Millersville University
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M E M O R A N D U M

TO: Dr. Ana Borger-Greco
Faculty Senate Chairperson

FROM: Vilas A. Prabhu
Provost and Vice President
for Academic Affairs

DATE: APRIL 28, 2009

SUBJECT: APPROVAL OF FACULTY SENATE CURRICULAR RECOMMENDATIONS

As the President's designee, I am informing you of the approvals of the following Faculty Senate Curricular Actions.

Faculty Senate action at February 17, 2009, meeting:

New Undergraduate Course(s):

SPAN 334 – Spanish American Civilization II

- 3 credits, Pre-requisites: SPAN 202 or 351, elective course for Spanish majors/minors
- CIP CODE: 05.0107
- Faculty Load: Has been offered as an experimental course in spring 2009 and will be offered in rotation every alternative year with other elective courses; must be scheduled within existing complement.

Approved, Effective Summer 2009

Changes in Undergraduate Courses/Curricula:

All Economics majors:

Update required related courses for Economics majors.

Current required related courses:

CSCI 111, 121, 140, 161 OR MATH 151 or higher (160, 161, 211)

Revised required related courses:

MATH 151 or 161

Approved, Effective Summer 2009

Faculty Senate action at March 17, 2009, meeting:

New Undergraduate Course(s):

BIOL 101 Foundations of Biology

- 4 credits, Pre-requisites: Declared Biology major, minor or permission of instructor, required for B.A., B.S., B.S.E. Biology (Botany, Environmental, Marine, Molecular/Biotechnology, Medical Technology, Nuclear Medicine, Optometry, Podiatry, and Pre-Athletic Training) and minors in Biology and Molecular Biology.
- G2, L - General Education Designation
- Equivalent courses: BIOL 100; students can not take both BIOL 101 AND 100 for credit.
- CIP CODE: 26.0101
- Faculty Load Implications – Modifications to the course proposal and dean's resource analysis memo has addressed faculty load implications. Must be taught within compliment.

Approved, Effective Summer 2009

BIOL 343 – Principles of Ecology and Evolution

- 4 credits, Pre-requisites: BIOL 211, 221 and MATH 160 or equivalent; ENGL 110, required for B.A., B.S., B.S.E. Biology (Botany, Environmental, Marine, Molecular/Biotechnology, Medical Technology, Nuclear Medicine, Optometry, and Podiatry) and minors in Biology and Molecular Biology.
- Writing - General Education Designation
- Equivalent courses: BIOL 241 and 242; students can not take BIOL 343 AND BIOL 241, 242 for credit.
- CIP CODE: 26.1310
- Faculty Load: There are no resource implications - Reconfiguration of existing courses.

Approved, Effective Summer 2009

New Undergraduate Course(s):

BIOL 362 – Cell and Developmental Biology

- 4 credits, Pre-requisites: BIOL 101 or 100 with a C- or higher, B minor or higher in BIOL 100 for biology majors; ENGL 110, Pre- or Co-Req CHEM 112, required for B.A., B.S., B.S.E. Biology (Botany, Environmental, Marine, Molecular/Biotechnology, Medical Technology, Nuclear Medicine, Optometry, and Podiatry) and minors in Biology and Molecular Biology.
- Writing - General Education Designation
- G2, L - General Education Designation
- BIOL 362 will replace BIOL 263 in the biology curriculum. BIOL 263 will be inactivated within a few semesters
- CIP CODE: 26.0401
- Faculty Load: There are no resource implications - Reconfiguration of existing courses.

Approved, Effective Summer 2009

BIOL 364 – Foundations of Genetics and Molecular Biology

- 4 credits, Pre-requisites: BIOL 101 or 100 with a C- or higher, B minor or higher in BIOL 100 for biology majors; Prereq CHEM 112, required for B.A., B.S., B.S.E. Biology (Botany, Environmental, Marine, Molecular/Biotechnology, Medical Technology, Nuclear Medicine, Optometry, and Podiatry) and minors in Biology and Molecular Biology.
- Equivalent courses: BIOL 365 or BIOL 644; students can not take BIOL 364 and 365 and 644 for credit.
- CIP CODE: 26.0802
- Faculty Load: There are no resource implications - Reconfiguration of existing courses.

Approved, Effective Summer 2009

New Graduate Course(s):

BIOL 564 – Foundations of Genetics and Molecular Biology

- 4 credits
- Equivalent courses: BIOL 365 or BIOL 644; students can not take BIOL 364 and 365 and 644 for credit.
- CIP CODE: 26.0802
- Faculty Load: Course proposal was originally submitted as BIOL 664, but the course number was changed so as to be aligned with university policy that allows dual listing of 300- and 500-level courses. There are no resource implications – to be dual listed with BIOL 364.

Approved, Effective Summer 2009

Changes in Undergraduate Courses/Curricula:

Basic Biology Core Curriculum	Proposed Changes	Analysis/Implications
• For all Biology Majors/Options	• Create Core Foundation for majors	•
Required Biology Courses (16 credits) • BIOL 100 • BIOL 211 • BIOL 221 • BIOL 263 • BIOL 365 • BIOL Seminar (472 or 470) • Cellular & Molecular (3-4 credits) • Plants (3-4 credits) • Animals (3-4 credits) • Population Biology (6 credits) • Biology Electives (varies based on declared option) Option course requirements vary. • BSE: BIOL 241, 242, 375, 473 • Botany: BIOL 325, 427, 436 • Environmental: BIOL 241, 242, 375, 242, 448 • Marine: BIOL 241, 291, 375 • Molecular: BIOL 462, 466	Required Biology Courses (24 credits) • BIOL 101 • BIOL 211 • BIOL 221 • BIOL 343 • BIOL 362 • BIOL 364 • BIOL Seminar (472 or 470) • Biology Electives (varies based on declared option) Option course requirements vary. • BSE: BIOL 375, 473 • Botany: BIOL 325, 427, 436 • Environmental: BIOL 242, 375, 448 • Marine: BIOL 291, 375 • Molecular: BIOL 462, 466	• The core has been revised to place greater emphasis in inquiry-based, quantitative, interdisciplinary learning as well as the importance of independent research in the education of undergraduate biologists. • Four of the six core courses that will be required for biology majors are new courses; BIOL 101, 343, 362, 364. • Declared Biology majors will be required to complete BIOL 101 with a grade of C minus or higher. Students transferring into the major may substitute BIOL 100: General Biology for BIOL 101 if they earn a grade of B minus or better in this course. Credit can not be earned for both BIOL 100 and BIOL 101.
Required Related	Minor changes – B.S. BIOL MEDT - PHYS 131 & 132 have been dropped. B.S. BIOL RESP – PHYS 132 has been dropped. B.S. BIOL PREPD – MATH 211 has been replaced by CHEM 326.	•

Approved, Effective Summer 2009

Changes in Undergraduate Courses/Curricula:

Changes in Retention-in-the-Major Policy

Currently, all biology majors except those in allied health options must earn grades of C (2.0) or higher in BIOL 211, 221 and BIOL 263 (Cell Biology). Allied health students must earn grades of C (2.0) or higher in BIOL 211 and BIOL 263, since they are not required to take BIOL 221. These requirements must be satisfied before completion of 60 Millersville University credit hours. Those who change their major or option, and transfer students with more than 60 credits, must satisfy these requirements before completing 30 additional credits.

REVISED Retention-in-the-Major Policy

University requirements for retention must be met. In addition, all biology majors must earn grades of C- (C minus) or higher in all core courses (BIOL 101, 211, 221, 343, 362, 364) required for their option. These requirements must be satisfied before completion of 90 Millersville University credit hours. Those who change their major or option, and transfer students with more than 60 credits, must satisfy these requirements before completing 45 additional credits. Those transferring into the major may substitute BIOL 100 for BIOL 101 if they earn a grade of B- (B minus) or higher in this course.

For most biology majors, the core would include all six courses. Those in allied health options (medical technology, nuclear medicine technology, optometry, pre-podiatry, respiratory therapy, and pre-athletic training), who are not required to complete six core courses, would be required to earn a C- or higher in all of the core courses required for that particular option.

Approved, Effective Summer 2009

<u>Changes in Undergraduate Courses/Curricula</u>:

Pre-requisite Changes

Due to the curricular changes for the Biology programs, the pre-requisites must reflect these changes. **Effective for Winter/Spring 2010 early registration**

Course	Title	Credits	Current Prerequisites	Revised Prerequisites
BIOL 101	Foundations of Biology	4	Declared biology major, minor or permission of instructor	
BIOL 343	Ecology and Evolution	4	BIOL 211, 221, ENGL 110 and MATH 160 or equivalent	
BIOL 362	Cell & Developmental Biology	4	BIOL 101 or 100 w/ grade of C minus or higher; B minus or higher in BIOL 100 for Biology majors. ENGL 110, co-or prereq CHEM 112	
BIOL 364	Genetics and Molecular Biology	4	BIOL 101 or 100 w/ grade of C minus or higher; B minus- or higher in BIOL 100 for Biology majors. CHEM 112	
BIOL 204	Human Biology	3	BIOL 100, ENGL 110	BIOL 101 or 100, ENGL 110
BIOL 205	Heredity and Human Affairs	3	BIOL 100	BIOL 101 or 100, MATH 1**
BIOL 207	Human Sexuality	3	BIOL 100, ENGL 110	BIOL 101 or 100, ENGL 110
BIOL 208	Plants and People	3	BIOL 100	BIOL 101 or 100

Course	Title	Credits	Current Prerequisites	Revised Prerequisites
BIOL 211	Concepts of Zoology	4	BIOL 100	BIOL 101 or 100 w/ grade of C minus or higher; B minus- or higher in BIOL 100 for Biology majors
BIOL 221	Concepts of Botany	4	BIOL 100	BIOL 101 or 100 w/ grade of C minus or higher; B minus- or higher in BIOL 100 for Biology majors
BIOL 241	Principles of Ecology	3	BIOL 100, MATH 235, 151, 160 or 161	BIOL 101 or 100, MATH 235, 151, 160 or 161
BIOL 247	Biodiversity: origins & extinctions	3	BIOL 100, COMM 100	BIOL 101 or 100, COMM 100
BIOL 254	Human Anat and Physiology 1	4	BIOL 100	BIOL 101 or 100
BIOL 256	Nutrition	3	ENGL 110	BIOL 100, ENGL 100
BIOL 266H	Hnrs: Adv Princ Cell Biology	1	BIOL 263 B minus or higher	BIOL 362 B minus or higher
BIOL 281	Behavioral Biology	3	BIOL 100, ENGL 110	BIOL 101 or 100, ENGL 110
BIOL 318	Comparative Vertbrate Anatomy	4	BIOL 211, 263	BIOL 211, 362
BIOL 324	Plant Biochemistry & (CHEM 324)	4	BIOL 221, 263, CHEM 232 or 235	BIOL 221, 362, CHEM 232 or 235
BIOL 345	Applied Ecology	3	BIOL 211, 221, 241, 375, ENGL 110	BIOL 211, 221, 343, 375, ENGL 110
BIOL 352	Nutritional Science	3	BIOL 263 and ENGL 110	BIOL 362 and ENGL 110
BIOL 356	Functional Human Anatomy	5	BIOL 211	BIOL 211, 362
BIOL 360	Histology	4	BIOL 211, 263	BIOL 362
BIOL 363	Medical Microbiology	3	BIOL 263	BIOL 362
BIOL 375	Biometry	3	BIOL 100, MATH 160	BIOL 101 or 100, MATH 160
BIOL 417	Parasitology	3	BIOL 211, BIOL 263 recommended	BIOL 211, BIOL 362 recommended
BIOL 424	Mycology	3	BIOL 221, 263	BIOL 211, 362
BIOL 427	Developmental Plant Anatomy	3	BIOL 221, BIOL 263 recommended	BIOL 221, BIOL 362 recommended
BIOL 428	Plant Morphogenesis	3	BIOL 221, 263, 365, CHEM 235 or 231	BIOL 221, 362, 364, CHEM 235 or 231
BIOL 435	Animal Physiology	3	BIOL 211, 263, CHEM 112 and 235 or 231	BIOL 211, 362, CHEM 112
BIOL 436	Plant Physiology	3	BIOL 221, 263, CHEM 231 or 235 recommended	BIOL 221, 362, CHEM 231 or 235
BIOL 437	Endocrinology	3	BIOL 263	BIOL 362
BIOL 438	Neurobiology	3	BIOL 263, ENGL 110	BIOL 362, ENGL 110
BIOL 443	Conservation Biology	3	BIOL 211, 221, 241, 242, 375	BIOL 101, 343
BIOL 446	Ecosystems	3	BIOL 211, 221, 241, 375, ENGL 110, BIOL 242 (pre- or co-)	BIOL 343, ENGL 110
BIOL 447	Chesapeake Bay System	4	BIOL 211, 221, 241, 375, ENGL 110	BIOL 241 or 343, ENGL 110

Course	Title	Credits	Current Prerequisites	Revised Prerequisites
BIOL 454	Immunology	2	BIOL 263	BIOL 362
BIOL 455	Cardiopulmonary Physiology	3	BIOL 211, 263, 356, CHEM 231 or 235	BIOL 254, 255, 362, CHEM 111, 112
BIOL 461	General Microbiology	3	BIOL 263	BIOL 362
BIOL 462	Molecular Biology	4	BIOL 365, ENGL 110, BIOL 461 or CHEM 326 recommended	BIOL 362, 364, ENGL 110, BIOL 461 or CHEM 326 recommended
BIOL 463	Virology	4	BIOL 263, BIOL 365 recommended	BIOL 364 or permission of instructor
BIOL 465	Developmental Biology	3	BIOL 211, 221, 263, or permission of instructor	BIOL 362, 364 pre- or co-requisite, or permission of instructor
BIO 467	Human Genetics :Analysis/Apps	3	BIOL 365, ENGL 110	BIOL 364, ENGL 110
BIOL 470	Biology Colloquium	1-2	BIOL 263	BIOL 101 or 100 or permission of instructor
BIOL 485	Animal Behavior	3	BIOL 211	BIOL 211, BIOL 343 recommended
BIOL 487	Evolution	3	BIOL 365, MATH 161	BIOL 343, 364, MATH 161

Faculty Senate action at April 7, 2009, meeting:

Revise Graduate Policy - ADMISSIONS TESTING:

Current policy

Applicants for all degree programs and some certificate programs are required to submit official score reports from an appropriate standardized test. Most departments accept either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). Departments that have specific requirements follow. Please note that scores for any test should not be more than five years old at the time of application.

REVISED Policy

Some degree and certificate programs require official score reports from appropriate standardized tests. Graduate degree programs that require standardized admission testing are listed below. Please note that scores for any test should not be more than five years old at the time of application.

Approved, Effective Summer 2009