15-55a
UWUCCAP 1/19/16
Senate App 2/2/16

Bachelor of Science Biology/Pre-Medical-PrgRsv-2015-09-01

Form Information
Bachelors in Biology Pre-Medical-PrgRsv-2015-08-10

Please direct any questions to curriculum-approval@iup.edu

Indicates a required field

Proposer*	Megan Knoch	**Proposer Email***	mknoch@iup.edu
Contact Person*	Megan Knoch	**Contact Email***	mknoch@iup.edu
Proposing Department/Unit*	Biology	**Contact Phone***	7-2613

Program Revision Options (Check all that apply)

Program Revision

Course Level:* undergraduate-level

Rationale for Proposed Changes

(A) Why is the program being revised?*

Last year the Biology Department increased the number of credits for BIOL 250 from 3 credits to 4 credits. This change to BIOL 250 resulted in the reduction of the number of controlled biology electives from 9 credits to 8 credits. We are proposing to readjust our Required Biology Courses and our Controlled Biology Electives for Biology/Pre-Medical Track students. These changes will allow us to provide courses that are more relevant to the content that students are expected to know for the Medical College Admission Test (MCAT). Specifically, BIOL 220 and 352 were moved to controlled electives as their content is not as relevant to the Biology/Pre-Medical Track as the other Required Biology Courses. BIOL 240 was included as a Required Biology Course since the course content is directly applicable to the Pre-medical Track. These curriculum changes result in the Required Biology Course credits dropping from 17 credits to 15 credits. These credits were moved to the Biology Controlled Electives, which will allow students to broaden their background in the biological sciences. All Biology/Pre-Medical students will still be required to complete the Biology Required Courses that include BIOL 201, BIOL 202 and BIOL 203.

(B) Identify the Program Student Learning Outcomes (SLO). Mark any SLOs that are changing as a part of the Program Revision.*

Upon completion of the program:

i) Apply biological principles across multiple scales of biological organization such as cell, organism, and ecosystem

ii) Apply the principles of experimental design and the scientific method for problem solving and the process of research

iii) Access and assess peer-reviewed literature in biology

iv) Communicate scientific information in written and oral form

v) Evaluate the ethical and social implications of biology.

(C) Implications of the change on the program, other programs and the Students:*	The proposed curriculum change requires courses with content that consistently appears on admissions tests and in curriculum for medical programs. Thus, these courses will improve student preparedness for professional programs. No other programs will be affected. Current students will be permitted to complete the proposed curriculum to satisfy graduation requirements.

Current Program Information		**Proposed Changes**	
(D) Current Program Title*		**Proposed Program Title** *(if changing)*	
(E) Current Narrative **Catalog Description** *It is acceptable to copy/paste from the current catalog entry.*	***UG Course Catalog: http://www.iup.edu/registrar/catalog/*** ***Grad Course Catalog:http://www.iup.edu/graduatestudies/catalog/***	**Proposed Narrative** **Catalog Description** *(if changing)*	
(F) Current Program Requirements	Liberal Studies: (45 cr) As outlined in Liberal Studies section with the following specifications: Mathematics: MATH 121 Natural Science: CHEM 111-112 or CHEM 113-114 Social Science: 9cr, PSYC 101, SOC 151 Liberal Studies Electives: 3cr, no courses with BIOL prefix Major: (37 cr) Required Core Courses: (12 cr) BIOL 201 Principles of Ecology and Evolution 4cr BIOL 202 Principles of Cell and Molecular Biology 4cr BIOL 203 Principles of Genetics and Development 4cr Required Biology Courses: (17 cr) BIOL 220 General Zoology 3 cr BIOL 250 Principles of Microbiology 4 cr BIOL 331 Animal Development Biology 3cr BIOL 352 Comparative Animal Physiology 3cr BIOL 402 Advanced Human Anatomy 4 cr Controlled Biology Electives: (8 cr) BIOL 151, 210, 221, 242, 271, 310, 323, 363, 364, 401, 405, 410, 460, 466, 475, 477, 481, 482, 483, 484, 491, 493, 499 or other biology major courses by permission of advisor or department chairperson. **(1)**	**Proposed Program Requirements** *(if changing, please highlight in RED what is being changed)*	Liberal Studies: (45 cr) As outlined in Liberal Studies section with the following specifications: Mathematics: MATH 121 Natural Science: CHEM 111-112 or CHEM 113-114 Social Science: 9cr, PSYC 101, SOC 151 Liberal Studies Electives: 3cr, no courses with BIOL prefix Major: (37 cr) Required Core Courses: (12 cr) BIOL 201 Principles of Ecology and Evolution 4cr BIOL 202 Principles of Cell and Molecular Biology 4cr

Ancillary Science Requirements: (23 cr)

CHEM 231 Organic Chemistry I 4cr

CHEM 232 Organic Chemistry II 4cr

CHEM 351 Biochemistry 4cr

MATH 216 Probability and Statistics for Natural Sciences 3cr or 217 Probability and Statistics

PHYS 111 Physics I Lecture 3cr

PHYS 121 Physics I Lab 1cr

PHYS 112 Physics II Lecture 3cr

PHYS 122 Physics II Lab 1cr

Other Requirements: **(2)** Foreign Language Intermediate Level (0-6 cr), Exit survey for assessment purposes.

Free Electives: 9-15 cr

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives. **(2)** (a) Two courses in one language, including the placement course; or (b) intermediate level. In lieu of a foreign language, students may elect to take a sequence of two courses in either computer science, exclusive of COSC 101 (COSC 110 and 210 recommended), or two courses in geography/regional planning (from the following: GEOG/RGPL 213, 314, 316, 415, 417).

BIOL 203 Principles of Genetics and Development 4cr

Required Biology Courses: (15 cr)

BIOL 240 Human Physiology 4 cr

BIOL 250 Principles of Microbiology 4 cr

BIOL 331 Animal Development Biology 3cr

BIOL 402 Advanced Human Anatomy 4 cr

Controlled Biology Electives: (10 cr)

BIOL 200, 210, 220, 221, 242, 271, 310, 323, 352, 363, 364, 401, 405, 410, 460, 466, 475, 477, 481, 482, 483, 484, 491, 493, 499 or other biology major courses by permission of advisor or department chairperson. **(1)**

Ancillary Science Requirements: (23 cr)

CHEM 231 Organic Chemistry I 4cr

CHEM 232 Organic Chemistry II 4cr

CHEM 351 Biochemistry 4cr

MATH 216 Probability and Statistics for Natural Sciences 3cr or 217 Probability and Statistics

PHYS 111 Physics I Lecture 3cr

PHYS 121 Physics I Lab 1cr

PHYS 112 Physics II Lecture 3cr

PHYS 122 Physics II Lab 1cr

Other Requirements: **(2)** Foreign Language Intermediate Level (0-6 cr), Exit survey for assessment purposes.

Free Electives: 9-15 cr

Total Degree Requirements: 120

(1) No more than 6cr total from Independent Study, Special Topics, or Internship applies to major; excess applied as free electives. **(2)** (a) Two courses in one language, including the placement course; or (b) intermediate level. In lieu of a foreign language, students may elect to take a sequence of two courses in either computer science, exclusive of COSC 101 (COSC 110 and 210 recommended), or two courses in geography/regional planning (from the following: GEOG/RGPL 213, 314, 316, 415, 417).

(G) Supporting Documents

If making a major change, please attach a document with a summary of any/all changes.

File	Modified

For Deans Review

Are Resources Available/Sufficient for this Course?

Is the Proposal Congruent with the College Mission?

Has the Proposer Attempted to Resolve Potential Conflicts with Other Academic Units?

Comments: