

CANR Curricula and Courses Committee
Meeting Minutes
March 2, 2012
2:00 pm Room 207 WB

I. The meeting was called to order at 2:13 pm by committee chair Mike Darre. Members present were: Marilyn Altobello, George Elliott, Sal Frasca, Hedley Freake (sitting in for Rhonda Brownbill) , Susan Gregoire, Gary Kazmer and Jason Vokoun (sitting in for Mark Rudnicki)

Guests: Kathleen Segerson and Steven Swallow from the Environmental Studies Faculty Advisory Board.

II. The minutes of February 3, 2012 were approved as distributed.

III. Old Business:

1. Pat Jepson asked that all departments submit their comments on the draft for new requirements for the AGNR major ASAP to her for consideration. (See attached to end of minutes)
2. Each major needs to double check the way the overlap with minors is written, to be sure the meaning is correct, such as “no more that 12 credits of the 36 credits applied toward the major may be used toward the minor”.

IV. New Business:

A. The committee was asked to review the proposed Environmental Studies Major that will be offered by the college and the associated new courses to be offered under the EVST subject heading. Departments with courses being offered as part of the major should have their faculty approval documents prior to the CANR CC approving of the new major. Kathleen Segerson and Stephen Swallow, co-chairs of the Environmental Studies faculty advisory board attended to answer questions. They are proposing to offer a basic course that would be open to all students, but required for the major and a 4000 level W course open only to the majors.

1. ADD: **EVST 1000 (proposed). Introduction to Environmental Studies**

Either semester. Three credits. Field trips required.

Survey of human-nature interrelationship through interdisciplinary environmental themes and study of specific environmental issues.

2. ADD: **EVST 4XXX W (proposed). Environmental Studies Capstone Research Project** Either semester. Three credits.

Individual student research projects integrate knowledge and perspectives on environmental issues. Extensive reading, research, written work and presentation/oral communication required.

It was suggested that language be added to the EVST 4XXXW catalog copy stating

consent of instructor is required. Some discussion on who would be teaching this course ensued and it was stated that as the number of students enrolling grew, faculty from both CANR and CLAS would be asked to participate.

3. ADD: New Major: Environmental Studies (B.A.)

The major leads to a Bachelor of Arts degree in the College of Liberal Arts and Sciences (CLAS) or the College of Agriculture and Natural Resources (CANR). The student's choice of colleges should be made in consultation with faculty and advisors based upon the student's interests and career goals.

Requirements:

Introductory Courses

All majors must take three introductory courses:

- EVST 1000. Introduction to Environmental Studies
- NRE 1000. Environmental Science; or GEOG 2300. Introduction to Physical Geography; or GSCI 1050. Earth and Life Through Time with Lab; or GSCI 1051. Earth and Life Through Time
- BIOL 1102. Foundations of Biology; or, for those seeking a more advanced background, BIOL 1108. Principles of Biology II

Core Courses (18 credits)

Humanities Core: All majors must take 2 of the following courses:

- PHIL 3216. Environmental Ethics
- HIST 3540. American Environmental History
- ENGL 3240. American Nature Writing

Social Sciences Core: All majors must take 2 of the following courses

- ARE 3434. Environmental and Resource Policy
- NRE 3245. Environmental Law
- POLS 3412. Global Environmental Politics

Natural Science Core: All majors must take 2 of the following courses:

- EEB 2208. Introduction to Conservation Biology
- GEOG 3400. Climate and Weather
- AH 3175. Environmental Health
- GSCI 3010. Earth History and Global Change
- NRE 4170. Climate-Human-Ecosystem Interactions

Electives: In addition, environmental studies majors in CANR must take an additional 15 credits of electives (or courses related to the major) at the 2000 level or above, approved by the student's advisor. These courses must be designed to form a coherent set of additional courses that will provide the student with a focus or additional depth in an area of interest. They must be chosen in consultation with the student's faculty advisor and be approved by the advisor.

EVST 4XXXW. Capstone Research Project (3 credits). All majors must complete a capstone research project, which fulfills the W and Information Literacy requirements for the major.

Total Credits (2000-level or above): 36

***Other areas of recommended preparation (not required):**

- **Physical Science:** CHEM 1122. Chemical Principles and Applications with lab; CHEM 1127Q. General Chemistry; PHYS 1030Q/1035Q. Physics of the Environment without/ with lab
- **Earth Science:** GSCI/GEOG 1070. Global Change and Natural Disasters; MARN 1002/1003. Introduction to Oceanography without/ with lab
- **Economics:** ARE 1110. Population, Food, and the Environment; ARE 1150. Principles of Agricultural and Resource Economics; ECON 1179. Economic Growth and the Environment; ECON 1200. Principles of Economics, Intensive; ECON 1201. Principles of Microeconomics
- **Statistics:** STAT 1000Q. Introduction to Statistics I; STAT 1100Q. Elementary Concepts of Statistics

The committee questioned why there were three other courses listed as alternatives to NRE 1000 in the section of the proposed major titled Introductory Courses when NRE was asked to develop a Lab for this course, and under previous drafts of the proposal was the only choice. It was stated that this is what is listed for the Environmental Science major and should suffice for this area also. Some suggested that the Environmental Science major requirement probably need revisiting and revising, as not all courses listed are comparable.

It was also suggested that under the heading “Electives” to remove the word “electives”, as this not really what they are. Students are required to take an additional 15 cr. It was suggested to change it to Related Courses. The new paragraph should read as follows:

Related Courses: In addition, environmental studies majors in CANR must take an additional 15 credits of coursework at the 2000 level or above. They must be selected to form a coherent set of additional courses that will provide the student with a focus or additional depth in an area of interest. They must be chosen in consultation with the student’s faculty advisor and be approved by the advisor.

B. The Plant Science and Landscape Architecture Department proposes the following:

1. REVISE: SOIL 2120 Soils - A change in title, add CHEM 124 to the listing of possible CHEM courses and offer as CA 3 Gen Ed.

Current Title and Catalog Copy: 2120. Soils (251) (Formerly offered as PLSC 251.) Three credits. Three class periods. Prerequisite: CHEM 1122, 1127 or 1147. Not open for credit to students who have passed PLSC 250. Schulthess

Introduction to the physical, chemical and biological properties of soils. The relationship between soils and the growth of higher plants. Impact of soils on environmental quality.

Revised Title and Catalog Copy: 2120. Soils and the Environment (251) (Formerly offered as PLSC 251.) Three credits. Three class periods. Prerequisite: CHEM 1122, 1124, 1127 or 1147. Not open for credit to students who have passed PLSC 250. Schulthess

Introduction to the physical, chemical and biological properties of soils. The relationship between soils and the growth of higher plants. Impact of soils on environmental quality. CA-3

It was suggested that the change in title might cause problems in those students seeking certain certification in the field of soil science, perhaps "Environmental Soil Science" would be a better title? It was moved to table until the department can discuss this possibility.

MOTION TABLED: CANR CC 11-12-51

C. The Department of Allied Health Science proposes the following:

1 REVISE: Science electives for the Allied Health Sciences major to state that one credit courses may not be used to satisfy this requirement. Effective Fall 2012

Current Catalog copy:

Required courses in basic sciences and mathematics:

Allied Health Sciences (no concentration) and Allied Health Sciences with Health Promotion Sciences concentration: CHEM 1122 or 1124Q or 1127Q; PHYS 1010Q or CHEM 1125Q or 1128Q; BIOL 1107; NUSC 1165; PSYC 1100; PSYC 1101 or 1103; PSYC 2300, 2400; MATH 1040Q or 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences. Science courses used to meet program requirements cannot be used to meet this requirement.

Writing in the major: AH 4240W

Allied Health Sciences with Health Sciences concentration: CHEM 1124Q or 1127Q; CHEM 1125Q or 1128Q; CHEM 2241 and 2242 or 2443, 2444, and 2445; BIOL 1107; PHYS 1201Q and 1202Q or PHYS 1401Q and PHYS 1402Q or PHYS 1501Q and 1502Q; PSYC 1100; MATH 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences. Science courses used to meet program requirements cannot be used to meet this requirement.

Writing in the major: AH 4240W

Allied Health Sciences with Occupational Safety and Health concentration: BIOL 1107; CHEM 1124Q or 1127Q; CHEM 1125Q or 1128Q; MATH 1060Q or 1125Q or higher; NRE 1000; PHYS 1010Q or PHYS 1201Q or higher; PSYC 1100; PSYC 1101 or 1103; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences (required science courses cannot also be used to meet the science electives; CHEM 1126Q and/ or CHEM 2241 suggested).

Writing in the major: AH 4221W or 4240W

Revised Catalog copy:

Required courses in basic sciences and mathematics:

Allied Health Sciences (no concentration) and Allied Health Sciences with Health Promotion Sciences concentration: CHEM 1122 or 1124Q or 1127Q; PHYS 1010Q or CHEM 1125Q or 1128Q; BIOL 1107; NUSC 1165; PSYC 1100; PSYC 1101 or 1103; PSYC 2300, 2400; MATH 1040Q or 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences.

Science courses used to meet **other** program requirements cannot be used to meet this requirement. **Courses used to satisfy this requirement must be two or more credits.**

Writing in the major: AH 4240W

Allied Health Sciences with Health Sciences concentration: CHEM 1124Q or 1127Q; CHEM 1125Q or 1128Q; CHEM 2241 and 2242 or 2443, 2444, and 2445; BIOL 1107; PHYS 1201Q and 1202Q or PHYS 1401Q and PHYS 1402Q or PHYS 1501Q and 1502Q; PSYC 1100; MATH 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences. Science courses used to meet **other** program requirements cannot be used to meet this requirement. **Courses used to satisfy this requirement must be two or more credits.**

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Writing in the major: AH 4221W or 4240W

CANR CC 11-12-52A motion revision (to correct the 3/2/13 minutes):

REVISE: Science electives for the Allied Health Sciences major to state that one credit courses may not be used to satisfy this requirement. Effective Fall 2012

Current Catalog copy:

Required courses in basic sciences and mathematics:

Allied Health Sciences (no concentration) and Allied Health Sciences with Health Promotion Sciences concentration: AH 1100, CHEM 1122 or 1124Q or 1127Q; PHYS 1010Q or CHEM 1125Q or 1128Q; BIOL 1107; NUSC 1165; PSYC 1100; PSYC 1101 or 1103; PSYC 2300, 2400; MATH 1040Q or 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences. Science courses used to meet program requirements cannot be used to meet this requirement.

Writing in the major: AH 4240W

Allied Health Sciences with Health Sciences concentration: AH 1100, CHEM 1124Q or 1127Q; CHEM 1125Q or 1128Q; CHEM 2241 and 2242 or 2443, 2444, and 2445; BIOL 1107; PHYS 1201Q and 1202Q or PHYS 1401Q and PHYS 1402Q or PHYS 1501Q and 1502Q; PSYC 1100; MATH 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences. Science courses used to meet program requirements cannot be used to meet this requirement.

Writing in the major: AH 4240W

Allied Health Sciences with Occupational Safety and Health concentration: AH 1100, BIOL 1107; CHEM 1124Q or 1127Q; CHEM 1125Q or 1128Q; MATH 1060Q or 1125Q or higher; NRE 1000; PHYS 1010Q or PHYS 1201Q or higher; PSYC 1100; PSYC 1101 or 1103; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences (required science courses cannot also be used to meet the science electives; CHEM 1126Q and/ or CHEM 2241 suggested).

Writing in the major: AH 4221W or 4240W

Revised Catalog copy:

Required courses in basic sciences and mathematics:

Allied Health Sciences (no concentration) and Allied Health Sciences with Health Promotion Sciences concentration: AH 1100, CHEM 1122 or 1124Q or 1127Q; PHYS 1010Q or CHEM 1125Q or 1128Q; BIOL 1107; NUSC 1165; PSYC 1100; PSYC 1101 or 1103; PSYC 2300, 2400; MATH 1040Q or 1060Q or 1125Q or higher; STAT 1000Q or 1100Q; and two (2) additional science courses approved by the Department of Allied Health Sciences. Science courses used to meet **other** program requirements cannot be used to meet this requirement. **Courses used to satisfy this requirement must be two or more credits.**

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Writing in the major: AH 4221W or 4240W

MOTION PASSED CANR CC 11-12-52A (10-5-2012)

2. REVISE: GPAH 5720: Chromosome and DNA Diagnostic Techniques from one credit to variable credit. Effective Summer 1 2012.

Current Catalog copy:

GPAH 5720(1 Credit) Instructor Consent Required
Chromosome and DNA Diagnostic Techniques
Either semester. One credit. Recommended preparation: a course in human genetics.
Open by instructor consent.
Molecular and cytogenetic techniques utilized in clinical diagnostics. Sections taught in a series of modules, each focusing on a different technique and a clinical case. With a change of content, this course may be repeated for credit. Components: Laboratory

Revised Catalog copy:

GPAH 5720. Chromosome and DNA Diagnostic Techniques
Either semester. **Variable credits.** Repeatable for credit with section change.
Recommended preparation: a course in human genetics. Open by instructor consent.
Molecular and cytogenetic techniques utilized in clinical diagnostics. Sections taught in a series of modules, each focusing on a different technique and a clinical case. With a change of content, this course may be repeated for credit.

D. Other Departmental Business. None

V. Report from Academic Programs: None

VI. Other Business. The committee discussed the possibility of strengthening our offerings in the area of Environmental Science and revisit the Environmental Science major, in light of the proposed Environmental Studies major and the potential popularity of the subject area.

VII. Adjourn The meeting adjourned at 3:56 pm. Next meeting is March 23, 2012, 2 pm.

ATTACHMENT 1

Agriculture and Natural Resources Major ---DRAFT---

Proposed Description and Requirements (for discussion)

Catalog Description

The Agriculture and Natural Resources major is an interdisciplinary major designed for students who want broad training in agricultural, environmental, and/or health sciences, with content that does not readily align with any one department or major. Students work with advisors to develop and complete a personalized and interdepartmental baccalaureate program based on their educational and career interests and goals. Courses selected for this major will include both introductory and advanced material from multiple departments in the College of Agriculture and Natural Resources, as well as prerequisite and related knowledge and experiences in other disciplines.

Requirements

One course from BIOL 1107, 1108, 1110

One course from CHEM 1122, 1124Q, 1127Q, 1137Q

One additional course (minimum 3 credits) from BIOL, CHEM, GSCI, MARN, or PHYS, or one extra MATH or STAT course beyond those required for general education requirements

Two 1000 level courses (minimum 3 credits each) representing two departments in CANR. (AGNR, AH, ANSC, ARE, HORT, LAND, NRE, NUSC, PLSC, PVS, SOIL, TURF)

Courses in the 36 Credit Group for Agriculture and Natural Resources majors must meet all the requirements listed under the 36 Credit requirements for all CANR majors, and also the more stringent requirements below:

- Courses must include at least six credits (each) from three departments in CANR
- Courses must include at least 24 credits (combined total) from departments CANR

Writing Competency: Students must pass one 2000-level or above W course in any department of the College of Agriculture and Natural Resources (AH, ANSC, ARE, HORT, LAND, NRE, NUSC, PLSC, PVS, SOIL, TURF).

Computer Technology Competency: Satisfied by University entrance expectations.

Information Literacy Competency: Satisfied by meeting the Writing Competency Requirement.

Agriculture and Natural Resources majors must submit a statement describing how courses relate to their desired career. This statement and courses for the major must be approved by advisor and CANR Associate Dean as early as possible in order to confirm the courses approved for the final Plan of Study.

Background Information and Rationale:

The College of Agriculture and Natural Resources has had a non-departmentalized major in **Agriculture and Natural Resources** (previously titled General Studies in Agriculture and Natural Resources) for decades. The 2011-2012 catalog (page 32) describes the Agriculture and Natural Resources major, *“This interdisciplinary major is designed for students who want broad training in agriculture and natural resources. Students work with their advisors to develop a personalized program of study.”*

Currently, the requirements for the Agriculture and Natural Resources (AGNR) major include the CANR 36 Credit Group and one “W” course from one of the CANR departments. The courses used for these major requirements must be approved by the student’s advisor and the CANR Associate Dean (in place of department head, as required for departmental majors).

It has been suggested in recent years that credibility and consistency of the AGNR major would be improved by establishing more specific requirements. These requirements would be designed to add structure and strengthen minimum expectations for the major, while maintaining the original goal of providing an option for students desiring a broad knowledge in various aspects of agriculture and related areas. Better-defined requirements would also decrease the likelihood of students viewing the AGNR major as an easy-way-out, when/if they are avoiding the most difficult requirements of a departmental major.