

MEMORANDUM

TO: Dr. Ana Borger-Greco
Faculty Senate Chairperson

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

DATE: June 17, 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 June 9, 2009, meeting:

Changes in Undergraduate Courses/Curricula:

Pre-requisite change for CHEM 342 – Physical Chemistry II (W)

Current:

Require CHEM 341 with a D- (D minus) and ENGL 110.

Revised:

Require CHEM 341 with a D or higher or permission of instructor.

COMMENT: ENGL 110 is required for CHEM 341 so not necessary to list as pre-requisite for CHEM 342.

Approved, Effective Winter/Spring 2010 early registration

New Undergraduate Course(s):

BIOL 390 – The Natural History of the Mid-Atlantic Shore

- 3 credits, Pre-requisites: COMM 100, ENGL 110 and junior status. Course will NOT count for credit towards a Biology degree requirements.
- Perspectives - General Education Designation
- CIP CODE: 26.1302
- Equivalent course: BIOL 291. Students cannot complete any combination of these courses for credit.
- Faculty Load: Will be taught within existing complement; alternating or replacing course offering with other BIOL perspectives course BIOL 340 that is taught on campus.

Approved, Effective Fall 2009

PHYS 101 – Survey of Physics

- 3 credits, Pre-requisites: MATH placement at the 100 level or higher, no credit in G2 block for majors in the School of Science and Mathematics. Course is required as a core science elective for middle level education majors.
- G2 - General Education Designation
- Equivalent course: PHYS 103 & 104. Students cannot complete any combination of these courses for credit.
- CIP CODE: 40.0801
- Faculty Load: Will be taught within existing complement. When offered, a section of PHYS 103 will have to be eliminated and replaced by a section of PHYS 101.

Approved, Effective Fall 2009

SCMA 391 / WSTU 391 – Women in Mathematics and Science

- 3 credits, Pre-requisites: COMM 100, ENGL 110, 100-level MATH courses and one 100-level course in Science and Junior Status.
- Perspectives - General Education Designation
- Cultural Diversity & Community - General Education Designation
- CIP CODE: 40.9999
- Faculty Load: Will be taught within existing complement between Science and Mathematics and Humanities and Social Sciences Schools.

Approved, Effective Fall 2009

Changes in Undergraduate Courses/Curricula:

Revise the Five Interdisciplinary Environmental Minors

The steering committee of the MU Center for Environmental Science which oversees the interdisciplinary environmental minors has recommended these changes to better meet the needs of students and the increasing number of environmental courses approved at Millersville University.

Approved, Effective Fall 2009

Minor - Industrial Environmental Health Current Curriculum	Proposed Changes	Analysis/Implications
<ul style="list-style-type: none"> • 21-22 minimum credits 		19-21 minimum credits
<p>Core Courses:</p> <ul style="list-style-type: none"> • OSEH 321 – Environmental and Industrial Hygiene I • OSEH 435 – Environmental Technology • ENVI 330 – Environmental Statistics and Risk Assessment • BIOL 356 – Functional Human Anatomy • ENVI 495 – Environmental Clinic <p>Choose one of the following courses:</p> <ul style="list-style-type: none"> • CHEM 232 – Organic Chemistry II • CHEM 235 – Short Course in Organic Chemistry • CHEM 375 – Environmental Chemistry (w/Lab-4 credits) • ESCI 349 – Chemistry of the Atmosphere 	<p>Core Courses:</p> <ul style="list-style-type: none"> • OSEH 321 • OSEH 435 • ENVI 330 • ENVI 495 <p>Choose TWO of the following courses:</p> <ul style="list-style-type: none"> • BIOL 204 – Human BIOL • BIOL 255 - A&P II • BIOL 435 - Animal Physio • BIOL 455 - Cardio Physio • CHEM 232 • CHEM 235 • CHEM 375 • ESCI 322 – Env Hydrology • ESCI 329 – Aqueous Geochem • ESCI 349 • ESCI 426 – Groundwater Geology 	<p>Allow for more flexibility for students by removing BIOL 356 from core courses and require two electives instead of one.</p>

Approved, Effective Fall 2009

Minor – Land Use Current Curriculum	Proposed Changes	Analysis/Implications
<ul style="list-style-type: none"> • 21 minimum credits <p>Core Courses:</p> <ul style="list-style-type: none"> • ECON 207 – Environmental Economics • GEOG 295 – Geographic Information Systems • GEOG 372 – Urban and Regional Planning • BIOL 241 – Principles of Ecology • ENVI 495 – Environmental Clinic <p>Choose one of the following courses:</p> <ul style="list-style-type: none"> • GEOG 230 – Physical Geography • ESCI 225 - Geomorphology <p>Choose one of the following courses:</p> <ul style="list-style-type: none"> • GEOG 227 – Urban Geography • GEOG 305 – Geography of Energy • GEOG 333 - Biogeography • GEOG 434 - Hydrology • ESCI 426 – Groundwater Geology • OSEH 220 – Legal Aspects of Safety and Hygiene 	<p>Core Courses:</p> <ul style="list-style-type: none"> • BIOL 241 • ECON 207 • GEOG 372 • ENVI 495 <p>Choose ONE of the following courses:</p> <ul style="list-style-type: none"> • ESCI 225 - Geomorph • ESCI 322 – Env Hydro • ESCI 329 – Acqu Geochem • ESCI 426 • ESCI 429 – Weathering Syst. • ENVI 330 – Env Stats • GEOG 227 • GEOG 305 • GEOG 333 <p>Choose ONE of the following courses:</p> <ul style="list-style-type: none"> • ESCI 281 – GIS Appl ESCI • GEOG 295 - GIS • GEOG 395 Adv GIS 	<ul style="list-style-type: none"> • 18-19 min. credits <p>Allow for more flexibility for students by removing GEOG 295 from core courses and adding it to the electives list for Geographic Information Systems; expand ESCI/GEOG electives list.</p>

Approved, Effective Fall 2009

Minor - Environmental Policy and Regulation Current Curriculum	Proposed Changes	Analysis/Implications
<ul style="list-style-type: none"> • 21 minimum credits <p>Core Courses:</p> <ul style="list-style-type: none"> • ECON 207 – Environmental Economics • ENVI 330 – Environmental Statistics and Risk Assessment • OSEH 220 – Legal Aspects of Safety and Hygiene • OSEH 435 – Environmental Technology • ENVI 495 – Environmental Clinic <p>Choose two of the following courses:</p> <ul style="list-style-type: none"> • ECON 316 – Public Finance • GEOG 372 – Urban and Regional Planning • SOCY 313 – Social of Disaster 	<p>Core Courses:</p> <ul style="list-style-type: none"> • ECON 207 • OSEH 220 • ENVI 330 • ENVI 495 <p>Choose two of the following courses:</p> <ul style="list-style-type: none"> • GEOG 306 – Env Impact Assessment • GEOG 372 • OSEH 435 – Env Techn • SOCY 313 	<ul style="list-style-type: none"> • 18 minimum credits <p>Allow for more flexibility for students by removing OSEH 435 from core courses and adding it to the electives list along with a new course; GEOG 306.</p>

Approved, Effective Fall 2009

Minor - Quantitative Methods in Environmental Science Current Curriculum	Proposed Changes	Analysis/Implications
<ul style="list-style-type: none"> • 21-22 minimum credits 		<ul style="list-style-type: none"> • 18-22 minimum credits
<p>Core Course:</p> <ul style="list-style-type: none"> • ENVI 495 – Environmental Clinic <p>Choose one course from Statistical Methods:</p> <ul style="list-style-type: none"> • ENVI 330 – Environmental Statistics and Risk Assessment • BIOL 375 – Biometry <p>Choose one course from Visualization and Modeling:</p> <ul style="list-style-type: none"> • ESCI 386 – Earth System Data Visualization and Modeling • GEOG 295 – Geographic Information Systems <p>Choose four courses from Quantitative Scientific Specializations:</p> <ul style="list-style-type: none"> • ESCI 267 – Field Methods in Oceanography • ESCI 349 – Chemistry of the Atmosphere • ESCI 426 – Groundwater Geology • ESCI 447 – Meteorological Instruments, Measurement, and Observing Systems • CHEM 265 – Quantitative Analysis • CHEM 375 – Environmental Chemistry (with or without lab) • CHEM 476 – Environmental Chemistry II • BIOL 449 – Plant Communities • OSEH 321 – Environmental and Industrial Hygiene I • ITEC 465 – Instrumentation and Control 	<p>Core Course:</p> <ul style="list-style-type: none"> • ENVI 495 <p>Choose one course from Statistical Methods:</p> <ul style="list-style-type: none"> • BIOL 375 • ENVI 330 <p>Choose one course from GIS:</p> <ul style="list-style-type: none"> • ESCI 281 – GIS Appl ESCI • GEOG 295 • GEOG 395 Advanced GIS <p>Choose THREE courses from Quantitative Scientific Specializations:</p> <ul style="list-style-type: none"> • BIOL 241 – Prin Ecology • CHEM 265 • CHEM 375 • CHEM 476 • ESCI 267 • ESCI 322 – Env Hydro • ESCI 349 • ESCI 426 • ESCI 447 • ITEC 465 • OSEH 321 	<p>Allow for more flexibility for students by adding more environmental courses to the electives lists.</p>

Approved, Effective Fall 2009

Minor – Water Resources Current Curriculum	Proposed Changes	Analysis/Implications
<ul style="list-style-type: none"> • 22 minimum credits 		<ul style="list-style-type: none"> • 18-12 minimum credits
<p>Core Courses:</p> <ul style="list-style-type: none"> • GEOG 304 – Water Resources Management • GEOG 434 – Hydrology <p>OR</p> <ul style="list-style-type: none"> • ESCI 322 Hydrology • CHEM 375 – Environmental Chemistry (w/Lab 4 credits) • ESCI 329 – Aqueous Geochemistry • ESCI 426 – Groundwater Geology • BIOL 445 – Aquatic Biology • ENVI 495 – Environmental Clinic 	<p>Core Courses:</p> <ul style="list-style-type: none"> • GEOG 304 • ENVI 330 – Env Stats • ENVI 495 <p>Choose THREE courses from the following:</p> <ul style="list-style-type: none"> • BIOL 241 Prin Ecology • BIOL 445 • BIOL 447 Chesapeake Bay Syst • CHEM 375 • CHEM 476 Env Chem II • ESCI 322 • ESCI 329 • ESCI 426 	<p>Allow for more flexibility for students by expanding the environmental course selection for the elective list.</p>

Approved, Effective Fall 2009