 CH
OR		
PHYS 174	Physics I (calculus based)	4 CH
PHYS 184	Physics II (calculus based)	4 CH

Suggested schedule of science courses for biology majors (B.A.)		
	Fall	Spring
1	BIO 145: Foundations of Biology CHEM 140: General Chemistry I MATH 142: Precalculus (minimum)	BIO 290 Cell Biology or Systematics Course CHEM 160 General Chemistry II
2	BIO 322 Genetics or BIO Elective	BIO 290 Cell Biology or Systematics Course
3	BIO 392 Ecology and BIO 322 Genetics or BIO Elective	BIO 342 Biostatistics and Research Methods BIO 395 Junior Research Seminar
4	BIO 462 Senior Seminar and BIO 452 Advanced Biology or BIO 482 Independent Study	BIO Elective

Business Administration

Bachelor of Arts Degree

The objectives of the business administration program are to provide a broad understanding of the American business system and to establish a base for good citizenship in our democratic society; to teach basic business principles and fundamental skills essential for success in either a large or small business; and to prepare for employment in a business related field. A student who graduates from Thiel College with a major in business administration will demonstrate:

- the ability to perform basic business management functions.
- competency in data analysis techniques, including use of spreadsheets and databases.
- facility in resolving ethical dilemmas faced by business managers.
- interpersonal skills and learn to be a valuable member of a team.
- the ability to communicate effectively in oral and written form.

Major Requirements

Major Core Requirements (All Tracks)		
ACCT 113	Principles of Accounting I	3 CH
BADM 233	Managerial Accounting	3 CH
ECON 211	Macroeconomics	3 CH
ECON 221	Microeconomics	3 CH
MATH 211	Elementary Statistics	4 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 113 *or* CIS 122	Data Management Applications Advanced Spreadsheet Apps	1 CH
CIS 129	Fundamentals of Info Systems	3 CH
BADM 355	Business Law I	3 CH
BADM 356	Business Law II	3 CH
BADM 374	Principles of Management	3 CH
BADM 384	Business Communication	3 CH

Advertising and Marketing Track		
BADM 210	Principles of Marketing	3 CH
BADM 324	Advertising	3 CH
BADM 376 or BADM 456	International Business International Marketing	3 CH
Three of the following:		
IS 140	Graphic Applications	3 CH
BADM 455	Cooperative Education	CH var.
COMM 280	Survey Mediated Communication	3 CH
COMM 282	Writing for Mass Media	3 CH
COMM 331	Intercultural Communication	3 CH
COMM 340	Public Relations	3 CH
Finance Track		
BADM 344	Finance	3 CH
CSCI 120	Introduction to Data Analytics	3 CH
Four of the following:		
ACCT 213	Intermediate Accounting I	3 CH
BADM 304	Principles of Investments	3 CH
BADM 334	Risk Management and Insurance	3 CH
BADM 376	International Business	3 CH
BADM 490	Strategic Management	3 CH
CSCI 179	Programming – Visual Basic	4 CH
Management Track *Two of the following:*		
BADM 344	Finance	3 CH
BADM 444	Operations Management	3 CH
BADM 484	Human Resource Management	3 CH
BADM 490	Strategic Management	3 CH

Two of the following:		
BADM 210	Principles of Marketing	3 CH
BADM 334	Risk Management and Insurance	3 CH
BADM 364	Business Ethics	3 CH
BADM 376	International Business	3 CH
BADM 455	Cooperative Education	CH var.
BADM 474	Ruth A. Miller Senior Seminar	3 CH
BADM 490	Strategic Management	3 CH
CIS 241	Project Management	3 CH
Human Resource Management Track		
BADM 470	Employment Law	3 CH
BADM 484	Human Resource Management	3 CH
PSY 150	General Psychology	3 CH
One of the following:		
COMM 225	Interpersonal Communication	3 CH
PSY 223	Social Psychology	3 CH
ACCT 253	Payroll Accounting	3 CH
BADM 334	Risk Management and Insurance	3 CH
Graduate School Track		
MATH 181	Calculus	4 CH
All of the following:		
BADM 210	Principles of Marketing	3 CH
BADM 344	Finance	3 CH
BADM 444	Operations Management	3 CH
BADM 484	Human Resource Management	3 CH
BADM 490	Strategic Management	3 CH

Sports Management Track		
BADM 105	Introduction to Sports Management	3 CH
HPED 314	Coaching Organization & Admin.	3 CH
BADM 450	Facilities Management Practicum	1 CH
BADM 452	Sports Information Practicum	1 CH
INDS 155	Principles of Ethical Leadership	3 CH
Choose one of the following:		
BADM 210	Principles of Marketing	3 CH
BADM 324	Advertising	3 CH
BADM 490	Strategic Management	3 CH
Supply Chain Management Track		
CIS 241	Project Management	3 CH
BADM 444	Operations Management	3 CH
BADM 480	Supply Chain Management and Logistics	3 CH
BADM 490	Strategic Management	3 CH

Transfer students are required to complete at Thiel College a minimum of four upper-level courses required for the major.

Conservation Biology

Bachelor of Arts Degree

A student who graduates from Thiel College with a major in conservation biology will:

- Understand biological principles and their implications including: evolution; structure and function; information flow, exchange, and storage; pathways and transformation of energy and matter; and biological systems.
- study, analyze experimentally and interpret biological problems including: a. modeling and simulation b. quantitative reasoning c. generation of lab reports that reflect methodology.
- understand the interdisciplinary nature of conservation strategies and societal implications.
- be able to effectively communicate about biological matters in both oral and written form.
- be prepared for discipline-related or admission into a discipline-related graduate or professional program.

I. Foundational Courses		
BIO 145	Foundations of Biology	4 CH
BIO 116	Conservation Biology	4 CH
BIO 263	Plant Systematics	4 CH
And one of the following two courses:		
BIO 262	Animal Systematics	4 CH
BIO 272	Entomology	4 CH
II. Breadth in the Discipline		
BIO 342	Biostatistics and Research Methods	4 CH
BIO 392	General Ecology	4 CH
And one of the following two courses:		
BIO 290	Cell Biology	4 CH
BIO 322	Genetics	4 CH
And two of the following courses:		
BIO 212	Microbiology	4 CH
BIO 222	Entomology	4 CH

BIO 262	Animal Systematics	4 CH
BIO 272	Animal Behavior	4 CH
BIO 273	Toxicology	4 CH
BIO 302	Plant Physiology	4 CH
BIO 394	Aquatic Ecology	4 CH
Note: Courses applied as foundational courses may not also be applied as breadth in the discipline courses.		

III. Senior Capstone Experience in Biology
A completed research project under the supervision of a biology department faculty member is required of the student majoring in biology. The project is culminated with a formal scientific research
paper and a formal oral presentation.
Students must take <u>both</u> of these courses.

BIO 395	Junior Research Seminar	1 CH
BIO 462	Senior Seminar	2 CH
And <u>one</u> of the following <u>two</u> courses:		
BIO 452	Advanced Biology	2 CH
BIO 482	Independent Study	2 CH

IV. Specified I.R. courses, related sciences (because of the interdisciplinary nature of the major)

MATH 107	College Algebra (minimum requirement)	3 CH
And <u>one</u> of the following three pairings:		
CHEM 140	General Chemistry I	4 CH
CHEM 160	General Chemistry II	4 CH
OR		
PHYS 154	Physics I (non-calc based)	4 CH
PHYS 164	Physics II (non-calc based)	4 CH
OR		
PHYS 174	Physics I (calculus based)	4 CH
PHYS 184	Physics II (calculus based)	4 CH

And one of the following		
POSC 116	American Government and Politics	3 CH
POSC 236	Public Policy	3 CH
And one of the following		
ECON 211	Macroeconomics	3 CH
ECON 221	Microeconomics	3 CH
And one of the following		
SOC 141	Macrosociology	3 CH
SOC 211	Anthropology	3 CH
And one of the following		
REL 200	Contemporary Ethical Issues	3 CH
PHIL 267	Ethics	3 CH
PHIL 297	Environmental Ethics	3 CH
And a Foreign language, especially Spanish (I.R. I)		
Note: These courses can be applied to the CORE.		

Suggested schedule of science courses for conservation biology majors (B.A.)

	Fall	Spring
1	BIO 145: Foundations of Biology CHEM 140: General Chemistry I MATH 107: College Algebra	BIO 262 Animal Systematics or BIO Elective CHEM 160 General Chemistry II BIO 116 Conservation Biology
2	BIO 222 Entomology or BIO 263 Plant Systematics	BIO 262 Animal Systematics or BIO Elective and BIO 290 Cell Biology
3	BIO 392 Ecology or BIO Elective and BIO 322 Genetics	BIO 342 Biostatistics and Research Methods BIO 395 Junior Research Seminar
4	BIO 462 Senior Seminar	BIO 452 Advanced Biology or BIO 482 Independent Study

Criminal Justice Studies

Bachelor of Arts Degree

The program is framed by Thiel College's commitment to the liberal arts, signifying the importance of supporting the development of humane and altruistic perspectives of students in all fields of thought and work.

Graduates from the program may work in courts, law enforcement, probation and parole, specialized treatment programs, public and private agencies such as juvenile probation, child and protective services and other occupations dedicated to principles of behavior reform.

The major in criminal justice studies (CJS) requires a minimum of 43 semester credit hours, distributed according to the rules presented below. (Note: All courses listed are three credit hours unless otherwise indicated)

Major Requirements

The major requires a minimum of 43 credit hours and must include the following courses:

CJS 101	Introduction to Criminal Justice Studies	3 CH
SOC 121 *or* SOC 141	Microsociology Macrosociology	3 CH
SOC 215	Statistics for the Social Sciences	3 CH
CJS 221	Corrections in America	3 CH
CJS 230	Law Enforcement in America	3 CH
PHIL 267	Ethics	3 CH
CJS 301 *or* CJS 305	Juvenile Justice Studies Victimology	3 CH
SOC 321 *or* SOC 331	Deviance Criminology	3 CH
SOC 341	Social Research Methods	3 CH
SOC 342	Sociological Theory	3 CH
SOC/CJS 371	Professional Seminar	1 CH
CJS/POSC 438 *or* CJS/POSC 439 *or* POSC 445	Criminal Due Process Criminal Law The Great American Trial	3 CH
CJS 440	Capstone in Criminal Justice Studies	3 CH

Criminal justice studies majors must also take six elective credit hours in courses 200 and above, with exceptions permitting POSC 116 and SOC 191, to fulfill the 43 required credit hours. Students may choose from the unselected courses above or any of the following:

SOC 191	Social Problems	3 CH
SOC 251	Minorities	3 CH
SOC 435	Popular Culture	3 CH
ACCT 453	Forensic Accounting and Fraud Examination	3 CH
BADM 355	Business Law I	3 CH
ENSC 200	Introduction to Environmental Law	3 CH
POSC 116	American Government	3 CH
POSC 186	Introduction to Legal Studies	3 CH
POSC 226	State and Local Politics and Policy	3 CH
POSC 236	Public Policy	3 CH
POSC 316	Topics: Civil Rights and Liberties	3 CH
POSC 388	The Death Penalty	3 CH
POSC 436	Constitutional Law	3 CH
POSC 438	Criminal Due Process Rights	3 CH
POSC 439	Criminal Law	3 CH
POSC 445	The Great American Trial	3 CH
PSY 241	Abnormal Behavior	3 CH
PHIL 337	Freedom, Justice & Political Power	3 CH
PHIL 347	Social and Political Philosophy	3 CH
PHIL 377	Legal Philosophy	3 CH

Students electing to double major in sociology and criminal justice studies may not use the same elective courses to satisfy the elective requirement in both majors.

An elective, experiential educational opportunity in criminal justice studies areas is strongly encouraged. Internships may be in the local area, Washington, D.C., via Thiel College's Washington Semester programs or in another region accessible to the student and approved by the program's administrators (e.g. Harrisburg, PA, a nearby city or near the student's home.) Credit hours awarded are variable (1 to 16), depending on the program selected.

A declaration of a major in criminal justice studies must be filed no later than the first semester of the junior year.

Forensic Accounting

Bachelor of Arts Degree

The objective of the forensic accounting major is to develop skills in accounting, auditing and investigating to uncover truth while conducting financial and/or systems examinations. Forensic accountants are needed for litigation support, corporate investigations, criminal matters and preparing and assessing Risk Management and Insurance claims and damages.

Major Requirements

ACCT 113	Principles of Accounting I	3 CH
ACCT 123	Principles of Accounting II	3 CH
ACCT 213	Intermediate Accounting I	3 CH
ACCT 223	Intermediate Accounting II	3 CH
ACCT 313	Cost Accounting	3 CH
ACCT 323	Taxation-Personal	3 CH
ACCT 333	Taxation-Corporate	3 CH
ACCT 412	Accounting Information Systems	3 CH
ACCT 423	Auditing	3 CH
ACCT 453	Forensic Accounting and Fraud Examination	3 CH
BADM 344	Finance	3 CH
BADM 355	Business Law I	3 CH
BADM 356	Business Law II	3 CH
BADM 374	Principles of Management	3 CH
BADM 384	Business Communication	3 CH
CIS 111 *or* CIS 114	Word Processing Applications Presentation Applications	1 CH

CIS 112	Spreadsheet Applications	1 CH
CIS 122	Advanced Spreadsheet Apps	1 CH
CIS 129	Fundamentals of Info Systems	3 CH
CSCI 351	Info Systems Security & Forensics	3 CH
MATH 211	Elementary Statistics	4 CH

International Business

Bachelor of Arts Degree

This program prepares students for attractive career opportunities as major U.S. and foreign corporations continue to expand in international markets. A student who graduates from Thiel College with a major in international business will demonstrate:

- the ability to perform basic business management functions.
- competency in data analysis techniques, including use of spreadsheets and databases.
- facility in resolving ethical dilemmas faced by business managers.
- interpersonal skills and learn to be a valuable member of a team.
- the ability to communicate effectively in oral and written form.

Major Requirements*

ACCT 113	Principles of Accounting I	3 CH
BADM 233	Managerial Accounting	3 CH
MATH 211	Elementary Statistics	4 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 113 or CIS 122	Data Management Applications Advanced Spreadsheet Apps	1 CH
CIS 129	Fundamentals of Info Systems	3 CH
ECON 211	Principles of Macroeconomics	3 CH
ECON 221	Principles of Microeconomics	3 CH
POSC 146	Intro to Comparative Politics	3 CH
GEOG 110	World Regional Geography	3 CH
BADM 376	International Business	3 CH
BADM 456	International Marketing	3 CH
BADM 355	Business Law I	3 CH
BADM 356	Business Law II	3 CH
COMM 331	Intercultural Communication	3 CH

REL 190	World Religions	3 CH
Any three:		
BADM 344	Finance	3 CH
BADM 374	Principles of Management	3 CH
BADM 444	Operations Management	3 CH
BADM 210	Introduction to Marketing	3 CH
BADM 484	Human Resource Management	3 CH
Any one:		
POSC 327	Politics of Developing Societies	3 CH
POSC 347	Politics of Industrialized Societies	3 CH

Medical Technology

Bachelor of Arts Degree

Dr. Michael T. Balas, Adviser and Coordinator

A student who graduates from Thiel College with a major in medical technology will:

- understand basic biological and chemical principles that are necessary to understand clinical laboratory applications.
- study, analyze experimentally and interpret biological and chemical principles that are necessary to understand clinical laboratory applications.
- be able to effectively communicate in written and oral form basic biological and chemical principles that are necessary to understand clinical applications.
- be prepared for discipline-related employment.

A student must complete three BIO or CHEM lab courses by the end of sophomore year (with a C- or better). Not meeting these requirements would be considered failure to progress and the student's name will be sent to the Academic Standing Committee for review, at the discretion of the department.

All of the following courses:		
BIO 145	Foundations of Biology	4 CH
BIO 212	Microbiology	4 CH
BIO 295	General Parasitology	4 CH
BIO 280	Human Anatomy and Physiology I	4 CH
BIO 350	Principles of Immunology	3 CH
CHEM 140	General Chemistry I	4 CH
CHEM 160	General Chemistry II	4 CH
CHEM 200	Organic Chemistry I	4 CH
CHEM 240	Quantitative Analysis	4 CH
MATH 211	Elementary Statistics	4 CH
PSY 150	General Psychology	3 CH

In the senior year, majors in allied health-medical technology must attend one of the hospitals affiliated with Thiel College, or any other hospital with an ASCP-approved program in medical technology for a year of clinical and classroom work.

The medical technology professional study year includes the following courses: clinical microbiology, clinical chemistry, clinical hematology/coagulation, clinical immuno-hematology, clinical immunology/serology and clinical seminar. Thiel awards 32 credit hours for the professional study year when satisfactorily completed.

Public Relations, Advertising and Integrated Marketing Communication

Bachelor of Arts Degree

The public relations, advertising, and integrated marketing communication major is a cooperative program offered through the Arthur McGonigal Department of Business Administration and Accounting and the Department of Media, Communication and Public Relations. This joint venture includes a variety of courses in public relations, advertising, integrated marketing communication, interpersonal communication, media, accounting, business management, computer information systems, computer science, and economics. This degree has been designed in response to employers, who are demanding that their public relations and advertising professionals complete extensive coursework in business administration. The degree has two slightly different tracks, depending on whether the student anticipates eventually working in general management (management-oriented track) or not (media-oriented track).

The public relations, advertising and integrated marketing major helps prepare students for a variety of jobs in public relations, advertising, and marketing, working in PR/advertising agencies, corporations or small businesses (including media companies), large and small nonprofit organizations, or government. It also helps prepare students for graduate study in public relations, advertising, marketing, business administration (such as an MBA degree), nonprofit management, or business journalism.

A student who graduates from Thiel College with a major in public relations, advertising, and integrated marketing communication will:

- Be able to effectively create persuasive messages.
- Understand the ethical issues in media work created by First Amendment freedoms and be able to act in ethical ways.
- Understand and be able to apply adaptive leadership and collaboration skills.
- Be able to analyze, apply current theories and approaches to decision-making in Public Relations.
- Demonstrate effective communication in oral and written forms in the field.

Major Requirements

Students must maintain a minimum cumulative GPA of 2.0 in courses in the major.

Management Track		
COMM 155	Introduction to Integrated Marketing Comm.	3 CH
COMM 225 *or* COMM 321	Interpersonal Communication Organizational Communication	3 CH
COMM 280	Survey of Mediated Comm.	3 CH
COMM 282	Writing for Media	3 CH

COMM 325	Communication Ethics	3 CH
COMM 340	Public Relations	3 CH
COMM 405	Advanced Public Relations	3 CH
COMM 470	Senior Seminar	3 CH
COMM 480	Internship	3 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 122	Advanced Spreadsheet Apps	1 CH
ACCT 113	Principles of Accounting	3 CH
BADM 210	Principles of Marketing	3 CH
BADM 233	Managerial Accounting	3 CH
BADM 324	Advertising	3 CH
BADM 355	Business Law I	3 CH
BADM 374	Principles of Management	3 CH
BADM 384	Business Communication	3 CH
ECON 221	Microeconomics	3 CH
		TOTAL 54 CH

Recommended: IS 140—Graphic Arts; COMM 181—Public Speaking; COMM 300—Persuasion; COMM 331—Intercultural Communication; and COMM 455—Media Law & Regulation

Media Track		
COMM 155	Introduction to Integrated Marketing Comm.	3 CH
COMM 225 *or* COMM 321	Interpersonal Communication Organizational Communication	3 CH
COMM 280	Survey of Mediated Comm.	3 CH
COMM 282	Writing for Media	3 CH
COMM 325	Communication Ethics	3 CH
COMM 340	Public Relations	3 CH

COMM 405	Advanced Public Relations	3 CH
COMM 470	Senior Seminar	3 CH
COMM 480	Internship	3 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 122	Advanced Spreadsheet Apps	1 CH
BADM 100	Introduction to Business	3 CH
CSCI 139	Web Design & Development	3 CH
BADM 210	Principles of Marketing	3 CH
BADM 324	Advertising	3 CH
BADM 374	Principles of Management	3 CH
BADM 384	Business Communication	3 CH
BADM 456	International Marketing	3 CH
ECON 221	Microeconomics	3 CH
		TOTAL 54 CH

Recommended: IS 140—Graphic Arts; COMM 181—Public Speaking; COMM 300—Persuasion; COMM 331—Intercultural Communication; and COMM 455—Media Law & Regulation

Students should consider being involved in relevant extracurricular activities such as student media.

Communication Studies

Bachelor of Arts Degree

Human communication is a transactional process in which persons share meaning. The communication studies major includes a variety of courses including public speaking, small group and organizational communication, persuasion, rhetorical theory, and intercultural communication. Students can become more proficient thinkers and speakers as they learn the theories and skills associated with human communication, whether in their professional, personal, economic or civic lives.

The communication studies major prepares students for a wide variety of jobs in which sound human communication skills are especially significant and necessary. It also prepares students for graduate study in communication.

A student who graduates from Thiel College with a major in communication studies will:

- Be able to adapt to various levels of communication such as interpersonal, small group, and organization.
- Be able to apply effective argumentation and persuasion skills to interpersonal, small group, and organizational communication.
- Understand the ethical issues involved in the various levels of communication such as interpersonal, small group, and organizational communication.
- Demonstrate effective communication in oral and written forms in the field.

Major Requirements

COMM 171	Introduction to Communication	3 CH
COMM 175	History of Communication	3 CH
COMM 181	Public Speaking	3 CH
COMM 225	Interpersonal Communication	3 CH
COMM 250	Small Group Communication	3 CH
COMM 265	Communication and Gender	3 CH
COMM 281	Media Literacy	3 CH
COMM 300	Persuasion	3 CH
COMM 321	Organizational Communication	3 CH
COMM 325	Communication Ethics	3 CH
COMM 331	Intercultural Communication	3 CH
COMM 455	Media Law & Regulation	3 CH

COMM 470	Senior Seminar	3 CH
Choose one		
COMM 155 COMM 220 COMM 235 COMM 440	Introduction to Integrated Marketing Introduction to Digital and Print Journalism Announcing Communication Theory	3 CH
		TOTAL 42 CH

Students must maintain a minimum cumulative GPA of 2.0 in the major.

It is recommended that students majoring in communication studies take an internship and become involved with extracurricular activities in theatre and student media.

Computer Science

Bachelor of Arts Degree

Computer science is the study of problem solving. The primary goal of the program is to develop problem-solving skills in students. With that in mind, the emphasis of this major is to prepare graduates to understand the field of computing, both as an academic discipline and as a profession.

Further, the major is designed to challenge students to consider the ethical and societal issues that are associated with the computing field, to prepare students to rigorously apply their knowledge to the solution of specific, constrained problems, to expose students to the rich theoretical basis of the field and to integrate their understanding of computing with the foundation of a liberal arts education.

A student who graduates from Thiel College with a major in Computer Science will be able to

- Apply the principles of logic and mathematics to the design, analysis, and implementation of computation algorithms
- Utilize high-level programming languages and data structures to implement software solutions to computing problems in a variety of fields
- Understand the principles of computer design and management of computer systems from both theoretical and practical standpoints
- Communicate technical and computing information effectively, both in oral and written formats

Major Requirements

All courses that are applied to the major must be completed with a grade of C- or higher.

To satisfy the prerequisite for a course the student must earn a C- or higher in the listed course(s). A prerequisite may always be waived for selected students by permission of the instructor. Junior or senior standing is required for courses numbered 300 and above.

Computer Science majors intending to attend graduate school are strongly encouraged to pursue a minor in Mathematics at Thiel College.

MATH 181	Calculus I	4 CH
MATH 182	Calculus II	4 CH
MATH 211	Elementary Statistics	4 CH
MATH 221	Discrete Mathematical Structures	3 CH
CSCI 109	Principles of Computer Science	3 CH
CSCI 159	Introduction to Programming	4 CH
CSCI 169	Data Structures	4 CH

CSCI 269	Theory of Programming Languages	4 CH
CSCI 319	Database Management	4 CH

Choose one of the following two courses:

CSCI 347	Theory of Computation	3 CH
CSCI 369	Design and Analysis of Algorithms	3 CH

CSCI 419	Computer Organization with Assembler	4 CH
CSCI 427	Operating Systems	3 CH
CSCI 300+	any 300-level course or higher	3-4 CH

Early Childhood Education (ECE) PreK-4 and Special Education PreK-12 Degree

Bachelor of Arts

A student who graduates from Thiel College with a major in Early Childhood and Special Education will:

1. Demonstrate oral, written, and presentation communication skills appropriate to the field.
2. Demonstrate mastery of major content knowledge areas and pedagogical strategies to design engaging and meaningful instruction and learning activities.
3. Demonstrate their knowledge of diversity by addressing learners' commonalities and individual differences to design inclusive learning experiences.
4. Apply the Council for Accreditation of Education Preparation (CAEP) standards to the field of PK-4/SPED PK-12.
5. Understand and demonstrate effectiveness by designing rigorous and effective lessons and learning experiences.

Early Childhood and Special Education

ECE 110 Child Development, Typical and Atypical, Birth-Age 5
ECE 111 Foundations of Education
ECE 112 The Developing Child—The Primary Years K-4th Grade
ECE 213 Language Development for Early Childhood
ECE 214 Early Literacy Foundations for Preschool Years
ECE 215 The Learning Process: Integrating Curriculum, Instruction & Assessment
ECE 216 Math Foundations for the Preschool Years
ECE 304 Literacy Foundations for the Primary Grades
ECE 334 Math Foundations for the Primary Grades
ECE 335 Science Methods
ECE 336 Social Studies Methods
ECE 355 Evidence-Based Practices in Early Childhood Care and Education
ECE 367 Advocacy Collaboration and Cooperative Learning Issues and Trends
ECE 369 Integrating the Arts for the Developing Child, Pre K-4
ECE 420 Using Instructional Technology and Universal Design to Support Literacy, Math and Science Achievement
ECE 424 Student Teaching

SPED 356 Special Education: Processes, Procedures, Screening, Assessment, IEP Development and Evaluation
SPED 357 Effective Instructional Practices and Delivery Methods in Subject Area Content for All Levels of Special Education Support
SPED 358 Intensive Reading, Writing and Math Intervention Approaches
SPED 360 Educational Assessment
EDUC 400 Educating English Language Learners
SPED 420 Effective Collaboration and Communication in the Academic Setting
SPED 424 Student Teaching
SPED 440 Evidence-Based Effective Instruction – Teaching Students with Behavioral Disabilities
SPED 450 Instructing Students with Low and High Disabilities
SPED 470 Transitions Across the Lifespan of All Students with Special Needs

Health Systems Major

Bachelor of Arts Degree

Dr. Neil Lax, Advisor

The Health Systems major provides student with an interest in a career in healthcare a broad foundation in biology, chemistry, psychology and ethics. Additionally, the major provides many of the prerequisite courses needed for transition to bachelor of nursing (BSN) or occupational therapy (OT), physical therapy (PT), and physician's assistant (PA) graduate programs. The major was designed to simplify double-majors with several other areas.

Program Objectives:

Upon completion of the major, students will be able to:

- Design and evaluate scientific questions through hypothesis, generation, experimentation, and data analysis
- Communicate effectively in oral and written form

Major Requirements (43 – 44 CH)

Core Courses All of the following courses:		
BIO 117	Medical Terminology	3 CH
BIO 212	Microbiology	4 CH
BIO 280	Human Anatomy and Physiology I	4 CH
BIO 281	Human Anatomy and Physiology II	4 CH
CHEM 140	General Chemistry I	4 CH
CHEM 160	General Chemistry II	4 CH
PSY 150	General Psychology	3 CH
NSCI 202	Introduction to Neuroscience	4 CH
Choose ONE of the following:		
BIO 145	Foundations of Biology	4 CH
NSCI 101	Brain and Behavior	4 CH
Choose ONE of the following:		
PSY 215/SOC 215	Statistics for the Social Science	3 CH

MATH 211	Elementary Statistics	4 CH

Choose ONE of the following:

PHIL 267	Ethics	3 CH
PHIL 387	Medical Ethics	3 CH
REL 200	Contemporary Ethical Issues	3 CH

Choose ONE of the following:

PSY 255	Lifespan Development	3 CH
PSY 262	Child Development	3 CH
PSY 272	Adulthood and Aging	3 CH

History

Bachelor of Arts Degree

History majors must successfully complete 39 credit hours in history, which are outlined below. All courses applied to the history major/minor must be completed with a C- or better.

Choose two of the following (6 CH):		
HIST 101	United States History Until 1877	3 CH
HIST 102	United States History Since 1877	3 CH
HIST/SEMS 250	World History	3 CH
Must complete the following course (3 CH):		
HIST 290	Introduction to Historical Research	3 CH
Must complete three courses in each of the following areas (27 CH):		
United States History at 200 - 400 level		9 CH
European History at 200 - 400 level		9 CH
Non Western 200 - 400 level		9 CH
Choose one of the following (3 CH):		
HIST 496	Capstone US History	3 CH
HIST 497	Capstone European History	3 CH
HIST 498	Capstone World History	3 CH

During the junior or senior year, each major must present at an academic conference or complete a history related internship.

Mathematics

Bachelor of Arts Degree

The major in Mathematics places a focus on the logic and critical thinking needed to solve difficult problems. It is increasingly clear that many careers created by our technology-oriented society demand both the knowledge and skills possessed by trained mathematicians. The Mathematics major at Thiel College seeks to prepare students for various occupations in academics, government, and industry available to mathematicians.

To satisfy the prerequisite for a particular course, the student must earn a grade of C- or higher in courses listed as prerequisites. Prerequisites may be waived at the discretion of the course instructor. Students are not permitted to enroll in a course for credit if the course serves as a prerequisite to a course which the student has already successfully completed.

A student who graduates from Thiel College with a degree in Mathematics will be able to:

- Use abstract logic and reasoning skills to understand mathematical theorems and their proofs, and also construct proofs to mathematical statements.
- Use mathematics to model real world phenomena and use these models to make predictions.
- Communicate mathematical concepts effectively, both orally and in writing.

Major Requirements

To complete the major in Mathematics, a student must fulfill these requirements successfully:

1. Complete all of the required courses:

MATH 181	Calculus I	4 CH
MATH 182	Calculus II	4 CH
MATH 281	Calculus III	4 CH
MATH 291	Linear Algebra	4 CH
MATH 302	Real Analysis	4 CH
MATH 371	Differential Equations	4 CH

2. Complete one of the following sequences:

Sequence 1		
MATH 311	Non-Euclidean Geometry	3 CH
MATH 331	Abstract Algebra	3 CH
Sequence 2		

MATH 451	Probability	4 CH
MATH 461	Statistics	4 CH
Sequence 3		
MATH 432	Numerical Methods	4 CH
MATH 433	Mathematical Modeling	3 CH

3. Complete an additional 3-4 CH mathematics course numbered 220 or above. PHYS 363 (Mathematical Physics) can be counted as a mathematics class for the purpose of this requirement. The Capstone Seminar, MATH 341 and MATH 342 cannot be used to fulfill this requirement.

4. Complete MATH 482 Capstone Seminar. The capstone project can take the form of a supervised research experience (such as REU), an approved internship, or student teaching (for Education majors). Research projects should be presented at an appropriate venue, such as a Thiel Forum, Thiel Research Symposium, or professional conference.

5. Complete

One of the following two:		
PHYS 174	Introductory Physics I	4 CH
PHYS 184	Introductory Physics II	4 CH
and one of the following two		
CSCI 159	Intro to Programming	4 CH
CSCI 189	Java Programming	4 CH

Students planning on attending graduate school in mathematics should include PHYS 184, as well as:

- Abstract Algebra (for pure math)
- Numerical Analysis, Mathematical Modeling, Mathematical Physics (for applied math) in their course of study.

Media and Journalism

Bachelor of Arts Degree

Media now include many forms of mass communication and social media to reach a wide variety of audiences via different media, ranging from the Internet, newspapers, magazines, newsletters, and books, to television, radio, film and video. The Media and Journalism major offers and requires a variety of foundational and skills courses to help prepare students to enter the “real world” of media. The blending of media law and media ethics with hands-on skills is inherent in this major’s courses. Media and Journalism graduates also benefit substantially from the College’s core curriculum and electives in social sciences, sciences, humanities, fine and performing arts because today’s media professionals need both a broad knowledge background and multiple specialized areas of expertise.

The media and journalism major has two quite different course tracks; students must choose one starting when they declare the major. The television, radio, and digital media track is designed for students planning to work in television (broadcast, cable, satellite, digital, mobile) and/or radio (broadcast, satellite, digital). The digital and print media track is designed for students planning to work in digital-only news media, or newspapers, magazines, newsletters, and news services (such as Associated Press), and their digital media (websites, social media, and mobile media).

A student who graduates from Thiel College with a major in media and journalism will:

- Demonstrate the knowledge and skill to create information/education message products.
- Be able to effectively conduct fact-based research in the field.
- Understand the ethical issues in media work created by First Amendment freedoms and be able to act in ethical ways.
- Demonstrate the ability to prepare, plan and execute production plans.
- Demonstrate the ability to effectively communicate in oral and written forms in the field.

Major Requirements

At minimum, students must maintain a cumulative GPA of 2.0 in the major.

Television, Radio and Digital Media Track		
COMM 235	Announcing	3 CH
COMM 280	Survey of Mediated Comm.	3 CH
COMM 282	Writing for Media	3 CH
COMM 301	Radio Broadcasting & Production	3 CH
COMM 302	TV Studio Production	3 CH
COMM 303	Field Production & Editing	3 CH
COMM 304	Digital Television and Radio Newswriting	3 CH

COMM 305	Television News Production	3 CH
COMM 325	Communication Ethics	3 CH
COMM 360	Co-Curricular Practicum I: *The Thielensian*	1 CH
COMM 365	Co-Curricular Practicum II: TCTV	1 CH
COMM 371	Co-Curricular Practicum III: WXTC	1 CH
COMM 455	Media Law and Regulation	3 CH
COMM 470	Senior Seminar	3 CH
COMM 480	Communication Internship	3 CH
CIS 113	Data Management Applications	1 CH
CIS 129	Fundamentals of Information Systems	3 CH
CSCI 139	Web Design and Development	3 CH
CSCI 159	Introduction to Programming	4 CH
		TOTAL 50 CH

Digital and Print Media Track		
COMM 220	Introduction to Digital and Print Journalism	3 CH
COMM 280	Survey of Mediated Comm.	3 CH
COMM 281	Media Literacy	3 CH
COMM 315	Digital and Print Feature & Opinion Writing	3 CH
COMM 325	Communications Ethics	3 CH
COMM 340	Public Relations	3 CH
COMM 350	Print Media Production	3 CH
COMM 360	Co-Curricular Practicum I: *The Thielensian*	1 CH
COMM 365	Co-Curricular Practicum II: TCTV	1 CH
COMM 371	Co-Curricular Practicum III: WXTC	1 CH
COMM 455	Media Law and Regulation	3 CH
COMM 470	Senior Seminar	3 CH
COMM 480	Communication Internship	3 CH

CIS 113	Data Management Applications	1 CH
CIS 129	Fundamentals of Information Systems	3 CH
CSCI 139	Web Design and Development	3 CH
CSCI 159	Introduction to Programming	4 CH
		TOTAL 44 CH

Neuroscience

Bachelor of Arts Degree

Major Requirements (42 – 44 CH)

Core Courses		
NSCI 101	Brain and Behavior	4 CH
NSCI 202	Introduction to Neuroscience	4 CH
NSCI 303	Techniques in Neuroscience	4 CH
NSCI 313	Junior Seminar in Neuroscience	2 CH
NSCI 404	Advanced Neuroscience	3 CH
NSCI 414	Senior Seminar in Neuroscience	2 CH
Choose ONE of the following:		
NSCI 489	Internship in Neuroscience	2 CH
NSCI 499	Independent Research in Neuroscience	2 CH
Related Courses		
PSY 150	General Psychology	3 CH
PSY 215	Statistics for the Social Sciences	3 CH
Choose TWO of the following:		
PSY 223	Social Psychology	3 CH
PSY 241	Abnormal Behavior	3 CH
PSY 255	Lifespan Development	3 CH
PSY 262	Child Development	3 CH
PSY 272	Adulthood and Aging	3 CH
PSY 342	Cognitive Psychology	3 CH
PSY 352	Sensation and Perception	3 CH
PSY 450	Topics in Psychology	3 CH

Choose ONE of the following:

PHIL 267	Ethics	3 CH
PHIL 387	Medical Ethics	3 CH
REL 200	Contemporary Ethical Issues	3 CH

Elective Courses – Choose TWO, from TWO different departments. Note: elective courses may have prerequisites not listed here

BIO 272	Animal Behavior	4 CH
BIO 281	Human Anatomy and Physiology II	4 CH
BIO 290	Cell Biology	4 CH
BIO 322	Genetics	4 CH
BIO 343	Developmental Biology	4 CH
BIO 399	Molecular Biology	4 CH
CSD 213	Nature and Development of Language	3 CH
CSD 214	Speech and Hearing Science	3 CH
CSD 215	A&P of the Vocal Mechanism	3 CH
CSD 500	Neurology of Communication Disorders	3 CH
CHEM 345	Biochemistry I	4 CH
CHEM 348	Biochemistry II	3 CH
CHEM 440	Advanced Topics Biochemistry	3 CH
ENGL 317	Linguistics	3 CH
NSCI 320	Neuropharmacology	3 CH
NSCI 330	Neuroanatomy	3 CH
NSCI 340	Neuroendocrinology	3 CH
NSCI 350	Neuroscience Diseases and Disorders	3 CH
NSCI 390	Special Topics in Neuroscience	3 CH
PHIL 347	Philosophy of Mind	3 CH

PHYS 164 OR PHYS 184	Introduction to Physics II	4 CH
REL 250	Psychology of Religion	3 CH
SOC 281	Sociology of Aging	3 CH
SOC 391	Medical Sociology	3 CH

Philosophy - Major Requirements

Bachelor of Arts Degree

In order to major in philosophy, a student must complete at least 30 credit hours in philosophy (ten courses total):

Six Required Courses:

PHIL 127 Introduction to Philosophy
PHIL 137 Critical Thinking
PHIL 147 Ancient Ideas: Greece, Rome, and the Middle Ages
Or
PHIL 157 Modern Ideas: Science, the Soul, and the Good Life
PHIL 227 Introduction to Chinese Philosophy
Or
PHIL 250 World Philosophy
PHIL 267 Ethics
One Applied Ethics Course: PHIL 277, 297 or 387 Business Ethics, Environmental Ethics, or Medical Ethics

Two Elective Philosophy Courses at the 200 level or higher

Two Cross-disciplinary Courses:

1) One related Humanities Course from the following list:

Religion:
REL 140 (History of Christianity), 210 (Religion and the Sciences), 230 (Philosophy and Religion), 250 (Psychology of Religion), 275 (Krishna to Hindutva: Intro to Hinduism);

English:
ENG 290 (Literature of World Mythology), 317 (Linguistics), 347 (Literary Theory and Criticism), 385 (Women in Literature);

History:
HIST 241 (Women's History), 260 (East Asian History), 331 (19th Century Europe 1815-1914), 332 (20th Century Europe 1914-Present), 370 (Latin America: Culture, Conquest, Colonization), 371 (Latin America: Reform and Revolution), 450 (Gender and Sexuality in 19th Century Europe)

2) One related Social Science Course from the following list:

Communications:
COMM 345 (Communication Ethics);

Political Science:
POSC 230 (Globalization), 236 (Public Policy), 300 (Intro to Legal Studies), 388 (The Death Penalty), 405 (Terrorism);

Psychology and Neuroscience:
PSY 203 (Positive Psychology) PSY 223 (Social Psychology), 342 (Cognitive Psychology), 352 (Sensation & Perception), 435 (Hist. & Phil. of Psychology); NSCI 101 (Brain and Behavior)

Sociology:
SOC 211 (Anthropology), 251 (Minorities), 321 (Deviance), 342 (Sociological Theory), 351 (Social Stratification), 421 (Gender and Society)

Political Science

Bachelor of Arts Degree

The major in political sciences shall successfully complete:

A total of 47 CH, with 41 CH in political science coursework and 6 CH in other areas (see below). Students are required to take each of the following courses (for a total of 26 CH of the 41 CH).

POSC 116	American Government in Politics	3 CH
POSC 146	Introduction to Comparative Politics	3 CH
POSC 156	Introduction to International Relations	3 CH
POSC 186	Introduction to Legal Studies	3 CH
POSC 236	Public Policy	3 CH
POSC 295	Writing in Political Science	3 CH
POSC 394	Professional Development in Political Science	1 CH
POSC 395	Research Methods in Political Science	3 CH
POSC 496	Senior Seminar	4 CH

The additional 15 CH (of the 41 CH) will be taken from political science electives; 9 CH of which must come from three different subfields of the following five. The remaining 6 CH can be fulfilled with coursework from the list below, an internship or an independent study within political science.

American Politics		
POSC 225	Gender and Politics	3 CH
POSC 297	Political Parties and Elections in the United States	3 CH
POSC 315	Political Psychology	3 CH
POSC 335	The American Presidency	3 CH

Public Policy and Public Administration		
POSC 226	State and Local Politics	3 CH
POSC 242	American Foreign Policy	3 CH
POSC 304	Healthcare Policy	3 CH

POSC 336	Public Administration	3 CH
POSC 388	The Death Penalty	3 CH
Public Law		
POSC 436	Constitutional Law	3 CH
POSC 437	First Amendment	3 CH
POSC 438	Criminal Due Process	3 CH
POSC 439	Criminal Law	3 CH
POSC 445	The Great American Trial	3 CH
International Relations		
POSC 312	International Security	3 CH
POSC 386	Dictators and Totalitarianism	3 CH
POSC 405	Terrorism	3 CH
POSC 410	International Law and Organization	3 CH
Comparative Politics		
POSC 230	Globalization	3 CH
POSC 310	International Political Economy	3 CH
POSC 327	Politics of Developing Societies	3 CH
POSC 347	Politics of Industrial Societies	3 CH

The major in political science shall also successfully complete 6 CH in the following:

Two additional courses selected from any of the following programs: economics, English, history, psychology and sociology.

Recommended Study: Political science majors are strongly advised to complete at least one of the following courses by the end of the sophomore year:

MATH 125	Quantitative Reasoning	3 CH
MATH 211	Elementary Statistics	4 CH

Majors who intend to pursue graduate study in political science and related disciplines should consult with departmental faculty concerning preparation for graduate school.

Psychology

Bachelor of Arts Degree

The major in psychology consists of 46-48 credit hours. These credit hours include 21CH of foundation courses, 4CH of capstone courses, 6CH of “Breadth of Knowledge” electives hours, and 16CH in one of three specialized tracks chosen by the student: (1) Counseling, (2) Cognitive Development, or (3) Social Psychology.

In order to successfully complete the psychology major, students must earn a grade of at least C- in all courses required for the major and maintain a 2.0 overall average for all psychology courses. Majors will be assigned an advisor within the psychology department (typically aligned with their chosen track), and work conscientiously to ensure appropriate course selections and timely progress toward fulfilling major and general college requirements while developing their passion in the field of psychology.

Foundation Courses		**21 CH total**
PSY 105	Orientation to Psychology	2 CH
PSY 150	General Psychology	3 CH
NSCI 101	Brain and Behavior	4 CH
PSY 215	Statistics for the Social Sciences	3 CH
PSY 235	Research Methods	3 CH
PSY 255	Lifespan Development	3 CH
PSY 435	History and Philosophy of Psychology	3 CH

Capstone Courses		**4 CH total**
PSY 345	Professional Development in Psychology	2 CH
PSY 445	Senior Seminar in Psychology	2 CH

All majors select <u>one</u> of the following track specializations:

Track 1: Counseling		**16 CH total**
PSY 161	Interpersonal Process	1 CH
PSY 221	Counseling Methods & Personality Theory	3 CH
PSY 241	Abnormal Behavior	3 CH

PSY 281	Microcounseling Skills	3 CH
PSY 381	Research with Human Participants (Lab)	4 CH
PSY 401/450/455/499	Counseling Special Populations or Topics in Psychology or Internship in Psychology or Independent Research in Psychology	3 CH

Track 2: Cognitive Development		**16 CH total**
PSY 262	Child Development	3 CH
PSY 272	Adulthood & Aging	3 CH
PSY 342/352	Cognitive Psychology or Sensation and Perception	3 CH
PSY 382	Developmental Psychology Research (Lab)	4 CH
PSY 450/455/499	Topics in Psychology or Internship in Psychology or Independent Research in Psychology	3 CH

Track 3: Social Psychology		**16 CH total**
PSY 203	Positive Psychology	3 CH
PSY 223	Social Psychology	3 CH
PSY 263/363	Health Psychology or Psychology of Eating	3 CH
PSY 383	Experimental Social Psychology (Lab)	4 CH
PSY 450/455/499	Topics in Psychology or Internship in Psychology or Independent Research in Psychology	3 CH

Breadth of Knowledge Electives (2 courses) 6-8 CH total

(In addition to the courses below, students may also choose PSY electives from their unchosen track specialization)

BADM 100 Intro to Business
BADM 300 Intro Entrepreneur
BADM 324 Advertising
BADM 454 Marketing
BADM 484 Human Res Mgmt
BIO 117 Medical Terminology
CJS 101 Intro Criminal Justice
CHEM 220 Forensic Science
COMM 171 Intro to Comm
COMM 225 Interpersonal Comm
COMM 250 Small Group Comm
COMM 265 Comm & Gender
CSD 111 Intro Comm Sci & Dis
EDUC 111 Foundations of Ed
EDUC 112 Psych Found of Ed
ENG 260 Bus and Tech Writing
ENG 270 Advanced Comp
ENG 317 Linguistics
EXER 105 Intro Exercise Science
INDS 202 Wom & Gend Stud
NSCI 202 Intro Neuroscience
NSCI 320 Neuropharmacology
NSCI 350 Neurosci Dis & Disord
PHIL 137 Critical Thinking
PHIL 267 Ethics
PHIL 337 Social & Political Phil
PHIL 347 Philosophy of Mind
PHIL 358 Phil of Language
PHIL 387 Medical Ethics
POSC 236 Public Policy
POSC 330 Health Care Policy
POSC 315 Political Psychology
REL 210 Religion and the Sci
REL 230 Phil of Religion
REL 250 Psych of Religion
SOC 121 Microsociology
SOC 191 Social Problems
SOC 321 Deviance
SOC 381 Medical Sociology
SOC 391 Sociology of Aging
SOC 401 Sociology of Family
SOC 421 Gender and Society

Public Policy

Bachelor of Arts Degree

For the first two years, students are expected to take foundational courses that will foster understanding of the political and economic realities contributing to the policy making process. Simultaneously, students will begin to take classes within their concentration to delve deeply and meaningfully into an issue of interest. In their junior year students will take a policy evaluation course, to help them understand the complexities of the analysis. This will be followed by a capstone experience in their senior year, where students will conduct applied policy research, most likely for a non-profit organization or a local government agency.

Foundational courses (26 total credit hours)

Seven required courses (26 credit hours):		
POSC 116	American Government	3 CH
POSC 226	State and Local Politics	3 CH
POSC 236	Public Policy	3 CH
BADM 374 or POSC 336	Principles of Management Public Administration	3 CH
ECON 211 or ECON 221	Principles of Macroeconomics Principles of Microeconomics	3 CH
POSC 295	Writing in Political Science	3 CH
POSC 394	Professional Development in Political Science	1 CH
POSC 395	Research Methods in Political Science	3 CH
POSC 495	Public Policy Capstone	4 CH

Concentrations (15 CH - 29 CH)

Criminal Justice (18CH) Six required courses:		
CJS 101	Criminal Justice Studies	3 CH
SOC 121 or SOC 141	Microsociology Macrosociology	3 CH
CJS 221 or CJS 230	Corrections Law Enforcement	3 CH

SOC 301 or CJS 305	Juvenile Justice Studies Victimology	3 CH
SOC 331 or SOC 342	Criminology Sociological Theory	3 CH
CJS/POSC 438 or POSC 439 or POSC 445	Criminal Due Process Criminal Law The Great American Trial	3 CH

Environmental Biology (28 – 29 CH)
Four required courses (17 CH):

ENSC 111	Introduction to Environmental Studies	3 CH
GEOL 150	Earth Systems	4 CH
ENSC 225	Geographical Information Systems	3 CH
BIO 145	Foundations of Biology	4 CH

Three of the following (11 – 12 CH):

BIO 116	Conservation Biology	3 CH
BIO 262	Animal Systematics	4 CH
BIO 263	Plant Systematics	4 CH
BIO 212	Microbiology	4 CH
BIO 222	Entomology	4 CH
BIO 272	Animal Behavior	4 CH
BIO 273	Toxicology	4 CH
BIO 295	General Parasitology	4 CH
BIO 302	Plant Physiology	4 CH
BIO 394	Aquatic Ecology	4 CH

Environmental Studies (19 – 21 CH)
Two required courses (7 CH):

ENSC 111	Intro to Environmental Studies	3 CH
GEOL 150	Earth Systems	4 CH

Four of the following (12 – 14 CH):

ENSC 200	Environmental Law	3 CH
ENSC 225	Geographical Information Systems	3 CH
ENSC 250	Meteorology	4 CH
ENSC 320	Land Use Planning	3 CH
GEOL 210	Principles of Hydrogeology	3 CH
GEOL 250	Environmental Geology	4 CH

Food and Agricultural Biology (19 – 20 CH)
Four required courses (16 CH):

BIO 145	Foundations of Biology	4 CH
BIO 222	Entomology	4 CH
BIO 263	Plant Systematics	4 CH
BIO 392	General Ecology	4 CH

One of the following (3-4 CH):

BIO 110	Ethnobotany	4 CH
BIO 111	Edible Botany	4 CH
BIO 116	Conservation Biology	3 CH
BIO 212	Microbiology	4 CH
BIO 302	Plant Physiology	4 CH
BIO 322	Genetics	4 CH

Health Systems (21 – 22 CH)
Seven required courses:

BIO 145 or NSCI 101	Foundations of Biology The College Brain	4 CH
BIO 280 or BIO 281	Anatomy & Physiology I Anatomy & Physiology II	4 CH
CHEM 140	General Chemistry I	4 CH
PSY 150	General Psychology	3 CH
NSCI 101 or NSCI 102 or PSY 255	The College Brain Introduction to Neuroscience Lifespan Development	3-4 CH
PHIL 267 or PHIL 387 or REL 200	Ethics Medical Ethics Contemporary Ethical Issues	3 CH

International Studies (18 CH)
Two required courses (6 CH):

POSC 146	Intro to Comparative Politics	3 CH
POSC 156	Intro to International Relations	3 CH

Four of the following (12 CH):

POSC 230	Globalization	3 CH
POSC 310	International Political Economy	3 CH
POSC 312	International Security	3 CH
POSC 327	Politics of Developing Societies	3 CH
POSC 347	Politics of Industrialized Societies	3 CH
POSC 386	Dictators and Totalitarianism	3 CH
POSC 405	Terrorism	3 CH

POSC 410	International Law and Organization	3 CH

Leadership and Management (15 CH)		
ACCT 113	Principles of Accounting I	3 CH
INDS 155	Principles of Ethical Leadership	3 CH
BADM 233	Managerial Accounting	3 CH
BADM 374	Principles of Management	3 CH
BADM 484	Human Resource Management	3 CH

Social Issues (18 CH)
Four required courses (12 CH):

SOC 121	Microsociology	3 CH
SOC 141	Macrosociology	3 CH
SOC 211	Anthropology	3 CH
SOC 342	Sociology Theory	3 CH

Two of the following (6 CH):

SOC 251	Minorities	3 CH
SOC 351	Social Stratification	3 CH
SOC 401	Sociology of the Family	3 CH
SOC 421	Gender and Society	3 CH
SOC 425	Urban Sociology	3 CH

Wildlife Biology (18 CH)
Two required courses (8 CH):

BIO 145	Foundations of Biology	4 CH
BIO 392	General Ecology	4 CH

One of the following (4CH)		
BIO 222	Entomology	4 CH
BIO 262	Animal Systematics	4 CH
BIO 263	Plant Systematics	4 CH
Two of the following (6 CH):		
BIO 116	Conservation Biology	3 CH
BIO 212	Microbiology	4 CH
BIO 272	Animal Behavior	4 CH
BIO 295	General Parasitology	4 CH
BIO 322	Genetics	4 CH
BIO 350	Principles of Immunology	3 CH
BIO 394	Aquatic Ecology	4 CH

Women and Gender Studies (18 CH)
One required course (3 CH):

INDS 202	Introduction to Women's and Gender Studies: Gender, Culture and Sexuality	3 CH
Five of the following (15 CH):		
ART 214	Women in Art	3 CH
COMM 265	Communication and Gender	3 CH
ENG 385	Women in Literature	3 CH
HIST 241	European Women's History	3 CH
HIST 450	Gender and Sexuality in 19th Century Europe	3 CH
INDS 432	Special Topics in Gender Studies	3 CH
POSC 225	Gender and Politics	3 CH
PSY 450	Special Topics: Sex in the 21st Century	3 CH

REL 220	Women in the Jewish and Christian Traditions	3 CH
REL 225	Selected Topics: Sex, Sexuality, and Religion	3 CH
SEMS 400	7 Deadly Sins and Global Issues	3 CH
SEMS 400	Women's Issues and Global Human Rights	3 CH
SOC 261	American Women's Experience: A Multicultural Perspective	3 CH
SOC 271	Sociology of Sport	3 CH
SOC 401	Sociology of the Family	3 CH
SOC 421	Gender and Society	3 CH
SOC 431	Disney and Gender	3 CH

Religion

Bachelor of Arts Degree

Upon graduation with a religion major from Thiel College, a student will demonstrate:

- familiarity with the biblical writings of the Jewish and Christian traditions and with scholarly approaches to interpreting these and other religious texts;
- the ability to interpret the nature of religious experience, Christian and otherwise, with a level of sophistication appropriate to an undergraduate scholar of religion;
- knowledge of the key persons, works, and movements from the history of Christianity; and
- a mature understanding of the interrelatedness of religion and culture

Major Requirements

Students majoring in religion must fulfill the following minimum requirements.

Thirty-one credit hours in religion including:		
REL 110	Introduction to Religion	3 CH
REL 120	Interpreting the Jewish and Christian Scriptures	3 CH
REL 190	World Religions	3 CH
The following two courses, ordinarily taken in the senior year:		
REL 330	Readings in Religious Studies	2 CH
REL 340	Readings in Theology	2 CH
A maximum of three credit hours of:		
REL 380	Cooperative Education	
or		
REL 390	Independent Study may be applied toward the major.	
One of the following, preferably in the first year:		
PHIL 127	Introduction to Philosophy	3 CH

PHIL 147	Introduction to the History of Philosophy: Socrates to Aquinas	3 CH
PHIL 157	Introduction to the History of Philosophy: Descartes to Sartre	3 CH

Sociology

Bachelor of Arts Degree

The major requires a minimum of 37 credit hours and must include the below courses:

SOC 121	Microsociology	3 CH
SOC 141	Macrosociology	3 CH
SOC 215	Statistics for the Social Sciences	3 CH
SOC 251	Minorities	3 CH
SOC 341	Social Research Methods	3 CH
SOC 342	Sociological Theory	3 CH
SOC 351	Social Stratification	3 CH
SOC/CJS 371	Professional Seminar	1 CH
SOC 440	Capstone in Sociology	3 CH

In addition, three elective sociology courses (numbered 261 through 491, excluding SOC 455), and one other sociology course (any course number) are required.

Note: Students electing to double major in sociology and criminal justice studies may not use the same elective courses to satisfy the elective requirement for both majors. SOC 215: Statistics for the Social Sciences is accepted as a student's second math class towards Thiel core curriculum graduation requirements. SOC 251: Minorities is required for the sociology major and may be used also as an elective in the criminal justice studies major if a student is a double major in sociology and criminal justice studies.

A declaration of a major in sociology must be filed no later than the first semester of the junior year.

Theology And Youth Ministry

Bachelor of Arts Degree

Upon graduation with a Theology and Youth Ministry major from Thiel College, a student will demonstrate:

- familiarity with the biblical writings of the Jewish and Christian traditions and with scholarly approaches to interpreting these and other religious texts;
- the ability to interpret the nature of religious experience, Christian and otherwise, with a level of sophistication appropriate to an undergraduate scholar of religion;
- knowledge of the key persons, works, and movements from the history of Christianity; and
- a mature understanding of the interrelatedness of religion and culture.

Major Requirements

Students majoring in theology and youth ministry will fulfill the following requirements:

REL 110	Introduction to Religion	3 CH
Choose REL 120 REL 121 REL 122 REL 123	***Any 1 of the following 4:*** Interpreting the Jewish and Christian Scriptures Intro to the Old Testament/Hebrew Bible Introduction to the New Testament Intro to Christianity	3 CH
REL 130	Introduction to Ministry	3 CH
REL 190	World Religions	3 CH
REL 290	Luther and His Legacy	3 CH
REL 340	Readings in Theology	2 CH
REL 370	Meaning Making	3 CH

Any two additional Religion courses.

Any two courses in Psychology or Sociology, chosen in consultation with one's advisor. One Philosophy course, Business or Accounting course, or INDS 202 (Introduction to Women's and Gender Studies).

Dietrich Honors Institute

DHI Graduation Requirements

DHI students complete a four-year, sequenced, Core curriculum taken in place of the general College Core. To graduate as a Dietrich Honors Institute Scholar students must complete the following:

Foreign Language Competency

Six credits of introductory level college coursework in the same language or three credits of intermediate level language. Exemption possible through the Department of Language examination.

Mathematics Competency

Earn a grade of C- or higher in Math 142 (or higher) or PSY 215/SOC 233, Statistics for the Social Sciences.

Scientific Reasoning Competency

Successfully complete one natural or physical science laboratory course (as determined in the general College Core).

DHI Core Courses

Pass all of the following courses:

HONS 109	Becoming Human: Love, Power, Justice	3 CH
HONS 113	Communicating Effectively: Grammar, Dialectic, Rhetoric	3 CH
HONS 114	Creating Culture: Ancient, Medieval, Modern	3 CH
HONS 128	Interpreting Scriptures: Jewish, Christian, Islamic	3 CH
HONS 126	Composing Contextually: Enlightenment, Romanticism, Postmodernism	3 CH
HONS 250	Global Perspectives	3 CH
HONS 330	Creative Practices: Art, Research, and Problem-Solving	3 CH
HONS 340	Contributing Culturally: Researching, Creating, Presenting	3 CH

DHI Elective Course

The DHI Elective is meant to encourage students to follow their curiosity and challenge themselves. The DHI Elective must be a 3- or 4-credit course

At the 300- or 400-level, outside the student's major department
OR
Any level ART course.

Classes that are required to satisfy the major, but which are not in the major department, qualify for the DHI Elective. (E.g., PHIL 387 Medical Ethics satisfies requirements for a B.S. in Neuroscience; since it is outside the major department as a non-Neuroscience course, it can count as a DHI Elective.) The DHI Elective can be taken in satisfaction of requirements for a minor. Students may petition the DHI Director for exemptions to these guidelines. Students must submit their DHI Elective selection to the DHI Office via the electronic DHI Elective Form.

DHI Thesis

All Dietrich students must satisfactorily complete and present an approved honors thesis.

Good Standing in the DHI

To remain in good standing in the DHI, students must

- Maintain a 3.0 GPA, both cumulatively and semester-by-semester;
- Abide by the Thiel Honor Code and Academic Integrity policies as outlined in the Thiel College Student Handbook;
- Make timely progress in DHI coursework;
- Be good ambassadors of Thiel College and the DHI, especially while participating in special events and trips.

Failure to meet these requirements may result in probationary status or dismissal from the DHI. Further details about DHI programs and policies are found in the DHI Student Handbook (click here).

Core Requirements

The College offers two parallel core pathways to fulfill the All-College Learning Goals: The general core curriculum and the Dietrich Honors Institute (DHI) core.

Bachelor of Arts and Bachelor of Science Degree

Credit Hours

- 124 credit hours of successfully completed course work shall be required for the Bachelor of Arts degree.
- The 124 credit hours shall be distributed approximately as follows:
    - 25 to 30 percent for the Core Curriculum Requirement
    - 30 to 45 percent for the major
    - 25 to 45 percent for electives

1. **Literacy Series**
    - **Composition (3 CH)**
        - Successfully complete ENG 101: College Writing (C- or higher required)
    - **Presentation (3 CH)**
        - Successfully complete INDS 101: Introduction to Presentational Literacy (C- or higher required)
    - **Quantitative and Scientific Reasoning (10-12 CH)**
        - **Quantitative Reasoning**
            - B.A. Programs: Students must earn a grade of C- or higher in MATH 125, MATH211, or higher.
            - B.S. Programs: Students must earn a grade of C- or higher in MATH 142 or any calculus course.
        - **Scientific Reasoning**
            - Successfully complete one natural or physical science laboratory course.
        - **Additional Quantitative / Scientific Reasoning Course**
            - Successfully complete one additional course satisfying either Quantitative or Scientific Reasoning: computer science, mathematics, natural or physical science course—biology, chemistry, computer science, environmental science, geology, neuroscience, mathematics, or physics. PSY/SOC 233, Statistics for Social Sciences, will also fulfill this requirement. Courses with the CIS and IS prefix will not satisfy this requirement.
    - **Creative and Humanistic (12 CH)**
        - **Creative (3 CH)**
            - Successfully complete a course (or earn at least 3 CH) in art, music or theatre, excluding THAR 101: Theatre Practicum.
        - **Humanistic (6 CH)**

        - Students must successfully complete REL 120, 121, 122 or 123 and one additional course in English, history, languages, philosophy or religion.
    - **Additional Creative and Humanistic Course (3 CH)**
        - Students must successfully complete an additional course satisfying either Creative or Humanistic: art, music, theatre, history, English, philosophy, religion or a Spanish culture course (250 for example). This course must be outside the student's major (i.e. cannot be a course with the same department prefix as the major).
    - **Socio-Political (3-4 CH)**
        - Successfully complete one course in economics, geography, political science, psychology, sociology or criminal justice studies. Courses with the prefix ACCT, BADM, EDUC, ECE, SPED, and SECED will not satisfy this requirement.
    - **Foreign Language (0-6 CH)**
        - The foreign language requirement may be satisfied in one of the following ways:
            - Earn a final grade of C- or better in two years of the same foreign language in high school;
            - Take the placement test and test out of a class or the requirement altogether;
            - Complete (C- or better) two semesters of a foreign language at the introductory level;
            - Complete (C- or better) one semester of a foreign language at the intermediate level.

2. **Seminar Series (9 CH)**

   The Seminar Series at Thiel College is designed to introduce students to engaged, participatory learning. This series of three courses is intended to be the centerpiece of the core curriculum, emphasizing student-centered learning and investigation of big ideas, the interconnected nature of the disciplines, as well as creative and team-based problem solving.

    - **SEMS 110: Introduction to Seminar Series (3 CH)**
        - This seminar, taken during the student's first year at Thiel College, is the first seminar within the core series. It is designed to introduce students to seminar style learning in a disciplinary context. SEMS 110 must be completed with a C- or higher to meet graduation requirements.
    - **SEMS 250: World Cultures (3 CH)**
        - This seminar is to be taken during the student's second, third, or fourth semester. By the end of this seminar, students will have the resources to develop into mature, informed, critically thinking citizens through the exploration of similarities and differences between cultures. This seminar will be cross-listed with pre- approved courses that are discipline-specific. Cannot be used to concurrently satisfy another core requirement in the Literacy Series. (P: SEMS 110)
    - **SEMS 400: Global Issues (3 CH)**
        - This is the final seminar in the core seminar series. The topic will be determined by the instructor and the consulting faculty. The purpose of the course is for the class to give an in-depth analysis of an issue of current global importance. Students will be expected to bring their own experience from the previous seminars as well as their expertise from their own major to bear on the issue at hand. Cannot be used to concurrently satisfy another core

requirement in the Literacy Series. (Recommended P: junior or senior standing and SEMS 110 and 250)

3. **Concern for Physical Well-Being (2-3 CH)**

   Thiel College hopes to engage our students in activities that build their appreciation for and participation in healthy activity. These courses are designed to promote an intellectual understanding of physical well-being and development to provide the opportunity for students to apply theory in a variety of structured options.

   Students will successfully complete two or three credit hours of theory courses such as AH 105 Taking Care of your Health, AH 115 Food Patterns and Health, AH 125 Nutrition, HPED 198 Slimnastics, or HPED 199 Fitness for Life and Wellness.

Chemistry

Bachelor of Science Degree

Major Requirements

The major in chemistry consists of all the courses in Sections A and C, and one course from Section B, and one from Section D:

Section A	
CHEM 140	General Chemistry I
CHEM 160	General Chemistry II
CHEM 200	Organic Chemistry I
CHEM 210	Organic Chemistry II
CHEM 240	Quantitative Analysis
CHEM 315	Physical Chemistry—Fundamentals
CHEM 345	Biochemistry I
CHEM 370	Instrumental Analysis
CHEM 405	Junior Seminar
CHEM 406	Capstone
CHEM 495	Independent Study
Section B	
CHEM 325	Physical Chemistry-Applications
CHEM 390	Inorganic Chemistry
Section C	
MATH 181	Calculus I
MATH 182	Calculus II
PHYS 174	Introductory Physics I
PHYS 184	Introductory Physics II
Section D	
CHEM 410	Advanced Topics in Inorganic Chemistry

CHEM 415	Biological Inorganic Chemistry
CHEM 420	Advanced Topics in Physical Chemistry
CHEM 430	Advanced Topics in Environmental Chemistry
CHEM 440	Advanced Topics in Biochemistry
CHEM 450	Advanced Topics in Organic Chemistry
CHEM 465	Advanced Topics in Analytical Chemistry

Students planning to be professional chemists are encouraged to take more than the minimum course work in physics and mathematics.

Suggested first year schedule for all chemistry majors (includes Pre-Medicine, Pre-Dentistry, Pre-Pharmacy, Pre-Veterinary, B.S. in Biochemistry, Chemistry, and Environmental Chemistry):

First Year, Fall		
CHEM 140	General Chemistry I	4 CH
MATH 181	Calculus I	4 CH
ENG 101	College Writing	3 CH
SEMS 110	Introduction to Seminar	3 CH
	Electives	1-4 CH
		TOTAL 15-18 CH
First Year, Spring		
CHEM 160	General Chemistry II	4 CH
MATH 182	Calculus II	4 CH
INDS 101	Presentational Literacy	3 CH
	Core Elective	3 CH
	Elective	0-4 CH
		TOTAL 14-18 CH

Students needing more preparation in mathematics are advised to take MATH 107 College Algebra in the fall;CHEM 140 and MATH 142 Precalculus in the spring; and CHEM 160 and MATH 181 in the fall semester of the second year.

Students with exceptionally strong math/science backgrounds should consult with the chemistry department before registering.

Conservation Biology

Bachelor of Science Degree

A student who graduates from Thiel College with a major in conservation biology will:

- understand biological principles and their implications including: Evolution; Structure and Function; Information flow, exchange, and storage; Pathways and transformation of energy and matter; and Biological Systems.
- study, analyze experimentally and interpret biological problems including: a. modeling and simulation b. quantitative reasoning c. generation of lab reports that reflect methodology.
- understand the interdisciplinary nature of conservation strategies and societal implications.
- be able to effectively communicate about biological matters in both oral and written form.
- be prepared for discipline-related or admission into a discipline-related graduate or professional program.

I. Foundational Courses		
BIO 145	Foundations of Biology	4 CH
BIO 116	Conservation Biology	4 CH
BIO 263	Plant Systematics	4 CH
And one of the following two courses:		
BIO 262	Animal Systematics	4 CH
BIO 272	Entomology	4 CH

II. Breadth in the Discipline Must take all 4		
BIO 290	Cell Biology	4 CH
BIO 322	Genetics	4 CH
BIO 342	Biostatistics and Research Methods	4 CH
BIO 392	General Ecology	4 CH
And two courses from the following:		
BIO 212	Microbiology	4 CH
BIO 222	Entomology	4 CH
BIO 262	Animal Systematics	4 CH
BIO 272	Animal Behavior	4 CH

BIO 273	Toxicology	4 CH
BIO 302	Plant Physiology	4 CH
BIO 394	Aquatic Ecology	4 CH

Note: Courses applied as foundational courses may not also be applied as breadth in the discipline courses.

III. Senior Capstone Experience in Biology
A completed research project under the supervision of a biology department faculty member is required of the student majoring in biology. The project is culminated with a formal scientific research
paper and a formal oral presentation.

Students must take both of these courses.

BIO 395	Junior Research Seminar	1 CH
BIO 462	Senior Seminar	2 CH

And one of the following two courses:

BIO 452	Advanced Biology	2 CH
BIO 482	Independent Study	2 CH

IV. Specified I.R. courses, related sciences (because of the interdisciplinary nature of the major)

MATH 107	College Algebra (minimum requirement)	3 CH

And one of the following three pairings:

CHEM 140	General Chemistry I	4 CH
CHEM 160	General Chemistry II	4 CH

OR

PHYS 154	Physics I (non-calc based)	4 CH
PHYS 164	Physics II (non-calc based)	4 CH

OR

PHYS 174	Physics I (calculus based)	4 CH
PHYS 184	Physics II (calculus based)	4 CH

And one of the following

POSC 116	American Government and Politics	3 CH
POSC 236	Public Policy	3 CH

And one of the following

ECON 211	Macroeconomics	3 CH
ECON 221	Microeconomics	3 CH
And one of the following		
SOC 141	Macrosociology	3 CH
SOC 211	Anthropology	3 CH
And one of the following		
REL 200	Contemporary Ethical Issues	3 CH
PHIL 267	Ethics	3 CH
PHIL 297	Environmental Ethics	3 CH
And a Foreign language, especially Spanish (I.R. I)		
Note: These courses can be applied to the CORE.		

Suggested schedule of science courses for conservation biology majors (B.S.)		
	Fall	Spring
1	BIO 145: Foundations of Biology CHEM 140: General Chemistry I MATH 142: Precalculus	BIO 262 Animal Systematics or BIO Elective CHEM 160 General Chemistry II BIO 116 Conservation Biology
2	BIO 222 Entomology or BIO 263 Plant Systematics	BIO 262 Animal Systematics or BIO Elective and BIO 290 Cell Biology
3	BIO 392 Ecology or BIO Elective and BIO 322 Genetics	BIO 342 Biostatistics and Research Methods BIO 395 Junior Research Seminar
4	BIO 462 Senior Seminar	BIO 452 Advanced Biology or BIO 482 Independent Study

Exercise Science

Bachelor of Science Degree

The biology department of Thiel College offers a Bachelor of Science degree in Exercise Science. Through an interdisciplinary and comprehensive approach, students will gain knowledge in scientific foundation of human movement, physical activity, and exercise sport and performance. This curriculum will prepare students for a wide variety of graduate and professional programs, or for diverse careers in health - related professions.

A student who graduates from Thiel College with a major in Exercise Science will:

- Understand exercise science principles and their implications/applications.
- Experimentally analyze, critique, and interpret problems in the exercise science field.
- Effectively communicate scientific concepts in both written and oral forms.
- Be effectively prepared for discipline-related employment, or admission into a graduate/professional program.

Exercise Science Requirements Must take <u>all</u> of the following:		
1. EXER 105	Intro to Exercise Science	3 CH
2. EXER 205	Facility Management	3 CH
3. EXER 305	Exercise Testing/Prescription (Lab)	4 CH
4. EXER 310	Kinesiology	4 CH
5. EXER 315	Exercise Physiology (Lab)	4 CH
6. EXER 405	Strength and Conditioning (Lab)	4 CH
7. EXER 410	Exercise Science Senior Seminar	2 CH
8. **And** <u>one</u> of the following:		
EXER 490	Ind Study in Exercise Research	3 CH
EXER 495	Internship	3 CH

Related Math and Science Courses Must take <u>all</u> of the following:		
1. BIO 117	Medical Terminology	3 CH
2. BIO 280	Human Anatomy and Physiology I	4 CH

3. BIO 281	Human Physiology and Physiology II	4 CH
4. MATH 211	Elementary Statistics	4 CH
5. AH 125	Nutrition	2 CH

Suggested schedule of science courses for exercise science majors (B.S.)

	Fall	Spring
1	EXER 105: Introduction to Exercise Science BIO 145: Foundations of Biology	EXER 205: Facility Management MATH 107: College Algebra
2	BIO 280: Human Anatomy and Physiology I MATH 211: Elementary Statistics	BIO 117: Medical Terminology BIO 281: Human Anatomy and Physiology II
3	EXER 310: Kinesiology AH 125: Nutrition	EXER 305: Exercise Testing and Prescription EXER 315: Exercise Physiology
4	EXER 490: Independent Study in Exercise Research OR EXER 495: Internship in Exercise Science EXER 405: Strength and Conditioning	EXER 410: Exercise Science Senior Seminar

Nursing

Bachelor of Science in Nursing (B.S.N.) Degree

Major Requirements

Pre-Nursing Courses: Completed in the first three semesters in addition to enrolling in College Core requirements. Students are also encouraged to participate in the Health Professions Institute course sequence (HPI 101, HPI 202, and HPI 303).

Pre-Nursing Courses:		
BIO 145	Foundations of Biology	4 CH
BIO 280	Anatomy & Physiology I	4 CH
PSY 150	General Psychology	3 CH
BIO 281	Anatomy & Physiology II	4 CH
PSY 255	Lifespan Development	3 CH
AH 125	Nutrition	3 CH
BIO 205	Microbiology for Nurses	4 CH
CHEM 130	Chemistry for Health Sciences	4 CH
MATH 211	Elementary Statistics	4 CH

Note: Students must complete all of the required pre-nursing courses by the end of the third semester (second Fall semester) with a grade of C- or better and a 3.0 minimum G.P.A.. Only pre-nursing courses calculated in the pre-nursing G.P.A. that are considered in the official admission into the Sharon Regional Health System School of Nursing RN program. Upon completion of the third semester at Thiel College, students who have maintained the academic expectations (including successful passing of the *Test of Essential Academic Skills* - TEAS) will be formally admitted into the Sharon Regional Health System School of Nursing.

Nursing Courses: Completed at both Thiel College and at Sharon Regional Health System, School of Nursing (SRHS SON):

Thiel College:		
SPAN 523	Medical Spanish	3 CH
NUR 301	Nursing Leadership and Management	3 CH
NUR 304	Advanced Health Assessment	3 CH
NUR 402	Healthcare Informatics	3 CH

NUR 404	Healthcare Policy	3 CH
NUR 406	Vulnerable Populations	3 CH
NUR 409	Research & Evidence-Based Practice	3 CH
NUR 412	Community & Public Health Nursing	3 CH
SRHS SON:		
	Introduction to Healthcare	1 CH
	Fundamentals	4 CH
	Health Assessment	3 CH
	Core Concepts of Pharmacology Introduction	1 CH
	Medical-Surgical Nursing I	7 CH
	Medical-Surgical Nursing II	7 CH
	Core Concepts of Pharmacology I	1 CH
	Core Concepts of Pharmacology II	1 CH
	Core Concepts of Pharmacology Specialty	1 CH
	Specialty Nursing	7 CH
	Practicum	3 CH

Note: Students will sit for the NCLEX-RN after their fourth year, spring semester.

Actuarial Studies

Bachelor of Science Degree

The continuing growth of insurance and governmental agencies has maintained a constant demand for qualified actuaries. The Actuarial Studies Program aims to provide students with the mathematical training and business background needed to enter the actuarial profession directly or to prepare for advanced study in actuarial science at a university.

A student who graduates from Thiel College with a major in Actuarial Studies will be able to:

- Use general probability theory to solve problems in the field of financial risk management.
- Apply interest theory to calculate the values of and payments for various financial instruments.
- Use derivatives to create and evaluate financial positions, especially those involving insurance.
- Use statistical methods to make decisions and analyze situations.
- Communicate statistical and financial information effectively, in both oral and written formats.

Major Requirements

In addition to taking one of the first two SOA exams (P or FM), a student majoring in Actuarial Studies must successfully complete the following courses. All courses applied to the major must be completed with a grade of C- or higher.

ACCT 113	Principles of Accounting I	3 CH
ACCT 123	Principles of Accounting II	3 CH
Choose one of the following two courses:		
BADM 233	Managerial Accounting	3 CH
ACCT 313	Cost Accounting	3 CH
Choose one of the following two courses:		
ENG 270	Advanced Composition	3 CH
ENG 260	Business and Technical Writing	3 CH
BADM 344	Finance	3 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 113	Data Management Applications	1 CH

CSCI 159	Introduction to Programming	4 CH
MATH 181	Calculus I	4 CH
MATH 182	Calculus II	4 CH
MATH 281	Calculus III	4 CH
MATH 291	Linear Algebra	4 CH
MATH 341	Theory of Interest and Life Annuities	4 CH
MATH 342	Derivatives Markets	3 CH
MATH 451	Probability	4 CH
MATH 461	Statistics	4 CH
ECON 211	Principles of Macroeconomics	3 CH
ECON 221	Principles of Microeconomics	3 CH

Biochemistry

Bachelor of Science Degree

In the interdisciplinary science of biochemistry, the structure, composition and chemical reactions of substances in living systems are studied. The biochemistry major is valuable for students applying to medical, dental, veterinary, pharmacy or graduate school by providing a multidisciplinary foundation in chemistry, biology and physics. This major also prepares students for work in pharmaceutical, agricultural chemical, biotechnology and consumer products industries.

A student who graduates from Thiel College with a Bachelor of Science degree in biochemistry will:

- demonstrate knowledge of the structures and functions of biological molecules and explain molecular pathways associated with cellular metabolism of the major classes of biochemical compounds;
- possess scientific literacy and problem solving skills associated with the main branches of chemistry: analytical, biochemistry, inorganic, organic and physical;
- know how to conduct an internal or external research project;
- be prepared for chemistry-related employment in the medical, pharmaceutical, biotechnology or related fields or biochemistry-related graduate or professional programs including medical, dental or veterinary schools.
- Demonstrate the ability to communicate effectively in oral and written form.

Major Requirements

The B.S. degree in biochemistry requires all of the courses in Sections A and C, one course in Section B, and two courses in Section D. It is expected that the course from Section B will have a biochemistry focus.

Section A
CHEM 140 General Chemistry I
CHEM 160 General Chemistry II
CHEM 200 Organic Chemistry I
CHEM 210 Organic Chemistry II
CHEM 240 Quantitative Analysis
CHEM 315 Physical Chemistry - Fundamentals
CHEM 345 Biochemistry I
CHEM 348 Biochemistry II
CHEM 405 Junior Seminar
CHEM 406 Capstone
CHEM 495 Independent Study
Section B
CHEM 3XX Biophysical Chemistry
CHEM 3XX Biological Analytical Chemistry
CHEM 415 Biological Inorganic Chemistry
CHEM 440 Advanced Topics in Biochemistry

Section C
MATH 181 Calculus I
MATH 182 Calculus II
PHYS 174 Introductory Physics I (calculus-based)
PHYS 184 Introductory Physics II (calculus-based)
BIO 145 Foundations of Biology
Section D
BIO 290 Cell Biology
BIO 294 Human Physiology
BIO 322 Genetics
BIO 343 Developmental Biology
BIO 284 Human Anatomy
or
BIO 282 Comparative Chordate Anatomy

Biology

Bachelor of Science Degree

A student who graduates from Thiel College with a major in biology will:

- understand biological principles and their implications, including: evolution; structure and function; information flow, exchange, and storage; pathways and transformation of energy and matter; and biological systems.
- study, analyze experimentally and interpret biological problems, including: a. modeling and simulation b. quantitative reasoning c. generation of lab reports that reflect methodology.
- be able to effectively communicate about biological matters in both oral and written form.
- be prepared for discipline-related employment (including secondary education in Pennsylvania) or admission into a discipline-related graduate or professional program.

I. Foundational Courses		
BIO 145	4 CH	Foundations of Biology
And one of the following four systematics courses:		
BIO 262	4 CH	Animal Systematics
BIO 222	4 CH	Entomology
BIO 263	4 CH	Plant Systematics
BIO 212	4 CH	Microbiology

II. Breadth in the Discipline of Biology *Students must take all five courses.*		
BIO 290	4 CH	Cell Biology: A molecular approach
BIO 322	4 CH	Genetics
BIO 342	4 CH	Biostatistics and Research Methods
BIO 392	4 CH	General Ecology
One elective from any four-credit, 200 or 300 level BIO lab course. Students may also choose from NCSI 202, 209 or 315.		
And one of the following two courses:		
BIO 350	3 CH	Principles of Immunology
BIO 399	4 CH	Molecular Biology

Note: Courses applied as foundational courses may not also be applied as breadth in the discipline courses.

III. Senior Capstone Experience in Biology
A completed research project under the supervision of a biology department faculty member is required of the student majoring in biology. The project is culminated with a formal scientific research paper and a formal oral presentation. See the biology chair for specific requirements of the research project.
Students must take both of these courses.

BIO 395	1 CH	Junior Research Seminar
BIO 462	2 CH	Senior Seminar

And one of the following two courses:

BIO 452	2 CH	Advanced Biology
BIO 482	2 CH	Independent Study

IV. Related Math and Science Courses
All of the following

MATH 181	4 CH	Calculus I
CHEM 140	4 CH	General Chemistry I
CHEM 160	4 CH	General Chemistry II
CHEM 200	4 CH	Organic Chemistry I
CHEM 210	4 CH	Organic Chemistry II
CHEM 345	4 CH	Biochemistry I

Suggested schedule of science courses for biology majors (B.S.)		
	Fall	Spring
1	BIO 145: Foundations of Biology CHEM 140: General Chemistry I MATH 142: Precalculus (minimum)	BIO 290 Cell Biology OR Systematics Course CHEM 160 General Chemistry II MATH Calculus I
2	BIO 322 Genetics OR BIO Elective AND CHEM 200 Organic Chemistry I	BIO 290 Cell Biology OR Systematics Course AND CHEM 210 Organic Chemistry II
3	BIO 392 Ecology AND BIO 322 Genetics OR BIO Elective AND CHEM 345 Biochemistry I	BIO 342 Biostatistics and Research Methods BIO 395 Junior Research Seminar BIO 399 Molecular Biology
4	BIO 462 Senior Seminar AND BIO 452 Advanced Biology OR BIO 482 Independent Study	BIO Elective

Communication Sciences and Disorders

Bachelor of Science Degree

The CSD major requires 84 credit hours consisting of 39 hours of CSD courses and 45 hours of interdisciplinary requirements.

All courses taken for the major in CSD must be passed with a grade of C- or better. All courses with a CSD and BIO prefix, after matriculation, are to be completed at Thiel College.

Suggested Sequence of Major CSD Requirements

Fall Semester

CSD 111 Introduction to Communication Sciences & Disorders (freshman year)
CSD 213 Nature and Development of Language (sophomore year)
CSD 218 Sign Language I (sophomore year)
CSD 220 Intro to Audiology & Auditory Disorders (sophomore year)
CSD 250 Intro to Communication Disorders in Children (sophomore year)
CSD 415 Intro to Clinical Observation & Methodology (junior or senior year)
CSD 450 Current Topics in Communication Sciences and Disorders (senior year)

Spring Semester

CSD 191 Clinical Phonetics (freshman year)
CSD 215 Anatomy and Physiology of the Vocal Mechanism (sophomore year)
CSD 314 Speech and Hearing Science (junior year)
CSD 370 Introduction to Communication Disorders in Adults (junior year)
CSD 395 Aural Rehabilitation (junior year)
CSD 420 Clinical Practicum (junior or senior year)

- CSD majors may elect to take CSD 318 Sign Language II as a continuation of CSD 218 Sign Language I.
- Seniors may elect to take CSD 460 Integrational Internship in CSD and up to 6 credits of CSD 425 Advanced Clinical Practicum as a continuation of their clinical experience.

Interdisciplinary Requirements

Students seeking a B.S. are required to take 45 credit hours of interdisciplinary requirements:

- NSCI 101 Brain and Behavior 4 CH
- CHEM 100 Chemtech *or* PHYS 154 Into to Physics 4 CH
- MATH 211 Elementary Statistics 4 CH
- NSCI 315 Neuroanatomy *or* NSCI 350 Neuroscience Disorders/Diseases 3 CH
- BIO 117 Medical Terminology 3 CH
- BIO 280 Human Anatomy & Physiology I 4 CH
- BIO 281 Human Anatomy & Physiology II 4 CH
- EDUC 400 Educating English Language Learners 3 CH
- ENG 317 Linguistics 3 CH
- NSCI 202 Intro to Neuroscience 4 CH
- PSY 150 General Psychology 3 CH
- PSY 235 Research Methods 3 CH
- PSY 255 Lifespan Development 3 CH

Data Analytics

Bachelor of Science Degree

The Data Analytics program is designed to give students a strong background in the fundamentals of data science. Students study mathematics, computer science, and data science in order to have a broad understanding of the subject. Students graduating with a degree in Data Analytics will be well prepared for careers in business, government, and science in addition to being prepared for graduate study in data science.

A student who graduates from Thiel College with a major in Data Analytics will

- Demonstrate proficiency in standard mathematical and statistical methods relevant to data science
- Be able to use programming and databases to organize and process data
- Be able to use computational and statistical methods to discover patterns within large data sets
- Be able to communicate information effectively through data visualization as well as oral and written communication

A student majoring in Data Analytics must successfully complete the following courses. All courses applied to the major must be completed with a grade of C- or higher.

CSCI 120	Intro to Data Analytics	3 CH
MATH 181	Calculus I	4 CH
MATH 182	Calculus II	4 CH
MATH 291	Linear Algebra	4 CH
MATH 451	Probability	4 CH
MATH 461	Statistics	4 CH
CSCI 149	Programming in Python	4 CH
CSCI 159	Intro to Programming	4 CH
CSCI 169	Data Structures	4 CH
CSCI 319	Database Management	4 CH
CIS 113	Data Management App	1 CH
MATH 350	Data Analysis in R	4 CH
CSCI 422	Data Mining	4 CH

Students majoring in Data Analytics are also required to complete a minor in a data-intensive field, such as business, biology, or sociology. The choice of minor must be approved by the student's academic advisor.

Environmental Chemistry

Bachelor of Science Degree

This major provides students with a strong foundation in chemistry and in the environmental sciences. Courses in a variety of disciplines prepare the student well to work in this rapidly growing, interdisciplinary field. Students planning to be professional environmental chemists are strongly encouraged to seek related summer internships and to take more than the minimum coursework in areas related to the environment.

A student who graduates from Thiel College with a major in environmental chemistry will:

- demonstrate competency in conducting an internal or external research project.
- possess scientific literacy and problem solving skills associated with the main branches of chemistry: analytical, biochemistry, inorganic, organic, physical and environmental.
- be able to solve problems dealing with soil, water and atmospheric chemistry, toxic chemicals and waste disposal.
- possess practical field skills including environmental sampling and analysis.
- demonstrate competency in conducting a trace analysis.
- be able to critically analyze current environmental issues from a scientific standpoint.
- be prepared for employment in environmental chemistry or admission into an environmental or chemistry-related graduate or professional program.
- demonstrate the ability to communicate effectively in oral and written form.

Major Requirements

The B.S. degree in biochemistry requires all of the courses in Sections A and C, and two courses in Section B. It is expected that the courses from Section B will have an environmental chemistry focus.

Section A
CHEM 140 General Chemistry I
CHEM 160 General Chemistry II
CHEM 200 Organic Chemistry I
CHEM 210 Organic Chemistry II
CHEM 240 Quantitative Analysis
CHEM 330 Environmental Chemistry
CHEM 370 Instrumental Analysis
CHEM 390 Inorganic Chemistry
CHEM 405 Junior Seminar
CHEM 406 Capstone
CHEM 430 Advanced Topics in Environmental Chemistry
CHEM 495 Independent Study

Section B
ENSC 250 Meteorology & Air Quality Assessment
GEOL 150 Earth Systems
GEOL 210 Principles of Hydrogeology
ENSC 111 Introduction to Environmental Studies
or
BIO 116 Conservation Biology
Section C
MATH 181 Calculus I
MATH 182 Calculus II
PHYS 174 Introductory Physics I
PHYS 184 Introductory Physics II

Environmental Safety Management

Bachelor of Science Degree

Business Administration Courses (12 Credit Hours)		
ACCT 113	Principles of Accounting I	3 CH
BADM 444 or BADM 484	Operations Management Human Resources Management	3 CH
BADM 374	Principles of Management	3 CH
BADM 334	Insurance	3 CH
Environmental Science Courses (13 Credit Hours)		
ENSC 111	Introduction to Environmental Studies	3 CH
ENSC 200	Introduction to Environmental Law	3 CH
ENSC 225	Geographical Information Systems	3 CH
ENSC 250	Meteorology and Air Quality Assessment	4 CH
Environmental Safety Management Courses (24 Credit Hours)		
ESM 110	Hazard Awareness	1 CH
ESM 111	Introduction to Safety	3 CH
ESM 210	Advanced Hazard Recognition	1 CH
ESM 221	Emergency Preparedness, Prevention and Response	3 CH
ESM 231	Construction Safety	3 CH
ESM 241	Regulatory Compliance and Safety Management	3 CH
ESM 351	Hazardous Materials and Environmental Safety	3 CH
ESM 361	Fundamental Concepts of Industrial Hygiene	3 CH
ESM 371	Essential Topics in Environmental Safety Management	3 CH
ESM 380	ESM Lab Experience	1 CH
Other Lab Science Courses (12 Credit Hours) Select 3 courses:		
BIO 145	Foundations of Biology	4 CH
CHEM 140	General Chemistry I	4 CH

CHEM 160	General Chemistry II	4 CH
GEOL 150	Earth Systems	4 CH
PHYS 154/174	Introductory Physics I	4 CH
PHYS 164/184	Introductory Physics II	4 CH
Internship (12 Credit Hours)		
ESM 499	Environmental Safety Management Internship	12 CH
	TOTAL	**73 CH**

Environmental Safety Management Major – Year 1 recommended courses

Year 1	SEMS 110 (3 CH)	INDS 101/ENG 101 (3 CH)
As a	INDS 101/ENG 101 (3 CH)	Religion Core (3 CH)
First Year	Math 107 or Math 142 (3 CH)	Concern for Well-Being Core (2 CH)
Student	ENSC 111 Introduction to Environmental Studies (3 CH)	ESM 111 Introduction to Safety (3 CH) GEOL 150 (4 CH)
31 credits	Social Science Core (3 CH)	ESM 110 Hazard Awareness (1 CH)
	15 credit hours	16 credit hours

Information Systems

Bachelor of Science Degree

The Information Science degree focuses on using technology as a tool to manage information in a variety of contexts. Students majoring in Information Systems will be prepared to enter the workforce with skills in both business and technology or to pursue graduate education.

A student who graduates with a degree in Information Systems will be able to

- Understand and apply core knowledge of programming, networking, and databases.
- Identify and analyze requirements for information or web systems.
- Demonstrate effective knowledge of business applications.
- Demonstrate effective communications to both business and IT professionals.

In addition to completing the core requirements, students need to choose a concentration area within Information Systems program.

Major Requirements

All courses that are applied to the major must be completed with a grade of C- or higher.

IS 120	A+	3 CH
IS 260	Networking +	3 CH
CIS 129	Fundamentals of Info Systems	3 CH
BADM 384	Business Communication	3 CH
CSCI 159	Intro to Programming	4 CH
CIS 111	Word Processing Applications	1 CH
CIS 112	Spreadsheet Applications	1 CH
CIS 113	Data Management Applications	1 CH
CSCI 319	Database Management	4 CH

Complete the requirements for one of the following concentrations:

Business and E-Commerce		
CSCI 139	Web Design and Development	3 CH
CIS 201	E-Commerce	3 CH

CIS 241	Project Management	3 CH
CSCI 331	Web Programming	4 CH
CSCI 351	Information Security and Forensics	3 CH
CIS 469	System Analysis	3 CH

Web Development		
CSCI 139	Web Design and Development	3 CH
CSCI 331	Web Programming	3 CH
CIS 201	E-Commerce	3 CH
CSCI 431	Professional Web Portfolio	3 CH
IS 140	Graphics Applications	3 CH
BADM 324	Advertising	3 CH
CSCI 351	Info System Security and Forensics	3 CH

Software and Networking		
CSCI 120	Intro to Data Analytics	3 CH
CSCI 149	Programming in Python	4 CH
CSCI 169	Data Structures	4 CH
CSCI 351	Info. Sys. Security and Forensics	3 CH
CSCI 439	Data Communication & Networks	3 CH
CIS 469	System Analysis	3 CH

Neuroscience

Bachelor of Science Degree

Major Requirements (50 – 52 CH)

Core Courses		
NSCI 101	Brain and Behavior	4 CH
NSCI 202	Introduction to Neuroscience	4 CH
NSCI 303	Techniques in Neuroscience	4 CH
NSCI 313	Junior Seminar in Neuroscience	2 CH
NSCI 404	Advanced Neuroscience	3 CH
NSCI 414	Senior Seminar in Neuroscience	2 CH
Choose ONE of the following:		
NSCI 489	Internship in Neuroscience	2 CH
NSCI 499	Independent Research in Neuroscience	2 CH

Related Courses		
CHEM 140	General Chemistry I	4 CH
CHEM 160	General Chemistry II	4 CH
CHEM 200	Organic Chemistry I	4 CH
CHEM 210	Organic Chemistry II	4 CH
Choose ONE of the following:		
PHIL 267	Ethics	3 CH
PHIL 387	Medical Ethics	3 CH
REL 200	Contemporary Ethical Issues	3 CH

Elective Courses – Choose THREE, from THREE different departments. One elective must be a 4 CH laboratory course. Note: elective courses may have prerequisites not listed here.

BIO 272	Animal Behavior	4 CH
BIO 281	Human Anatomy and Physiology II	4 CH
BIO 290	Cell Biology	4 CH

BIO 322	Genetics	4 CH
BIO 343	Developmental Biology	4 CH
BIO 399	Molecular Biology	4 CH
CSD 213	Nature and Development of Language	3 CH
CSD 214	Speech and Hearing Science	3 CH
CSD 215	A&P of the Vocal Mechanism	3 CH
CSD 500	Neurology of Communication Disorders	3 CH
CHEM 345	Biochemistry I	4 CH
CHEM 348	Biochemistry II	3 CH
CHEM 440	Advanced Topics Biochemistry	3 CH
ENGL 317	Linguistics	3 CH
NSCI 320	Neuropharmacology	3 CH
NSCI 330	Neuroanatomy	3 CH
NSCI 340	Neuroendocrinology	3 CH
NSCI 350	Neuroscience Diseases and Disorders	3 CH
NSCI 390	Special Topics in Neuroscience	3 CH
PHIL 347	Philosophy of Mind	3 CH
PHYS 164/184	Introduction to Physics II	4 CH
PSY 223	Social Psychology	3 CH
PSY 241	Abnormal Behavior	3 CH
PSY 255	Lifespan Development	3 CH
PSY 262	Child Development	3 CH
PSY 272	Adulthood and Aging	3 CH
PSY 342	Cognitive Psychology	3 CH
PSY 352	Sensation and Perception	3 CH
PSY 450	Topics in Psychology	3 CH
REL 250	Psychology of Religion	3 CH

Accounting

Minor Requirements

ACCT 113	Principles of Accounting I	3 CH
ACCT 123	Principles of Accounting II	3 CH
ACCT 213	Intermediate Accounting I	3 CH
ACCT 223	Intermediate Accounting II	3 CH
ACCT 313	Cost Accounting	3 CH
ACCT 323 *or* ACCT 333	Taxation-Personal Taxation-Corporate	3 CH
ACCT 423	Auditing	3 CH

Biology Minors - Programs and Requirements

All courses for any minor in biology must be passed with a grade of C- or better.

Environmental Biology Minor

The purpose of this minor is to provide depth and diversity of coursework to students who wish to pursue vocations in environmental science and biological conservation upon graduation. It will expand upon the knowledge and skills bases of both environmental science and biology majors who wish to pursue opportunity in the complementary field. It also would establish a strong field science foundation for students in the natural sciences, humanities and social sciences who have strong interest in environmental ethics.

All of the following courses:		
1. ENSC 111	Introduction to Environmental Studies	3 CH
2. GEOL 150	Earth Systems	4 CH
3. ENSC 225	Geographical Information Systems	3 CH
4. BIO 145	Foundations of Biology	4 CH
And three of the following courses:		
BIO 116	Conservation Biology	3 CH
BIO 262	Animal Systematics*	4 CH
BIO 263	Plant Systematics*	4 CH
BIO 212	Microbiology	4 CH
BIO 222	Entomology	4 CH
BIO 272	Animal Behavior	4 CH
BIO 273	Toxicology	4 CH
BIO 295	General Parasitology	4 CH
BIO 302	Plant Physiology	4 CH
BIO 394	Aquatic Ecology	4 CH
Total CH		25-26

**A course from this pair may not count toward both the minor and the Biology or Environmental Science majors.*

Wildlife Biology Minor

This minor serves students who desire a concentration in the study of natural populations of plant and animal life. It would be of special interest to students who are majors in environmental science and geology since it strongly complements these majors. Some students of other natural sciences, social sciences and humanities may also find this concentration useful.

BIO 145	Foundations of Biology	4 CH
BIO 392	General Ecology	4 CH
And one of the following:		
BIO 222	Entomology	4 CH
BIO 262	Animal Systematics	4 CH
BIO 263	Plant Systematics	4 CH
And two of the following:		
BIO 116	Conservation Biology	3 CH
BIO 212	Microbiology	4 CH
BIO 272	Animal Behavior	4 CH
BIO 295	General Parasitology	4 CH
BIO 322	Genetics	4 CH
BIO 350	Principles of Immunology	3 CH
BIO 394	Aquatic Ecology	4 CH

Food and Agricultural Biology Minor

Biology is one of the foundation disciplines for nutrition, food and agricultural sciences. Food and agricultural sciences are striving to revitalize their roots in the liberal arts. This set of courses provides basic preparation in biology that is relevant to any student who wants to pursue eventual advanced study in agriculture.

BIO 145	Foundations of Biology	4 CH
BIO 222	Entomology	4 CH
BIO 263	Plant Systematics	4 CH
BIO 392	General Ecology	4 CH
And one of the following:		

BIO 110	Ethnobotany	4 CH
BIO 111	Edible Botany	4 CH
BIO 116	Conservation Biology	3 CH
BIO 212	Microbiology	4 CH
BIO 302	Plant Physiology	4 CH
BIO 322	Genetics	4 CH

Medical Biology Minor

Students with an interest in human and veterinary medicine or related fields typically major in biology or chemistry. However, they may major in other fields. The medical biology minor includes courses that are especially useful in preparation for such careers.

BIO 145	Foundations of Biology	4 CH
And four of the following:		
BIO 280	Human Anatomy and Physiology I OR BIO 282 Comparative Chordate Anatomy	4 CH
BIO 212	Microbiology	4 CH
BIO 290	Cell Biology: A Molecular Approach	4 CH
BIO 295	General Parasitology	4 CH
BIO 343	Developmental Biology	4 CH
BIO 322	Genetics	4 CH
BIO 350	Principles of Immunology	3 CH

Behavioral Biology Minor

Behavioral biology involves a study of interaction between organisms and their environment, a very pervasive part of biology and its applications. Biology is fundamental to understanding some of the phenomena in the social sciences, especially those considered in psychology and sociology. The minor in behavioral biology establishes a concentration of biology courses that provide keys to understanding behavior in all animals, including that of human

beings. These courses would provide a biological perspective of behavior to complement a social science perspective. It would be of special interest to students of social sciences and humanities.

BIO 145	Foundations of Biology	4 CH
BIO 272	Animal Behavior	4 CH
And three of the following:		
BIO 118	Human Evolution	3 CH
BIO 322	Genetics	4 CH
BIO 352	Animal Physiology	4 CH
BIO 392	General Ecology	4 CH

Business Administration

Minor Requirements

ACCT 113	Principles of Accounting I	3 CH
BADM 233	Managerial Accounting	3 CH
ECON 221	Principles of Microeconomics	3 CH
BADM 355	Business Law I	3 CH
Any one:		
BADM 210	Principles of Marketing	3 CH
BADM 344	Finance	3 CH
BADM 374	Principles of Management	3 CH

Coaching Minor

The coaching minor program provides instruction in sports administration and many aspects in the coaching of sports, with concentration on the high school and the collegiate level. The students will understand the development of a budget and the allocation of funds. The students will develop effective communication skills, the skill of working with groups and interview preparation. There is a significant need for qualified coaches for all sports programs. The Institute for the Study of Youth Sports estimates that 40 million youth participate in sports annually. More than 4 million adults serve as volunteer coaches. It is not unusual for schools, community agencies and religious groups to seek competent persons to coach their children. All of these same organizations desire assistance with administration of their sport programs. High school administrators in particular put a very high priority on the hiring of teachers who also are qualified coaches. The need is great for qualified coaching personnel. This issue is at the forefront for parents of children and the administrators in the community, youth, high school and even the collegiate-level of sports programs.

A student who graduates from Thiel College with a minor in coaching will be able to:

- Identify strategies to motivate athletes within their sports programs in oral and written communication.
- To develop physical training programs and use sports skills effectively.
- Demonstrate an understanding of the administrative facets of coaching by learning how to utilize the equipment, facilities, scheduling, and team logistics.

Minor Requirements

BADM 100 or ACCT 113	Introduction to Business Principles of Accounting I	3 CH
HPED 198 or HPED 199	Slimnastics Fitness, Life & Wellness	2 CH
PSY 150 or SOC 271	General Psychology Sociology of Sport	3 CH
COMM 171	Introduction to Communication	3 CH
HPED 314	Coaching Organization and Administration	3 CH
HPED 315	Practicum Experience and CPR	4 CH
TOTAL	**18 CH**	

Note: Students must possess and maintain current Red Cross CPR and Community First Aid certifications.

Note: Students must have a current TB test and all necessary clearances if coaching experiences take place in public schools.

Economics

Minor Requirements

ACCT 113	Principles of Accounting I	3 CH
ECON 211	Principles of Macroeconomics	3 CH
ECON 221	Principles of Microeconomics	3 CH
And any three:		
ENSC 320	Urban & Regional Land Use Planning	3 CH
POSC 146	Introduction to Comparative Politics	3 CH
POSC 336	Public Administration	3 CH
BADM 376	International Business	3 CH

Environmental Studies

Minor

The Minor in Environmental Studies is open to all Majors. The objective of the Minor is to provide the student with an interdisciplinary perspective on the environmental field enabling them to become a more environmentally aware steward of the planet. Thiel College graduates with the Environmental Studies Minor seeking employment in a variety of areas will have an advantage over candidates without the Minor. The student must complete at least six (6) courses (19-21 credit hours) to fulfill the requirements.

Minor Requirements

Required courses (7 credits):		
ENSC 111	Introduction to Environmental Studies	3 CH
GEOL 150	Earth Systems	4 CH
Elective courses (12 - 14 credits) - Select 4:		
ENSC 200	Environmental Law	3 CH
ENSC 225	Geographical Information Systems	3 CH
ENSC 250	Meteorology	4 CH
ENSC 320	Land Use Planning	3 CH
GEOL 210	Hydrogeology	3 CH
GEOL 250	Environmental Geology	4 CH
	TOTAL	**19-21 CH**

Biochemistry

Minor Requirements

The biochemistry minor provides students with an opportunity to diversify their education in chemistry and biology. Many fields utilizing chemistry and biology, such as medicine, dentistry, pharmacology and medicinal chemistry, involve aspects of biochemistry. This minor is often of interest to biology majors by providing a chemical perspective to their biology studies.

Fulfillment of the minor requires the following courses:

CHEM 140 General Chemistry I
CHEM 160 General Chemistry II
CHEM 200 Organic Chemistry I
CHEM 210 Organic Chemistry II
CHEM 345 Biochemistry I
CHEM 348 Biochemistry II
BIO 145 Foundations of Biology
BIO 322 Genetics
BIO 290 Cell Biology

Chemistry

Minor Requirements

A minor in chemistry consists of all the courses in Section A and one course in Section B:

Section A	
CHEM 140	General Chemistry I
CHEM 160	General Chemistry II
CHEM 200	Organic Chemistry I
CHEM 240	Quantitative Analysis
Section B	
CHEM 210	Organic Chemistry II
CHEM 310	Physical Chemistry—Fundamentals
CHEM 320	Physical Chemistry—Applications
CHEM 370	Instrumental Analysis
CHEM 380	Organic Structural Analysis
CHEM 390	Inorganic Chemistry

Communication Studies

Minor Requirements

COMM 171	Introduction to Communication	3 CH
COMM 181	Public Speaking	3 CH
COMM 225	Interpersonal Communication	3 CH
COMM 265	Communication and Gender	3 CH
COMM 300	Persuasion	3 CH
COMM 325	Communication Ethics	3 CH
COMM 331	Intercultural Communication	3 CH
		TOTAL 21 CH

Students must maintain a minimum cumulative GPA of 2.0 in the minor.

It is recommended that students minoring in communication studies take an internship and become involved with extracurricular activities in theatre and student media.

Computer Science

Minor Requirements

All courses that are applied to the minor must be completed with a grade of C- or higher.

MATH 221	Discrete Mathematical Structures	3 CH
CSCI 109	Principles of Computer Science	3 CH
CSCI 159	Introduction to Programming	4 CH
CSCI 169	Data Structures	4 CH
CSCI 419	Computer Organization with Assembler	4 CH
Choose one of the following four courses:		
CSCI 269	Theory of Programming Languages	4 CH
CSCI 347	Theory of Computation	3 CH
CSCI 369	Design and Analysis of Algorithms	3 CH
CSCI 427	Operating Systems	3 CH
Choose one of the following four courses:		
CIS 469	Systems Analysis	3 CH
CSCI 139	Web Design and Development	3 CH
CSCI 319	Database Management	4 CH
CSCI 439	Data Communication and Networks	3 CH

Criminal Justice Studies

Minor Requirements

The minor requires a minimum of 18 credit hours and must include the following courses:

CJS 101	Introduction to Criminal Justice Studies	3 CH
SOC 121 *or* SOC 141	Microsociology Macrosociology	3 CH
CJS 221 *or* CJS 230	Corrections in America Law Enforcement in America	3 CH
CJS 301 *or* CJS 305	Juvenile Justice Studies Victimology	3 CH
SOC 331 *or* SOC 342	Criminology Sociological Theory	3 CH
CJS/POSC 438 *or* POSC 439 *or* POSC 445	Criminal Due Process Criminal Law The Great American Trial	3 CH

A declaration of minor in Criminal Justice Studies must be filed no later than the first semester of the senior year.

Data Analytics

Minor Requirements

In order to minor in data analytics, a student must successfully complete the following courses. All courses that are applied to the minor must be completed with a grade of C- or higher.

CSCI 120	Introduction to Data Analytics	3 CH
MATH 211	Elementary Statistics	4 CH
CIS 113	Data Management Applications	1 CH
CSCI 149	Programming in Python	4 CH
CSCI 319	Database Management	4 CH
MATH 350	Data Analysis in R	4 CH

English

Minor

The English minor requires a minimum of 18 credit hours consisting of two required courses (Introduction to Literature, Advanced Composition), one literary survey course (American Literature Survey, British Literature Survey, World Literature Survey), and three other departmental courses not taken to fulfill the previous requirements. All students pursuing the English minor must earn a C-minus or better in all courses to count toward the minor.

- **Required Minor Courses 6 CH**
- **Literature Survey Course 3 CH**
- **Electives 9 CH**

Required Minor Courses

ENG 120	Introduction to Literature	3 CH
ENG 270	Advanced Composition and Research	3 CH
		6 CH Total

Literature Survey Courses

Any 3 CH from the following		
ENG 210	British Literature to Romanticism	3 CH
ENG 220	British Literature: 1798 to Today	3 CH
ENG 267	World Literature Survey	3 CH
ENG 235	American Literature Survey	3 CH
		3 CH total

Elective Courses

ENG _____	English Department Electives	**9 CH total**

Environmental Chemistry

Minor Requirements

A minor in environmental chemistry consists of all the courses in Section A and two courses selected from Section B.

Section A
CHEM 140 General Chemistry I
CHEM 160 General Chemistry II
CHEM 240 Quantitative Analysis
CHEM 330 Environmental Chemistry
CHEM 430 Advanced Topics in Environmental Chemistry
Section B
ENSC 250 Meteorology & Air Quality Assessment
GEOL 150 Earth Systems
GEOL 210 Principles of Hydrogeology
ENSC 111 Introduction to Environmental Studies
or
BIO 116 Conservation Biology

Environmental Safety Management

Minor

The Minor in Environmental Safety Management is open to all majors. It is recommended for Science majors and Business Administration majors. The objective of the minor is to provide the student with a basic background in business administration, environmental science and occupational safety. Thiel College graduates with the ESM Minor seeking employment in manufacturing, construction, healthcare and energy industries (oil and gas) will have an advantage over candidates without the minor. The student must complete at least seven (7) courses (19-20 credit hours) to fulfill the requirements.

Minor Requirements

Required ESM courses: (4 CH)		
ESM 110	Hazard Awareness	1 CH
ESM 111	Introduction to Safety	3 CH
Select 3 ESM elective courses: (9 CH)		
ESM 221	Emergency Preparedness, Prevention and Response	3 CH
ESM 231	Construction Safety	3 CH
ESM 241	Regulatory Compliance and Safety Management	3 CH
ESM 351	Hazardous Materials and Environmental Safety	3 CH
ESM 361	Fundamental Concepts of Industrial Hygiene	3 CH
ESM 371	Essential Topics in Environmental Safety Management	3 CH
Minor electives: (6-7 CH) Business Administration (3 CH) - Select one:		
ACCT 113	Principles of Accounting I	3 CH
BADM 374	Principles of Management	3 CH
BADM 444	Operations Management	3 CH
Environmental Science (3-4 CH) - Select one:		
ENSC 111	Introduction to Environmental Studies	3 CH
ENSC 225	Geographical Information Systems	3 CH
ENSC 250	Meteorology and Air Quality Assessment	4 CH
	TOTAL	**19 -20 CH**

Equestrian Studies Minor

Students interested in horses may find the equine minor a perfect fit for pursuing their professional or recreational goals in the equine industry. The selection of equine courses creates a strong working knowledge essential to any individual preparing for the horse industry. The equine minor emphasizes the horse (equine nutrition, behavior, conformation, biomechanics, and selection) allowing it to accompany many majors including but not limited to: Biology, Business, Education, Physical Theory, and Criminal Justice. The combination of lecture and lab courses for the equine minor provides current, hands-on equine learning. The equine minor requires 18 credits.

A student who graduates from Thiel College with a minor in equine will be able to:

- Understand the fundamental concepts in the equine industry.
- Select appropriate horses for specific disciplines based on conformation, breed, and behavior.
- Demonstrate a working knowledge of techniques to supplement training and problem solving.
- Account for the body systems in order to maximize equine performance, longevity, and health.
- Recognize common issues that may arise with horses' health and soundness.
- Judge a class of breed specific horses based on conformation.

Minor Requirements

All of the following:		
EQIN 150	Intro to Equine Science	3 CH
EQIN 210	Equine Behavior	3 CH
EQIN 220	Equine Nutrition and Feeding	3 CH
EQIN 330 or EQIN 340	Equine Profiling & Conformation Equine Health & Lameness	4 CH
EQIN 110 or EQIN 120	Equine Groundwork Equine Riding	3 CH
In addition to 2 semesters (2 CH total) of:		
EQIN 100	Thiel Equestrians	1 CH
	TOTAL	**18 CH**

Film Studies

The film studies minor gives student an interdisciplinary view of the film industry by looking at the history of film, the basics of filmmaking, and how films help define our society. Students take three required film courses while the remaining courses are selected from a diverse offering of film courses taught within other academic departments. The film studies minor must successfully complete a minimum of 18 credit hours.

A student who graduates from Thiel College with a minor in film studies will:

- Interpret film theory, cinematic production, scriptwriting and editing across cultures.
- Recognize and describe various genres of film literature, film criticism, and/or scriptwriting.
- Create scripts and graphics, record digital audio-visual content and complete post-production editing appropriate for moving image media.

Minor Requirements

Students must maintain a minimum cumulative GPA of 2.0 in the minor.

COMM 150	Introduction to Film	3 CH
COMM 303	Field Production & Editing	3 CH
COMM 335	Film in American Culture	3 CH

The student is also required to select three courses from the following list. At least two of the courses must be offered outside of the Department of Media, Communication and Public Relations. Film courses not listed below can be approved subject to department approval.

COMM 255	Dissecting Disney	3 CH
COMM 281	Media Literacy	3 CH
COMM 282	Writing for Media	3 CH
COMM 415	Advanced Film Production	3 CH
CJS 431	Selected Studies: Crime & Film	3 CH
ENG 286	Writing for Stage and Screen	3 CH
ENG 495	Special Topics: Scriptwriting	3 CH
IS 140	Graphic Arts	3 CH
SOC 431	Gender and Film	3 CH
		TOTAL 18 CH

Minor Requirements

Fine Art Minor

The fine art minor introduces students to the foundational language of the visual arts through studio courses in drawing, painting, and sculpture as well as art history. The curricular flexibility of this minor is well suited to students who are pursuing art in conjunction with another major or simply as a secondary interest.

A student who graduates from Thiel College with a minor in fine arts will:

- Demonstrate basic art-making skills in the visual arts
- Demonstrate a foundational knowledge of the history of art

A drawing course 100 or 200 level	4 CH
A painting course 100 or 200 level	4 CH
A sculpture/3D course 100 or 200 level	4 CH
A studio elective 100 or 200 level	4 CH
ART 101: Survey of Art I	3 CH
ART 201: Survey of Art II	3CH
TOTAL	22CH

The Department of Art requires a C- or better in all courses required for the minor.

History

Minor Requirements

The history minor must complete a minimum of 18 credit hours with a C- or better.

Choose two of the following (6 CH):

- HIST 101 United States History Until 1877
- HIST 102 United States History Since1877
- SEMS 250 World History

Four HIST courses at the 200 - 400 level (12 CH):

- At least two courses must be at the 300 - 400 level.
- At least one course from each of the following history concentrations: United States, European, Non-Western.

Interdisciplinary Ethics Minor Requirements

The interdisciplinary ethics minor prepares students for ethical leadership and responsibility in a wide variety of professional settings. The expanding field of applied ethics affords opportunities for entry-level employment and also rewards advanced graduate work (in law, medicine and business, as well as politics and government). This series of courses explores the interdisciplinary nature of ethics while strengthening critical thinking and analytic writing. It ensures a theoretical understanding of ethics along with case studies and internship experience resolving concrete ethical dilemmas. A commitment to strengthening these transferable skills provides leverage and qualitative capital in the pursuit of professional positions.

There is a growing need for expertise in applied ethics, in both the public and private arena. Many corporations engage in workplace ethics training and therefore prize applicants who can assist in conflict resolution or who can analyze various conflicts of interest. Ethics boards exist in most mid-sized and larger medical institutions. While the quantity of full- time ethics officers is growing, many organizations employ ethics compliance officers who also fulfill other duties. This minor positions our students for such positions.

The minor in ethics must pass both of the following courses with a C- or better:

PHIL 267	Ethics	3 CH
PHIL 467	Advanced Ethical Theory	3 CH

The student must also pass with a C or better four courses from the following. At least two of these must be outside the philosophy department, or cross-listed:

PHIL 387	Medical Ethics	3 CH
PHIL 297	Environmental Ethics	3 CH
PHIL 277/BADM 364	Business Ethics	3 CH
CJS 431	Ethical/Philosophical Issues in Criminal Justice	3 CH
COMM 345	Communication Ethics	3 CH
REL 200	Contemporary Ethics	3 CH

Gender Studies Minor

Gender Studies Student Learning Outcomes

After completing this minor, students will be able to

1. Identify, compare, and evaluate culturally and historically specific constructions of gender;
2. Analyze the intersections of gender with race, ethnicity, class, and sexuality;
3. Employ analytically the concept of gender.

Minor Requirements

The gender studies minor requires six courses (18 CH) that must be completed with a grade of C- or higher. They are:

INDS 202	Introduction to Women's and Gender Studies: Gender, Culture and Sexuality	3 CH

Five additional courses representing at least two academic departments outside the student's major area of study are required. At least two courses (6 CH) must be at the 300-level or above. Current courses that fulfill this requirement are:

ART 214	Women in Art	3 CH
COMM 265	Communication and Gender	3 CH
ENG 385	Women in Literature	3 CH
HIST 241	European Women's History	3 CH
HIST 450	Gender and Sexuality in 19th C. Europe	3 CH
INDS 432	Special Topics in Gender Studies	3 CH
POSC 225	Gender and Politics	3 CH
PSY 450	Special Topics: Sex in the 21st Century	3 CH
REL 220	Women in the Jewish and Christian Traditions	3 CH
REL 413	Selected Topics: Sex, Sexuality, and Religion	3 CH
SEMS 400	7 Deadly Sins and Global Issues	3 CH
SEMS 400	Women's Issues and Global Human Rights	3 CH
SOC 261	American Women's Experience: A Multicultural Perspective	3 CH
SOC 271	Sociology of Sport	3 CH

SOC 401	Sociology of the Family	3 CH
SOC 421	Gender and Society	3 CH
SOC 431	Disney and Gender	3 CH

Students may petition the Gender Studies Advisory Board to count toward the minor an internship or a course not listed here in which the student demonstrates substantial work toward the program's learning outcomes. For more information contact the Coordinator of the Gender Studies Minor, Dr. Sheila Farr.

Individualized Minor

An approved individualized minor of at least 15 credit hours and no more than 22 credit hours may be presented in lieu of a departmental minor. At least 9 credit hours must be taken beyond the introductory level.

An individualized minor will provide flexibility for a student to design a program that is on the academic “cutting edge” and closer to the student’s area of interdisciplinary interest. Such an option provides a personalized, educationally sound and interdisciplinary approach to academic program planning at Thiel for an academically eligible student.

A student with a minimum GPA of 2.5 wishing to enroll in an individualized minor should first select a faculty mentor. Forms for the individualized minor are available in the Office of Academic Affairs. The form describing the proposed individualized program should be completed by the student and the faculty mentor.

A comprehensive statement by the student justifying the minor must accompany the individualized minor form. The form must list the specific courses to be taken and suggested alternatives and be signed by the student and the faculty mentor before it is presented to the Curriculum Study Committee and the Dean of the College for approval. The proposed individualized minor must be approved by both Curriculum Study Committee and Dean of the College.

The proposed minor must be submitted for approval preferably by the beginning of the junior year, but no later than one year prior to the date of expected graduation. Following approval of the plan, any revisions must be approved by the mentor and Dean of the College.

A copy of the program will remain on file in the Office of Academic Affairs as a model for review and future potential use. A copy should also be placed in the student’s advising file and in the Academic Records Office.

Transcript title will be reflected on transcript entry as “Individualized: name of minor.”

International Studies

Minor Requirements

A minor in international studies is offered through the Political Science Department. The minor in international studies shall successfully complete six courses (18 CH) distributed as follows:

Required course		
POSC 156	Introduction to International Relations	3 CH
Any three of the following political science courses:		
POSC 230	Globalization	3 CH
POSC 242	American Foreign Policy Formulation	3 CH
POSC 310	International Political Economy	3 CH
POSC 312	International Security	3 CH
POSC 327	Politics of Developing Societies	3 CH
POSC 347	Politics of Industrial Societies	3 CH
POSC 386	Dictators and Totalitarianism	3 CH
POSC 410	International Organization and Law	3 CH
POSC 405	Terrorism	3 CH
Any two of the following non-political science courses:		
ART 201	Modern Art History	3 CH
BADM 456	International Marketing	3 CH
COMM 331	Intercultural Communication	3 CH
ENG 210	British Literature to Romanticism	3 CH
ENG 220	British Literature 1798 to Present	3 CH
HIST 329	The French Revolution and Napoleon	3 CH
HIST 331	19th Century Europe: 1815-1914	3 CH
HIST 332	20th Century Europe: 1914-Present	3 CH
HIST 371	Latin America: Reform and Revolution	3 CH

HIST 461	History of Modern China	3 CH
HIST 462	History of Modern Japan	3 CH
REL 190	World Religions	3 CH
Any foreign language course		3 CH

Legal Studies

Dr. Marie Courtemanche, Coordinator

Legal phenomena extend throughout many contemporary political systems, playing an important role in shaping the conduct of life for both individuals and institutions. Study in the minor emphasizes the forces that shape law and the ways law has been used and understood by a variety of peoples in differing historical circumstances. Political, sociological, historical and philosophical approaches to legal phenomena are included in the program, with other approaches always a possibility for the interested student.

Minor Requirements

The legal studies minor treats law as a subject of liberal inquiry, open to all students in any major or concentration. The legal studies minor, as a liberal studies program, is not a program in “prelaw” or professional preparation. For those students interested in law as a political, social, historical or philosophical phenomenon, however, the legal studies minor presents an opportunity to study one of the most important aspects of contemporary human society. To graduate with a minor in legal studies, students will need to take three required courses (7 CH), and 5 elective courses (15 CH).

Required Courses (7 CH)

PHIL 137	Critical Thinking	3 CH
POSC 186	Introduction to Legal Studies	3 CH
POSC 199	LSAT Prep	1 CH

Five Elective Courses (15 CH)

Students will select five additional courses from the following lists to help broaden their understanding of law and legal traditions, cultural backgrounds, and ways to improve their ability to communicate in written and oral form. Students must take two classes from the Written and Oral Communication substantive area, two classes from the Law and Legal Processes substantive area, and one class from the Cultural Awareness substantive area.

Written and Oral Communication (6 CH) Any two courses from the following:		
COMM 181	Public Speaking	3 CH
COMM 300	Persuasion	3 CH
ENG 120	Introduction to Literature	3 CH
ENG 260	Professional Writing	3 CH
ENG 270	Advanced Composition and Research	3 CH
ENG 317	Linguistics	3 CH

POSC 295	Writing in Political Science	3 CH

Law and Legal Processes (6 CH)
Any two courses from the following:

BADM 355	Business Law	3 CH
BADM 356	Business Law II	3 CH
COMM 445	Media Law and Regulations	3 CH
ENSC 210	Introduction to Environmental Law	3 CH
POSC 388	The Death Penalty	3 CH
POSC 436	Constitutional Law	3 CH
POSC/SOC 438	Criminal Due Process Rights	3 CH
POSC 445	The Great American Trial	3 CH

Awareness of Traditions and Culture (3 CH)
Any one course from the following:

CJS 301	Juvenile Justice Studies	3 CH
ENG 325	Survey of American Literature	3 CH
HIST 300	U.S. Colonial History	3 CH
HIST 305	Middle Period American History	3 CH
HIST 307	Emergence of Modern America	3 CH
HIST 309	Recent American History	3 CH
PHIL 267	Ethics	3 CH
PHIL 337	Freedom Justice and Political Power	3 CH
POSC 116	American Government	3 CH
POSC 226	State and Local Politics	3 CH
POSC 396	International Organization and Law	3 CH
SOC 321	Deviance	3 CH
SOC 331	Criminology	3 CH

Mathematics

Minor Requirements

In order to minor in Mathematics a student must complete successfully complete the following courses. All courses applied to the minor must be completed with a grade of C- or higher.

1. Required courses:		
MATH 181	Calculus I	4 CH
MATH 182	Calculus II	4 CH
MATH 291	Linear Algebra	4 CH

2. Elective courses:
Complete three additional 3-4 CH mathematics courses numbered 220 or above. The Capstone Seminar, MATH 341 and MATH 342 cannot be used to fulfill this requirement.

Media and Journalism

Minor Requirements

At minimum, students must maintain a cumulative GPA of 2.0 in the minor.

COMM 181	Public Speaking	3 CH
COMM 280	Survey of Mediated Comm.	3 CH
COMM 282	Writing for Media	3 CH
COMM 455	Media Law and Regulation	3 CH
Electives chosen from media and communication major		12 CH
		TOTAL 24 CH

Music

A student who graduates from Thiel College with a music minor will:

- Demonstrate a basic knowledge of the elements of music.
- Demonstrate knowledge of basic musical analysis and music theory
- Demonstrate basic music composition skills including proper voice leading, chord resolution, and melodic development
- Demonstrate fundamental conducting skills
- Demonstrate knowledge of the historical development of music—medieval to present.
- Demonstrate proficiency in individual skills needed for musical performance through participation in a musical ensemble.

Minor Requirements

The requirements for the minor in music include successful completion of the following courses for a total of 23 credit hours:

MUS 115	Intro. to Music: Music Theory I	3 CH
MUS 154	Music Theory II	3 CH
MUS 100	Music Appreciation	3 CH
MUS 390	The History of Classic Jazz	3 CH
MUS 364	Choral Conducting	2 CH
Applied Music—private lessons instrumental or voice lessons		4 CH
Ensemble—choir, band		5 CH
		TOTAL 23 CH

Neuroscience

Bachelor of Science Degree

Minor Requirements (21 – 23 CH)

Core Courses		
NSCI 101	Brain and Behavior	4 CH
NSCI 202	Introduction to Neuroscience	4 CH
NSCI 303	Techniques in Neuroscience	4 CH
NSCI 404	Advanced Neuroscience	3 CH
Elective Courses – Choose ***any TWO*** additional electives. Note: elective courses may have prerequisites not listed here.		
BIO 272	Animal Behavior	4 CH
BIO 280	Human Anatomy and Physiology I	4CH
BIO 281	Human Anatomy and Physiology II	4 CH
BIO 290	Cell Biology	4 CH
BIO 322	Genetics	4 CH
BIO 343	Developmental Biology	4 CH
BIO 399	Molecular Biology	4 CH
CSD 213	Nature and Development of Language	3 CH
CSD 214	Speech and Hearing Science	3 CH
CSD 215	A&P of the Vocal Mechanism	3 CH
CSD 500	Neurology of Communication Disorders	3 CH
CHEM 345	Biochemistry I	4 CH
CHEM 348	Biochemistry II	3 CH
CHEM 440	Advanced Topics Biochemistry	3 CH
ENGL 317	Linguistics	3 CH
NSCI 320	Neuropharmacology	3 CH
NSCI 330	Neuroanatomy	3 CH

NSCI 340	Neuroendocrinology	3 CH
NSCI 350	Neuroscience Diseases and Disorders	3 CH
NSCI 390	Special Topics in Neuroscience	3 CH
PHIL 347	Philosophy of Mind	3 CH
PHYS 164 OR PHYS 184	Introduction to Physics II	4 CH
PSY 223	Social Psychology	3 CH
PSY 241	Abnormal Behavior	3 CH
PSY 255	Lifespan Development	3 CH
PSY 262	Child Development	3 CH
PSY 272	Adulthood and Aging	3 CH
PSY 342	Cognitive Psychology	3 CH
PSY 352	Sensation and Perception	3 CH
PSY 450	Topics in Psychology	3 CH
REL 250	Psychology of Religion	3 CH
SOC 281	Sociology of Aging	3 CH
SOC 391	Medical Sociology	3 CH

Interdisciplinary Ethics Minor

The interdisciplinary ethics minor prepares students for ethical leadership and responsibility in a wide variety of professional settings. The expanding field of applied ethics affords opportunities for entry-level employment and also rewards advanced graduate work (in law, medicine and business, as well as politics and government). This series of courses explores the interdisciplinary nature of ethics while strengthening critical thinking and analytic writing. It ensures a theoretical understanding of ethics along with case-study experience resolving concrete ethical dilemmas. A commitment to strengthening these transferable skills provides leverage and qualitative capital in the pursuit of professional positions.

There is a growing need for expertise in applied ethics in both the public and private arena. Many corporations engage in workplace ethics training, and therefore value applicants who can assist in conflict resolution or who can analyze various conflicts of interest. Ethics committees exist in most mid-sized and larger health-care institutions. While the quantity of full- time ethics officers is growing, many organizations employ ethics compliance officers who also fulfill other duties. The minor positions our students for such positions.

The minor in Ethics must pass both of the following courses with a C or better:		
PHIL 267	3 CH	Ethics
PHIL 467	3 CH	Advanced Ethical Theory
The student must also pass, with a C or better, four courses from the following list. At least two of these must be outside the philosophy department, or cross-listed:		
PHIL 387	3 CH	Medical Ethics
PHIL 297	3 CH	Environmental Ethics
PHIL 277 BADM 364	3 CH	Business Ethics
CJS 431	3 CH	Ethical/Philosophical Issues in Criminal Justice
COMM 345	3 CH	Communication Ethics
REL 200	3 CH	Contemporary Ethics

Minor Requirements in Philosophy

To minor in philosophy, a student must complete at least 18 credit hours in philosophy (six courses):

Four Required Courses:		
PHIL 127	3 CH	Introduction to Philosophy
PHIL 137	3 CH	Critical Thinking
PHIL 147	3CH	Ancient Ideas: Greece to Rome
or		
PHIL 157		Modern Ideas: Science, the Soul and the Good Life
PHIL 267	3 CH	Ethics
And:		
Two Elective Philosophy courses at the 200-level or higher		

Political Science

Minor Requirements

The minor in political science shall successfully complete six courses (18 CH) in political science:

POSC 116	American Government and Politics	3 CH
POSC 146	Introduction to Comparative Politics	3 CH
POSC 156	Introduction to International Relations	3 CH
Three additional departmental POSC courses		9 CH

Psychology Minor Requirements

The minor in psychology consists of six courses, for a total of 18CH. Psychology minors must abide by all prerequisites, and earn a grade of at least C- in all courses required for the minor. The minor is specifically designed to allow for flexibility in the selection of psychology courses to best meet each student's interests in the field.

Psychology Minor:		**18 CH total**
PSY 150	General Psychology	3 CH
PSY elective #1	Any 3CH or higher PSY course	3 CH
PSY elective #2	Any 3CH or higher PSY course	3 CH
PSY elective #3	Any 3CH or higher PSY course	3 CH
PSY elective #4	Any 3CH or higher PSY course	3 CH
PSY elective #5	Any 3CH or higher PSY course	3 CH

Public Relations, Advertising and Integrated Marketing Communication

Minor Requirements

Students must maintain a minimum cumulative GPA of 2.0 in courses in the minor.

COMM 155	Introduction to Integrated Marketing Comm.	3 CH
COMM 240	Public Relations	3 CH
COMM 282	Writing for Media	3 CH
COMM 405	Advanced Public Relations	3 CH
IS 140	Graphic Arts	3 CH
BADM 324	Advertising	3 CH
		TOTAL 18 CH

Religion Minor Requirements

Students minoring in religion will earn 17-18 credits. Students must complete two required courses and four electives.

REL 120 Interpreting the Jewish and Christian Scriptures
or
REL 121 Intro to the Old Testament/Hebrew Bible
or
REL 122 Introduction to the New Testament
or
REL 123 Intro to Christianity

REL 190 World Religions

Four additional elective courses in Religion

Pre-Ministry - Minor Requirements

Students minoring in pre-ministry must meet the following minimum requirements:

Foundations (3 CH)
REL 130 Introduction to Ministry

Biblical Studies (6 CH)
REL 120 Interpreting the Jewish and Christian Scriptures
GREK/REL 150 Introduction to Greek Language

Practical Studies (3 CH)
REL 180 Christian Worship
or
MUS 354 History of Sacred Music
(with permission of instructor)

Historical Studies (3 CH)
REL 160 Religion in the United States
or
REL 190 World Religions
or
REL 240 African American Religion in the United States
or
REL 140 History of Christianity

Theological Studies (3 CH)
REL 230 Philosophy of Religion
or
REL 200 Contemporary Ethical Issues
or
REL 290 Luther and His Legacy

Sociology

Minor Requirements

The minor requires a minimum of 18 credit hours and must include the below courses:

SOC 121	Microsociology	3 CH
SOC 141	Macrosociology	3 CH
SOC 211	Anthropology	3 CH
SOC 342	Sociological Theory	3 CH

In addition, two additional sociology courses (numbered 261 through 491, excluding 455) are required.

A declaration of a minor in sociology must be filed no later than the first semester of the senior year.

Spanish Language and Culture

Minor Requirements

The Minor in Spanish Language and Culture combines acquisition of linguistic competence with the study of the cultural and historic manifestations of the Spanish-speaking world.

The requirements for the minor include 18 CHs of coursework above the introductory levels.

ALL of the following courses (18 CH):

SPAN 214 Intermediate Spanish I
SPAN 224 Intermediate Spanish II
SPAN 305 Applied Spanish Phonetics
SPAN 310 Spain: Culture and Civilization
SPAN 315 Advanced Intermediate I
SPAN 325 Advanced Intermediate II

Upon completion of the minor in Spanish Language and Culture, students should be able to:

- Speak, read, write, and comprehend Spanish at the intermediate-high level on a variety of current cultural topics;
- Demonstrate knowledge of the geography and culture of countries where the language is spoken and of Spain and Latin America's historical and contemporary position in the modern world;
- Recognize the historical, cultural, and creative contexts of Hispanic cultures and effectively articulate how such factors shape their world perspectives;
- Understand the impact Hispanic cultures and the Spanish language have had and continue to have on other cultures;
- Respect cultural differences leading to meaningful interaction within a Spanish-speaking society and in any culturally-diverse situation.

Theatre

A student who graduates from Thiel College with a theatre minor will:

- Demonstrate a working knowledge of the various aspects of theatre production;
- Articulate the development of performance traditions from ancient to modern times;
- Employ effective techniques in design, management, or performance;
- Be conversant in dramatic texts and theories from diverse periods and cultures;
- Analyze social, cultural, and political contexts as in dramatic literature and performance practices.

Minor Requirements

The requirements for the minor in theatre include successful completion of the following courses for a total of 12 credits:

All of the following:		
THAR 287	Theatre History I	3 CH
THAR 297	Theatre History II	3 CH
THAR 217	Technical Theatre	3 CH
THAR 257	Basic Acting	3 CH
And one of each pair for an additional 8-11 credits:		
ENG 286 *or* THAR 347	Creative Writing: Drama Advanced Acting & Directing	3-4 CH
ENG 330 *or* THAR 205	Dramatic Literature Analysis to Performance	2-3 CH
THAR 417 *or* THAR 225	Theatre Seminar Shakespeare: Page to Stage	3-4 CH
	TOTAL	**20-23 CH**

Business Certificate for Non-Majors

The Fundamentals of Business for Non-Majors concentration will provide the fundamentals of management to enable non-majors to enter work environments in which these skills are essential. Through the concentration, students will acquire:

- A basic understanding of management principles
- Knowledge of budgeting, including structure and uses
- Awareness of basic legal issues common to all organizations

The program consists of three, 3 CH courses, two to be selected by the student from the following list in addition to the required Introduction to Business (BADM 100):

- BADM 210 Principles of Marketing
- BADM 324 Advertising
- BADM 334 Risk Management and Insurance
- BADM 374 Principles of Management
- BADM 384 Business Communication
- BADM 484 Human Resource Management
- ACCT 323 Taxation – Personal

English Certificates for non-Majors

The English Department offers certificates in each of the specializations that are available to non-majors. Certificates may be taken to complement the student's chosen major, to demonstrate proficiency in a chosen area, and to permit the study of a desired cluster of courses in a manageable fashion. English certificates require at least 9 credit hours beyond ENG 101 in one of the specializations. A certificate in English Studies is also available to non-majors who wish to complement their chosen major by providing a broader rather than a specialized concentration in English. An English Studies certificate allows students to choose any three English Department electives for a total of 9 credit hours.

Students must earn a C-minus or better in all courses to count toward the English certificate. The English Department offers the following certificates:

English Certificate in Professional Writing – Any 9CH		
ENG 212	Creative Nonfiction	3 CH
ENG 242	Digital Rhetoric	3 CH
ENG 260	Professional Writing	3 CH
ENG 270	Advanced Composition & Research	3 CH
COMM 282	Writing for Mass Media	3 CH
ENG 317	Linguistics	3 CH
ENG 335	Persuasive Writing	3 CH

English Certificate in Creative Writing – Any 9CH		
ENG 212	Creative Nonfiction	3 CH
ENG 282	Poetry Writing	3 CH
ENG 284	Fiction Writing	3 CH
ENG 286	Writing for Stage and Screen	3 CH
ENG 317	Linguistics	3 CH

English Certificate in Literature Studies – Any 9CH		
ENG 120	Introduction to Literature	3 CH
ENG 190	Science Fiction and Fantasy	3 CH

ENG 210	British Literature to Romanticism	3 CH
ENG 220	British Literature: 1798 to Today	3 CH
ENG 235	American Literature Survey	3 CH
ENG 241	Children's Literature	3 CH
ENG 246	Adolescent and Young Adult Literature	3 CH
ENG 267	World Literature Survey	3 CH
ENG 290	Literature of World Mythology	3 CH
ENG 312	Topics in the Novel	3 CH
ENG 317	Linguistics	3 CH
ENG 325	Exploring Literary New England	3 CH
ENG 340	Shakespeare	3 CH
ENG 347	Literary Theory and Criticism	3 CH
ENG 385	Women in Literature	3 CH

English Certificate in Drama Studies – Any 9CH		
ENG 225/THAR 225	Shakespeare: Page to Stage	4 CH
ENG 317	Linguistics	3 CH
ENG 330	Dramatic Literature	3 CH
ENG 337	Drama into Film	3 CH
ENG 340	Shakespeare	3 CH
ENG 352	Topics in Drama	3 CH

English Certificate in Children's and Young Adult Literature – Any 9CH		
ENG 241	Children's Literature	3 CH
ENG 246	Adolescent and Young Adult Literature	3 CH
ENG 317	Linguistics	3 CH
Or one related course outside the Department such as PSY 255 — Lifespan Development or PSY 262 — Child Development		

English Certificate in English Studies		
ENG _____	Any three English Department Electives	9 CH

Certificate in Entrepreneurship

Through this certificate program students will:

- Develop and apply critical thinking and creativity skills toward the formulation of a new venture
- Assess and refine their entrepreneurial skills by developing insights into the entrepreneurial mindset
- Create a comprehensive business plan for a small business

The program consists of three, 3 CH courses:

BADM 250	Introduction to Business Models and Entrepreneurial Skillset	3 CH
BADM 300	Applied Entrepreneurship	3 CH
BADM 473	Entrepreneurship Seminar	3 CH
	TOTAL:	**9 CH**

Certificate in Ethics:

The Certificate in Ethics provides an intermediate-level understanding of ethics to non-majors/ non-minors of Philosophy. It may complement the student's major and/or demonstrate a significant level concentration in the discipline. It requires three courses, two of them in specified introductory level courses (Phil 137, 267), and one applied ethics course the student elects: Business Ethics, Environmental Ethics, or Medical Ethics.

Two required courses:		
PHIL 267	3 CH	Ethics
PHIL 137	3 CH	Critical Thinking
One Elective course:		
PHIL 387	3 CH	Medical Ethics
PHIL 297	3 CH	Environmental Ethics
PHIL 277 BADM 364	3 CH	Business Ethics

Certificate in Philosophy:

The Certificate in Philosophy provides an intermediate-level understanding of philosophy to non-majors and non-minors. It may complement the student's major and/or to demonstrate and receive recognition for some concentration in the discipline. It will require three courses, two in specified introductory level courses (Phil 127, 137), and one additional philosophy course the student selects.

Two Required Courses:		
PHIL 127	3 CH	Introduction to Philosophy
PHIL 137	3 CH	Critical Thinking

One Elective Course:
Any additional course offered in the Philosophy Department

Religion Certificate

The Certificate in Religion will provide an intermediate-level understanding of religion and religions to nonmajors and non-minors. It may be pursued to complement the student's major and/or to demonstrate and receive recognition for proficiency in the discipline. It will require at least eight credit hours, six credit hours in specified foundational courses and two or three credit hours in religion courses the student selects.

REL 120 Interpreting the Jewish and Christian Scriptures
or
REL 121 Intro to the Old Testament/Hebrew Bible
or
REL 122 Introduction to the New Testament
or
REL 123 Intro to Christianity

REL 190 World Religions

One additional religion course (2-3 CH)

Certification in Secondary Biology Education (Grades 7-12) with a Major in Biology

Foundational Courses—This course set is designed to provide the student with a basic understanding of the principles of science in general and biology in particular. They are to be taken during the first two years.

BIO 145 Foundations of Biology

And one of the following four systematics courses:

BIO 212 Microbiology
BIO 222 Entomology
BIO 262 Animal Systematics
BIO 263 Plant Systematics

Area Studies/Breadth in the Discipline of Biology—This course set is designed to introduce the student to concepts and principles of the major areas within the discipline of biology. They are to be taken after the foundational courses:

BIO 290 Cell Biology
BIO 322 Genetics
BIO 342 Biostatistics and Research Methods
BIO 392 General Ecology

Students must choose one elective based on availability and intent. The elective must be a 200 or 300 level BIO lab course that is 4 credits except BIO 350 – Principle of Immunology. Students may also choose NSCI 202, 209 or 315.

BIO XXX Elective

Capstone Experience—These three courses are designed to integrate material from a variety of courses and experiences and to provide the student with opportunities for development as a mature and independent scientist. Independent Research may begin in the junior year.

BIO 395 Junior Research Seminar
BIO 462 Senior Seminar

And one of the following two courses:

BIO 452 Advanced Biology (2 CH)
BIO 482 Independent Study (2 CH)

A completed research project under the supervision of a biology department faculty member is required of the student majoring in biology.

Related Math and Science Courses – Precalculus and eight credits of another science, either chemistry or physics, is required of the student majoring in biology.

MATH 142 Precalculus

And one of the following three pairings:

CHEM 140 General Chemistry I
CHEM 160 General Chemistry II
OR
PHYS 154 Physics I (non-calc based)
PHYS 164 Physics II (non-calc based)
OR
PHYS 174 Physics I (calculus based)
PHYS 184 Physics II (calculus based)

Certification in Secondary Chemistry Education (Grades 7-12) with a Major in Chemistry

Foundational Courses—This course set is designed to provide the student with a basic understanding of the principles of science in general and chemistry in particular.

CHEM 140 General Chemistry I
CHEM 160 General Chemistry II
CHEM ___ Intro to Inorganic Chemistry
CHEM 200 Organic Chemistry I
CHEM 210 Organic Chemistry II
CHEM 240 Quantitative Analysis
CHEM 315 Fund. of Physical Chemistry
CHEM 405 Chemistry Capstone I
CHEM 406 Chemistry Capstone II

Choose one of the following:

CHEM 490 Problems in Chemistry
CHEM 495 Independent Study

Choose one of the following:

CHEM 325 App of Physical Chemistry
CHEM 370 Instrumental Analysis
CHEM 390 Inorganic Chemistry

All of the following:

MATH 181 Calculus I
MATH 182 Calculus II
PHYS 174 Introductory Physics I
PHYS 184 Introductory Physics II

Certification in Secondary English Education (Grades 7-12) with a Major in English

Foundation Courses for English Major with Secondary Education Certification:

ENG 120 Introduction to Literature
ENG 210 British Literature to Romanticism
ENG 220 British Literature 1798-Present
ENG 235 American Literature Survey
ENG 267 World Literature Survey
ENG 270 Advanced Composition and Research
ENG 317 Linguistics
ENG 495 English Capstone

Distribution and Specialization Courses: Choose one course from each Specialization to fulfill the distribution requirement. Select one or more Specializations by completing an additional 6CH from your chosen subfield.

PROFESSIONAL WRITING
ENG 212: Creative Nonfiction
ENG 242: Digital Rhetoric
ENG 260: Professional Writing
COMM 282: Writing for Mass Media
ENG 335: Persuasive Writing

CREATIVE WRITING
ENG 212: Creative Nonfiction
ENG 282: Poetry Writing
ENG 284: Fiction Writing
ENG 286: Writing for Stage and Screen

LITERATURE
ENG 190: Science Fiction and Fantasy
ENG 290: Literature of World Mythology
ENG 241: Children's Literature
ENG 246: Adolescent and YA Literature
ENG 340: Shakespeare
ENG 312: Topics in the Novel
ENG 347: Literary Theory and Criticism* (required for the literature specialization)
ENG 385: Women in Literature

DRAMA
ENG 225: Shakespeare Page to Stage
THAR 287: Theater History I
THAR 297: Theater History II
ENG 330: Dramatic Literature
ENG 337: Drama in Film
ENG 340: Shakespeare
ENG 352: Topics in Drama

Note: There is a GPA requirement for ALL education classes, whether one is an education major or not. A GPA of 2.75 is required for the first three ECE courses, and the first two EDUC courses. A GPA of 3.0 is required for all other education courses.

Certification in Secondary Mathematics Education (Grades 7-12) with a Major in Mathematics

The requirements for a major in mathematics are designed to provide the students with breadth (32 CH in math plus a course in computer science and physics), depth (completion of a two-course sequence*) and flexibility (opportunity to choose from a number of upper division courses). Linear Algebra (MATH 291) is required because the theory taught in this course is widely applicable to contemporary issues, such as sustainability and information security. Courses have also been included that emphasize technology (PHYS 174 or 184 and CSCI 159).

Requirements for secondary certification—The major is designed to provide students with a basic knowledge of foundational mathematics courses, as well as in-depth study within a specific branch of mathematics. All courses that are applied to the major must be completed with a grade of C- or higher.

Required courses:

MATH 181 Calculus I
MATH 182 Calculus II
MATH 281 Calculus III
MATH 291 Linear Algebra
MATH 302 Differential Equations
MATH 371 Real Analysis

Complete one of the following sequence (required by the Pennsylvania Department of Education):

MATH 311 Non-Euclidean Geometry
MATH 331 Abstract Algebra
OR
MATH 451 Probability
MATH 461 Statistics
OR
MATH 432 Numerical Methods
MATH 433 Mathematical Modeling

Complete one additional 3-4 CH mathematics course numbered 220 or above. (MATH 341, 342 or 481 may not be used for this requirement, but PHYS 363 may be used here. MATH 221— Discrete Mathematics is recommended for secondary education majors).

Student teaching will fulfill the capstone requirement.

Complete the following support courses; one from each group:

PHYS 174 Intro to Physics I (calculus-based)
or
PHYS 184 Intro to Physics II (calculus-based)
And
CSCI 159 Introduction to Programming
or
CSCI 189 Java Programming

Certification in Secondary Social Studies Education (Grades 7-12) with a Major in History

Foundational courses—This course set is designed to provide students with a basic understanding of the nature and study of history and to introduce them to concepts and principles which are fundamental to responsible citizenship.

Survey courses within the major:

Select two out of these three courses:

HIST 101 United States History to 1877
HIST 102 United States History Since 1877
HIST/SEMS 250 World History

Required course within the major

HIST 290 Introduction to Historical Methods

Area studies – This set of courses is designed to introduce students to a broad body of historical knowledge and to give them practice in mastering the historical method.

United States History
Select three courses from the following:

HIST 201 Military History of the United States Until 1900
HIST 202 Military History of the United States Since 1900
HIST 210 Native American History
HIST 296 Selected Topics in the History of Warfare
HIST 297 Selected Topics in History and Film
HIST 300 United States Colonial History
HIST 305 Middle Period in American History
HIST 307 Emergence of Modern America
HIST 309 Recent American History
HIST 490 Advanced Topics in History (U.S. Focus)

European History
Select three courses from the following:

HIST 241 Women's History
HIST 296 Selected Topics in the History of Warfare
HIST 297 Selected Topics in History and Film
HIST 331 19th Century Europe 1815--1914
HIST 332 20th Century Europe 1914-Present
HIST 430 History of Modern Russia
HIST 431 The French Revolution and Napoleon
HIST 440 History of Modern France
HIST 450 Gender and Sexuality in 19th Century Europe
HIST 490 Advanced Topics in History (Europe Focus)

World (Non-Western) History
Select three courses from the following:

HIST 260 East Asian History
HIST 282 History of Modern Middle East
HIST 296 Selected Topics in the History of Warfare
HIST 297 Selected Topics in History and Film
HIST 362 Japanese History: Tokugawa to Present
HIST 370 Latin America: Culture, Conquest and Colonization
HIST 371 Latin America: Reform and Revolution
HIST 461 History of Modern China
HIST 462 History of Modern Japan
HIST 490 Advanced Topics in History (Non-Western Focus)

Capstone Experience—This requirement is designed to give students hands-on experience in the profession.
Choose one of the following:

HIST 496 Research Capstone in United States History
HIST 497 Research Capstone in European History
HIST 498 Research Capstone in World History

Secondary Education Certification

English, Biology, Chemistry, History/Social Studies, Mathematics

All Secondary Education Certification students will be assigned an advisor from the education department and an advisor from their major area of study.

A student who graduates from Thiel College with a major in English, History, Mathematics, Biology or Chemistry and a Secondary Education Certificate will:

1. Demonstrate oral, written, and presentation communication skills appropriate to the field.
2. Demonstrate mastery of major content knowledge areas and pedagogical strategies to design engaging and meaningful instruction and learning activities.
3. Demonstrate their knowledge of diversity by addressing learners' commonalities and individual differences to design inclusive learning experiences.
4. Apply the Council for Accreditation of Education Preparation (CAEP) standards to their discipline in the Secondary Education course of study, as assessed by the content field department.
5. Understand and demonstrate effectiveness by designing rigorous and effective lessons and learning experiences.

Secondary Education Certification

EDUC 111	Foundations of American Education	3 CH
EDUC 112	Psychological Foundations of Education	3 CH
EDUC 215	Curriculum, Instruction and Assessment	3 CH
EDUC 220	Integrated Instructional Systems	3 CH
EDUC 255	Mentoring I	3 CH
EDUC 400	Educating English Language Learners	3 CH
SPED 356	Special Education Processes, Procedures, Screening, Assessment, IEP Development and Evaluation	3 CH
SPED 357	Effective Instructional Practices and Delivery Methods in Subject Area Content for All Levels of Special Education Support	3 CH
SPED 358	Intensive Reading, Writing and Math Intervention Approaches	3 CH
SECED 268	Mentoring, Part II: On-Site Secondary Methodology	3 CH
SECED 325	Teaching Reading/Writing in the Content Areas	3 CH

SECED 340 SECED 350 SECED 360 SECED 370	Teaching English in Secondary Schools Teaching Social Studies in Secondary Schools Teaching Math in Secondary Schools Teaching Science in Secondary Schools	3 CH
SECED 444	Student Teaching	12 CH
	TOTAL	**48 CH**

Notes:

- *EDUC 111, EDUC 112, and EDUC 215 are prerequisites most other Education Department courses*
- *There is a GPA requirement for ALL education classes, whether one is an education major or not. A cumulative GPA of 2.75 is required for the first prerequisite courses (EDUC 111, EDUC 112, and EDUC 215). A cumulative GPA of 3.0 is required thereafter.*

Master of Business Administration

The objective of the MBA is that students will learn in an intense accelerated cohort-based experiential residential learning environment. They will focus on the idea of measuring performance with a balanced scorecard that includes both shareholder and other stakeholder perspectives in constructing metrics that include traditional measures of financial and operational achievement coupled with nontraditional measures that incorporate ethics, corporate social responsibility and sustainability. They will apply knowledge garnered from cutting-edge courses taught by faculty whose expertise extends beyond academia into world-class business experience. Students will have the opportunity to learn by doing, giving them the experience employers' demand and the skills to be a successful entrepreneur.

A student who graduates from Thiel College with a master of business administration will:

- employ entrepreneurial thinking to create innovative new ways of achieving objectives.
- identify, assess, and resolve ethical dilemmas in dynamic business environments.
- use the balance scorecard approach in solving complex business problems. Think critically to evaluate a situation, identify the problem, collect, manage, and analyze data, generate and weigh alternatives to select executable and sustainable solutions that satisfy multiple stakeholders.
- present business knowledge and decisions individually and as a team in both oral and written formats.
- effectively lead and motivate individuals and teams to achieve business objectives.

M.B.A. Requirements

MBA 510	Organizational Leadership	3 CH
MBA 590	Foundations of Management	3 CH
MBA 521	Managerial Economics	3 CH
MBA 542	Talent Optimization	3 CH
MBA 533	Advanced Financial Reporting and Managerial Accounting	3 CH
MBA 511	Applied Statistics	3 CH
MBA 554	Foundations of Marketing	3 CH
MBA 544	Finance	3 CH
MBA 564	Ethics, Corporate Social Responsibility, & Sustainability	3 CH
MBA 580	Introduction to Information Science	3 CH
MBA 574	Strategic Management	3 CH
MBA 555	Internship	3 CH

Thiel College Physician Assistant Program

The Physician Assistant program at Thiel College features two distinct paths to earn a Master of Science in Physician Assistant Studies:

Pathway 1 - Highly motivated high school seniors can enroll in our accelerated five-year program. Students will earn a traditional four-year bachelor's degree in Health systems and continue at Thiel for a fifth year to complete the master's degree program. Please refer to the Health Systems major for additional information regarding the undergraduate degree.

Pathway 2 – Students who have already completed a Bachelor of Arts or Bachelor of Science degree and wish to attain a Master of Science in Physician Assistant Studies from Thiel College should explore our 27-month post-baccalaureate program.

Pathway 1 - Undergraduate Curriculum

Note: Subject to change
*Denotes Pathway 1 Pre-requisite courses

Undergraduate Fall Semester 1

Course Name		Credits
MATH 142	Pre-Calculus	3
*BIO 145	Foundations of Biology	4
*CHEM 140	General Chemistry I	4
SEMS 110	Intro Seminar Series (DHI: HONS 109)	3
*ENGL 101	College Writing (DHI: HONS 113)	3
	Total Credits: Fall Undergraduate Semester 1	**17**

Undergraduate Spring Semester 1

Course Name		Credits
*BIO 212	Microbiology	4
	Humanities Course (DHI: HONS 114)	3
*CHEM 160	General Chemistry II	4
INDS 101	Presentational Literacy (DHI: HONS 128)	3
* 117	Medical Terminology	3

	Total Credits: Spring Undergraduate Semester 1	**17**

Undergraduate Fall Semester 2

Course Name		**Credits**
*BIO 280	Anatomy & Physiology I	4
*CHEM 200	Organic Chemistry I	4
*BIO 290	Cell Biology	4
	Creative Core (DHI: HONS 126)	3
*PSY	General Psychology (DHI: HONS 250)	3
	Total Credits: Fall Undergraduate Semester 2	**18**

Undergraduate Spring Semester 2

Course Name		**Credits**
*BIO 281	Anatomy & Physiology II	4
*CHEM 210	Organic Chemistry II	4
REL 12X	Religion Course (DHI: PSY 150)	3
SEMS 250	World Cultures (DHI: HONS 330)	3
*NSCI 202	Intro to Neuroscience	4
	Total Credits: Spring Undergraduate Semester 2	**18**

Undergraduate Fall Semester 3

Course Name		**Credits**
*CHEM 345	Biochemistry I	4
*BIO 350	Principles of Immunology	3
*PSY 215 or SOC 233	Stats for the Social Sciences	3
AH 105	Taking Care of Your Health	2
NSCI 3xx	Neuroscience Course OR Elective (if taking NSCI 3xx in Spring Year 3)	3

SPAN 150	Intro to Spanish Communication I (or ELECTIVE if met	3
	Total Credits: Fall Undergraduate Semester 3	**18**

Undergraduate Spring Semester 3

Course Name		Credits
PSY 241	Abnormal Behavior	3
PSY 255	Lifespan Development	3
SEMS 400	Global Issues (DHI: HONS 340)	3
*PHIL 387	Medical Ethics	3
NSCI 3x0	Neuroscience Course or ELECTIVE (if taking NSCI 3xx in Fall Year 3)	3
SPAN 151	Intro to Spanish Communication II (or ELECTIVE if lang. requirement met)	3
	Total Credits: Spring Undergraduate Semester 3	**18**

Thiel College Physician Assistant Program

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Pathway 2 – Students who have already completed a Bachelor of Arts or Bachelor of Science degree and wish to attain a Master of Science in Physician Assistant Studies from Thiel College should explore our 27-month post-baccalaureate program.

Pathway 2 - Graduate (Accredited) Curriculum

Summer 1 (note: this is an 8-week semester)

	Course Name	Credits
PA 501	Medical Science I	2
PA 504	Principles of Medicine I	3
PA 507	Pharmacology I	1
PA 510	Patient Assessment & Clinical Reasoning I	2
PA 514	Professional Practice	1
	Total Credits: Summer Semester 1	**9**

Fall Semester 1

	Course Name	Credits
PA 502	Medical Science II	3
PA 505	Principles of Medicine II	5
PA 508	Pharmacology III	2
PA 511	Patient Assessment & Clinical Reasoning II	3
PA 512	Diagnostic Medicine I	3
PA 515	Infectious Disease/Clinical Microbiology	2

	Total Credits: Fall Semester 1	**18**

Spring Semester 1

	Course Name	Credits
PA 503	Medical Science III	3
PA 506	Principles of Medicine III	5
PA 509	Pharmacology III	2
PA 513	Diagnostic Medicine II	2
PA 516	Evidence Based Medicine & Public Health	3
PA 517	Behavioral/Mental Health Medicine	2
PA 521	Clinical Skills & Procedures I	2
	Total Credits: Spring Semester 1	**19**

Summer Semester 2

	Course Name	Credits
PA 522	Clinical Skills & Procedures II	2
SPAN 523	Medical Spanish	2
PA 524	Healthcare Delivery	2
PA 525	Clinical Medicine across the Lifespan	4
PA 526	Surgery and Emergency Medicine	2
PA 527	Clinical Practicum	2
	Total Credits: Summer Semester 2	**14**

Fall Semester 2

	Course Name	Credits
PA 528	Professional Development I	1
PA 531	Clinical Clerkships I (Rotations 1, 2 & 3)	15
	Total Credits: Fall Semester 2	**16**

Spring Semester 2

	Course Name	Credits
PA 529	Professional Development II	1
PA 532	Clinical Clerkships II (Rotations 4, 5 & 6)	15
	Total Credits: Spring Semester 2	**16**

Summer Semester 3

	Course Name	Credits
PA 530	Professional Development III	1
PA 533	Clinical Clerkships III (Rotations 7, 8, & 9)	15
	Total Credits: Summer Semester 3	**16**

Clinical Mental Health Counseling

Master of Arts

Graduate Fall Semester 1

COUN 500	Orientation to Professional Counseling	3 CH
COUN 510	Counseling & Personality Theory	3 CH
COUN 520	Counseling Strategies & Techniques	2 CH
COUN 525	Counseling Skills Lab	1 CH
COUN 530	Human Development Over the Lifespan	3 CH
	Total	**12 CH**

Graduate Spring Semester 1

Winter Session of Spring Term:		
COUN 540	Group Dynamics Theory	2 CH
Spring:		
COUN 545	Group Dynamics Lab	1 CH
COUN 550	Career Development & Counseling	3 CH
COUN 560	Research Methods	3 CH
COUN 570	Multicultural & Social Justice Issues	3 CH
COUN 590	Crisis & Disaster Counseling	2 CH
	TOTAL	**14 CH**

Graduate Summer Semester 1

COUN 580	Assessment in Counseling	3 CH
COUN 600	Family & Couples Counseling	3 CH
COUN 610	Child & Adolescent Counseling	3 CH
	TOTAL	**9 CH**

Graduate Fall Semester 2

COUN 620	Diagnosis & Treatment Planning	3 CH
COUN 660	Advanced Topics Elective	1 CH
COUN 670	Seminar in Counseling	2 CH
COUN 675	Comprehensive Exam	0 CH
COUN 680	Clinical Practicum	3 CH
	TOTAL	**9 CH**

Graduate Spring Semester 2

Winter Session of Spring Term:		
COUN 630	Mental Health Counseling	2 CH
COUN 660	Advanced Topics Elective	1 CH
Spring:		
COUN 660	Advanced Topics Elective	1 CH
COUN 690	Clinical Internship	6 CH
	TOTAL	**10 CH**

Graduate Summer Semester 2

COUN 640	Addictions Counseling	3 CH
COUN 650	Social Justice Counseling	3 CH
	TOTAL	**6 CH**

Master of Arts in Communication and Leadership

Dr. Jared Hanneman, Program Director
Dr. George Branch-Trevathan, Dr. David Buck, Dr. Mary Theresa Hall, Dr. Lana Kulik, Dr. Michael McKinney, Dr. Matthew Morgan, Richard Orr, Dr. Cynthia Sutton, Dr. Susan Traverso, Gary J. Witosky

The Master of Arts in Communication and Leadership provides students support and guidance to develop advanced communication skills, embedded in a broad understanding of leadership. Coursework will facilitate assessment of leadership strategies and cultivate a variety of communication skills and methods so that graduates will become leaders in their own fields, flourishing in a variety of contexts.

The mission of the Master of Arts in Communication and Leadership is to ensure that graduates have developed the advanced communication skills necessary to be effective leaders. Students will not only be prepared for work, but for careers and lives of meaning and purpose.

The program is designed to intentionally integrate student learning and experience across individual courses. Each semester is designed so that students take two courses at a time of 7 weeks in length. During the fall and spring terms, they take a total of four courses over the 14-week semester. The total time to degree is 11 months (July-May).

To support students in developing lives and careers of meaning and purpose, the program will embed cocurricular activities designed to help students discern their vocation and find their approach to leadership. Students will keep a professional portfolio of their work for the duration of the program. The faculty will evaluate the students' portfolio as part of the program assessment.

The Master of Arts in Communication and Leadership program will:

- Produce advanced communicators who exhibit knowledge of leadership.
- Provide experiential learning opportunities for students to be able to communicate effectively across a variety of skills, including literacy in written and oral communication and financial and statistical literacy.
- Provide interdisciplinary engagement of students linking humanistic based inquiry with professional development.
- Provide an opportunity for students from a range of majors, from the arts and sciences and other professional fields, to hone and develop their communication and leadership skills.
- Create opportunities for students to articulate and connect personal leadership development with professional leadership practices.
- Build a diverse and inclusive learning environment which will encourage students to build and lead diverse inclusive communities.

Student Learning Outcomes

Upon completion of the program the student will be able to:

1. Communicate their ideas effectively and professionally through advanced oral communication, the written word, and a variety of media.
2. Use various communication tools, platforms, strategies, and technology strategically.
3. Demonstrate financial and statistical literacies to advance communication and leadership.
4. Develop particular leadership practices that are based on the ability to describe and assess well-informed values.
5. Demonstrate cross-cultural knowledge to effectively communicate with and lead diverse workplace communities.
6. Analyze leadership theories from psychological, sociological, humanistic, and communicative perspectives.

Students are required to have a 3.2 cumulative GPA from an accredited college or university and earned a baccalaureate degree.

Courses

LEAD 510	Effective Organizational Leadership	3 CH
LEAD 515	Leadership Theory & Approaches	3 CH
LEAD 520	Professional Communication	3 CH
LEAD 525	Leading Transformational Change	3 CH
LEAD 530	Strategic Planning & Policy	3 CH
LEAD 533	Data and Finance for Leadership	3 CH
LEAD 535	Applied Leadership Research	3 CH
LEAD 540	Communicating Effectively Across Differences & Creating Inclusivity	3 CH
LEAD 545	Content Creation & Strategy	3 CH
LEAD 550	Crisis Communication for Today's Global Challenges	3 CH
LEAD 555	Communicating Leadership Capstone	3 CH
LEAD 564	Communication & Ethical Leadership	3 CH

Master of Science in Speech-Language Pathology (MS-SLP)

Dr. Mary Beth Mason, CCC-SLP, MS-SLP Program Director/Department Chair;
Dr. Jeanette E. Benigas, CCC-SLP; Dr.Nicole Billak, CCC-SLP; Linda Collins, CCC-SLP; Julie Kobak, Director of Clinical Education; Dr.Neil Lax; Dr. Laura Pickens; Cassandra Shearer, CCC-SLP

The Master of Science in Speech-Language Pathology Program (MS-SLP) at Thiel College serves to prepare students to enter the workforce as speech-language pathologists. The program includes requirements needed for certification and licensure. Students will have a combination of academic coursework focusing on professional issues and disorders across the speech-language pathology scope of practice, lifespan, and diverse populations. Students will complete four clinical practicum experiences including two rotations at the Thiel College Center for Speech-Language Services, an externship in an educational setting, and an externship in a medical setting.

A student who graduates from Thiel College with an MS-SLP will be able to:

1. demonstrate understanding and competency of the foundations of SLP practices for entry into the profession
2. demonstrate understanding and competency of evidenced-based assessment principles across SLP scope of practice, lifespan, and diverse populations
3. demonstrate understanding and competency of evidence-based treatment principles across SLP scope of practice, lifespan, and diverse populations
4. demonstrate adequate oral and written communication for entry into the profession
5. demonstrate the ability to be critical consumers of research for entry into the profession

The MS-SLP Program has the following objectives:

1. to graduate speech-language pathology professionals who have the disciplinary knowledge and skills to provide entry-level services to diverse clienteles and to meet the needs of their community;
2. to graduate speech-language pathology professionals who have the clinical preparation and dispositions to provide entry-level services to diverse clienteles and to meet the needs of their community; and
3. to graduate speech-language pathology professionals who meet the requirements for certification and licensure.

Master of Science in Speech-Language Pathology: The MS-SLP may be satisfied by completing 54 graduate CSD credits. Students must pass all academic coursework with a grade of C or higher and satisfactorily complete all four clinical practicums with a total minimum of 25 observations hours and 375 clinical practicum hours.

Sequence of Courses

Semester I (Summer I)
CSD 500 Neuropathology of Communication Disorders with Lab
CSD 510 Research Methods in Communication Sciences and Disorders with Lab
CSD 511 Speech Sound Disorders with Lab
CSD 512 Language-Based Communication Disorders in Children with Lab
CSD 515 Clinical Practice I

Semester 2 (Fall)
CSD 521 Fluency Disorders with Lab
CSD 522 Aphasia and Cognitive-Communicative Disorders in Adults with Lab
CSD 531 Motor Speech Disorders with Lab
CSD 541 Dysphagia with Lab
CSD 550 Professional Practicum (1 credit)
CSD 580 Capstone in Speech-Language Pathology (1 credit)
CSD 525 Clinical Practice II

Semester 3 (Spring)
CSD 551 Voice Disorders with Lab
CSD 570 Augmentative and Alternative Communication with Lab
CSD 550 Professional Practicum (1 credit)
CSD 580 Capstone in Speech-Language Pathology (1 credit)
CSD 555 Externship I, Pediatric-Focused

Semester 4 (Summer II)
CSD 550 Professional Practicum (1 credit)
CSD 580 Capstone in Speech-Language Pathology
CSD 565 Externship II, Adult-Focused

Courses in Summer I and Fall are on-campus with classes being face-to-face. Courses in Spring and Summer II are synchronous online in evening with a residential week (on-campus) at end of each semester for hands-on training/labs, presentations, and final examinations. This allows students to complete their full-time externships across the United States.

Required Undergraduate Prerequisites:
Acoustical Phonetics
Nature and Development of Language
Anatomy and Physiology of the Vocal Mechanism
Audiology/Aural Rehabilitation, 6 credits
Speech and Hearing Science
Human Biology
Physics or Chemistry
Statistics
Social Science
25 Observation Hours