



Ursinus College

TEACHER EDUCATION PROGRAMS

MARCH 2017

**Education Department
Bomberger Hall, 1st floor
601 E. Main Street
Collegeville, PA 19426
601-409-3581**

<https://www.ursinus.edu/academics/education/>

URSINUS COLLEGE TEACHER PREPARATION PROGRAM

MISSION STATEMENT

The Ursinus College Teacher Education Program is dedicated to preparing education professionals who can inspire, motivate, and educate all of their students for positive participation in a diverse, democratic society.

This includes:

Valuing a rigorous, liberal arts approach to the study of education, including a focus on the social, political, cultural, historical, and philosophical contexts in which teaching and learning take place.

Applying academic learning to educational problems and practices, in schools as well as society.

Shaping classrooms characterized by a culture of learning, respect for differences, and the pursuit of individual and collective growth

Developing curriculum plans, teaching strategies, and assessments that engage all students and make a lasting impact on their lives.

Demonstrating a commitment to ethical standards and professionalism, including continual growth.

To fulfill our mission, the Education Department establishes working partnerships with Ursinus College faculty across several disciplines and with educators in surrounding communities. Together we seek to inspire and guide pre-professional students through a program that incorporates high academic standards; content mastery in the liberal arts with intense focus in the area(s) of certification; foundational coursework; and common intellectual experiences that engage them in critical thinking, writing, presentation, and dialogue.

We support our mission as well by emphasizing technology skill-building, while providing courses in general and special methods, guest workshops on critical topics, and field explorations that expose the multicultural, socioeconomic, pedagogical and human influences on school climate and student progress. Capping the preparation phase is a supervised student-teaching experience that represents the laboratory and the lens through which we assess the fulfillment of our goals.

Our mission takes its strength from a departmental conviction that active learning and critical reflection are essential for effective teaching and learning. Education students practice the thoughtful approach to learning that they are expected to develop in their own classrooms when they student teach. This stress on individual responsibility for learning is also reflected in various opportunities to peer evaluate and self evaluate.

INTRODUCTION

The Education Department offers two programs: teaching certification and a minor in education.

Teaching Certification

Ursinus offers certification in the following areas:

Grades 7-12

Biology
Chemistry
English
General Science*
Mathematics
Physics
Social Studies

Grades K-12

French
German
Japanese
Latin
Spanish
Health/Physical Education

*This certification area is only offered in conjunction with Biology, Chemistry or Physics certification.

Students interested in certification must meet the following college and state requirements:

The College requires specified coursework to complete a major and a sequence of courses and field experiences in Education. Candidates for student teaching must meet overall GPA standards, as well as specified GPAs in major areas and Education courses. Students who successfully complete student teaching and pass the necessary PAPA or CORE*/Praxis exams and coursework become eligible for Pennsylvania Department of Education Instructional I certification, which is reciprocal with 46 other states.

States require a bachelor's degree, successful completion of an approved certification program, United States citizenship (unless teaching a foreign language), and passing scores on the PAPA or CORE*/Praxis exams (National Teachers Examinations) for entry-level teaching positions. Some states require additional NTE specialty exams to begin teaching and completion of a master's degree for permanent certification.

For permanent certification in Pennsylvania, new teachers must complete: 1) an induction program developed by the school district; 2) twenty-four credit hours of coursework beyond a bachelor's degree at an accredited institution; and 3) three years of successful teaching. After receiving the permanent Instructional II certificate, teachers must participate in a program of continuing professional development.

*Note that the PDE now accepts SAT and ACT scores – see department staff for details.

URSINUS COLLEGE TEACHER CERTIFICATION PROGRAM

In accordance with revisions enacted by the Pennsylvania Board of Education (Chapter 354), all students seeking teaching certification must have fulfilled the following requirements before they can be officially admitted into the Ursinus Teacher Education Program:

- Completion of 48 credit hours of college-level study
- Completion of six (6) semester-hour credits in English including coursework in composition and literature
- Completion of six (6) semester-hour credits in Mathematics
- Achievement of an overall GPA of 3.00

Additionally:

- A 3.00 average in Education Department core courses 210, 265, 320, 350, 360, 375 and 443. (HPE students complete HEP 355 and HEP 356 as opposed to EDUC 350 and 443)
- Specified Departmental GPA in certification area
- Major Department recommendation
- The Basic Skills examination requirement

Note: Post-baccalaureate candidates who are not 9th semester Ursinus graduates must also pass Praxis II examinations prior to student teaching.

Course Sequences

Students and advisors should consult the Education department, especially in cases that do not conform to these sequences. All Education coursework must be completed prior to student teaching. Advising sheets for each certification subject area are available through the Education Department. Please contact Carol Royce for additional information.

Student Teaching: Spring Semester

Year 1

EDUC-210 Foundations of Education

Year 2

EDUC-265 Educational Psychology (5 hours field experience; clearances required)

EDUC-320 Diversity of Learners (10 hours field experience; clearances required)

Year 3

EDUC-350 Curriculum and Instruction (15 hours field experience; clearances required)

EDUC-360 Teaching English Language Learners (2 credits)

EDUC-375 The Inclusive Classroom (15 hours field experience; clearances required)

Year 4

Fall semester:

EDUC-443 Methods Practicum (2 credits) (25 hours field experience; clearances required)

Spring semester:

EDUC-405/493 Student Teaching (12 credits)

EDUC-406 Professional Applications (2credits)

(See 9th semester and athletics/employment paragraph below.)

Student Teaching: Fall Semester

Year 1

EDUC-210 Foundations of Education

Year 2

EDUC-265 Educational Psychology (5 hours field experience; clearances required)

EDUC-320 Diversity of Learners (10 hours field experience; clearances required)

Year 3

Fall semester:

EDUC-350 Curriculum and Instruction (15 hours field experience; clearances required)

EDUC-375 The Inclusive Classroom (15 hours field experience; clearances required)

Spring semester:

EDUC-360 Teaching English Language Learners (2 credits)

EDUC-443 Methods Practicum (2 credits) (25 hours field experience; clearances required)

Year 4

Fall semester:

EDUC-405/493 Student Teaching (12 credits)

EDUC-406 Professional Applications (2credits)

*Note: EDUC-405 and EDUC-406 must be taken concurrently and should not be scheduled during a student's participation in athletics or employment. No other courses, day or evening, may be scheduled. While most students complete student teaching during their senior year, some students elect to student teach in a 9th semester; see the Education department for details. **Students must arrange transportation for all field experiences and student teaching.***

Health and Physical Education (HPE) certification students do not take EDUC-350 and EDUC-443; instead, they should take HEP-356 (fall semester only; 28 hours field experience) and HEP-355 (spring semester only; 12 hours field experience). Both courses require clearances and are offered every other year.

MINOR IN EDUCATION

The minor is intended for students with a range of interests in education, including those who seek to pursue careers in schools (counseling, administration, private school, Teach for America, special education, higher education) and those who have a broader interest in human growth and flourishing.

While the minor is an option for students who are not pursuing teaching certification, students in the certification program automatically earn a minor in completing their pre-teaching coursework.

Course requirements:

*EDUC-210, 265

*Three from among the following (at least two courses must be EDUC):

EDUC-320, 350, 375, 446, 491, 492;

PSYC-232, 340, 342;

PSYC/NEUR-332;

HEP-223 and 224 (must take both to count as one course)

HEP-366, 464

Students may receive departmental permission to substitute a different non-EDUC course, not on the above list, if they provide compelling evidence for its relevance to the minor. EDUC-446 may be taken more than once (with a new topic). Students interested in careers in teaching are encouraged to choose from among EDUC-320, 350, 375 and HEP-223, 224, 366, 464. Education minors who undertake study abroad in Education may work with the department to determine adequate substitutions for required courses.

URSINUS COLLEGE GENERIC TEACHING COMPETENCIES

By the end of the student teaching experience, students will demonstrate proficiency in the following competencies:

1. Content Mastery - demonstrates knowledge of standards, major principles and concepts, tools of inquiry, methods and resources of the subject matter and presents subject matter effectively.
2. Lesson Planning - writes detailed and easy-to-follow instructional plans to achieve stated objectives through use of appropriate procedures, sequences, materials and technology.
3. Classroom Management - sets and maintains appropriate behavior standards that foster self-discipline, mutual respect, and positive interpersonal relations, handling discipline fairly and consistently.
4. Learning Environment - effectively organizes time, space, materials, and equipment conducive to individual and group inquiry and interaction honoring human growth and development in terms of the teaching-learning process.
5. Monitoring Student Progress - effectively assesses student academic needs and progress through diagnosis, regular constructive feedback, oral/written testing, appropriate questioning techniques, and well-designed projects or exhibitions of knowledge.
6. Classroom presence - demonstrates personal enthusiasm, self-confidence, poise and professionalism in conducting class.
7. Individualization - provides for the needs of exceptional students by collaborating with colleagues, consulting IEP's, and providing appropriate instruction.
8. Student Self-Concepts - fosters positive self concepts through sensitivity, patience, empathy and respect for all students, honoring racial, cultural, gender and religious diversity.
9. Pupil Participation - provides instructional activities that draw upon student prior knowledge and consider learning abilities and styles, active learning, critical thinking, problem solving and student generated comments questions and performance.
10. Communication - communicates effectively orally and in writing with students through proper English usage, clarity and tact.
11. Creativity - incorporates originality in design and implementation of lesson plans.
12. Professionalism - demonstrates ethical behavior with responsibility for professional growth and development, working collaboratively with colleagues and administrators to enact policies, procedures, and curricula of the school district, respecting the rights and responsibilities of students, parents and community.

**CERTIFICATION AREAS OF CONCENTRATION
OFFERED AT URSINUS COLLEGE**

ENGLISH

FOREIGN LANGUAGES

**FRENCH
GERMAN
JAPANESE
LATIN
SPANISH**

HEALTH AND PHYSICAL EDUCATION

MATHEMATICS

**SCIENCES
BIOLOGY
CHEMISTRY
GENERAL SCIENCE
PHYSICS**

SOCIAL STUDIES

URSINUS COLLEGE COMPETENCIES FOR ENGLISH CERTIFICATION

The person certified in **English** should:

1. Be familiar with major historical and literary periods
2. Be familiar with various types of literary genres
3. Demonstrate competency in grammar
4. Demonstrate competency in writing for different purposes
5. Demonstrate competency in speaking for different purposes
6. Have an understanding of how students develop language skills
7. Be able to integrate reading, critical listening, speaking, and writing in individual lessons
8. Be competent in designing and producing a variety of instructional media
9. Utilize audio-visual aids and student in-class work and homework to reinforce content
10. Teach according to objectives and intended outcomes
11. Employ a variety of instructional methods that respond to students' learning styles
12. Create a friendly but business-like classroom atmosphere
13. Design tests and authentic assessments that focus on previously established objectives
14. Provide students with clear expectations of their behavior that are consistently upheld
15. Maintain a professional appearance of dress, mannerisms, and speech.

Copies of the Pennsylvania Standards for Program Approval in **English** Certification are available in the Education Department.

**Ursinus College Teacher Certification Program
ENGLISH**

Required courses and activities for certification in English.

Like all English majors, candidates for certification must complete at least ten (10) courses in English including English 290W plus one 200 level literature class, four 300-level Colloquia, a senior seminar, and electives. These ten courses should include literary genres, themes, historical movements and major writers. **Post-baccalaureate candidates for teacher certification in English must have taken at least one 300 level English course at Ursinus College.**

To meet state education department guidelines, candidates must select the following courses:

Writing/Language/Composition

ENG 214 Structure of the English Language
ENG 290W Methods in Literary Studies
(ENG 214 counts as an elective for the English major.)

Speaking and Listening

ENG 400 level: Oral Presentation in senior seminar or honors project

Evaluating Media: Film (ONE of the following)

MCS 205 Media and Society or any course in Film Studies

The following areas of study are not required but are very strongly recommended:

Shakespeare (English 240, or 300-level Colloquium on Shakespeare)

Experiences

It is strongly recommended that the candidate participate in journalism or theater activities (to prepare for future advising responsibilities.)

Note: The English Department requires a GPA in the major 3.0.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

URSINUS COLLEGE COMPETENCIES FOR FOREIGN LANGUAGE

FOREIGN LANGUAGE PROGRAMS OFFERED

FRENCH
GERMAN
JAPANESE
LATIN
SPANISH

The person certified in **Foreign Languages** should:

1. Demonstrate knowledge of the elements for successful lesson planning with emphasis on balance, time, variety, materials, number of activities, order of activities, and skill development.
2. Demonstrate the ability to teach all four language skills (listening, speaking, reading, and writing), using appropriate and varied techniques and materials.
3. Possess knowledge of the history of foreign language education in the United States with emphasis on current research about methodology
4. Plan meaningful lessons which include the teaching of culture within the context of the lesson at hand, using authentic materials whenever possible
5. Demonstrate the ability, through the teaching of vocabulary, grammar, and culture, to create testing devices for language skills which challenge students' abilities and meet the given objectives
6. Encourage and motivate students to become proficient in the target language by collecting practical, effective, and creative ideas (an idea file) to teach vocabulary, grammar, and culture in all languages, at all language levels, and at all grade levels.
7. Stay current regarding foreign language trends and terminology
8. Enroll in one of the various professional organizations for foreign language teachers.
9. Preview and be aware of sources for teaching materials (such as visuals, tapes, supplementary books, realia) to enhance his/her classroom teaching.

Copies of the Pennsylvania Standards for Program Approval in **Foreign Language** Certification are available in the Education Department.

Ursinus College Teacher Certification Program

FRENCH

Required courses and activities for certification in French.

Candidates for certification must complete a minimum of twenty-four (24) credit hours at the 200, 300 and 400 levels and maintain a GPA of 3.00 in French courses. **Post-baccalaureate students will be considered on a case-by-case basis.**

French

- 251 Introduction à la Littérature Française et Francophone
- 252 Le Monde Francophone
- 317 Culture Populaire et Questions Contemporaines en Europe Francophone
- 328 Advanced Grammar and Translation

Plus at least two (2) additional courses at the 300 or 400 level. In addition to the course requirements, students are required to pass a qualifying examination before they will be admitted to candidacy for certification and a competency examination before being certified. These tests will examine students' linguistic competence, orally and in writing, testing phonetics, conversation, grammar and composition. The exit exam will also check their knowledge of French literature and culture, including the arts, history and geography.

Students and their advisers should consult the Ursinus College Education Department. Language majors and students preparing for certification are required to supplement their work at Ursinus by spending a summer, a semester or an entire year in a foreign country with a program approved by the department. Exceptions to this policy may be made by petition to the department chair.

The student is advised to take appropriate courses in Anthropology, History, Politics, Economics and Intercultural Communication.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

Ursinus College Teacher Certification Program

GERMAN

Required courses and activities for certification in German.

Candidates for certification must complete a minimum of twenty-four (24) credit hours at the 200 level and above and maintain a GPA of 3.00 in German courses. **Post-baccalaureate students will be considered on a case-by-case basis.**

German

- 251 German Literature I
- 252 German Literature II
- 328 Advanced German Grammar

Plus one of the following

- 313 German Studies in Literature **OR**
- 314 German Studies in Literature and Culture **OR**
- 315 Germany Today **OR**
- 319 Contemporary German Literature **OR**
- 320 German Novelle

Plus two (2) additional courses at the 300 or 400 level. The student is advised to take appropriate courses in Anthropology, History, Politics, Economics and Intercultural Communication.

Activities

Pass a qualifying exam for admission to candidacy for certification, and pass a competency exam before being recommended for certification.

Spend a summer, a semester, or an entire year in a foreign country with a program approved by the Modern Languages Department.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

Ursinus College Teacher Certification Program

JAPANESE

Required courses and activities for certification in Japanese.

Post-baccalaureate students will be considered on a case-by-case basis.

Japanese

- 211 Intermediate Japanese I
- 212 Intermediate Japanese II
- 311 Advanced Japanese I
- 312 Advanced Japanese II
- 328 Advanced Japanese Grammar

East Asian Studies

One of the following:

Summer Study in Japan*

Semester in Japan*

Two of the following:

- EAS 299 Topics in East Asian Studies
- EAS 314 Japanese Culture and Society
- EAS 224 Japanese Literature in Translation
- HIS 243 Introduction to the History and Culture of Japan
(offered Fall semester in even years)

The student is advised to take appropriate courses in Anthropology, History, Politics, Economics and Intercultural Communication.

Activities

Pass an assessment for admission to candidacy for certification and before being recommended for certification.

*A six-week or longer summer program in Japan, or a semester or year-long program. Programs must be approved by the Modern Languages Department.

A GPA of 3.00 in Japanese courses is required of all prospective Japanese teachers. For the certified teacher, work in foreign language pedagogy and demonstration of teaching competency in Japanese are required. For the candidate without prior teacher certification, the candidate must complete the professional education sequence.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

Ursinus College Teacher Certification Program LATIN

Required courses and activities for certification in Latin.

Post-baccalaureate students will be considered on a case-by-case basis.

Latin

Five (5) courses are required, one of which must be 300 level or above.

History

261 The Pre-Modern World

English

214 Linguistics and Modern Grammar

Classics

One of the following:

321 Topics in Classical Studies (equivalent to English 230)

326 Mythology (equivalent to English 226)

Art

150 History of Art I: Ancient Through Early Christian and Byzantine

Anthropology

100 Introduction to Sociocultural Anthropology

NOTE: In order to be recommended for student teaching of Latin, the student must earn a “B” (3.00) average for courses in the certification program.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

Ursinus College Teacher Certification Program

SPANISH

Required courses and activities for certification in Spanish.

Post-baccalaureate students will be considered on a case-by-case basis.

A minimum of 24 credit hours at the 200 level and above.

Spanish

- 251 Survey of Spanish Literature
- 252 Survey of Latin American Literature
- 317 The Hispanic World
- 328 Advanced Spanish Grammar

Plus two additional courses at the 300 or 400 level. The student is advised to take appropriate courses in Anthropology, History, Politics, Economics and Intercultural Communication.

A GPA of 3.00 in Spanish courses is required of all prospective Spanish teachers.

Activities

Pass an assessment for admission to candidacy for certification and before being recommended for certification. This assessment includes an evaluation of the prospective teacher's listening, speaking, reading and writing skills in Spanish as well as his/her cultural knowledge of Spanish-speaking countries.

Spend a summer, semester, or an entire year in a foreign country with a program approved by the Modern Languages Department.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

URSINUS COLLEGE COMPETENCIES FOR HEALTH AND PHYSICAL EDUCATION

The person certified in **Health and Physical Education** should:

1. construct appropriate lesson objectives from the cognitive, affective, and psychomotor domains
2. determine appropriate standards of performance and conditions under which performance will be judged
3. provide for individual difference to maximize learning
4. effectively communicate educational objectives to the learner
5. select and organize learning activities which support lesson objectives
6. develop units of instruction and daily lesson plans
7. select appropriate teaching styles to achieve objectives
8. plan for adjustments within a lesson to accommodate the unforeseen
9. plan activities appropriate to the needs of special populations
10. provide for maximum safety within learning activities
11. plan for smooth transitions between activities
12. plan activities to maintain a focus of instruction and minimize off-task behavior
13. plan learning activities which foster growth within the dimensions of human movement
14. employ various teaching strategies to assist learners by providing examples, questions, clarifications, etc.
15. be sensitive to the needs and emotions of the learner, listen to and accept feedback from learners
16. provide positive reinforcement for a learner's behavior
17. give clear, explicit directions and demonstrate skills within the learning activity
18. coordinate space, materials, equipment, and time to successfully complete the learning activity
19. use a variety of effective communication modes
20. self-evaluate teaching behavior and adjustments
21. diagnose, identify, and remedy sources of off-task behavior
22. administer and interpret a variety of standardized and/or self-made assessment techniques
23. involve the learner in the assessment and interpretation of her/his own progress
24. summarize and report on the learner's progress
25. adjust teaching styles based on feedback

Ursinus College Teacher Certification Program HEALTH AND PHYSICAL EDUCATION

Health & Exercise Physiology

HEP 100	Concepts of Wellness and Fitness
HEP 202	Concepts in Public Health
HEP 205/BIO 205	Anatomy & Physiology I
HEP 206/BIO 206	Anatomy & Physiology II
HEP 220	Critical Components of Conditioning
HEP 223	Teaching Games for Understanding: Team Sports
HEP 224	Theory and Analysis of Teaching Individual/Dual Sports
or	HEP 209 Martial Arts / HEP Tai Chi
or	HEP 209 Self Defense
HEP 232W	Current Trends in Health
HEP 235	Life Guarding or an approved swimming class with CPR and First Aid Certification
HEP 245	Leadership in Group Initiatives & Adventure Activities
HEP 333	Drugs and Alcohol – Use and Abuse in Modern Society
HEP 334	Nutrition
HEP 351	Structural Kinesiology
HEP 352	Exercise Physiology
HEP 355	Methods of Teaching Secondary Health and Physical Education
HEP 356	Methods of Teaching Elementary Health and Physical Education
HEP 446	Principles & Foundations of Health Fitness Management
HEP 464	Adapted Physical Education

Mathematics

STAT 141Q	Statistics I
-----------	--------------

Dance

DANC 200	Fundamental Dance Technique
or	an approved Dance elective

Capstone Experience: A requirement for an Ursinus degree in Exercise and Sport Science. One of the following courses will meet the capstone experience:

HEP 465	Health and Physical Education Teaching Seminar
HEP 491	Research /Independent Work

Note: Candidates for teaching certification must maintain a 2.8 GPA in HEP courses to be eligible for student teaching. In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

*Note that the PDE now accepts SAT and ACT scores – see department staff for details.

03/17

URSINUS COLLEGE COMPETENCIES FOR MATHEMATICS

The person certified in **Mathematics** should:

1. Create a learning environment that fosters the development of each student's mathematical ability
2. Engage students in tasks that promote the understanding of concepts, procedures, and connections of mathematics with practical situations in everyday life
3. Be able to work with a diverse range of students individually, in small groups, and in large group settings to encourage every student to develop a positive disposition towards mathematics
4. Provide a classroom forum which will elicit, engage, and challenge each student's thinking ability and refine his or her inductive and deductive reasoning skills
5. Stimulate students to make connections and develop a coherent mathematical framework, particularly as it is integrated with computers, physics, chemistry, and the other sciences
6. Conduct learning activities involving a variety of new technologies which allow students to make decisions and select the means by which exploration, representation, and data analysis aid in problem solving
7. Use a variety of assessment methods to determine students' understanding of mathematics
8. Constantly be aware of new content and techniques for mathematics and be able to design a curriculum which actively engages students at appropriate levels
9. Provide and structure the classroom time for adequate problem solving strategies and mathematical modeling necessary for the teaching and learning of basic principles
10. Develop effective experiences which will encourage students to raise questions, formulate conjectures, and support ideas with mathematical reasoning.

Ursinus College Teacher Certification Program Mathematics

Required courses and activities for certification in mathematics

Math

112	Calculus II
211	Multivariable Calculus
235	Linear Algebra
236W	Discrete Mathematics
311W	Analysis I
322	Modern Geometry
335	Abstract Algebra
341	Probability
350	Oral Presentation (must be some aspect of the History of Mathematics)*
442	Mathematical Statistics

Computer Science

173	Introduction to Computer Science
-----	----------------------------------

Recommended courses

Stat 141Q	Statistics I
Stat 242	Statistics II
Math 310	Differential Equations and Mathematical Models
Math 421	Topology
Math 434	Number Theory

Note: If a student can take Stat 141Q-242, they should be taken before Math 341-442.

Experiences

A demonstration of a sample teaching lesson prior to student teaching.

Observation during the student teaching experience by a member of the Mathematics Department.

NOTE: Prospective student teachers in mathematics must have a 2.50 average in their courses taken in the Mathematics and Computer Science Department at the Ursinus College day school at the time the Department considers them for student teaching. Non-traditional and transfer students will be considered on an individual basis.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE** and Praxis II exams, and maintain the overall GPA required by the Commonwealth in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

*See UC catalogue Courses of Instruction for Mathematics (Secondary Certification).

** Note that the PDE now accepts SAT and ACT scores – see department staff for details.

**URSINUS COLLEGE COMPETENCIES FOR SCIENCE
SCIENCE PROGRAMS OFFERED**

**BIOLOGY
CHEMISTRY
GENERAL SCIENCE
PHYSICS**

The person certified in **Science** should:

1. Build a knowledge base of educational resources in science education
2. Apply effective classroom techniques and procedures
3. Direct the use of computers in science education
4. Teach the scientific method and relate it to everyday experiences
5. Implement appropriate laboratory exercises in which students take part in the scientific process
6. Assist in addressing current ethical issues and new technologies in science
7. Implement classroom activities which will generate critical thinking and potential solutions to environmental issues
8. Have knowledge of appropriate laboratory safety with regard to disposal of dangerous chemicals in the high school laboratories.
9. Work appropriately with exceptional students in lecture and laboratory situation
10. Become active in the development of Outcomes-Based Education in their school district.

Ursinus College Teacher Certification Program

BIOLOGY

Required Biology Core

Biology 101Q	Issues in Ecology and Evolution
Biology 102Q	Cell Biology and Genetics of Health and Disease
Biology 201W	Genetics and Biology of the Cell
Biology 250 OR 415W	Environmental Biology OR Ecology (Either course fulfills the Population/Ecology group)

Distribution Courses: One course from each group

Molecular/Cellular	Bio 224 Within the Cell; Bio 225 Glial Cell Biology; Bio 328 Protein Biogenesis; Bio 345 Microbiology; Bio 346 Developmental Biology; Bio 425W Molecular Genetics; Bio 426W Molecular Biology; Bio 429W Structural Biology; Bio 431W Cellular Neurobiology; Bio 433W Molecular Neurobiology; Bio 435W Developmental Neurobiology Bio 449W Immunology; Bio 459W Virology, BCMB 351 Biochemistry I
Animal Biology	Bio 305 Human Anatomy and Functional Morphology; Bio 306 Human Physiology; Bio 324 Biology of Fishes; Bio 325 Insect Biology; Bio 349 Experimental Physiology; Bio 365 Ornithology; Bio 442W Mammalogy, Bio444W Advanced Integrative Physiology
Plant Biology	Bio 334 Plant Biology; Bio 335 Plant Physiology
Population/Ecology	Bio 250 Environmental Biology; Bio 310 Biological Oceanography; Bio 320 Biology of the Neotropics; Bio 330 Marine Biology; Bio 336 Freshwater Biology; Bio 355 Conservation Biology; Bio 415W Ecology; Bio 424W Evolution

Capstone Courses

Bio 415W Ecology; Bio 424W Evolution; Bio 425W Molecular Genetics; Bio 426W Molecular Biology; Bio 429W Structural Biology; Bio 431W Cellular Neurobiology; Bio 433W Molecular Neurobiology; Bio 435W Developmental Neurobiology; Bio 442W Mammalogy; Bio 444W Advanced Integrative Physiology; Bio 449W Immunology; Bio 459W Virology; 492W Honors Research, BCMB 452W Biochemistry II

Ancillary Courses

Chem 105, 105L And choice of Chem 106, 106L OR Chem 206, 206L	General Chemistry I: Foundations, Lab Organic Chemistry I, Lab General Chemistry II: Analysis, Lab
Geology 102Q or 105	Earth Around Us or Environmental Geology
Physics 100Q OR Physics 111Q	Introductory Physics General Physics
Math/Computer Science; Two of the Following:	Math 111 Calculus I; Math 112 Calculus II; Stat 141Q Statistics I; Stat 242 Statistics II; Stat 243W Biostatistics; CS 173 Introduction to Computer Science

Activities:

Work as a laboratory assistant or participate in training. In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. The Biology Department requires that undergraduate candidates attain a GPA of 2.50 in biology coursework in order to be recommended for student teaching and in order to obtain certification. Additional certification in General Science is only available to certified biology, chemistry or physics majors. See the Education Department for additional information regarding overall GPA requirements for eligibility in the State. ***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

Ursinus College Teacher Certification Program

CHEMISTRY

Required courses for certification in chemistry.*

Required Courses:

CHEM	105, 105L	General Chemistry I with laboratory
CHEM	206, 206LQ	General Chemistry II with laboratory
CHEM	106, 106L	Organic Chemistry I with laboratory
CHEM	205, 205L	Organic Chemistry II with laboratory
CHEM	309, 309L	Physical Chemistry I with laboratory
OR		
BCBM	307, 309L	Physical Chemistry for the Life Sciences with laboratory
CHEM	322, 322L	Inorganic Chemistry with laboratory
ENV	100	Issues in Environmental Studies
OR		
CHEM	101	Introduction to Environmental Chemistry

* These are the required chemistry courses required by the Commonwealth for certification in Chemistry. Additional courses are required for a degree in chemistry. For degree requirements please consult the latest College catalogue.

Students taking CHEM-151 (Advanced General Chemistry) can substitute for both CHEM-105 and CHEM-206 (the usual two-semester sequence of general chemistry).

Required Activities:

Work as a laboratory assistant and participate in training for that job. Participate actively in the Beardwood Chemical Society.

NOTE: Prospective student teachers in chemistry must have a 2.50 GPA in chemistry and receive a departmental evaluation which considers, in addition to academic performance, the student's interpersonal and communication skills. Also, a member of the Chemistry Department must observe prospective student teachers during their student teaching experience.

The candidate for certification in chemistry is advised that, in order to teach comprehensive general science at the junior high or middle school level, additional certification in general science may be required.

Additional certification in general science is only available to certified biology, chemistry or physics teachers.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE* and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

Ursinus College Teacher Certification Program

GENERAL SCIENCE

Candidates must obtain certification in biology, chemistry, or physics in order to be eligible for certification in general science.

Required courses and activities for certification in general science.*

Biology

101Q Issues in Ecology and Evolution
102Q Cell Biology and Genetics of Health and Disease

Chemistry

105, 105L General Chemistry I: Foundations, Lab
106, 106L Organic Chemistry I, Lab

Physics

111Q, 112 General Physics I, II

Earth & Space Sciences

PHYS 101Q Stars and Galaxies
GEOL 102Q Earth Around Us **or**
or 105 Environmental Geology

Mathematics

Any two (2) of the following courses:

Math 111, 112 Calculus I, II
CS 173 Introduction to Computer Science
Stat 141Q, 242 Statistics I, II

Activities

Work as a laboratory assistant or participate in training.

*The candidate for certification in general science is advised that this credential is most appropriate for junior high or middle school comprehensive general science teaching and for high school courses in general science.

In addition to these requirements, the candidate for certification must complete the professional education sequence, PAPA or CORE** and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

** Note that the PDE now accepts SAT and ACT scores – see department staff for details.

Ursinus College Certification Program

PHYSICS

Required courses and activities for certification in physics.*

Physics

121Q	Spacetime and Quantum Physics
122Q	Electricity, Magnetism, and Waves
201	Introductory Classical Mechanics
207	Modern Physics
299	Mathematical Physics I

408W	OR	Advanced Physics Laboratory
450		Senior Seminar

any three of 304 (Thermal Physics), 309 (Electronics for Scientists), 401 (Applications of Quantum Mechanics), 409 (Electrodynamics),

and at least four credits of additional work at the 300 level or above.

Mathematics

112	Calculus II
-----	-------------

Computer Science

173	Introduction to Computer Science
-----	----------------------------------

Biology

101Q	Issues in Ecology and Evolution
	or
102Q	Cell Biology and Genetics of Health and Disease
	or
ENV 100	Issues in Environmental Studies

Activities

Work as a laboratory assistant or help session staff.

*The candidate for certification is advised that, in order to teach comprehensive general science at the junior high/middle school, additional certification in general science may be required.

NOTE: To be approved for student teaching, a candidate must have 1) attained an average of 2.50 in required physics and mathematics courses and 2) demonstrated the interpersonal and communication skills necessary to convey ideas and concepts to others.

In addition to these requirements, the candidate for certification must complete the professional education sequence, the necessary PAPA or CORE** and Praxis II exams, and maintain the overall GPA required by the State in order to be recommended for certification. The Education Department requires a GPA of 3.00 in Education courses in order to student teach. See the Education Department for additional information regarding the overall GPA requirement for eligibility by the State.

** Note that the PDE now accepts SAT and ACT scores – see department staff for details.

URSINUS COLLEGE COMPETENCIES FOR SOCIAL STUDIES

The person certified in **Social Studies** should:

1. Understand the Pennsylvania Social Studies requirements for secondary schools
2. Demonstrate a knowledge of sources for preparing units of study
3. Demonstrate knowledge and use of criteria for evaluating textbooks and other teaching materials
4. Develop an understanding of techniques in dealing with controversial topics in the classroom
5. Learn the characteristics of a good Social Studies teacher
6. Learn various methods of teaching current events
7. Develop an understanding of various methods of teaching Social Studies

Copies of the Pennsylvania Standards for Program Approval in **Social Studies** are available in the Education Department.

Ursinus College Teacher Certification Program SOCIAL STUDIES (Two Pages)

Note: Post-baccalaureate Social Studies certification candidates who have not taken the required Methodology course as an undergraduate will be required to take HIST-200W as their Methodology course at Ursinus.

Required courses and activities for Social Studies certification:

A. Students must **major** in American Studies, Anthropology, Business and Economics, East Asian Studies, History, International Relations, Politics, Psychology, or Sociology. To be admitted to student teaching, a Social Studies certification candidate must have a **2.67 GPA** for courses in his or her major.

B. Students must complete both semesters of the Ursinus College Common Intellectual Experience course sequence (CIE100 & CIE 200). Note: History 261-262 (or their equivalent) may be substituted for CIE100/200 for eligible transfer or post-baccalaureate candidates.

C. Students must take the following courses: (total 9 courses = 36 credits)

Anthropology	(1)	<u>any</u>	Anthropology course (Anthropology 100 <u>or</u> Anthropology 352 is recommended)
Business & Economics	(1)	ECON120 ECON 102	Contemporary Economic Issues <u>or</u> Principles of Macroeconomics
History	(3)	262 <u>and</u> 113 321 322 323 <u>and</u> 114 220 327	The Modern World <u>one</u> pre-1877 U.S. History course, from: American History, 1500-1877 <u>or</u> Colonial America <u>or</u> Revolutionary America <u>or</u> Civil War America <u>one</u> post-1877 U.S. History course, from: Modern American History, 1877-Present <u>or</u> The Philadelphia Story: the City as Text <u>or</u> Topics in Modern United States History <u>or</u>
			<u>Note:</u> HIST-223 (African American History), HIST/GWMS-328 (Women in American History) or HIST-329 (Topics in African American History) may be taken to fulfill <u>either</u> the pre-1877 <u>or</u> post-1877 U.S. History course requirement.
Politics	(2)	218 <u>and</u> 242 252	American Government <u>one</u> additional Politics course; <u>either</u> Comparative Government <u>or</u> International Relations (is recommended) (POL 237 fulfills this requirement as well)
Sociology	(1)	<u>any</u>	Sociology course (Sociology 100 <u>or</u> Sociology 110 is recommended)
Methodology	(1)	<u>one</u>	from:
Anthropology/Sociology		{200 {200L	Methods in Anthropology & Sociology <u>and</u> ANSO 200 Lab
Business & Economics		STAT141Q	Statistics I
History		200W	Historiography and Methodology

Politics	418W Seminar in American Government <u>or</u> 437W Seminar in Political Philosophy <u>or</u> 442W Seminar in Comparative Politics <u>or</u> 452W Seminar in International Politics <u>or</u> IR 400W Research in International Relations
Psychology	200WQ Introductory Research Methods and Statistics

NOTES:

1. Students who enter with Advanced Placement credit in U.S. History or American Government should substitute another History or Politics course in their required course sequence, if their schedule permits. Completing either of these requirements through CLEP tests is not recommended.
2. While the required number of course/credits is high, the program overlaps with other requirements for various majors or minors and the college core requirements. For example, many of the courses listed above will fulfill the student's Humanities, Social Science, Diversity, (D), Global Studies (G) and even laboratory science and Q-course requirements.
3. In addition to these requirements, candidates for certification in Social Studies must complete all the Education courses required by the Education Department for teaching certification. **IMPORTANT:** All Teaching Certification students must take both their (4-credit) Mathematics course and their lab science/Q course at Ursinus College and not at another institution, in order to meet PDE standards.
4. To be admitted to student teaching, a student must have a minimum GPA of 3.00 in those Education courses, 2.67 GPA for courses in the major and passing scores for the PAPA or CORE* exam. ***Note that the PDE now accepts SAT and ACT scores – see department staff for details.**

URSINUS COLLEGE TEACHER CERTIFICATION APPEAL PROCEDURE

A student who desires to appeal a decision by the College not to recommend him/her for student teaching or for state certification should indicate this intent orally and in writing to the Chair of the Education Department. The Chair will review the steps of the appeal procedure with the student.

Within fifteen (15) days of the appeal, the Chair of the Education Department will convene a review panel of five members: the Chair of the student's major department, the Education Department Chair, and three other persons representing departments in which this student has had classes.

This review panel will meet with the student and request any additional information deemed appropriate. Within ten (10) days after this meeting, the student will be notified in writing of the decision and the reasons for that decision.

The decision of the panel will be final unless appeal is made in writing to the President. Such written appeal must be received by the President within five (5) days of the date on the written notice of the panel's decision. The decision of the President shall be final.

MARCH 1996