

SECONDARY EDUCATION, B.S. (EDUCATION)

Begin Campus: Any Penn State Campus

End Campus: University Park

Program Description

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

The following teaching options are available for majors in Secondary Education: Biological Science, Chemistry, Earth and Space Science, English, Environmental Education, General Science, Mathematics, Physics, and Social Studies/Citizenship Education.

The Secondary Education major helps prepare students for middle school and/or high school teaching positions and for other employment in fields related to their content specialties.

Biological Science Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education.

Chemistry Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education.

Earth and Space Science Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education.

English Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education. A comparable program is also open to student outside the College of Education who desire certification.

Environmental Education Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for a Pennsylvania teacher certification in Environmental Education when completed in conjunction with another secondary education teaching option (i.e., Biological Science Teaching option).

The total number of credits required will depend primarily on that other option.

General Science Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching General Science at the secondary-school level, which is issued by the Pennsylvania Department of Education. This option may only be completed in conjunction with another secondary education option (e.g., Biology); the total number of credits required will depend primarily on that other option.

Mathematics Teaching Option

Available at the following campuses: *Erie, University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education.

Physics Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching at the secondary-school level, which is issued by the Pennsylvania Department of Education.

Social Studies Teaching Option

Available at the following campuses: *University Park*

This option enables the graduate to meet all of the academic requirements for the Instructional I certificate for teaching social studies at the secondary-school level, which is issued by the Pennsylvania Department of Education.

What is Secondary Education?

The Secondary Education (SECE) major prepares graduates to teach at the middle school or high school level (grades 7-12) in English, Mathematics, Social Studies (which includes history, geography, government, and the social sciences), or a science subject (Biology, Chemistry, Earth & Space Science, or Physics). The program combines on-campus course work with clinical experiences in schools; graduates are eligible to apply for teacher licensure through the Pennsylvania Department of Education.

You Might Like This Program If...

- You are committed to public service and working with young people, and you appreciate that effective teaching demands both mastery of subject matter knowledge and understanding learners and communities.
- In your subject-matter studies, you tend to find yourself asking: How do we know that? Is there a better way to describe it? What are we overlooking? How could I help others understand this too?

MORE INFORMATION ABOUT SECONDARY EDUCATION (<https://ed.psu.edu/c-and-i/undergrad/secondary-education/>)

Entrance to Major

Baccalaureate degree candidates must meet the following requirements 1-3 by the end of their third semester:

1. A minimum cumulative grade point average of 3.00
2. Qualifying scores from the PECT PAPA for Reading, Writing and Mathematics
3. Documentation of at least 80 hours of volunteer or paid education work experience with learners of the age group the candidate plans to teach. Candidates for Secondary Education must document 40 of these hours with learners who come from backgrounds that are different from the candidate's.

Requirements 4-9 must be met by the end of the fourth semester when students typically participate in the Entrance-to-Major process.

4. A grade of "C" or better in all specified courses.
5. Completion of an early field experience specified by the certification program.
6. Completion of a core of Education courses specified by the certification program.
7. Completion of additional credits as specified by the certification program.
8. Completion of at least 48 semester credit hours, including ENGL 15 or ENGL 30H, three credits of literature, and six credits of quantification
9. Approval from the professional education adviser or the head of the pertinent certification program.

Degree Requirements

For the B.S. degree in Secondary Education with an option in Biological Science Teaching, a minimum of 126 credits is required; with an option in Chemistry Teaching, a minimum of 126 credits is required; with an option in Earth and Space Science Teaching, a minimum of 123 credits is required; with an option in English Teaching, a minimum of 126 credits is required; with an option in Environmental Education Teaching and a cohort option, a minimum of 123 credits is required; with an option in General Science Teaching and a cohort option, a minimum of 121 credits is required; with an option in Mathematics Teaching, a minimum of 132 credits is required; with an option in Physics Teaching, a minimum of 121 credits is required; with an option in Social Studies Teaching, a minimum of 129-132 credits is required. (See also Teacher Education Programs (<https://ed.psu.edu/certification/>)):

Requirement	Credits
General Education	45
Electives	0-20
Requirements for the Major	83-111

12-27 of the 45 credits for General Education are included in the Requirements for the Major. This includes:

Biological Science Teaching option, Chemistry Teaching option, Earth and Space Science Teaching option, Environmental Education Teaching option, General Science Teaching option, and Physics Teaching option--6 credits of GH courses; 9 credits of GN courses, 6 credits of GS courses; 6 credits of GQ courses. English Teaching option--0-6 credits of GA courses; 6 credits of GH courses; 6 credits of GS courses, 0-3 credits of GWS. Mathematics Teaching option--6 credits of GH courses; 6 credits of

GS courses; 6 credits of GQ courses. Social Studies Teaching option--6 credits of GH courses; 3 credits of GN courses; 6 credits of GS courses.

General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<http://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

Foundations (grade of C or better is required.)

- Quantification (GQ): 6 credits
- Writing and Speaking (GWS): 9 credits

Knowledge Domains

- Arts (GA): 6 credits
- Health and Wellness (GHW): 3 credits
- Humanities (GH): 6 credits
- Social and Behavioral Sciences (GS): 6 credits
- Natural Sciences (GN): 9 credits

Integrative Studies (may also complete a Knowledge Domain requirement)

- Inter-Domain or Approved Linked Courses: 6 credits

University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits.

Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80>)). For more information, check the Suggested Academic Plan for your intended program.

Requirements for the Major

A grade of C or better per course is required for teacher certification.

Common Requirements for the Major (All Options)

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
CI 280	Introduction to Teaching English Language Learners	3
CI 295	Introductory Field Experience for Teacher Preparation	2
CI 495C	Clinical Application of Instruction – Secondary Education	3
CI 495E	Practicum in Student Teaching–Secondary Education	15
EDPSY 14	Learning and Instruction	3
PSYCH 100	Introductory Psychology	3
SPLD 400	Inclusive Special Ed Foundations: Legal, Characteristics, Collaboration, Assessment, and Management	4
SPLD 403B	Evidence-Based Methods for Teaching Secondary Students with Disabilities in Inclusive Settings	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

PSYCH 412	Adolescence	3
or HDFS 239	Adolescent Development	

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better for teacher certification

Select 3 credits of GH courses from Literature Selection	3
Select 3 credits of the following:	3
EDTHP 115	Education in American Society
EDTHP 115A	Competing Rights: Issues in American Education
3 credits at the 400 level of any EDTHP course	

Requirements for the Option

Requirements for the Option: Require a grade of C or better for teacher certification

Select an option 38-66

Requirements for the Option

Biological Science Teaching Option (63-66 credits)

Available at the following campuses: University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
BIOL 220W	Biology: Populations and Communities	4
BIOL 240W	Biology: Function and Development of Organisms	4
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
CHEM 112	Chemical Principles II	3
CHEM 113	Experimental Chemistry II	1
MATH 140	Calculus With Analytic Geometry I	4
SCIED 411W	Teaching Secondary Science I	3
SCIED 412	Teaching Secondary Science II	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

BMB 251 & BMB 252	Molecular and Cell Biology I and Molecular and Cell Biology II	4-6
or BIOL 230W	Biology: Molecules and Cells	
MATH 141 or 4 credits of 200-level STAT GQ courses		4
Select one of the following:		3-4
ANTH 21	Introductory Biological Anthropology	
ANTH 460	Human Genetics	
BIOL 427	Evolution	
GEOSC 204	Geobiology	
GEOSC 424	Paleontology and Fossils	

Select one of the following: 8

PHYS 211 & PHYS 212	General Physics: Mechanics and General Physics: Electricity and Magnetism	
PHYS 250 & PHYS 251	Introductory Physics I and Introductory Physics II	

Select 6 credits of the following: 6

BMB 211	Elementary Biochemistry	
BMB 212	Elementary Biochemistry Laboratory	
BMB 401	General Biochemistry	
BMB 402	General Biochemistry	
CHEM 202	Fundamentals of Organic Chemistry I	
CHEM 203	Fundamentals of Organic Chemistry II	
CHEM 210	Organic Chemistry I	
CHEM 212	Organic Chemistry II	
CHEM 213	Laboratory in Organic Chemistry	

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better for teacher certification

Select 8 credits of 300-level or 400-level BIOL or biological fields 8

Note 1: Students may complete multiple science teaching options concurrently by completing all of each option's requirements. The six science teaching options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics.

Note 2: Red Cross certification in First Aid and CPR (or their equivalent) must be earned for science certification.

Chemistry Teaching Option (55-60 credits)

Available at the following campuses: University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
CHEM 112	Chemical Principles II	3
CHEM 113	Experimental Chemistry II	1
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
PHYS 211	General Physics: Mechanics	4
PHYS 212	General Physics: Electricity and Magnetism	4
SCIED 411W	Teaching Secondary Science I	3
SCIED 412	Teaching Secondary Science II	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

Select one of the following:		6-8
CHEM 202	Fundamentals of Organic Chemistry I	
& CHEM 203	and Fundamentals of Organic Chemistry II	
CHEM 210	Organic Chemistry I	
& CHEM 212	and Organic Chemistry II	
& CHEM 213	and Laboratory in Organic Chemistry	
Select 9 credits from 400 level CHEM or related field		9

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better for teacher certification

Select 6-9 credits in CHEM or chemistry-related fields at the 200 level or higher (e.g., BMB 211 and BMB 212, BMB 251, BMB 252, MICRB 251, FDSC 400, ANSC 301, NUTR 251, CHEM, CHE)		6-9
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Note 1: Students may complete multiple science teaching options concurrently by completing all of each option's requirements. The six science teaching options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics.

Note 2: Red Cross certification in First Aid and CPR (or their equivalent) must be earned for science certification.

Earth and Space Science Teaching Option (60-63 credits)

Available at the following campuses: University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
ASTRO 10	Elementary Astronomy	2

ASTRO 11	Elementary Astronomy Laboratory	1
BIOL 110	Biology: Basic Concepts and Biodiversity	4
BIOL 220W	Biology: Populations and Communities	4
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
EARTH 100	Environment Earth	3
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
SCIED 411W	Teaching Secondary Science I	3
SCIED 412	Teaching Secondary Science II	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

GEOSC 1	Physical Geology	3
or GEOSC 20	Planet Earth	
GEOSC 21	Earth and Life: Origin and Evolution	3-4
or GEOSC 204	Geobiology	
Select one of the following:		8
PHYS 211	General Physics: Mechanics	
& PHYS 212	and General Physics: Electricity and Magnetism	
PHYS 250	Introductory Physics I	
& PHYS 251	and Introductory Physics II	

Select 3-4 credits from the following: 3-4

METEO 3	Introductory Meteorology	
METEO 201	Introduction to Weather Analysis	
METEO 300	Fundamentals of Atmospheric Science	

Select 3-4 credits from the following: 3-4

BIOL 435	Ecology of Lakes and Streams	
BIOL 482	Coastal Biology	
GEOSC 40	The Sea Around Us	
GEOSC 440	Marine Geology	

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better for teacher certification

Select 8 credits of 200-400 level from EARTH, GEOSC, METEO, ASTRO, other earth science field, or BIOL 427		8
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Note 1: Students may complete multiple science teaching options concurrently by completing all of each option's requirements. The six science teaching options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics.

Note 2: Red Cross certification in First Aid and CPR (or their equivalent) must be earned for science certification.

English Teaching Option (40-42 credits)

Available at the following campuses: University Park

Note: Must complete at least 3 credits of IL and 3 credits of US Cultures selections.

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
CI 492	Identities, Power and Perceptual Pedagogies in Teaching and Learning	3

LLED 411	Teaching Language Arts In Secondary Schools I	3
LLED 412W	Teaching Language Arts in Secondary Schools II	3
LLED 420	Teaching Adolescent Literature and Literacy	3
LLED 421	Teaching Writing in Secondary Schools	3
LLED 422	Teaching the Young Adult Literature Workshop	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

Select 1-3 credits of Grammar from the following: 1-3

APLNG 484 Discourse-Functional Grammar

COMM 160 Basic News Writing Skills

Select 3 credits of Speech and Oral Performance from the following: 3

CAS 100 Effective Speech

CAS 280W Storytelling and Speaking

THEA 102 Fundamentals of Acting

Select 3 credits of Shakespeare from the following: 3

ENGL 129 Shakespeare

ENGL 405 Taking Shakespeare From Page to Stage

ENGL 440 Studies in Shakespeare

ENGL 444 Shakespeare

Select 6 credits of British and American Literature from the following: 6

ENGL 221 British Literature to 1798

ENGL 222 British Literature from 1798

ENGL 231 American Literature to 1865

ENGL 232 American Literature from 1865

Select 3 credits of Multicultural Literature in English from the following: 3

CMLIT/LTNST Latina/o Literature and Culture
403

ENGL/AMST Alternative Voices in American Literature
135

ENGL/AFAM African American Literature
139

ENGL/WMNST Women Writers
194

ENGL/AAS Asian American Literatures
428

ENGL 431/
AMST 475 Black American Writers

ENGL/WMNST Reading Black, Reading Feminist
462

ENGL/AFAM African American Novel I
466

ENGL/AFAM African American Novel II
467

ENGL/AFAM African American Poetry
468

ENGL/WMNST Women Writers and Their Worlds
490

ENGL 492/
AMST 476/
WMNST 491 American Women Writers

Select 3 credits of Nonprint Literature from the following: 3

AFAM/ENGL From Folk Shouts and Songs to Hip Hop Poetry
235

CMLIT 415	World Graphic Novels	
COMM 150N	The Art of the Cinema	
COMM 250	Film History and Theory	
COMM 411	Cultural Aspects of the Mass Media	
ENGL 136	The Graphic Novel	
THEA 100	The Art of the Theatre	
THEA 105	Introduction to Theatre	
Select 3 credits of Writing from the following:		3
ENGL 50	Introduction to Creative Writing	
ENGL 212	Introduction to Fiction Writing	
ENGL 213	Introduction to Poetry Writing	
ENGL 214	Introduction to Creative Nonfiction Writing	
ENGL 215	Introduction to Article Writing	

Environmental Education Teaching Option (55-58 credits)

Available at the following campuses: University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
BIOL 220W	Biology: Populations and Communities	4
CHEM 101	Introductory Chemistry	3
MATH 140	Calculus With Analytic Geometry I	4
SCIED 411W	Teaching Secondary Science I	3
SCIED 412	Teaching Secondary Science II	3
SCIED 457	Environmental Science Education	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

Select one of the following: 4

CHEM 20 Environmental Chemistry
& CHEM 21 and Environmental Chemistry Laboratory

CHEM 110 Chemical Principles I
& CHEM 111 and Experimental Chemistry I

Select one of the following: 3-4

BIOL 240W Biology: Function and Development of Organisms

WFS 407 Ornithology

WFS 408 Mammalogy

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better for teacher certification

Select two courses (6-8 credits) in environmental law, economics, management and policy (e.g., ECON 428, ERM 411, ERM 412, ERM 413W, WFS 410, WFS 447W, WFS 463W) 6-8

Select 4 credits of an environmentally related course in Science Technology and Society (e.g., STS 100, STS 460) 4

Select at least 14 credits from the cohort Teaching option ¹ 14

¹ This option may only be completed in conjunction with another secondary teaching option, such as the Biological Science Teaching option.

Note 1: Students may complete multiple science teaching options concurrently by completing all of each option's requirements. The six

science teaching options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics.

Note 2: Red Cross certification in First Aid and CPR (or their equivalent) must be earned for science certification.

General Science Teaching Option (38 credits)

Available at the following campuses: University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
CHEM 112	Chemical Principles II	3
CHEM 113	Experimental Chemistry II	1
MATH 140	Calculus With Analytic Geometry I	4
SCIED 411W	Teaching Secondary Science I	3
SCIED 412	Teaching Secondary Science II	3
Additional Courses		
<i>Additional Courses: Require a grade of C or better for teacher certification</i>		
MATH 141	or 4 credits of 200-level STAT GQ courses	4
Select one of the following: 4		
BIOL 220W	Biology: Populations and Communities	
BIOL 230W	Biology: Molecules and Cells	
BIOL 240W	Biology: Function and Development of Organisms	
Select one of the following: 8		
PHYS 211 & PHYS 212	General Physics: Mechanics and General Physics: Electricity and Magnetism	
PHYS 250 & PHYS 251	Introductory Physics I and Introductory Physics II	

Note 1: This option may only be completed in conjunction with another secondary teaching option, such as Biology.

Note 2: Students may complete multiple science teaching options concurrently by completing all of each option's requirements. The six science teaching options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics. options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics.

Note 3: Red Cross certification in First Aid and CPR (or their equivalent) must be earned for science certification.

Mathematics Teaching Option (57-59 credits)

Available at the following campuses: Erie, University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
MATH 220	Matrices	2-3
MATH 310	Elementary Combinatorics	3

MATH 311W	Concepts of Discrete Mathematics	3-4
MATH 312	Concepts of Real Analysis	3
MATH 414	Introduction to Probability Theory	3
MATH 471	Geometry for Teachers	4
MTHED 411	Teaching Secondary Mathematics I	3
MTHED 412W	Teaching Secondary Mathematics II	3
MTHED 427	Teaching Mathematics in Technology-Intensive Environments	3

Additional Courses

Additional Courses: Require a grade of C or better for teacher certification

CMPSC 101	Introduction to Programming	3
or CMPSC 121	Introduction to Programming Techniques	
MATH 231 & MATH 232	Calculus of Several Variables and Integral Vector Calculus	4
or MATH 230	Calculus and Vector Analysis	
MATH 435	Basic Abstract Algebra	3
or MATH 470	Algebra for Teachers	
MATH 436	Linear Algebra	3
or MATH 441	Matrix Algebra	
Select one of the following: 3		
MATH 415	Introduction to Mathematical Statistics	
STAT 401	Experimental Methods	
3 credits of MTHED from program list		

Supporting Courses and Related Areas

Supporting Courses and Related Areas: Require a grade of C or better

Select 6 credits from 400-level MATH or MTHED courses 6

Physics Teaching Option (55-62 credits)

Available at the following campuses: University Park

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
CHEM 110	Chemical Principles I	3
CHEM 111	Experimental Chemistry I	1
CHEM 112	Chemical Principles II	3
CHEM 113	Experimental Chemistry II	1
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
MATH 220	Matrices	2-3
PHYS 211	General Physics: Mechanics	4
PHYS 212	General Physics: Electricity and Magnetism	4
PHYS 213	General Physics: Fluids and Thermal Physics	2
PHYS 214	General Physics: Wave Motion and Quantum Physics	2
PHYS 237	Introduction to Modern Physics	3
PHYS 400	Intermediate Electricity and Magnetism	3
PHYS 419	Theoretical Mechanics	3
SCIED 411W	Teaching Secondary Science I	3
SCIED 412	Teaching Secondary Science II	3
Additional Courses		

Additional Courses: Require a grade of C or better for teacher certification

MATH 230	Calculus and Vector Analysis	2-4
or MATH 231	Calculus of Several Variables	
MATH 250	Ordinary Differential Equations	3-4
or MATH 251	Ordinary and Partial Differential Equations	
Select one of the following:		1-4
PHYS 402	Electronics for Scientists	
PHYS 457	Experimental Physics	
PHYS 458	Intermediate Optics	

Note 1: Students may complete multiple science teaching options concurrently by completing all of each option's requirements. The six science teaching options are: Biology, Chemistry, Earth and Space Science, Environmental Education, General Science, and Physics.

Note 2: Red Cross certification in First Aid and CPR (or their equivalent) must be earned for science certification.

Social Studies Teaching Option (57 credits)
Available at the following campuses: University Park

A grade of C or better per course is required for teacher certification.

Code	Title	Credits
Prescribed Courses		
<i>Prescribed Courses: Require a grade of C or better for teacher certification</i>		
ECON 104	Introductory Macroeconomic Analysis and Policy	3
GEOG 30N	Environment and Society in a Changing World	3
HIST 20	American Civilization to 1877	3
HIST 21	American Civilization Since 1877	3
PLSC 1	American Politics: Principles, Processes and Powers	3
SSED 411	Teaching Secondary Social Studies I	3
SSED 412W	Teaching Secondary Social Studies II	3
Additional Courses		
<i>Additional Courses: Require a grade of C or better for teacher certification</i>		
HIST 1	Western Civilization I	3
or HIST 10	World History to 1500	
HIST 2	Western Civilization II	3
or HIST 11	World History since 1500	
Select 9 credits of the following:		9
ANTH 45N	Cultural Diversity: A Global Perspective	
ECON 102	Introductory Microeconomic Analysis and Policy	
GEOG 6N	Maps and the Geospatial Revolution	
PLSC 3	Comparing Politics around the Globe	
PLSC 14	International Relations	
SOC 1	Introductory Sociology	
Supporting Courses and Related Areas		
<i>Supporting Courses and Related Areas: Require a grade of C or better for teacher certification</i>		
Select 6 credits of 400-level History		6
Select one concentration:		15
<i>Citizenship Education</i>		

Select 6 credits of History at the 100-level or above	
Select 3 credits of the following:	
ANTH 45N	Cultural Diversity: A Global Perspective
SOC 1	Introductory Sociology
Select 3 credits of the following:	
ECON 102	Introductory Microeconomic Analysis and Policy
PLSC 3	Comparing Politics around the Globe
PLSC 14	International Relations
Select 3 credits of the following:	
GEOG 6N	Maps and the Geospatial Revolution
GEOG 10	Physical Geography: An Introduction
GEOG 20	Human Geography: An Introduction
<i>Civics and Government</i>	
PLSC 3	Comparing Politics around the Globe
PLSC 14	International Relations
Select 3 credits of the following:	
PLSC 7N	Contemporary Political Ideologies
PLSC 10	Scientific Study of Politics
PLSC 17N	Introduction to Political Theory
Select 6 credits of 400-level Political Science	
<i>Classics and Ancient Studies</i>	
Select 3 credits from the following:	
CAMS 1	Greek and Roman Literature
CAMS 4	Jewish and Christian Foundations
CAMS 5	Ancient Mediterranean Civilizations
Select 3 credits of 100-level Classics and Ancient Mediterranean Studies	
Select 3 credits of Classics and Ancient Mediterranean Studies below the 400 level	
Select 6 credits of 400-level Classics and Ancient Mediterranean Studies	
<i>Economics</i>	
ECON 102	Introductory Microeconomic Analysis and Policy
ECON 302	Intermediate Microeconomic Analysis
ECON 304	Intermediate Macroeconomic Analysis
Select 6 credits of 400-level Economics	
<i>Geography</i>	
Select 9 credits of Geography below the 400 level	
Select 6 credits of 400-level Geography	
<i>Holocaust and Genocide Studies</i>	
HIST/JST 121	History of the Holocaust 1933-1945
Select 6 credits from the following:	
CMLIT/ENGL/ JST 128N	The Holocaust in Film and Literature
HIST/JST 143N	History of Fascism and Nazism
HIST/JST 195	Genocide in Global perspectives: Twentieth Century and beyond
Select 6 credits from the following:	
HIST/JST 426	Holocaust
HIST/JST/ WMNST 439	Women and the Holocaust

JST/PLSC 450H Genocide and Tyranny

ASIA/HIST 457/JST 474 Hiroshima & the Holocaust in History and Memory

JST/PHIL/RLST 478 Ethics After the Holocaust

Social Sciences

Select 9 credits of Anthropology, Psychology, and/or Sociology below the 400 level

Select 6 credits of 400-level Anthropology, Psychology, and/or Sociology

Note 1: Courses taken to meet Additional Courses and other Supporting Courses and Related Areas requirements cannot also be applied to the concentration. Different courses need to be selected for the concentration and Additional Courses and other Supporting Courses and Related Areas requirements.

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

University Park

College of Education Advising and Certification Center

228 Chambers Building
University Park, PA 16802
814-865-0488
ed@admissions.psu.edu

Erie

Jodie Styers

Assistant Teaching Professor in Math Education
8 Prischak
Erie, PA 16563
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Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2021-22 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (Note: the archive only contain suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin).

Biology Teaching Option: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 ^{*†#}	3 CHEM 110 ^{*#†}	3
MATH 140 or 140B ^{*†#}	4 CHEM 111 ^{*#†}	1
BIOL 110 ^{*#†}	4 MATH 141, 141B, or STAT 200 ^{*†}	4
PSYCH 100 ^{*#†}	3 EDPSY 14 ^{*#}	3
EDUC 100	1 Health and Wellness [*]	1.5
EDTHP 115 (or 400-level EDTHP) [*]	3 BIOL 220W ^{*#}	4
	18	16.5

Second Year

Fall	Credits Spring	Credits
BIOL 230W or BMB 251 <i>and</i> BMB 252 [*]	4 CI 280 ^{*†}	3
CAS 100A [†]	3 HDFS 239 or PSYCH 412 ^{*†}	3
CHEM 112 ^{*#†}	3 BIOL 240W [*]	4
CHEM 113 ^{*#}	1 PHYS 250 or 211 ^{*#}	4
Literature Selection ^{*#†1}	3 Health and Wellness [*]	1.5
CI 295 ^{*#}	2	
	16	15.5

Third Year

Fall	Credits Spring	Credits
SPLD 400 [*]	4 SCIED 411W [*]	3
PHYS 251 or 212 [*]	4 BIOL 300-400 Level Selection [*]	3
ENGL 202A or 202B [*]	3 SPLD 403B [*]	3
BIOL 427, ANTH 21, ANTH 460, GEOSC 204, or GEOSC 424 [*]	3-4 BMB 211/212, 401, 402, CHEM 202, CHEM 203, CHEM 210, CHEM 212, or CHEM 213 ^{*2}	3
BMB 211/212, 401, 402, CHEM 202, CHEM 203, CHEM 210, CHEM 212, or CHEM 213 ^{*2}	3	
	17-18	12

Fourth Year

Fall	Credits Spring	Credits
SCIED 412 [*]	3 CI 495E ^{*3}	15
CI 495C [*]	3	
Arts Selection	3	
GH, GA, GS, GHW, or Interdomain [*]	3	

BIOL 300-400 Level Selection*	3	
	15	15

Total Credits 125-126

- * Course requires a grade of C or better for the major
 - ‡ Course requires a grade of C or better for General Education
 - # Course is an Entrance to Major requirement
 - † Course satisfies General Education and degree requirement
- ¹ Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).
 - ² BMB 211 is related to and a prerequisite for the companion laboratory course BMB 212 (1 credit).
 - ³ No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Additional Notes:

- Must complete at least 3 cr. of United States (US) and 3 cr. of International Cultures (IL).
- W is the code used to designate courses that satisfy University Writing Across the Curriculum requirement.
- First Aid and CPR certification required. (on-line courses not acceptable)
- Summer study could reduce some of the credit loads above.
- Effective Fall 2012, all incoming Schreyer Honors College freshmen at University Park will take ENGL/CAS 137H in the fall semester and ENGL/CAS 138T in the spring semester. These courses carry GWS designation and replace both ENGL 030 and CAS 100. Each course is 3 credits. At the discretion of the college, ENGL/CAS 138T satisfies the first-year seminar requirement.
- Academic Advising Notes: The course series listed above is only one of many possible ways to move through this curriculum. Please be sure to also use the curriculum checksheets and degree audits, as well as consult with an adviser about appropriate scheduling

sequences, clearances for field experiences and testing requirements. Advisers also can assist students in identifying coursework offered at Penn State in the SUMMER.

Chemistry Teaching Option: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 ^{‡#}	3 CHEM 112 ^{*#†}	3
MATH 140 ^{*#†}	4 CHEM 113 ^{*#†}	1
CHEM 110 & CHEM 111 ^{*#†}	4 MATH 141 ^{*#†}	4
EDUC 100	1 EDPSY 14 ^{*#}	3
EDTHP 115 (or 400-level EDTHP)	3 Literature Selection ^{*#††}	3
	15	14

Second Year

Fall	Credits Spring	Credits
BIOL 110 ^{*#†}	4 CI 280 [*]	3
PHYS 211 ^{*#†}	4 PHYS 212 ^{*#†}	4
CI 295 ^{*#}	2 CHEM 212 and CHEM 213 or or CHEM 202 and CHEM 203 ^{*#}	5
CHEM 210 ^{*#}	3 Related 200 Level Selection [*]	3
PSYCH 100 ^{*#†}	3 Art Selection [*]	3
	16	18

Third Year

Fall	Credits Spring	Credits
SPLD 400 [*]	4 SCIED 411W [*]	3
ENGL 202A or 202B	3 HDFS 239 or PSYCH 412 ^{*†}	3
Related 200-level Selection [*]	3 CHEM 400 Level Selection ^{*2}	3
Related 200-level Selection [*]	3 SPLD 403B [*]	3
CAS 100A [‡]	3	
	16	12

Fourth Year

Fall	Credits Spring	Credits
SCIED 412 [*]	3 CI 495E ^{*3}	15
CI 495C [*]	3	
CHEM 400 Level Selection ^{*2}	3	
GA, GH, GS, or GHW Interdomain [*]	3	
Health and Wellness (GHW) [*]	1.5	
	13.5	15

Total Credits 119.5

- * Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

- ¹ Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).
- ² CHEM 402, CHEM 406, CHEM 408, CHEM 410, CHEM 412, CHEM 423W, CHEM 425W, or CHE 301 or CHE 435.
- ³ No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Additional Notes:

- Must complete at least 3 cr. of United States (US) and 3 cr. of International Cultures (IL).
- W is the code used to designate courses that satisfy University Writing Across the Curriculum requirement.
- First Aid and CPR certification required. (on-line courses not acceptable)
- Summer study could reduce some of the credit loads above.
- Effective Fall 2012, all incoming Schreyer Honors College freshmen at University Park will take ENGL/CAS 137H in the fall semester and ENGL/CAS 138T in the spring semester. These courses carry GWS designation and replace both ENGL 030 and CAS 100. Each course is 3 credits. At the discretion of the college, ENGL/CAS 138T satisfies the first-year seminar requirement.
- Academic Advising Notes: The course series listed above is only one of many possible ways to move through this curriculum. Please be sure to also use the curriculum checksheets and degree audits, as well as consult with an adviser about appropriate scheduling sequences, clearances for field experiences and testing requirements. *Advisers also can assist students in identifying coursework offered at Penn State in the SUMMER earth and space teaching option at University Park Campus and commonwealth campuses.*

Earth and Space Teaching Option: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 ^{‡#}	3 BIOL 220W ^{*#}	4
MATH 140 or 140B ^{‡##†}	4 CHEM 111 ^{*##†}	1
BIOL 110 ^{*##†}	4 MATH 141, 141B, or STAT 200 [*]	4
PSYCH 100 ^{*##†}	3 EDPSY 14 ^{*#}	3
EDUC 100	1 Health and Wellness	1.5
EDTHP 115 (or 400-level EDTHP) [*]	3 EARTH 100 [*]	3
	18	16.5

Second Year

Fall	Credits Spring	Credits
GEOSC 1 or 20 [*]	3 CI 280 [*]	3
CAS 100A [‡]	3 PHYS 250 or 211 ^{*##†}	4
CI 295 ^{*#}	2 Interdomain General Education [*]	3
CHEM 110 ^{*##†}	3 Health and Wellness [*]	1.5
Literature Selection ^{*##†}	3 METEO 3, 201, or 300 ^{*†}	3-4
	14	14.5-15.5

Third Year

Fall	Credits Spring	Credits
PHYS 251 or 212 [*]	4 SCIED 411W [*]	3
ENGL 202A or 202B [*]	3 SPLED 403B [*]	3
GEOSC 40, 440, BIOL 435, or BIOL 482 ^{*†}	3-4 GEOSC 21 or 204 ^{*†}	3-4
ASTRO 10 or 11 [*]	1-2 HDFS 239 or PSYCH 412 [*]	3
SPLED 400 [*]	4 BIOL 427 (or 200 -400 Level Selection (EARTH, GEOSC, METEO, ASTRO, PHYS, ANTH)) [*]	3
	15-17	15-16

Fourth Year

Fall	Credits Spring	Credits
SCIED 412 [*]	4 CI 495E ^{*2}	15
CI 495C [*]	3	
Arts Selection	3	
BIOL 427 (or 200 -400 Level Selection (EARTH, GEOSC, METEO, ASTRO, PHYS, ANTH)) [*]	3	

BIOL 427 (or 200 -400 Level Selection (EARTH, GEOSC, METEO, ASTRO, PHYS, ANTH))^{*†}

3

16

15

Total Credits 124-128

- * Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

¹ Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).

² No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Additional Notes:

- Must complete at least 3 cr. of United States (US) and 3 cr. of International Cultures (IL).
- First Aid and CPR certification required. (on-line courses not acceptable)
- Summer study could reduce some of the credit loads above.
- Academic Advising Notes: The course series listed above is only one of many possible ways to move through this curriculum. Please be sure to also use the curriculum checksheets and degree audits, as well as consult with an adviser about appropriate scheduling sequences, clearances for field experiences and testing requirements. *Advisers also can assist students in identifying coursework offered at Penn State in the SUMMER.* English and communication teaching option at university park and commonwealth campuses

English Teaching Option: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 or 30H ^{*#†}	3 PSYCH 100 ^{*#†}	3
Literature Selection ^{*†1}	3 Non-Print Selection ^{*3}	3
EDPSY 14 ^{*#}	3 Science Selection ^{†2}	3
EDUC 100	1 Mathematics Selection ^{*#†}	3
Mathematics Selection ^{*#†}	3 American or British Literature Selection ^{*4}	3
Science Selection (GN)/ Interdomain ^{†2}	3	
	16	15

Second Year

Fall	Credits Spring	Credits
CI 295 ^{*#}	2 CAS 100A (Speech and Oral Performance Selection) ^{*#}	3
Art Selection (GA) ^{*5}	3 PSYCH 412 or HDFS 239 [*]	3
Science Selection (GN) ^{†2}	3 Interdomain General Education (GA, GH, GS, GHW)	3
CI 280 ^{*†}	3 Grammar Selection ^{*7}	1-3
American or British Literature Selection ^{*4}	3 EDTHP 115 (or 400-level EDTHP) [*]	3
Writing Selection ^{*6}	3 Health and Wellness (GHW)	1.5
	17	14.5-16.5

Third Year

Fall	Credits Spring	Credits
LLED 411 [*]	3 LLED 421 [*]	3
CI 492 [*]	3 LLED 422 [*]	3
ENGL 202A or 202B ^{*†}	3 Multicultural Literature Selection ^{*9}	3
Shakespeare Selection ^{*8}	3 SPLED 400 [*]	4
Elective	3 Elective	3
Health and Physical Activity [†]	1.5	
	16.5	16

Fourth Year

Fall	Credits Spring	Credits
LLED 420 [*]	3 CI 495E ^{*10}	15
LLED 412W [*]	3	
CI 495C [*]	3	
SPLED 403B [*]	3	
Elective	3	
	15	15

Total Credits 125-127

- * Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

¹ Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).

² Science Selection list of acceptable courses available here (<https://ed.psu.edu/c-and-i/undergrad/eece/pk-4/suggested-course-listings/scied-458-prerequisite-courses/>).

³ AFAM 235/ENGL 235, CMLIT 415, COMM 150N, COMM 250, COMM 411, ENGL 136, THEA 100, THEA 105.

⁴ ENGL 221, ENGL 222, ENGL 231, ENGL 232.

⁵ ENGL 100, ENGL 407, ENGL 417; LING 100.

⁶ ENGL 50, ENGL 212, ENGL 213, ENGL 214, ENGL 215.

⁷ APLNG 484 or COMM 160.

⁸ ENGL 129, ENGL 405, ENGL 440, ENGL 444.

⁹ CMLIT 403/LTNST 403, ENGL 135/AMST 135, ENGL 139/AFAM 139, ENGL 194/WMNST 194, ENGL 428/AAS 428, ENGL 431/AMST 475, ENGL 462/WMNST 462, ENGL 466/AFAM 466, ENGL 467/AFAM 467, ENGL 468/AFAM 468, ENGL 490/AFAM 490, ENGL 492/AMST 476/WMNST 491.

¹⁰ No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Mathematics Teaching Option - Fall Semester Student Teaching: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 or 30H ^{*#}	3 MATH 141 ^{*#†}	4
EDUC 100	1 MATH 220 ^{*#†}	3
MATH 140 ^{*#†}	4 Literature Selection ^{*#†1}	3
CMPSC 101 or 121 ^{*#†}	3 Science Selection	3
PSYCH 100 ^{*#†}	3 CAS 100A [*]	3
Arts Selection	3 Health and Physical Activity	1.5
	17	17.5

Second Year

Fall	Credits Spring	Credits
MATH 230 or 231 ^{*#}	4 HDFS 239 or PSYCH 412 ^{*†}	3
MATH 311W [*]	3 MATH 310 [*]	3
Science Selection	3 MATH 312 [*]	3
EDPSY 14 ^{*#}	3 Science Selection	3
CI 280 ^{*†}	3 CI 295 ^{*#}	2
Health and Physical Activity	1.5 EDTHP 115 (or EDTHP 400 Level Selection) [*]	3
	17.5	17

Third Year

Fall	Credits Spring	Credits
MTHED 411 [*]	3 MTHED 412W [*]	3
MTHED 427 [*]	3 CI 495C [*]	3
SPLD 400 [*]	4 SPLD 403B [*]	3
MATH 435 or 470 [*]	3 MATH 471 [*]	4
MATH 414 [*]	3 MATH 436 [*]	3
	16	16

Fourth Year

Fall	Credits Spring	Credits
CI 495E ^{*2}	15 MATH 400 Level Selection or MTHED 400 Level Selection [*]	3
	MATH 400 Level Selection or MTHED 400 Level Selection [*]	3
	ENGL 202A or 202B [*]	3
	Arts Selection	3
	STAT 401 or MATH 415 [*]	3
	15	15

Total Credits 131

* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

1 Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).

2 No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Mathematics Teaching Option - Spring Semester Student Teaching: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 or 30H ^{*#}	3 MATH 141 ^{**†}	4
EDUC 100	1 MATH 220 ^{**†}	3
MATH 140 ^{**†}	4 Literature Selection ^{**†1}	3
CMPSC 101 or 121 ^{**†}	3 Science Selection	3
PSYCH 100 ^{**†}	3 CAS 100A [*]	3
Arts Selection	3 Health and Physical Activity	1.5
	17	17.5

Second Year

Fall	Credits Spring	Credits
MATH 230 or 231 ^{**}	4 HDFS 239 or PSYCH 412 [*]	3
MATH 311W [*]	3 MATH 310 [*]	3
Science Selection	3 MATH 312 [*]	3
EDPSY 14 ^{**}	3 Science Selection	3
CI 280 ^{**†}	3 CI 295 ^{**}	2
Health and Physical Activity	1.5 EDTHP 115 (or EDTHP 400 Level Selection) [*]	3
	17.5	17

Third Year

Fall	Credits Spring	Credits
Arts Selection	3 SPLED 400 [*]	4
ENGL 202A or 202B [*]	3 MTHED 411 [*]	3
MATH 414 [*]	3 MTHED 427 [*]	3
MATH 435 or 470 [*]	3 MATH 471 [*]	4
MATH 436 or 441 [*]	3 MATH 400 Level Selection or MTHED 400 Level Selection [*]	3
	15	17

Fourth Year

Fall	Credits Spring	Credits
MTHED 412W [*]	3 CI 495E ^{*2}	15
CI 495C [*]	3	
SPLED 403B [*]	3	
STAT 401 or MATH 415 (or MTHED List) [*]	3	
MATH 400 Level Selection or MTHED 400 Level Selection [*]	3	
	15	15

Total Credits 131

* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

1 Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).

2 No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Physics Teaching Option: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If report**). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 ^{*#}	3 CHEM 110 ^{*#†}	3
MATH 140 ^{*#†}	4 CHEM 111 ^{*#†}	1
PHYS 211 ^{*#†}	4 MATH 141 ^{*#†}	4
PSYCH 100 ^{*#†}	3 PHYS 212 ^{*†}	4
EDUC 100	1 EDPSY 14 ^{*#}	3
EDTHP 115 (or 400-level EDTHP)	3	
	18	15

Second Year

Fall	Credits Spring	Credits
MATH 220 ^{*†}	2-3 Health and Wellness [*]	1.5
BIOL 110 ^{*#†}	4 CI 295 ^{*#}	2
Literature Selection ^{*#†1}	3 MATH 250 or 251 [*]	3-4
CI 280 ^{*†}	3 PHYS 237 [*]	3
PHYS 213 or 214 ^{*†}	2 CHEM 112 ^{*#†}	3
	CHEM 113 ^{*#†}	1
	14-15	13.5-14.5

Third Year

Fall	Credits Spring	Credits
SPLD 400 [*]	4 CAS 100A ^{*†}	3
ENGL 202A or 202B ^{*†}	3 SCIED 411W [*]	3
MATH 230 or 231 [*]	3-4 Arts Selection	3
PHYS 400 [*]	3 SPLD 403B [*]	3
HDFS 239 or PSYCH 412 ^{*†}	3 PHYS 419 [*]	3
	16-17	15

Fourth Year

Fall	Credits Spring	Credits
SCIED 412 [*]	3 CI 495E ^{*2}	15
CI 495C [*]	3	
PHYS 402, 457, or 458 [*]	2-4	
Health and Wellness [*]	1.5	
GS, GH, GA, GHW, or Interdomain [*]	3	
	12.5-14.5	15

Total Credits 119-124

- * Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

¹ Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).

² No Additional coursework permitted during Student Teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Social Studies Option - Fall Semester Student Teaching: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
ENGL 15 or 30H ^{*#}	3 GEOG 30N ^{*#}	3
EDUC 100	1 EDTHP 115 (or 400-level EDTHP) [*]	3
HIST 20 ^{*#†}	3 HIST 21 ^{*#†}	3
PSYCH 100 ^{*#†}	3 PLSC 1 ^{*#}	3
Mathematics Selection ^{*#†}	3 Mathematics Selection ^{*#†}	3
Science Selection ^{*†}	3 Additional Course Selection ^{*1}	3
	16	18

Second Year

Fall	Credits Spring	Credits
EDPSY 14 ^{*#}	3 HDFS 239 or PSYCH 412 [*]	3
ECON 104 ^{*#†}	3 CI 280 ^{*†}	3
HIST 1 or 10 ^{*†}	3 HIST 2 or 11 ^{*†}	3
CI 295 ^{*#}	2 Additional Course Selection ^{*1}	3
Literature Selection ^{*#†2}	3 Concentration Selection ^{*3}	3
Additional Course Selection ^{*1}	3 Concentration Selection ^{*3}	3
	17	18

Third Year

Fall	Credits Spring	Credits
SSED 411 [*]	3 SSED 412W [*]	3
SPLD 400 [*]	4 CI 495C [*]	3
HIST 400-level Selection [*]	3 SPLD 403B [*]	3
Concentration Selection ^{*3}	3 HIST 400-level Selection [*]	3
Concentration Selection ^{*3}	3 Concentration Selection ^{*3}	3
	16	15

Fourth Year

Fall	Credits Spring	Credits
CI 495E ^{*4}	15 CAS 100A [*]	3
	ENGL 202A or 202B [*]	3
	Health and Wellness Selection	3
	Science Selection	3
	Art Selection	3
	15	15

Total Credits 130

* Course requires a grade of C or better for the major

† Course requires a grade of C or better for General Education

Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

1 Choose ANTH 45N or GEOG 6N and ECON 102, PLSC 3, PLSC 14 or SOC 1

2 Literature Selection list of acceptable courses available here (<https://ed.psu.edu/current-students/undergrad/academic-programs-1/literature/>).

3 Civics & Government (PLSC), Classics & Ancient Studies (CAMS), Economics (ECON), Geography (GEOG), Holocaust & Genocide Studies (JST, HIST) or Social Sciences (ANTH, PSYCH, SOC)

4 No additional coursework permitted during student teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Social Studies Option - Spring Student Teaching: Secondary Education, B.S. at University Park Campus and Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year

Fall	Credits Spring	Credits
GEOG 30N ^{*#}	3 ENGL 15 or 30H ^{*#}	3
EDUC 100	1 HIST 20 ^{*#†}	3
PLSC 1 ^{*#}	3 PSYCH 100 ^{*#†}	3
Arts Selection	3 Science Selection [†]	3
Mathematics Selection ^{*#†}	3 Mathematics Selection ^{*#†}	3
Science Selection ^{*†}	3 Health and Physical Activity	1.5
	16	16.5

Second Year

Fall	Credits Spring	Credits
CI 280 ^{*†}	3 CI 295 ^{*#}	2
EDTHP 115 (or 400-level EDTHP) ^{*†}	3 EDPSY 14 ^{*#}	3
HIST 21 ^{*#†}	3 ECON 104 ^{*#†}	3
Additional Course Selection ^{*1}	3 HIST 1 or 10 ^{*†}	3
Additional Course Selection ^{*1}	3 Additional Course Selection ^{*1}	3
Health and Physical Activity	1.5 Literature Selection ^{*#†2}	
	16.5	14

Third Year

Fall	Credits Spring	Credits
CAS 100A [*]	3 SSED 411 [*]	3
ENGL 202A or 202B [*]	3 SPLED 400 [*]	4
HDFS 239 or PSYCH 412 ^{*†}	3 HIST 400-level Selection [*]	3
HIST 2 or 11 ^{*†}	3 Concentration Selection ^{*3}	3
Concentration Selection [*]	3 Concentration Selection ^{*3}	3
Concentration Selection [*]	3	
	18	16

Fourth Year

Fall	Credits Spring	Credits
SSED 412W [*]	3 CI 495E ^{*4}	15
CI 495C [*]	3	
SPLED 403B [*]	3	
Concentration Selection ^{*3}	3	
HIST 400-level selection ^{*3}	3	
	15	15

Total Credits 127

* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

1 Choose ANTH 45N or GEOG 6N and ECON 102, PLSC 3, PLSC 14 or SOC 1.

2 Literature Selection list of acceptable courses available here (<https://ed.psu.edu/c-and-i/undergrad/literature-selections/>).

3 Civics & Government (PL SC), Classics & Ancient Studies (CAMS), Economics (ECON), Geography (GEOG), Holocaust & Genocide Studies (JST, HIST) or Social Sciences (ANTH, PSYCH, SOC).

4 No additional coursework permitted during student teaching.

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of 'C' or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

Career Paths

Our graduates teach in public and private schools in Pennsylvania, elsewhere in the U.S., and around the world. Education is a profession, and all teachers are expected to continue studying and developing new skills throughout their careers. In most U.S. states, teacher certification is a multi-stage process, with graduate study beyond a bachelor's degree expected early in a teacher's career. Graduates of this program who work in public schools usually go on to earn a master's degree. Alumni who wish to continue educational studies at the graduate level through Penn State can do so at University Park and through the University's World Campus.

Careers

In addition to resources like the College's Advising and Certification Center and Penn State Career Services, the University hosts large education career fairs in both the fall and spring semesters, which bring recruiters to campus from throughout Pennsylvania and the United States.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES OF THE SECONDARY EDUCATION PROGRAM (<http://studentaffairs.psu.edu/career/>)

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES
(<http://ed.psu.edu/c-and-i/graduate/degrees/>)

Professional Resources

- Pennsylvania State Education Association (<http://www.psea.org/resources-by-profession/student-psea/>)
- Occupational Outlook for High School Teachers (Bureau of Labor Statistics) (<https://www.bls.gov/ooh/education-training-and-library/high-school-teachers.htm>)
- National Council of Teachers of English (NCTE) (<http://www2.ncte.org>)
- National Council of Teachers of Mathematics (NCTM) (<http://www.nctm.org>)
- National Council for the Social Studies (NCSS) (<http://www.socialstudies.org>)
- National Science Teachers Association (NSTA) (<http://www.nsta.org>)

Accreditation

The College of Education educator preparation program is currently NCATE accredited and is seeking accreditation by the Council for the Accreditation of Education Preparation (CAEP) in Spring 2019. CAEP advances excellence in educator preparation through evidence-based accreditation that assures quality and supports continuous improvement to strengthen P-12 student learning.

MORE INFORMATION ABOUT ACCREDITATION OF THE SECONDARY EDUCATION PROGRAM (<https://ed.psu.edu/internal/associate-dean-undergrad/accreditation-and-program-review/Accreditation/>)

Professional Licensure/Certification

Many U.S. states and territories require professional licensure/certification to be employed. If you plan to pursue employment in a licensed profession after completing this program, please visit the Professional Licensure/Certification Disclosures by State (<https://psu.edu/state-licensure-disclosures/>) interactive map.

Contact

University Park

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