

College of Arts & Sciences Faculty Meeting
Wednesday, April 13, 2005
3:45 p.m.
Great Hall, Kauffmann Residence Center

3:45 p.m. Iced tea, lemonade, and cookies
4:00 p.m. Meeting begins

AGENDA

- Item I. Approval of minutes from Faculty Meeting, December 8, 2005.
- Item II. Opening comments.
- Item III. Opportunity for faculty to ask questions arising from annual reports of the various college committees (see appendix).
- Executive Committee
 - Committee on Academic Distinction and Awards for Students
 - Curriculum Committee
 - Faculty Instructional Development Committee
 - Grading Appeals Committee
 - Assessment Committee
- Item IV. Recommendation from the College Curriculum Committee to approve Essential Studies courses listed for Area E, Historical Studies and Area F, Humanities (see appendix). Supporting materials are available for review in the Dean's Office.
- Item V. Recommendation from the College Curriculum Committee to approve Integrative Studies courses (see appendix). Supporting materials are available for review in the Dean's Office.
- Item VI. Recommendation from the College Curriculum Committee to approve the proposed new minor in Archaeology.
- Item VII. Recommendation from the College Curriculum Committee to approve the proposed new major in Plant Biology
- Item VIII. Opportunity to ask questions of the Dean.

APPENDIX

Item I. Minutes from December 2005 Fall Faculty Meeting.
Minutes of the Autumnal Semestrial Meeting of the Faculty of the College of Arts and Sciences
8 December 2005 - 3:45 p.m.- 5:00 p.m.
Regency A - City Union
University of Nebraska-Lincoln

The Fall meeting of the College of Arts & Sciences faculty was called to order at 3:43 p.m. by Dean Richard Hoffmann.

The minutes of the faculty meeting of 13 April 2005 were approved in the first item of business.

In Opening Comments, the second item of business, Professor Lloyd Ambrosius (History) accepted reappointment as Parliamentarian.

In the third item of the agenda, discussion ensued regarding Appendix 3, 1. College Policy on Student Evaluation of Teaching Performance, 5. Faculty "Fairness and respect" and 6. Student "fairly and respectfully". Suspicions were allayed, as the language had been in effect already, and the recommendation on faculty evaluation was approved by the Body.

Items 4, 5, 6 (recommendations by the College Curriculum Committee for Essential Studies courses, Integrative Studies courses, and a new minor) were approved by the Body.

Item 7 (College Curriculum Committee recommendations regarding Individualized Program of Studies major and minor requirements) was approved with a motion (seconded and approved) to clarify the wording by adding "or designee" to the procedure for securing proposal approval.

Item 8 (College Curriculum Committee recommendation regarding major and minor requirements in Computer Science and Engineering) was approved.

Item 9 entertained questions from the Body for the Dean to address. At the same time Dean Hoffmann announced that the Semester at Sea program was not likely to come to UNL, as this Institution was no longer in the running. Also, the General Education Committee is currently meeting on campus regarding the four University objectives, and outcomes that need to be established. There is a draft on the WEB, and Arts and Sciences will be heavily involved. The Dean reported that an objective is to minimize demand for new resources.

Dean Hoffmann indicated that there would be an update on enrollment in mid-November. He also mentioned the trend of the decline in enrollment for all universities, especially in Colleges of Arts and Sciences. Further, Colleges of Business, Journalism, and Engineering are growing. There will be a need to look at recent data about what courses (last ten years) were taken at Southeast Community College.

The meeting adjourned at 4:37 p.m.

Respectfully submitted,

Thomas E. Rinkevich, Recording Sec'y

Item III. Opportunity for faculty to ask questions arising from annual reports of the various college committees.

ANNUAL REPORT OF THE EXECUTIVE COMMITTEE

As per its charge, the Executive Committee reviewed and made recommendations for faculty representation on the College's standing committees; provided advice to the Dean about a number of issues, especially the college strategic plan; and met with and made recommendations regarding the hiring of candidates who might merit an offer with tenure.

The annual review of tenure and promotion recommendations began in December. The committee reviewed eight recommendations regarding promotion to Associate Professor with tenure, seven recommendations regarding promotion to Full Professor, one promotion to Senior Lecturer, one promotion to Research Associate Professor and one promotion to Research Professor.

Committee Members: Professors Helen Moore (Sociology), David Forsythe (Political Science), Clinton Rowe (Geosciences), Susan Belasco (English), James Takacs (Chemistry) and Associate Dean Edward Schmidt.

ANNUAL REPORT OF THE COMMITTEE ON ACADEMIC DISTINCTION AND AWARDS FOR STUDENTS

This report covers the period of two graduations: August 2005 and December 2005. The College of Arts & Sciences awarded 3 degrees with Highest Distinction, 7 degrees with High Distinction, and 27 degrees with Distinction. For May 2006, the committee will consider 9 students for degrees with Highest Distinction, 37 students for degrees with High Distinction and 36 students for degrees with Distinction.

For the first time the college combined its process with the UNL Office of Scholarships and Financial Aid. There were 423 A&S students who completed the OSFA Upperclass scholarship application. Only 230 of those students also completed the A&S portion of the application. The committee considered over 120 students for 18 scholarship funds controlled by the college and will make one nomination for the Kate Field Grant-in-aid and two nominations for the Donald Walters Miller Scholarship

Committee Members: Professors James Carr (Chemistry), Franz Blaha (English), Gordon Woodward (Mathematics), David Cahan (History), Julia McQuillan (Sociology); and Associate Dean Amy Goodburn. Marc Kiviniemi (Psychology) replaced Franz Blaha for the spring 2006 semester.

ANNUAL REPORT OF THE CURRICULUM COMMITTEE

The committee reviewed 32 new course proposals; 58 change in course proposals; 5 course deletion proposals; 11 Essential Studies proposals; 10 Integrative Studies proposals; 11 proposals for various majors and minors; and 9 proposals for Individual Program of Studies.

The Committee forwarded to the faculty the following recommendations:

- to approve 9 courses to fulfill the University Essential Studies requirements for Arts & Sciences majors.
- to approve 11 courses to be forwarded to the University Curriculum Committee for Integrative Studies designation.
- to approve a new minor in Archaeology.
- to approve the changes in the Ethnic Studies major and minor.
- to approve changes in the Individualized Program of Studies major and minor.
- to approve a new minor in Lesbian, Gay, Bisexual, Transgender/Queer Studies.
- to approve a new major in Plant Biology.

The committee forwarded directly to the University Curriculum Committee: 27 new course proposals, 58 course change proposals, and 9 course deletions proposals. The Committee approved non-substantive changes in the Biochemistry major; Computer Science & Engineering major; English major; Ethnic Studies major and minor; Latin American Studies major and minor; and Physics and Astronomy major and minor. These changes went directly to the bulletin editor.

Finally, the committee made recommendations for faculty representation on standing committees. The chair for the 2006-2007 academic year will be decided at the next committee meeting.

Committee Members: Professors Thomas Marley (Mathematics), Ted Pardy (Biological Sciences), Catherine Nickel (Modern Languages & Literatures), Carolyn Edwards (Psychology), Steve Lavin (Anthropology & Geography); Abe Zabih (Student Advisory Board), Adam Grams (Student Advisory Board); Anne Kopera (Advising), and Associate Dean Amy Goodburn (Executive Secretary).

ANNUAL REPORT OF THE FACULTY INSTRUCTIONAL DEVELOPMENT COMMITTEE

The committee considered seven nominations for Distinguished Teaching Awards. One nomination for the Annis Chaikin Sorenson Award for distinguished teaching in the humanities was forwarded to the UNL Teaching Council's Subcommittee on Distinguished Teaching Awards and six nominations were made for the College Distinguished Teaching Award. The awardees will be honored at various events including the Arts & Sciences Honors Convocation on April 21, 2006.

The College Distinguished Teaching Award winners are: **Mark Awakuni-Swetland**, Assistant Professor, Anthropology and Geography; **Dan Leger**, Professor, Psychology; **David Pitts**, Professor, Mathematics; **Leen-Kiat Soh**, Assistant Professor, Computer Science and Engineering; and **Rosalie Torres Stone**, Assistant Professor, Sociology

The committee considered four nominations for the Graduate Studies Graduate Teaching Assistant Award and four nominations for the Graduate Studies Graduate Research Award. The nominees forwarded to Graduate Studies for these awards were Yelena A Kosheleva for the Outstanding Graduate Teaching Assistant Award and Luis Rosa for the Outstanding Graduate Research Assistant Award.

From the nominations submitted for the Graduate Studies Awards the committee selected recipients for college awards. The recipients for the College Graduate Teaching Assistant Awards are **Yelena A. Kosheleva**, Psychology and **Blair Thompson**, Communication Studies. The recipients for the College Graduate Research Assistant Awards are **Satya Bulusu**, Chemistry; **Haitham Hamza**, Computer Science and Engineering; **Luis Rosa**, Physics and Astronomy; and **Genelle K. Sawyer**, Psychology.

All of these students will be recognized at the Arts & Sciences Honors Convocation on April 21, 2006.

Committee Members: Professors Ray Hames (Anthropology & Geography), David Skoug (Mathematics) Steve DiMagno (Chemistry), Laura White (English); Jason Renner (Student Advisory Board representative), Laura Duclos (graduate student representative), and Associate Dean Amy Goodburn.

ANNUAL REPORT OF THE GRADING APPEALS COMMITTEE

The Committee received and heard two appeals during this academic year.

Committee Members: Professors Peter Angeletti (Biological Sciences), Stephen Burnett (Classics & Religious Studies), William Avery (Political Science); Paul Mancuso and Jack Higgins (Student Advisory Board); Associate Dean Jessica Coope.

ANNUAL REPORT OF THE ASSESSMENT COMMITTEE

The Assessment committee reviewed a demonstration of the PEARL on-line assessment system being piloted by CASNR and the College of Education and Human Sciences and discussed the usefulness of pursuing electronic methods for collecting program/ department assessment data. Currently, the College is using a biennial system for collecting program/department assessment reports. The deadline for these reports was extended until August 15, 2006, to parallel the university-wide assessment committee's deadlines for the Higher Learning Commission/North Central Association (HLC/NCA) Accreditation visit. Consequently, the committee did not respond to program/department assessment reports this year.

Committee Members: Professors Mark van Roojen (Philosophy), Mark Griep (Chemistry), Patrice McMahon (Political Science), Tom Carr (Modern Languages & Literatures), Nan Lindsley-Griffin (Anthropology & Geography), Martha McCollough (Anthropology & Geography), John Orr (Mathematics), Robert Gorman (Classics & Religious Studies), Al Williams (Sociology); Jennifer Edeal (Student Advisory Board representative); Associate Dean Amy Goodburn.

Item IV. Recommendation from the College Curriculum Committee to approve Essential Studies courses.

Area C, Human Behavior, Culture, and Social Organization
CEHS 200 Families, Schools, and Communities (3 cr)

Area F, Humanities
PHIL 345 Modern European Jewish Philosophy (JUDS 345) (3 cr)

Area H, Race, Ethnicity and Gender
ARCH 347 African Architecture (EHTN 347/AHIS 366) (3 cr)

Item V. Recommendation from the College Curriculum Committee to approve Integrative Studies courses.

ENGL 278 Introduction to Humanities Computing (3 cr)
HIST 402/802 Sexuality in Nineteenth & Twentieth Century America (3 cr)
FREN 460/860 Francophone Literatures (3 cr)
FREN 461/861 Studies in Francophone Literature and Cultures (3 cr)

Item VI. Recommendation from the College Curriculum Committee to approve the proposed new minor in Archaeology.

Proposed: Archaeology (Minor only)

Chair and Chief Advisor: M. Hoff,

Faculty: Anthanassopoulos, Bleed, Demers, Sanchez, Scott, Wandsnider (Anthropology and Geography); Hoff (Art and Art History); Lynott, Hunt, Noble (NPS-MW AC),

Modern archaeology studies the origins and growth of basic human institutions. It produces results of importance to researchers in many fields and involves the work of diverse academic areas. Recognizing these broad links, the archaeology minor gives students from diverse disciplinary backgrounds the opportunity to learn the approaches of modern archaeology. It allows students to develop academic strengths that will prepare for them advanced training and careers in the array of fields that make use of archaeological data and methods. Anthropology majors may declare an Archaeology Minor only if their major program includes at least 9 credits of 300 or 400 Cultural or Biological Anthropology classes.

Requirements: 18 hours of coursework with at least 6 hours each from Lists A, B, and C below *and* at least two of the departments participating in the minor.

List A

ANTH 232 Introduction to Prehistory (3 cr)
ANTH 432 Archaeological Method and Theory (3 cr)
AHIS 211 Classical Art and Archaeology (3 cr)

List B

ANTH 290 Archaeological Fieldwork (1-6 cr)
ANTH 490 Archaeological Fieldwork (1-6 cr)

List C

ANTH 252 Archaeology of World Civilization (3 cr)
ANTH 433 North American Archaeology (3 cr)
ANTH 434 Introduction to Plains Archaeology (3 cr)
ANTH 436 Ancient Maya (3 cr)
ANTH 438 Topics in Old World Archaeology (3 cr)
ANTH 435 Introduction to Heritage Resource Management (3 cr)
ANTH 487ABDE Analysis of Archaeological Materials (3 cr each)
AHIS 311 Greek Art and Archaeology (3 cr)

AHIS 313 Roman Art and Archaeology (3 cr)
 AHIS 411 Classical Architecture (3 cr)
 CLAS 252 Archaeology of World Civilizations (3 cr)
 CLAS 281 The World of Ancient Greece (3 cr)
 CLAS 320 The Classical World: Archaeology and Texts (3 cr)
 HIST 311 The World of Homer (3 cr)
 HIST 318 (3 cr) The Roman Empire. (3 cr)
 HIST 412 City States in Classical Greece

Justification: In the past generation, archaeology has changed from the study of ancient objects to a synthetic discipline devoted to understanding the human past. The core of the modern discipline is still systematic analysis of the archaeological record - material residues that are a result of all human activities. But where this record was once seen as inherently incomplete and relevant to only aesthetic and material realms, modern archaeologists view material residues as a vital part of human existence that reflects all of human behavior and every aspect of human life. These appreciations have drawn archeologists into diverse analytical and theoretical fields. Traditional archaeological excavation has been augmented by research tools developed in engineering, physics, geography, and geoscience. Archaeologists have refined their own analytical methods and observational skills, and augmented them with techniques as diverse as remote sensing, geographic information systems, and electron microscopy. Beyond such technical expansions, theoretical growth in archaeology and other fields have made consideration of the archaeological record relevant to the study of basic social, intellectual, and mental institutions of the human condition. Modern archaeology has moved from antiquarianism to a broadly relevant academic field.

This expansion has had two implications. First, development of increasingly powerful techniques for studying material reflections of human activities have drawn archaeologists into contact with researchers from all across academe. Indeed, archaeological applications have become a legitimate specialization in a number of fields such as physics, geology, and botany. Second, it has also meant that students and researchers in a range of disciplines have become interested in the results and practice of archaeological research.

Beyond these general developments, creation of a minor in archaeology at UNL justified by three factors:

1. UNL has a strong local archaeology community.
2. There is broad campus and student interest in archaeology.
3. Creation of a minor is parallel with developments in other universities.

1. UNL has a long tradition and strong resources in archaeology. There is a large and well integrated on-campus community of archaeologists and a number of aligned off-campus archaeological agencies. This community can easily support the minor program being proposed here.

Most of the archaeologists on the UNL campus are based in the Department of Anthropology and Geography (Anthanasopoulos, Bleed, Demers, Myers, Sanchez, Scott, and Wandsnider) where archaeology courses are offered as a part of the Anthropology major. M. Hoff, in the H-LCFA, Department of Art and Art History has established an archaeology program within Art and Art History. There is also an archaeology program at the UNL State Museum (Osborn). Through cross appointments, archaeology has also been made an explicit part of the program in Classics and Religious Studies. UNL also has active formal and informal links to the archaeology programs based just off campus in Lincoln. These include the National Park Service, Midwest Archeological Center - with a staff of 15 archaeologists - and the Nebraska State Historical Society archaeology program - with 6 active archaeological researchers. These agencies work with UNL faculty and students. The interdisciplinary work and administrative functions of these agencies mean that they regularly attract student workers and interns who do not arrive with an interest in archaeology or anthropology major. A minor in archaeology will offer these students a means of augmenting their career training and enhancing their professional prospects. It will also support the University's affiliated agencies.

Beyond its size, it is important to emphasize that the UNL archaeological community is active and well integrated. At any given time, in addition to a solid suite of classes, there are a number of research and outreach projects underway. These typically involve groups of students and faculty. UNL archaeologists are active participants in professional functions, indicating that they are familiar with current developments of their field.

Other UNL programs directly support interest in archaeology. Within the History program, Ancient History classes make regular use of archaeological information. The expanding fields of historical archaeology and battlefield archaeology are also bringing archaeologists and historians into regular contact. The recently initiated program in forensic sciences in the School of

Natural Resources may come to involve many archaeological methods. The historic preservation track within Community and Regional Planning specifically addresses archaeological resources.

2. There is very broad student interest in archaeology within UNL. Given the number and range of faculty activities relevant to archaeology this is hardly surprising. Most students interested in archaeology pursue the topic with a major in either Anthropology or Art History. Establishment of a separate archaeology minor will not diminish these programs but may offer students with specific interest in archaeology a means of expanding and highlighting their interest.

The minor will be especially useful to students who discover an interest in archaeology in the course of other majors. It will especially augment majors in Classics or History where the affiliations are clear and well established. Based on existing and emerging faculty interactions, we can expect students in Geography, Regional Planning, Physics, Natural Resources, and Environmental Studies to find it easy and useful to declare an archaeology minor. Recent growth in forensic sciences represents an especially dynamic area of student interest and career growth. A minor in archaeology will offer students in medical and Biological Sciences, Psychology, or Criminal Justice an advantage in seeking admission to a forensic science graduate program.

A number of archaeology classes attract students who are not Anthropology or Art History majors. This is especially true of the service classes, ANTH 232 and AHIS 211 and the residually popular Summer Field School in Archaeology. The success of these classes reflects wide student interest in archaeology. They would also form a solid "on-ramp" for students who wished to complete an archaeology minor.

3. Establishment of an archaeology minor at UNL would be in line with developments at other universities. Most programs continue to offer archaeology training within either an Anthropology, Classics, or Art History program, but formal undergraduate minors have recently been established at a number of universities, including Stanford, Arizona State University, Sweetbriar College, Southern Methodist, Georgetown, Emory, and the University of Minnesota.

Item V. Recommendation from the College Curriculum Committee to approve the proposed new major in Plant Biology.

Proposed: **Plant Biology**

Steering Committee: Professors Lee (agronomy and horticulture), Mackenzie (agronomy and horticulture, biological sciences and plant sciences initiative), Markwell (biochemistry), Osterman (biological sciences), Pappozzi, Chair (agronomy and horticulture), Powers (plant pathology), Schacht (agronomy and horticulture), Wedin (natural resources)

Chief Academic Advisor: Professor Lee (agronomy and horticulture), dlee1@unl.edu

Website: TBA

The plant biology major is designed provides flexible entry for undergraduate students that have an interest in the plant sciences. Once enrolled in the program, students will take a core of classes that will allow them to continue in the plant biology major or allow them to easily transfer to other Life Sciences programs. Students will have the opportunity to interact with the faculty of the Plant Science Initiative as well as the above departments and schools for advising and research opportunities.

Studying plant biology will allow students to explore their knowledge of plants at the: (1) molecular (biotechnology option), (2) cellular and organismal (biological, biochemical/chemical sciences), (3) whole plant/applied physiological (horticulture and agronomy courses), and (4) ecological levels (ecology and management option). Students may select a bachelor of science track through the College of Agricultural Sciences and Natural Resources (see "Plant Biology" on page XX) or a bachelor of science or arts track through the College of Arts and Sciences. Every major must complete a set of core courses that provide breadth in basic sciences. Introduction to Plant Biology should be taken during the first semester in the program. Majors also must complete an emphasis to provide depth in one of the following options: Ecology and Management or Biotechnology.

The plant biology program includes a career experience/internship course (BIOS 395/ AGRO/ RNGE 295/ HORT 395/ NRES 497) which provides the opportunity to gain work experience in an off-campus setting related to a student's academic and career objectives.

A research project initiated by the beginning of the junior year is required. Presentation of this work will be part of the Introduction to Plant Biology course.

Pass/ No Pass. Students majoring in Plant Biology may not take any of the core or option courses required for the major Pass/No Pass except for the Introduction to Plant Biology and Career Experience courses.

Students interested in majoring in plant biology through the College of Arts and Sciences are advised to make an initial appointment with the Chief Academic Advisor who will then assign them to a faculty member in Arts and Sciences.

Program Assessment. To gauge the effectiveness of this program, students will be required to start and maintain an experiential portfolio throughout their program, culminating with a presentation of their research in the Introduction to Plant Biology course.

Requirements for the Major in Plant Biology

The core courses and one of the options must be completed.

Core Courses Hours

BIOS/AGRO/HORT/NRES 110

Introduction to Plant Biology¹

"Introduction to Plant Biology" should be taken during the first semester in the program.

BIOS 395/AGRO/RNGE 295/HORT 395 /NRES 497

Career Experience 1

BIOS 498/AGRO/RNGE 496/HORT 396 or 399/NRES 496 Independent Study/Current Project 1

MATH 106 or 106B Anal. Geometry and Calculus I 5

STAT 218 Introduction to Statistics 3

CHEM 109 General Chemistry I 4

CHEM 110 General Chemistry II 4

CHEM 251 & 253L Organic Chemistry and Lab 4

BIOC 321 & 321L or higher 4

BIOS 102 Cell Structure and Function 4

BIOS 103 Organismic Biology 4

BIOS 109 Botany 4

BIOS 207 Ecology and Evolution 4

AGRO 315 or BIOS 206 Genetics 4

AGRO 325 Introductory Plant Physiology 4

BIOS 471 Plant Taxonomy 4

ALEC388 Ethics in Agriculture and Natural Resources (3 cr)

In the course of satisfying the College of Arts and Sciences ES requirements, students are encouraged to include a course in Economics, and courses which will further enhance their oral communication skills. See your adviser to determine which course or courses may be best for you.

Students interested in attending graduate school should also take PHYS 141 or higher.

Ecology and Management Option

AGRO 153 Soil Resources (4 cr)

AGRO 444 Vegetation Analysis (3 cr)

In addition, students must take at least 3 credits from each of the following six categories (Water/Climate, Geospatial Information Sciences, Plant Identification, Plant-Animal-Organismal Interactions, Ecology and Management I and Ecology and Management II).

Water/Climate

METR 200 Weather and Climate (3 cr)

NRES 208 Introduction to Bio-Atmospheric Resources (3 cr)
WATS 281 Introduction to Water Science (3 cr)
NRES 408 Microclimate: The Biological Environment (3 cr)

Geospatial Information Sciences

NRES 312 Introduction to Geospatial Information Sciences (3 cr)
GEOG 412 Introduction to Geographic Information (4 cr)
GEOG 418 Introduction to Remote Sensing (4 cr)

Plant Identification

AGRO 442 Wildland Plants (3 cr)
BIOS 455 Great Plains Flora (4 cr)

Plant-Animal-Organismal Interactions

ENTO 115 Insect Biology (2 cr) and ENTO 116 Insect ID (1 cr)
NRES 211 Wildlife Biology and Conservation (3 cr)
NRES 311 Wildlife Ecology and Management (3 cr)
AGRO 340 Range Management and Improvement (3 cr)
NRES 348 Wildlife Damage Management (3 cr)
AGRO 460 Soil Microbiology (3 cr)
BIOS 474 Ornithology (3 cr)
BIOS 476 Mammalogy (3 cr)

Ecology and Management I

HORT 130 Introduction to Horticulture (4 cr)
AGRO 204 Resource-Efficient Crop Management (3 cr)
AGRO 240 Forage Crop and Range Management (4 cr)
NRES 310 Introduction to Forest Management (4 cr)

Ecology and Management II

NRES 424 Forest Ecology (4 cr)
AGRO 440 Great Plains Ecosystem (3 cr)
BIOS 454 Ecological Interactions (4 cr)
BIOS 457 Ecosystem Ecology (4 cr)
NRES 417 Agroforestry systems in sustainable agriculture
NRES 459 Limnology (4 cr)
NRES 468 Wetlands (4 cr)
BIOS 470 Prairie Ecology (4 cr)
BIOS 473 Freshwater Algae (4 cr)

Biotechnology Option

AGRI 150. Biotechnology: Food Health and Environment or PLPT 250 Biotechnology: From Science to Society (3 cr)
AGRO 216 Plant Breeding Principles and Practice (2 cr)
BIOS 312 Fundamentals of Microbiology (3 cr)
BIOS 427 Practical Bioinformatics Laboratory (3 cr)
(Students considering graduate school should also take BIOS 478 Plant Anatomy (4 cr))

In addition, students must take at least 2 credits from each of the following four categories (Biological Sciences, Plant Biology, Applied Plant Biology and Plant and Food System Management) for a total of 15 hours or more.

Biological Sciences

AGRO 460 Soil Microbiology (3 cr)
BIOS 205 Genetics, Molecular and Cellular Biology lab (2 cr)
BIOS 401 Advanced Cell Structure and Function (3cr)
BIOS 407 Biology of Cells and Organelles (4 cr)
BIOS 418 Advanced Genetics (3 cr)
BIOS 420 Molecular Genetics (3 cr)
BIOS 477 Bioinformatics and Molecular Evolution
(3 cr)

Plant Biology

AGRO 408 Microclimatology (3 cr)
BIOS 425 Plant Biotechnology (3 cr)
HORT 221 Plant Propagation (3 cr)
PLPT 369 Introduction of Plant Pathology (3 cr)
NRES//HORT/AGRO 406 Plant Ecophysiology: Theory and Practice (4 cr)

Applied Plant Biology

AGRO 131 & 132 Introduction to Plant Science
or HORT 130 Introduction to Horticultural Science (4 cr)
AGRO 411 Crop Genetic Engineering (1 cr)
AGRO 412 Crop and Weed Genetics (1 cr)

Plant and Food System Management

AGRO 204 Resource Efficient Crop Management (3 cr)
AGRO 220 Principles of Weed Science (3 cr)
AGRO 240 Range and Pasture
or HORT 327 Turf Management (3-4 cr)
AGRO 437& 438 End Uses of Grain and Production of Grain for Specialty Uses (2 cr)
AGRO 405 Crop Management Strategies
or AGRO 435 Agroecology (3 cr)
ENTO 115 Insect Biology (2 cr) and ENTO 116 Insect ID (1cr)
FDST 205 Food Composition and Analysis (3 cr)
FDST 405, 406 Food Microbiology and Laboratory (5 cr)
FDST 425 Food Toxicology (2 cr)
HORT 260 Cut Flower, Perennial, Pot and Bedding Plant Production (3 cr)
HORT 362 Nursery Management and Crop Production (4 cr)
HORT 325 Greenhouse Management (4 cr)
HORT 425 Turfgrass Sciences and Culture (3 cr)
HORT 470 Landscape Management (3 cr)

Justification: The Plant Biology program is a latent outgrowth of the Life Sciences Task Force report (1997). This program focuses on plants and is a combination of the strengths of basic biology, the Plant Science Initiative and agriculture. The proposal is currently on its way to or actually at the Academic Planning committee. The transmittal process has been through CASNR, but Dr. John Osterman and Dr. Alan Christensen (School of Biological Sciences) have been part of the development process. As a main part of this program consists of biological science courses and many of the required courses are the core of the Biological Sciences major, it is felt that undergraduate students should have the option to follow this program of study through either CASNR or Arts & Sciences.

Item VI. Opportunity to ask questions of the Dean.