To be Adopted:

Proposed Changes in Course Requirements for the Bachelor of Arts and Bachelor of Science Degrees in Botany and Plant Sciences

Present

MAJOR REQUIREMENTS
The major requirements for the B.A. and B.S. degrees in Botany/Plant Science are as follows:

For the Bachelor of Arts

1. Life Sciences Core Curriculum (53-56 units)
   a) BIOL 005A, BIOL 005B, BIOL 005C
   b) PHYS 002A-PHYS 002B-PHYS 002C, PHYS 02LA-PHYS 02LB-PHYS 02LC
   c) CHEM 001A-CHEM 001B-CHEM 001C
   d) MATH 009A-MATH 009B (MATH 009C recommended)
   e) STAT 020 or STAT 100A or STAT 105 or STAT 120A (STAT 120A strongly recommended)
   f) BCH 100 or BCH 110A (BCH 110A strongly recommended)

2. Upper-division requirements (51 units)
   a) CHEM 112A-CHEM 112B-CHEM 112C
   b) BIOL 102
   c) BPSC 130/BIOL 130, BPSC 132/BIOL 132, BPSC 138/BIOL 138, BPSC 143/BIOL 143
   d) Two (2) units of BPSC 197 (Research for Undergraduates)
   e) Sixteen (16) units in one program of specialization (consult with a faculty advisor)

Proposed

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 005B, BIOL 005C
   b) CHEM 001A-CHEM 001B-CHEM 001C, CHEM 112A-CHEM 112B-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 strongly recommended)
   f) BCH 100 or BCH 110A (BCH 110A strongly recommended)

NOTE: For the B.S. degree, courses in Statistics and Biochemistry taken as part of the core may count towards 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 towards the 16 units required from an area of specialization.

2. Upper-division Requirements (36-52 units)
   A grade point average 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 130/BIOL 130
   c) Three courses from the following: BIOL...
For the Bachelor of Science
1. Life Sciences Core Curriculum (53-56 units) (same as for the B.A. degree)
2. Upper-division requirements include the requirements for the B.A. and, in addition, 16 units in upper-division courses or substantive lower-division courses in one or more fields related to the major.

Programs of Specialization
Individual student career goals may be achieved by selection of a program of specialization within the diverse disciplines of botany and plant science. 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. Suggested programs of specialization within the Botany/Plant Sciences major are shown below. Students should select 16 additional units from among the courses listed.

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

2. Organismal Botany/Plant Sciences (Anatomy, Developmental Biology (Genetics, Biotechnology):
   BCH 102, BCH 110A, BCH 110B, BCH 110C or BIOL 107A, BCH 162, BCH 183, CHEM 109, ENTM 100/BIOl 100, ENTM 112/BIOl 112/BPSC 112, ENSC 100, ENSC 100L, NEM 120, NEM 159/BIOl 159, PLPA 120/BIOl 120/MCBL 120, PLPA 134/BIOl 134, PLPA 134L/BIOl 134L, STAT 120A, STAT 120B, SWSC 100L

Areas of Specialization
Individual student career goals may be achieved by selection of 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.

4. For the Bachelor of Science:
   Twenty-four (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 specializations listed, and students may apply a maximum of six units of BPSC 190 and/or BPSC 197 (alone or in combination) to bring total units to 52.

For the Bachelor of Arts:
Sixteen (16) units from one of the four areas of specialization (consult with a faculty advisor), and two (2) units of BPSC 197 (Research for Undergraduates)

NOTE: Students planning a B.A. degree should schedule the required language courses in place of a series of electives.
Biochemistry, Development, Morphology, Physiology, Systematics, Taxonomy:
BPSC 103, BPSC 134/ENSC 134/SWSC 134,
BPSC 135, BPSC 144, BPSC 153/BCH 153/BIOI 153 or BIOI 159, BPSC 155/BIOI 155, BPSC 185/BCH 185, BCH 102, BCH 183, BIOI 107A, BIOI 107B, BIOI 111, BIOI 120/MCBL 120/PLPA 120, BIOI 120L/MCBL 120L, BIOI 121B/MCBL 121B, BIOI 121L/MCBL 121L, BIOI 123/PLPA 123, BIOI 134/PLPA 134, BIOI 134L/PLPA 134L, BIOI 159/NEM 159, ENSC 100, ENSC 100L, STAT 120A-STAT 120B, SWSC 100L, SWSC 111

3. Ecology, Agriculture, and Natural Resources
(Population Biology, Ecology, Evolution, Agroecology, Horticulture):
BPSC 102, BPSC 103, BPSC 122/BIOL 142, BPSC 134/ENSC 134/SWSC 134, BPSC 146, BPSC 150, BPSC 170/ANTH 170, BCH 102, BCH 183, BIOI 105, BIOI 108, BIOI 117 or BIOI 127/ENTM 127, BIOI 118, BIOI 120/MCBL 120/PLPA 120, BIOI 120L/MCBL 120L, BIOI 123/PLPA 123, BIOI 134/PLPA 134, BIOI 134L/PLPA 134L, BIOI 159/NEM 159, ENSC 100, ENSC 100L, ENSC 104/SWSC 104, STAT 120A-STAT 120B, SWSC 100L, SWSC 111, SWSC 124

4. Pest Management, Plant Pathology, and Nematology:
BPSC 102, BPSC 103, BPSC 146, BPSC 150, BCH 183, BIOI 120/MCBL 120/PLPA 120, BIOI 120L/MCBL 120L/PLPA 120L, BIOI 121A/MCBL 121A, BIOI 121B/MCBL 121B, BIOI 121L/MCBL 121L, BIOI 127/ENTM 127, BIOI 134/PLPA 134, BIOI 134L/PLPA 134L, BIOI 159/NEM 159, ENSC 100, ENSC 100L, ENTM 124, ENTM 129, ENTM 129L, NEM 120, SWSC 100L

Students planning a B.A. degree should schedule the required language courses in place of a series of electives. For the B.S. degree the electives must include 16 units of upper-division or substantive lower-division courses in a field or fields related to the major.
JUSTIFICATION

In keeping with the reorganization of the biological sciences curricula in the College and the formation of the Biological Sciences major in which the Department of Botany and Plant Sciences has a track, the faculty of the Department have reviewed and revised both the Plant Biology track in the Biological Sciences major and the Botany and Plant Sciences major. We revised the upper-division core requirements in both programs to better reflect the diversity of the discipline of plant biology.

The Botany and Plant Sciences major requirements are being revised to bring them in line with those imposed on the Plant Biology track as part of the Biological Sciences major.

Effective: Fall 2001

Approved by the Botany and Plant Sciences Faculty: January 8, 2001
Reviewed and Approved by CNAS Executive Committee: January 31, 2001
Reviewed and Approved by the Committee on Educational Policy: March 6, 2001