

Faculty Senate Curriculum Revision Form

Effective Date: FALL

Submission Date: 08/19/2024

Department: Biology

College of: Arts & Sciences

Contact Person: Christine Brodsky

Minor Required? No

Revision

Major/Minor/Emphasis/Certification Name:

Biology / Biology Education Emphasis

If selection is "Deletion" complete questions 2, 3, & 4, then complete signatures.

Revision to Curriculum – REQUIRES ACADEMIC PLANNING EXCEL ATTACHED.

Used to change program name and/or curriculum, effective the upcoming academic catalog.

Removes Major/Minor/Emphasis/Certificate from upcoming catalog.

1. Describe your Changes:

Updating curriculum to move one preferred General Education course (CHEM 215/216; 5 hours) into the major requirements. We previously requested an exception for CHEM 215/216 to be taken with KBOR General Education, as this course is a prerequisite to upper-division Chemistry. We seek to now permanently move CHEM 215/216 into the emphasis curriculum and correspondingly remove Biology elective hours to equal 120 total hours.

2. Rationale for change, including changes to curriculum objectives:

Comply with KBOR requirement to not require specific Gen Ed courses within curriculum.

3. Will this change affect any education majors? *If "yes," this requirement will need approval of the Council for Teacher Education before upload to " College Curriculum Legislation" in SharePoint.*

Yes No

4. If this change affects any other department on campus, please attach any email notifications between departments.

5. Does the revision meet University catalog definitions for majors, minors, emphases, and certificates as appropriate?

Yes No

6. Will additional resources or costs will be required?

Yes No

If so, what will be needed?

Definition of an Emphasis

Area of Emphasis is a specific subject area that exists within an approved degree program and major. At Pittsburg State University a minimum of 12 credit hours and no more than 24 credit hours are expected for an area of emphasis in a baccalaureate degree program.

Definition of a Minor

Minors at Pittsburg State University may range from 15 to 24 credit hours. When selected to accompany a degree that requires a minor there must be at least nine unique credit hours in the minor that are not found in the student's major in order to meet graduation requirements. In instances where the major requires a minor (not the degree type), academic departments/schools may specify minors that best achieve the learning objective for their students.

Definition of Certificate Program

A certificate program can be undergraduate or graduate in course content and provides a specific body of knowledge for personal or career development or professional continuing education. Certificates may be taken while also pursuing a degree or independent from any other studies at Pittsburg State University. It is recommended that if the student is only pursuing a certificate and not in conjunction with a degree and wishes to apply for federal financial assistance that they visit with personnel in the Student Financial Assistance office regarding the eligibility for aid for the certificate of interest. At Pittsburg State University a certificate can range from 12 credit hours to 24 credit hours.

Authorization Sign-Off Sheet

Checklist

- Program guide from current catalog.
- Academic Planning Excel attached.
- 120 Credit hours met.
- Course Id's match Course names.
- Course hours are correct.
- Listed courses are currently active
- Needed Documentation attached.

-Approved: Department Chair/Director

Date: 08/19/2024

Signature: _____



-Approved: College Curriculum Committee

Date: 11/6/24

Signature: _____



-Approved: Dean of College

Date: 11/6/24

Signature: _____



-Approved: Council for Teacher Education (if applicable)

Date: 12/4/24

Signature: _____



-Approved: University Undergraduate Curriculum Committee

Date: _____

Signature: _____

-Approved: Faculty Senate

Date: _____

Signature, Recorder Faculty Senate: _____

Following final College Curriculum Committee approval, please apply the appropriate signatures, and send them to your College Administrator.

Originating Department: After completing this form, please upload it to the SharePoint, within the appropriate College folder, "Preliminary Legislation", to allow for review and questions. Any modifications should be saved as "original file name.v2.docx" and uploaded as well.

Biology Education Emphasis

Degree: Bachelor of Science

Major: Biology

Emphasis: Biology Education

Students planning to teach should become familiar with the current Regulations for Certifying School Personnel, issued by The State Board of Education. Information concerning these regulations may be obtained from the Director of Teacher Education, 110 Hughes Hall, Pittsburg State University. See Admission to Professional Semester for professional education grade point requirements.

Biology Core Requirements (45 hours)

- __ BIOL-211 Principles of Biology I (4 hours)
- __ BIOL-212 Principles of Biology II (4 hours)
- __ BIOL-257 Anatomy and Physiology (3 hours)
- and __ BIOL-258 Anatomy and Physiology Laboratory (2 hours)
- __ BIOL-300 Assisting in the Biology Laboratory (1 hour)
- __ BIOL-322 Genetics (3 hours)
- and __ BIOL-323 Genetics Laboratory (2 hours)
- __ BIOL-330 Principles of Ecology (3 hours)
- __ BIOL-371 General Microbiology (3 hours)
- and __ BIOL-372 General Microbiology Laboratory (2 hours)
- __ BIOL-529 Evolution (3 hours)

Select one Field course from:

- __ BIOL-303 Regional Natural History (3 hours)
- __ BIOL-405 Taxonomy of Vascular Plants (4 hours)
- __ BIOL-533 Ichthyology (4 hours)
- __ BIOL-534 Herpetology (4 hours)
- __ BIOL-535 Ornithology (4 hours)
- __ BIOL-536 Mammalogy (3 hours)
- __ BIOL-561 General Entomology (3 hours)

Select one Social Perspectives course from:

- __ BIOL-313 Principles of Conservation (3 hours)
- __ BIOL-605 Bioethics (3 hours)
- __ BIOL-617 Environmental Health (3 hours)

Biology Electives (9 hours)

Professional Education Requirements (20 hours)

See notes *1

- __ EDUC-261 Explorations in Education (3 hours)
- __ EDUC-370 Organization and Management of the Middle and Secondary Classroom (2 hours)
- __ BIOL-479 Techniques for Teaching Biology (3 hours)

or __ EDUC-479 Effective Teaching Strategies for Middle and Secondary (3 hours)

Note: Can only be taken after admission to Teacher education.

__ EDUC-520 Methods and Materials for Academic Literacy (3 hours)

Note: Can only be taken after admission to Teacher education.

__ PSYCH-263 Developmental Psychology (3 hours)

__ PSYCH-357 Educational Psychology (3 hours)

Note: Can only be taken after admission to Teacher education.

__ SPED-510 Overview of Special Education (3 hours)

Notes *1: See Admission to Professional Semester for professional education grade point requirements.

Professional Semester (15 hours)

__ BIOL-579 Supervised Student Teaching and Follow-Up of Teachers (2 hours)

__ EDUC-458 Methods and Curriculum (3 hours)

__ EDUC-464 Measurement and Evaluation (2 hours)

__ EDUC-475 Supervised Clinical Experience (9 hours)

Requirements from other Departments (13 hours)

__ CHEM-215 General Chemistry I (3 hours)

and __ CHEM-216 General Chemistry I Laboratory (2 hours)

__ CHEM-320 Introductory Organic Chemistry (3 hours)

and __ CHEM-326 Organic Chemistry I Laboratory (2 hours)

__ PSYCH-155 General Psychology (3 hours)

TOTAL hours for Bachelor of Science Degree with a Major in Biology: Biology Education Emphasis (120 hours)

General Education Requirements

PittState Pathway Requirements: Courses must meet the requirements approved by the University or approved substitutes.

4-5 hours of Natural Sciences are satisfied by course requirements in CHEM 215/216 General Chemistry I/Laboratory.

Biology Education emphasis requires certain Pitt State Pathway courses for admission into Teacher Education;

- Education emphasis must take a Math course to satisfy C0 requirement.
- Education emphasis must take EDUC 261 to satisfy E0 requirement.

Core Elements (12 hours)

A0 - Written Communications

__ ENGL-101 English Composition (3 hours)

__ ENGL-299 Introduction to Research Writing (3 hours)

B0 - Verbal Communication

__ COMM-207 Speech Communication (3 hours)

C0 - Quantitative/Analytic Methods

__ MATH-110 College Algebra with Review (5 hours)

__ MATH-113 College Algebra (3 hours)

__ MATH-126 Pre-Calculus (4 hours)

__ MATH-133 Quantitative Reasoning (3 hours)

__ MATH-143 Elementary Statistics (3 hours)

__ MATH-150 Calculus I (5 hours)

__ MATH-204 Mathematics for Education I (3 hours)

- __ PHIL-206 Rational Decisions (3 hours)
- __ PHIL-207 Critical Thinking (3 hours)
- __ PHIL-208 Logic (3 hours)

Essential Studies (23-24 hours minimum)

See notes *2

Notes *2: D-G and cannot be same prefix as major.

D - The Human Experience (3-6 hours)

D1- Diverse Perspectives

- __ ENGL-113 Literature and Culture (3 hours)
- __ ENGL-114 General Literature (Genre) (3 hours)
- __ ENGL-116 General Literature (Theme) (3 hours)
- __ ENGL-117 Introduction to Fiction (3 hours)
- __ ENGL-118 Introduction to Poetry (3 hours)
- __ ENGL-120 Literature and Film (3 hours)
- __ ENGL-125 Introduction to Horror in Literature (3 hours)
- __ ENGL-250 Introduction to Creative Writing (3 hours)
- __ ENGL-315 Mythology (3 hours)
- __ ENGL-320 Literature and Film (3 hours)

D3 - Non-Verbal and Creative Expression

- __ ART-178 Introduction to the Visual Arts (3 hours)
- __ ART-188 The Designed World (3 hours)
- __ ART-217 Crafts I (3 hours)
- __ ART-222 Jewelry Design I (3 hours)
- __ ART-233 Drawing I (3 hours)
- __ ART-244 Ceramics I (3 hours)
- __ ART-266 Sculpture I (3 hours)
- __ ART-277 Painting I (3 hours)
- __ ART-288 Introduction to Art History I (3 hours)
- __ ART-289 Introduction to Art History II (3 hours)
- __ ART-311 Art Education (3 hours)
- __ COMM-105 Performance Appreciation (3 hours)
- __ COMM-205 Performance Studies (3 hours)
- __ COMM-395 Theatre History (___) (3 hours)
- __ HHP-151 Dance Appreciation (3 hours)
- __ MUSIC-120 Music Appreciation (___) (3 hours)
- __ MUSIC-121 Introduction to Music Literature (3 hours)
- __ MUSIC-321 History of Music (3 hours)
- __ MUSIC-322 History of Music (3 hours)

E - Human Systems (9-12 hours)

E0 - No Companion

- __ CIS-130 Computer Information Systems (3 hours)
- __ EDUC-261 Explorations in Education (3 hours)
- __ EET-247 Computer Programming for Electronic Systems (3 hours)
- __ MECET-121 Engineering Graphics I (3 hours)
- __ MGT-101 Introduction to Business (3 hours)

E1 - Diverse Perspectives

- __ ANTH-101 Introduction to Cultural Anthropology (3 hours)
- __ GEOG-106 World Regional Geography (3 hours)
- __ GEOG-300 Elements of Geography (3 hours)
- __ GEOG-304 Human Geography (3 hours)
- __ HIST-101 World History to 1500 (3 hours)

- __ HIST-102 World History from 1500 (3 hours)
- __ HIST-201 American History to 1865 (3 hours)
- __ HIST-202 American History from 1865 (3 hours)
- __ MFGET-405 Quality Control (3 hours)
- __ MLL-124 French Language and Culture I (3 hours)
- __ MLL-154 Spanish Language and Culture I (3 hours)
- __ PHIL-103 Introduction to Philosophy (3 hours)
- __ PHIL-231 World Religions (3 hours)
- __ POLS-103 Comparative Politics (3 hours)
- __ SOC-100 Introduction to Sociology (3 hours)
- __ WGS-399 Global Women's Issues (3 hours)

E2 - Social Responsibility

- __ ECON-191 Issues in Today's Economy (3 hours)
- __ ECON-200 Principles of Microeconomics (3 hours)
- __ ECON-201 Principles of Macroeconomics (3 hours)
- __ EDTH-330 Technology for Teaching and Learning (3 hours)
- __ ENGL-121 Intro to Anti-Racist Literature (3 hours)
- __ ENGL-122 Introduction to Women's Literature (3 hours)
- __ ENGL-123 The Citizen in Literature (3 hours)
- __ ETECH-502 Engineering Economy (3 hours)
- __ FCS-230 Consumer Education and Personal Finance (3 hours)
- __ FIN-210 Financial Planning (3 hours)
- __ GT-210 Technology in the World Today (3 hours)
- __ GT-350 Technology and Civilization (3 hours)
- __ NURS-303 Introduction to Public Health (3 hours)
- __ PHIL-105 Ethics (3 hours)
- __ PHIL-112 Biomedical Ethics (3 hours)
- __ PHIL-113 Business Ethics (3 hours)
- __ PHIL-114 Environmental Ethics (3 hours)
- __ POLS-101 U.S. Politics (3 hours)
- __ WGS-200 Introduction to Women's Studies (3 hours)

E4 - Scientific Inquiry

- __ MFGET-263 Manufacturing Methods I (2 hours)
- and __ MFGET-268 Manufacturing Methods I Laboratory (1 hour)

F - Natural World (4-5 hours)

F0 - No Companion

- __ BIOL-617 Environmental Health (3 hours)

F4 - Scientific Inquiry

- __ BIOL-111 General Biology (3 hours)
- and __ BIOL-112 General Biology Laboratory (2 hours)
- __ BIOL-113 Environmental Life Science (4 hours)
- __ BIOL-211 Principles of Biology I (4 hours)
- __ CHEM-105 Introductory Chemistry (3 hours)
- and __ CHEM-106 Introductory Chemistry Laboratory (1 hour)
- __ CHEM-215 General Chemistry I (3 hours)
- and __ CHEM-216 General Chemistry I Laboratory (2 hours)
- __ PHYS-100 College Physics I (4 hours)
- or __ PHYS-104 Engineering Physics I (4 hours)
- __ PHYS-130 Elementary Physics Laboratory I (1 hour)
- __ PHYS-160 Physical Geology (3 hours)
- and __ PHYS-165 Physical Geology Laboratory (1 hour)
- __ PHYS-166 Meteorology (3 hours)
- and __ PHYS-167 Meteorology Laboratory (1 hour)
- __ PHYS-171 Physical Science (3 hours)

- and __ PHYS-172 Physical Science Laboratory (1 hour)
- __ PHYS-175 Descriptive Astronomy (3 hours)
- and __ PHYS-176 Astronomy Laboratory (1 hour)
- __ PHYS-375 Solar System Astronomy (3 hours)

G - Wellness Strategies (4-6 hours)

G0 - No Companion

- __ ENGL-124 Health and Literature (3 hours)
- __ EXSCI-200 Introduction to Exercise Science (1 hour)
- __ FCS-203 Nutrition and Health (3 hours)
- __ HHP-150 Lifetime Fitness Concepts (1 hour)
- __ HIST-207 Health Habits in American History (3 hours)
- __ REC-350 Promoting Community and Worksite Wellness (3 hours)

G2 - Social Responsibility

- __ SWK-250 Relationship Skills (3 hours)

G3 - Non-Verbal and Creative Expression

- __ DANCE-200 Dance (___) (1-3 hours)

G4 - Scientific Inquiry

- __ PSYCH-155 General Psychology (3 hours)

H - Gorilla Gateway

H0 - No Companion

- __ UGS-150 Gorilla Gateway (2 hours)

I - Pathway Elective (3 hours)

See notes *3

Notes *3: Elective can be from any D,E,F, or G Essential Studies and can be from the same prefix as major or repeat of prefix used in Essential Studies.

Revised: 08/21/2023

Make sure to attach the program guide from current catalog! (For Revised Curriculum)

<https://www.pittstate.edu/registrar/catalog>

Academic Planning Document for 2025-2026

Major/Emphasis/Minor/Certificate - BS, Biology, Biology Education

Course Prefix	Course Num.	Course Name	Cr. Hr.
Core Courses -			30
BIOL	211	Principles of Biology I	4
BIOL	212	Principles of Biology II	4
BIOL	257	Anatomy and Physiology	3
	And		
BIOL	258	Anatomy and Physiology Laboratory	2
BIOL	300	Assisting in the Biology Laboratory	1
BIOL	322	Genetics	3
	And		
BIOL	323	Genetics Laboratory	2
BIOL	330	Principles of Ecology	3
BIOL	371	General Microbiology	3
	And		
BIOL	372	General Microbiology Laboratory	2
BIOL	529	Evolution	3
Support Courses -			13
CHEM	215	General Chemistry I	3
	And		
CHEM	216	General Chemistry I Laboratory	2
CHEM	320	Introductory Organic Chemistry	3
	And		
CHEM	326	Introductory Organic Chemistry Laboratory	2
PSYCH	155	General Psychology	3
Emphasis Courses -			42
Select 3 hours of Field Biology from:			3
BIOL	303	Regional Natural History	
BIOL	405	Taxonomy of Vascular Plants	
BIOL	533	Ichthyology	
BIOL	534	Herpetology	
BIOL	535	Ornithology	
BIOL	536	Mammalogy	
BIOL	561	General Entomology	
Select 3 hours of Social Perspectives from:			3
BIOL	313	Principles of Conservation	
BIOL	605	Bioethics	
BIOL	617	Environmental Health	
Professional Education Requirements - 20 Hours			
See Admission to Professional Semester for professional education grade point requirement			
EDUC	261	Explorations in Education	3
EDUC	370	Organization and Management of the Middle and Secondary Classroom	2
BIOL	479	Techniques for Teaching Biology	

	OR		3
EDUC	479	Effective Teaching Strategies for Middle and Secondary	
EDUC	520	Methods and Materials for Academic Literacy	3
PSYCH	263	Developmental Psychology	3
PSYCH	357	Educational Psychology	3
SPED	510	Overview of Special Education	3
Professional Semester - 16 Hours			
BIOL	579	Supervised Student Teaching and Follow-Up of Teachers	2
EDUC	458	Methods and Curriculum	3
EDUC	464	Measurement and Evaluation	2
EDUC	475	Supervised Clinical Experience	9
Elective Courses -			
Total Credit Hours -			85
Minor -			0
General Education, 34-35 hours -			35
Total Credit Hours:			120

Be sure all information is correct and courses are active before submitting.
Curriculum Revisions **REQUIRE** a program guide from the current catalog, 24/25.
Your legislation will be returned if either is found.