

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		02-91	App-3/11/03	App 4/1/03

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Terry Peard	Email Address Tpeard@iup.edu
Proposing Department/Unit Biology	Phone 357-2352

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply)

☐ New Course	☐ Course Prefix Change	☐ Course Deletion
☐ Course Revision	☐ Course Number and/or Title Change	☐ Catalog Description Change

<u>Current</u> Course prefix, number and full title	<u>Proposed</u> course prefix, number and full title, if changing
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2. Additional Course Designations: check if appropriate

☐ This course is also proposed as a Liberal Studies Course.	☐ Other: (e.g., Women's Studies, Pan-African)
☐ This course is also proposed as an Honors College Course.	

3. Program Proposals

☐ New Degree Program	☐ Program Title Change	☒ Program Revision
☐ New Minor Program	☐ New Track	☐ Other

Bachelor of Science in Education	
- Biology	
<u>Current</u> program name	<u>Proposed</u> program name, if changing

4. Approvals

	Date
Department Curriculum Committee Chair(s)	2-11-03
Department Chair(s)	2/13/03
College Curriculum Committee Chair	2/26/03
College Dean	02/26/03
Director of Liberal Studies *	
Director of Honors College *	
Provost *	
Additional signatures as appropriate: (include title)	2/26/03
	2/26/03
UWUCC Co-Chairs	3/11/03

* where applicable

FEB 26 2003

Part II. Description of Curriculum Change

1. Catalog Description for the Revised Bachelor of Science in Education - Biology

Bachelor of Science in Education – Biology (*)

Liberal Studies: As outlined in Liberal Studies section with the following specifications:

54

Mathematics: MATH 110 or 121

Natural Science: CHEM 111-112

Social Science: PSYC 101

Liberal Studies Electives: 9 sh, MATH 217, PHYS 151, one course with GEOS prefix from the Liberal Studies Natural Science (Option II) Nonlaboratory List.

College of Education:

29

Pre-Professional Education Sequence:

COMM 103 Digital Instructional Technology 3 sh

EDSP 102 Educational Psychology 3 sh

Professional Education Sequence:

EDEX 301 Education of Students with Disabilities in Inclusive
Secondary Settings 2 sh

EDSP 477 Assessment of Student Learning: Design and
Interpretation of Educational Measures 3 sh

EDUC 242 Pre-student Teaching Clinical Experience I 1 sh

EDUC 342 Pre-student Teaching Clinical Experience II 1 sh

EDUC 441 Student Teaching (1) 12 sh

EDUC 442 School Law 1 sh

EDUC 451 Teaching Science in the Secondary Schools 3 sh

Major: (1)

Required Courses:

29

BIOL 111 Principles of Biology I 4 sh

BIOL 112 Principles of Biology II 4 sh

BIOL 210 Botany 3 sh

BIOL 220 General Zoology 3 sh

BIOL 250 Principles of Microbiology 3 sh

BIOL 263 Genetics 3 sh

BIOL 480 Biology Seminar 1 sh

Controlled Electives: (2)

Biology Electives (majors courses only) 8 sh

Other Requirements:

8

Chemistry Sequence:

CHEM 231 Organic Chemistry I 4 sh

CHEM 351 Biochemistry (3) 4 sh

Free Electives:

0

(#) Total Degree Requirements

120 sh

(*) See requirements leading to teacher certification, titled "Admission to Teacher Education," in the College of Education and Educational Technology section of this catalog.

(1) Eligibility for student teaching and certification in secondary biology education will require a grade of C or better in all biology courses and a cumulative combined GPA in biology and education courses of 2.75 or better.

(2) No more than 6 sh from Independent Study (BIOL 482), Special Topics (BIOL 481), or Internship (BIOL 493) applies to major: excess applied as free electives.

(3) The two-semester (6 sh) sequence of BIOC 301-302 can be substituted for CHEM 351 to meet the biochemistry requirement.

(#) See advisory paragraph, "Timely Completion of Degree Requirements," in the section on Requirements for Graduation.

2. Summary of Changes

a) Table comparing old and new programs

Bachelor of Science in Education – Biology (*)

Current catalog description (2002-03)

Liberal Studies: As outlined in Liberal Studies section 54-56 with the following specifications:

Mathematics: MATH 110 or 121

Natural Science: CHEM 111-112

Social Science: PSYC 101

Liberal Studies Electives: MATH 217, PHYS 111, one course with GEOS prefix from the Liberal Studies

Natural Science (Option II) Nonlaboratory List, no courses with a BIOL prefix.

College of Education:

32

Pre-Professional Education Sequence:

COMM 103 Digital Instructional Technology

3 sh

EDSP 102 Educational Psychology

3 sh

FDED 102 American Education in Theory and Practice

3 sh

Professional Education Sequence:

EDEX 301 Education of Students with Disabilities in Inclusive Secondary Settings

2 sh

EDSP 477 Assessment of Student Learning: Design and Interpretation of Educational Measures

3 sh

EDUC 242 Pre-student Teaching Clinical Experience I

1 sh

EDUC 342 Pre-student Teaching Clinical Experience II

1 sh

EDUC 441 Student Teaching (1)

12 sh

EDUC 442 School Law

1 sh

EDUC 451 Teaching Science in the Secondary Schools

3 sh

Major: (1)

30

Required Courses:

BIOL 111 Principles of Biology I

4 sh

BIOL 112 Principles of Biology II

4 sh

BIOL 210 Botany

3 sh

BIOL 220 General Zoology

3 sh

BIOL 250 Principles of Microbiology

3 sh

BIOL 263 Genetics

3 sh

BIOL 480 Biology Seminar

1 sh

Controlled Electives: (2)

Biology electives (majors courses only)

9 sh

Other Requirements:

13

Chemistry Sequence:

CHEM 231 Organic Chemistry I

4 sh

CHEM 351 Biochemistry (3)

4 sh

Physics Sequence:

PHYS 121 Physics I Lab.

1 sh

PHYS 112 Physics II Lecture

3 sh

PHYS 122 Physics II Lab. Education

1 sh

Free Electives:

0

(#)Total Degree Requirements

129-131

(*) See requirements leading to teacher certification, titled "Admission to Teacher Education," in the College of Education

Bachelor of Science in Education – Biology (*)

New catalog description (2003-2004)

Liberal Studies: As outlined in Liberal Studies section 54 with the following specifications:

Mathematics: MATH 110 or 121

Natural Science: CHEM 111-112

Social Science: PSYC 101

Liberal Studies Electives: 9 sh, MATH 217, PHYS 151, one course with GEOS prefix from the Liberal Studies

Natural Science (Option II) Nonlaboratory List.

College of Education:

29

Pre-Professional Education Sequence:

COMM 103 Digital Instructional Technology

3 sh

EDSP 102 Educational Psychology

3 sh

Professional Education Sequence:

EDEX 301 Education of Students with Disabilities in Inclusive Secondary Settings

2 sh

EDSP 477 Assessment of Student Learning: Design and Interpretation of Educational Measures

3 sh

EDUC 242 Pre-student Teaching Clinical Experience I

1 sh

EDUC 342 Pre-student Teaching Clinical Experience II

1 sh

EDUC 441 Student Teaching (1)

12 sh

EDUC 442 School Law

1 sh

EDUC 451 Teaching Science in the Secondary Schools

3 sh

Major: (1)

Required Courses:

29

BIOL 111 Principles of Biology I

4 sh

BIOL 112 Principles of Biology II

4 sh

BIOL 210 Botany

3 sh

BIOL 220 General Zoology

3 sh

BIOL 250 Principles of Microbiology

3 sh

BIOL 263 Genetics

3 sh

BIOL 480 Biology Seminar

1 sh

Controlled Electives: (2)

Biology electives (majors courses only)

8 sh

Other Requirements:

8

Chemistry Sequence:

CHEM 231 Organic Chemistry I

4 sh

CHEM 351 Biochemistry (3)

4 sh

Free Electives:

0

(#)Total Degree Requirements

120

(*) See requirements leading to teacher certification, title "Admission to Teacher Education," in the College of and Educational Technology section of this catalog.

(1) Eligibility for student teaching and certification in secondary biology education will require a grade of C or better in all biology courses and a combined GPA in biology and education courses of 2.75 or better.

(2) No more than 6 sh from Independent Study (BIOL 482),

and Educational Technology section of this catalog.

(1) Eligibility for student teaching and certification in secondary biology education will require a grade of C or better in all biology courses.

(2) No more than 6sh from Independent Study (BIOL 482), Special Topics (BIOL 481), or Internship (BIOL 493) applies to major: excess applied as free electives.

(3) The two-semester (6 sh) sequence of BIOC 301-302 can be substituted for CHEM 351 to meet the biochemistry requirement.

(#) See advisory paragraph, "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Special Topics (BIOL 481), or Internship (BIOL 493) applies to major: excess applied as free electives.

(3) The two-semester (6 sh) sequence of BIOC 301-302 can be substituted for CHEM 351 to meet the biochemistry requirement.

(#) See advisory paragraph, "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

b) List of all associated course changes (new or revised courses, number, title, or description changes, and deletions).

Revised Courses with New Titles, Numbers of Descriptions

None

New Courses

None

Course Additions

PHYS 151 Medical Physics (3 sh) has been added as a required **Liberal Studies Elective**. The Liberal Studies Electives remain at 9 sh (see Course Deletions, below).

Course Deletions

PHYS 111 Physics I Lecture (3 sh) has been deleted as a **Liberal Studies Elective**.

The Physics Sequence has been deleted from **Other Requirements**:

PHYS 121 Physics I Lab (1 sh)

PHYS 112 Physics II Lecture (3 sh)

PHYS 122 Physics II Lab (1 sh)

This reduces the **Other Requirements** from 13 sh to 8 sh.

FDED 102 American Education in Theory and Practice (3sh) has been deleted from the **Pre-Professional Education Sequence**. This reduces the credits in the **College of Education** from 32 to 29.

3. Rationale for Change

The above changes have been made to meet the state mandated reduction of program hours to 120 sh. The three credit FDED 102 has been removed as it is no longer required by the PA Department of Education.

There is no acceptable way to reduce further the credits in the biology education program without possibly jeopardizing NCATE and PDE accreditation. The replacement of Physics 111 (3 sh), Physics 121 (1 sh), Physics 112 (3 sh) and Physics 122 (1 sh) with Physics 151 (3 sh) is a way to address the 120 mandate while still meeting PDE and NCATE standards.

Part III. Implementation

1. How will the proposed revision affect students already in the existing program. It will have no effect on current students, only those entering the program as of the fall 2003 semester.

2. Are faculty resources adequate? Yes

3. Are other resources adequate? Yes

4. Do you expect an increase or decrease in the number of students as a result of these revisions? No

Part IV. Periodic Assessment

The biology education program is evaluated in the following manner:

1. Exit questionnaire administered at the end of the student teaching semester.

2. Evaluation of an electronic portfolio at three check points during the program:
 - a. to qualify for acceptance into the Teacher Certification Program
 - b. to qualify for placement into student teaching
 - c. as one evidence of successful completion of the certification program

Part V. Course Proposals

Not applicable. No new courses are proposed.

Part VI. Letters of Support or Acknowledgement

See attached letter from the Physics Department.