To be Adopted:

Proposed Changes in Course Requirements for the Bachelor Science Degree in Biological Sciences

Present

MAJOR REQUIREMENTS

Some of the following requirements for the major may also fulfill the College’s breadth requirements. Consult with a department advisor for program planning.

The major requirements for the B.S. in Biological Sciences are as follows:

1. Biological Sciences core requirements (65-69 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
   d) PHYS 002A-PHYS 002B-PHYS 002C, PHYS 02LA-PHYS 02LB-PHYS 02LC
   e) STAT 020 or STAT 100A or STAT 105
   f) BCH 100 or BCH 110A

2. As specified in the individual tracks, at least 36 upper division units for the major and 16 units of substantive course work related to the major. Courses in Statistics and Biochemistry taken as part of the core may be included.

   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.

Plant Biology Track

Notes: (1) BCH 110A is strongly recommended, (2) STAT 120A is strongly recommended.

1. Upper-division core requirements
   a) BIOL 102
   b) BPSC 130/Biol 130, BPSC 132/Biol 132, BPSC 138/Biol 138, BPSC 143/Biol 143

Proposed

MAJOR REQUIREMENTS

Some of the following requirements for the major may also fulfill the College’s breadth requirements. Consult with a department advisor for program planning.

The major requirements for the B.S. in Biological Sciences are as follows:

1. Biological 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
   d) PHYS 002A-PHYS 002B-PHYS 002C, PHYS 02LA-PHYS 02LB-PHYS 02LC
   e) STAT 100A or STAT 120A or STAT 120A
   f) BCH 100 or BCH 110A

2. As specified in the individual tracks, at least 36 upper division units for the major and 16 units of substantive course work related to the major. Courses in Statistics and Biochemistry taken as part of the core may be included.

   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.

Plant Biology Track

Notes: (1) BCH 110A is strongly recommended, (2) STAT 120A is strongly recommended.

1. Upper-division core requirements
   a) BIOL 102
   b) BPSC 130/Biol 130
   c) Three courses from the following: BIOL 107A, BPSC 132/Biol 132, BPSC 135,
2. Additional upper-division requirements
   (24 units must come from one of the following
   four areas of specialization)
   a) Plant Cellular, Molecular, and
      Developmental Biology (Genetics,
      Biotechnology)
      BCH 102, BCH 110B-BCH 110C or BIOL
      107A, BCH 162, BCH 183, BCH 184,
      BIOL 105, **BCH 107A**, BIOL 107B, BIOL
      108, BIOL 111, BIOL 115, BIOL
      121A/MCBL 121A, BIOL 121B/MCBL
      121B, BIOL 121L/MCBL 121L, BIOL
      128/NRSC 128, BIOL 150/ENTX 150,
      BPSC 135, BPSC 144, BPSC 148, BPSC
      150, BPSC 153/BCH 153/BIOL 153 or
      BIOL 109, BPSC 155/BIOL 155, BPSC
      185/BCH 185, 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 120B, SWSC 100L

   b) Organismal Botany and Plant Sciences
      (Anatomy, Biochemistry, Development,
      Morphology, Physiology, Horticulture,
      Agronomy, Botany)
      BCH 102, BCH 183, BIOL 107A, BIOL
      107B, BIOL 111, BIOL 121A/MCBL 121A,
      BIOL 121B/MCBL 121B, BIOL
      121L/MCBL 121L, BPSC 102, BPSC 103,
      BPSC 135, BPSC 144, BPSC 153/BCH
      153/BIOl 153 or BIOl 109, BPSC
      155/BIOl 155, BPSC 185/BCH 185,
      CHEM 109, ENSC 100, ENSC 100L, 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 120B,
      SWSC 100L, SWSC 104/ENSC 104, SWSC
      111, SWSC 124, SWSC 134/BPSC
      134/ENSC 134

   c) 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
      117 or ENTM 127/BIOl 127, BIOl 118,
      BPSC 102, BPSC 103, BPSC 122/BIOl
      142, BPSC 144, BPSC 146, BPSC

2. Additional upper-division requirements
   (24 units must come from one of the following
   four areas of specialization)
   a) 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, BCH 107A, BIOL 107B, BIOL
      108, BIOL 111, BIOL 115, BIOL
      121A/MCBL 121A, BIOL 121B/MCBL
      121B, BIOL 121L/MCBL 121L, BIOL
      128/NRSC 128, BIOL 150/ENTX 150,
      BPSC 135, BPSC 144, BPSC 148, BPSC
      150, BPSC 153/BCH 153/BIOL 153 or
      BIOL 109, BPSC 155/BIOL 155, BPSC
      185/BCH 185, 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

b) Organismal Botany and Plant Sciences
   (Anatomy, Biochemistry, Development,
   Morphology, Physiology, Horticulture,
   Agronomy, Botany)
   BCH 102, BCH 183, BIOL 107A, BIOL
   107B, BIOL 111, BIOL 121A/MCBL 121A,
   BIOL 121B/MCBL 121B, BIOL
   121L/MCBL 121L, BPSC 102, BPSC 103,
   BPSC 135, BPSC 144, BPSC 153/BCH
   153/BIOl 153 or BIOl 109, BPSC
   155/BIOl 155, BPSC 185/BCH 185,
   CHEM 109, ENSC 100, ENSC 100L, 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 120B,
   SWSC 100L, SWSC 104/ENSC 104, SWSC
   111, SWSC 124, SWSC 134/BPSC
   134/ENSC 134

   c) 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
      117 or ENTM 127/BIOl 127, BIOl 118,
      BPSC 102, BPSC 103, BPSC 122/BIOl
      142, BPSC 144, BPSC 146, BPSC
      170/ANTH 170, ENTM 112/BIOl
170/ANTH 170, ENTM 112/BIOL
112/BPSC 112, ENSC 100, ENSC 100L,
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 120B, SWSC 100L, SWSC
104/ENSC 104, SWSC 111, SWSC 124,
SWSC 134/BPSC 134/ENSC 134
d) Pest Management, Plant Pathology, and
Nematology
BCH 183, BIOL 121A/MCBL 121A, BIOL
121B/MCBL 121B, BIOL 121L/MCBL
121L, BPSC 102, BPSC 103, BPSC 146,
BPSC 150, ENTM 100/BIOL 100, ENTM
109, ENTM 124, ENTM 127/BIOL 127,
ENTM 129, ENTM 129L, ENSC 100,
ENSC 100L, NEM 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 120B, SWSC 100L, SWSC
104/ENSC 104, SWSC 111
3. Additional upper-division courses in biological
sciences and related areas from any of the above
lists, 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.

JUSTIFICATION
1. Deletion of STAT 020, Statistics for the Life Sciences (2 units): This course does not provide adequate
preparation in statistics for students majoring in Biological Sciences.
   Inclusion of STAT 120A, Experimental Techniques for Biologists (4 units): This course is an in-depth
course for upper division students. It is included as an additional option to satisfy the core requirement and
facilitate the scheduling demands of students.
2. 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

Reviewed and approved by the Committee in Charge of the Biological Sciences Major: March 22, 2000
Reviewed and approved by the Committee in Charge of the Plant Biology Track: January 8, 2001
Reviewed and approved by the CNAS Executive Committee: January 31, 2001
Reviewed and approved by the Committee on Educational Policy: March 5, 2001