To be adopted:

Proposed Changes to the B.A. and B.S. Degrees in Botany and Plant Sciences

PRESENT:

Major Requirements

The major requirements for the B.S. and B.A. degrees in Botany and Plant Sciences are as follows:

1. Life Sciences core requirements (65-68 units)
   Students must complete all required courses with a grade of C- or better and with a cumulative GPA in the core courses of at least 2.0. Grades of D or F in two core courses, either separate courses or repetitions of the same course, are grounds for discontinuation from the major.
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 112A, CHEM112B, CHEM 112C
   c) MATH 009A, MATH 009B (MATH 009C recommended)
   d) PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC
   e) STAT 100A or STAT 105 or STAT 120A (STAT 120A is strongly recommended)
   f) BCH 100 or BCH 110A (BCH 110A is strongly recommended)
   Note for the B.S. degree, courses in Statistics and Biochemistry taken as part of the core may count toward the 24 units from an area of specialization. For the B.A. degree, courses in Statistics and Biochemistry taken as part of the core may not count toward the 16 units required from an area of specialization.

2. Upper-division requirements (36-52 units)
   A GPA of at least 2.0 in upper-division courses taken in the field of the major is a graduation requirement. A student is subject to

PROPOSED:

Major Requirements

[no change]

1. Life Sciences core requirements (68-72 units)
   Students must complete all required courses with a grade of C- or better and with a cumulative GPA in the core courses of at least 2.0. Grades of D or F in two core courses, either separate courses or repetitions of the same course, are grounds for discontinuation from the major.
   a) [no change]
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 011A, CHEM 011B, CHEM 011C, CHEM 112A, CHEM 112B, CHEM 112C
   c) MATH 008B or MATH 009A, MATH 009B (MATH 009C recommended)
   d) [no change]
   e) STAT 100A or STAT 105
   f) [no change]

2. Upper-division requirements (37-52 units)
   A GPA of at least 2.0 in upper-division courses taken in the field of the major is a graduation requirement. A student is subject to
discontinuation from the major whenever the GPA in upper-division course work is below 2.0. Students finding themselves in this circumstance must meet with an advisor.

a) BIOL 102
b) BPSC 104/BIOL 104
c) Three courses from the following: BIOL 107A, BPSC 132/BIOL 132, BPSC 135, BPSC 138/BIOL 138, BPSC 143/BIOL 143, BPSC 146

d) For the B.S. 24 units from one of the four areas of specialization (consult with a faculty advisor) and additional upper-division courses in biological sciences and related areas from any of the areas of specialization lists, and students may apply a maximum of 6 units of BPSC 190 and/or BPSC 197 and/or BPSC 198-I to bring total units to 52.

For the B.A. 16 units from one of the four areas of specialization (consult with a faculty advisor) and 2 units of BPSC 197.

Note: Students planning a B.A. degree should schedule the required language courses in place of a series of electives.

Areas of Specialization

Individual student career goals may be achieved by selecting an area of specialization within the diverse disciplines of botany and plant sciences. Adjustments within these programs can be made to accommodate students’ interests. Students must consult with a faculty advisor to clarify educational goals and to plan a program of study.

1. Plant Cellular, Molecular, and Developmental Biology (Genetics, Biotechnology)

   BCH 102, BCH 110A, BCH 110B, BCH 110C or BIOL 107A, BCH 162, BCH 183, BCH 184, BIOL 105, BIOL 107B, BIOL 108, BIOL 115, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L, BIOL 124/MCBL 124, BPSC 135, BPSC 148/BIOL 148, BPSC 150,
BPSC 153/BCH 153/BIOL 153 or BIOL 109, 
BPSC 155/BIOL 155, BPSC 185/BCH 185, 
CBNS 101, CBNS 128/BIOL 128, CBNS 
150/ENTX 150, CHEM 109, ENTM 100/BIOL 
100, ENTM 112/BIOL 112/PSCI 112, ENSC 
100/SWSC 100, ENSC 120/NEM 120/SWSC 
120, NEM 159/BIOL 159, PLPA 120/BIOL 
120/MCBL 120, PLPA 134/BIOL 134, PLPA 
134L/BIOL 134L, STAT 120A, STAT 120B 
BPSC 153/BCH 153/BIOL 153 or BIOL 109, 
BPSC 155/BIOL 155, CBNS 101, CBNS 108, 
CBNS 128/BIOL 128, CBNS 150/ENTX 150, 
CHEM 109, ENTM 100/BIOL 100, ENTM 
112/BIOL 112/PSCI 112, ENSC 100/SWSC 
100, ENSC 120/NEM 120/SWSC 120, NEM 
159/BIOL 159, PLPA 120/BIOL 120/MCBL 
120, PLPA 134/BIOL 134, PLPA 134L/BIOL 
134L 

2. Organismal Botany and Plant Sciences 
(Anatomy, Biochemistry, Development, 
Morphology, Physiology, Horticulture, 
Agronomy, Botany)

BCH 102, BCH 183, BIOL 107A, BIOL 107B, 
BIOL 121/MCBL 121, BIOL 121L/MCBL 
121L, BIOL 124/MCBL 124, BPSC 135, 
BPSC 150, BPSC 153/BCH 153/BIOL 153 or 
BIOL 109, BPSC 155/BIOL 155, BPSC 158, 
BPSC 166, BPSC 185/BCH 185, CBNS 101, 
CHEM 109, ENSC 100/SWSC 100, NEM 
159/BIOL 159, PLPA 120/BIOL 120/MCBL 
120, PLPA 120L/BIOL 120L/MCBL 120L, 
PLPA 123/BIOL 123/MCBL 123, PLPA 
134/BIOL 134, PLPA 134L/BIOL 134L, 
STAT 120A, STAT 120B, SWSC 104/ENSC 
104, SWSC 134/BPSC 134/ENSC 134

3. Ecology, Evolution, and Systematics 
(Agriculture and Natural Resources, 
Agroecology, Ethnobotany, Population 
Biology, Taxonomy)

ANTH 110, ANTH 111, ANTH 129, BCH 
102, BCH 183, BIOL 105, BIOL 108, BIOL 
116, BIOL 116L, BIOL 116M/BPSC 116M, 
BIOL 117 or ENTM 127/BIOL 127, BPSC 
146, BPSC 150, BPSC 158, BPSC 165/BIOL 
165, BPSC 166, BPSC 170/ANTH 170, ENTM 
112/BIOL 112/PSCI 112, ENSC 100/SWSC 
100, GEO 151, NEM 159/BIOL 159, PLPA 
120/BIOL 120/MCBL 120, PLPA 120L/BIOL 
120L/MCBL 120L, PLPA 134/BIOL 134, 
PLPA 134L/BIOL 134L, STAT 120A, STAT 
120B, SWSC 104/ENSC 104, SWSC 
134/BPSC 134/ENSC 134

4. Pest Management, Plant Pathology, and 
Nematology 

[no change]
BCH 183, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L, BPSC 146, BPSC 150, BPSC 158, BPSC 166, ENTM 100/BIOL 100, ENTM 129, ENTM 129L, ENSC 100/SWSC 100, ENSC 120/NEM 120/SWSC 120, NEM 159/BIOL 159, PLPA 120/BIOL 120/MCBL 120, PLPA 120L/BIOL 120L/MCBL 120L, PLPA 123/BIOL 123/MCBL 123, PLPA 134/BIOL 134, PLPA 134L/BIOL 134L, STAT 120A, STAT 120B, SWSC 104/ENSC 104

JUSTIFICATIONS:

1. The units have been changed to 68-72 to reflect the increase in units caused by the inclusion of the new Chemistry 1 laboratories and the unit difference between MATH 008B and MATH 009A.

1. b) The inclusion of CHEM 01LA, CHEM 01LB, CHEM 01LC reflects the Chemistry Department’s separation of the lecture and laboratory components of the CHEM 1 series.

1. c) The inclusion of MATH 008B is prompted by the Mathematics Department’s creation of several new courses in response to the deletion of MATH 003. UCR’s math placement exam will assign students to MATH 005 or MATH 008A or MATH 9A. Students who place into and successfully complete MATH 008A will continue into MATH 008B which covers trigonometry and the equivalent of MATH 009A subject matter. Completion of MATH 008B meets the prerequisite to continue into MATH 009B.

1. e) STAT 120A, STAT 120B are removed because they are no longer offered.

2. The units have been corrected.

2. c) BPSC 133, Taxonomy of Flowering Plants, is a new course we wish to include in this category.

2. d) The requirement for two units of undergraduate research was inadvertently dropped for the B.S. when a new catalog format was adopted for the 2001-2002 catalog. We want to correct that error. BPSC 198I, Individual Internship, and BPSC 195H, Senior Honor Thesis, are courses we wish to include as options available to our students.

PRESENT 2. d) Revised to 2. e)

PROPOSED 2. e) We wish to include new course BPSC 195H, Senior Honor Research, as an option.

For the B.A. Deleted is and 2 units of BPSC 197" because it is redundant.

Areas of Specialization:

1. BPSC 185/BCH 185 is removed because it has been deleted effective Summer 2006. We wish to include CBNS 108, Intro to Developmental Biology, because it is an appropriate course for this area. STAT 120A, STAT 120B are removed because they are no longer offered.
2. BPSC 185/BCH 185 is removed because it has been deleted effective Summer 2006. We wish to include BPSC 133 (Taxonomy of Flowering Plants) and CBNS 108 (Intro to Developmental Biology) because they are appropriate courses for this area. STAT 120A, STAT 120B are removed because they are no longer offered.

3. BIOL 116M/BPSC 116M is removed because it has been deleted effective Summer 2006. We wish to include BIOL 164A, BIOL 164B, BIOL 164C (Integrated Methods in Landscape Ecology), and BPSC 133, Taxonomy of Flowering Plants, because they are appropriate courses for this area. STAT 120A, STAT 120B are removed because they are no longer offered.

4. We wish to include BPSC 133, Taxonomy of Flowering Plants, because it is an appropriate course for this area. STAT 120A, STAT 120B are removed because they are no longer offered.

APPROVALS:

Approved by the faculty of the Department of Botany and Plant Sciences: April 17, 2006
Approved by the CNAS Executive Committee: April 18, 2006
Approved by the Committee on Educational Policy: May 2, 2006