

**PROCEDURAL SEQUENCE FOR ACADEMIC SENATE APPROVAL OF PROPOSALS**

1. Submit all proposals to the Office of Academic Affairs.
2. The Senate President will log items and forward them to the appropriate Senate subcommittees.
3. The Senate subcommittee will send the proposal to the Senate.
4. Senate proposals will be considered by the Full Faculty.
5. If approved, the proposal will then be forwarded to the Provost/Senior Vice Chancellor.

Proposals that require action to approve/disapprove/table or remand will be sent back to the Senate according to the monthly meeting schedule.

TITLE: A proposal to revise the B. S. in Biology Degree Program.

SUBCOMMITTEE: Curriculum PROPOSAL #: 00-32

**PROPOSAL:**

This is a proposal for a program revision as mandated by recent Board of Regents action. A key principal of this revision is adoption of a common core of courses for both a non-teaching Biology degree and the General Science Education degree. That core consists of the following courses:

- BIOL 140 Cell Biology
- BIOL 141 Cell Biology Lab
- BIOL 221 Botany I
- BIOL 222 Botany I Laboratory
- BIOL 348 Zoology
- BIOL 350 Zoology Laboratory
- CHEM 121 General Inorganic Chemistry I
- CHEM 122 General Inorganic Chemistry II
- CHEM 123 General Inorganic Chemistry I Laboratory
- CHEM 124 General Inorganic Chemistry II Laboratory
- PHYS 231 Fundamentals of Physics I
- PHYS 232 Fundamentals of Physics II
- PHYS 234 Fundamentals of Physics I Laboratory
- PHYS 235 Fundamentals of Physics II Laboratory

**Action Signatures:**

Roger Barber 12-1-2000  
 Submitter Date

Will Rorer Ed Groves  
 College Chair/Dean Date

Thomas M. Welch C.C.  
 Committee Chair

Approve  Disapprove  Date 03/06/01

Terence E. Munson  
 Committee Chair Acad Senate

Approve  Disapprove  Date 3-20-01

Terence E. Munson  
 Faculty Senate President

Approve  Disapprove  Date 3-27-01

Roger Barber  
 Provost/Senior Vice Chancellor for Academic Affairs

Approve  Disapprove  Date 4/11/01

Revised: 11/15/99  
[Signature]  
 Chancellor

approve  disapprove  11/3/01  
 date

### Program Revision Form

NEW \_\_\_\_\_ DROPPED \_\_\_\_\_ MAJOR REVISION X INFORMATION ONLY \_\_\_\_\_

Department Arts + Sciences Program Area B.S. in Biology Date 11-29-00

Please provide in the space below a "before and after" picture of the program with the changes in the program noted. Attached appropriate Course Revision Forms.

**Current**

Fundamental Skill Requirements 15 - 16 credits

General Education Requirements 24 credits  
(distribution requirements)

**Required Courses:**

- BIOL 140 Cell Biology 4
- BIOL 141 Cell Biology Lab 1
- BIOL 217 Microbiology 4
- BIOL 221 Botany I 3
- BIOL 222 Botany I Lab 2
- BIOL 322 Botany II 4
- BIOL 348 Zoology 3
- BIOL 350 Zoology Lab 2
- BIOL 406 Molecular Biology Techniques 3
- BIOL 407 Freshwater Biology 3
- BIOL 455 Phycology 3
- BIOL 460 Advanced Microbiology 3
- BIOL 468 Molecular Biology & Genetics 4
- CHEM 121 General Inorganic Chem I 3
- CHEM 123 General Inorganic Chem I Lab 2
- CHEM 122 General Inorganic Chem II 3
- CHEM 124 General Inorganic Chem II Lab 2
- CHEM 330 Biochemistry I 3
- CHEM 331 Biochemistry II 3
- CHEM 341 Organic Chemistry I 3
- CHEM 343 Organic Chemistry I Lab 2
- MATH 116 Statistics 3
- MATH 125 Trigonometry 2
- NSCI 201 Essence of Science 3
- NSCI 450 Undergraduate Research I 3
- NSCI 451 Undergraduate Research II 3

**Program Selectives (18 credits)**

- BIOL 241 Anatomy and Physiology I 4
- BIOL 242 Anatomy and Physiology II 4
- BIOL 314 General Ecology 3
- BIOL 324 Entomology 3
- BIOL 334 Ornithology 3
- FOSL 210 Intro to Paleontology 3
- TSCI 320 Environmental Analytical Techn 2

**Suggested Course if grad school is contemplated:**

- MATH 220 Calculus & Analytical Geo. I 5
- MATH 221 Calculus & Analytical Geo. II 5
- PHYS 231 Fundamentals of Physics I 4
- PHYS 232 Fundamentals of Physics II 4
- CHEM 342 Organic Chemistry II 3
- CHEM 344 Organic Chemistry II Lab 2

**Proposed**

Fundamental Skill Requirements 15 credits

General Education Requirements 18 credits  
(distribution requirements)

**Common Science Core (35 credits):**

- BIOL 140 Cell Biology 4
- BIOL 141 Cell Biology Lab 1
- BIOL 221 Botany I 3
- BIOL 222 Botany I Lab 2
- BIOL 348 Zoology 3
- BIOL 350 Zoology Lab 2
- CHEM 121 General Inorganic Chem I 3
- CHEM 122 General Inorganic Chem II 3
- CHEM 123 General Inorganic Chem I Lab 2
- CHEM 124 General Inorganic Chem II Lab 2
- PHYS 231 Fundamentals of Physics I 3
- PHYS 232 Fundamentals of Physics II 3
- PHYS 234 Fundamentals of Physics I Lab 2
- PHYS 235 Fundamentals of Physics II Lab 2

**Required Program Course (22 credits)**

- BIOL 314 General Ecology 4
- BIOL 468 Molecular Biology & Genetics 4
- CHEM 341 Organic Chemistry I 3
- CHEM 342 Organic Chemistry I Lab 2
- MATH 116 Statistics 3
- NSCI 201 Essence of Science 3
- NSCI 450 Undergraduate Research I 3

**Program Selectives (13 credits)**

- BIOL 322 Botany II 4
- BIOL 324 Entomology 3
- BIOL 334 Ornithology 3
- BIOL 363 Lentic Ecology 3
- BIOL 364 Stream Ecology 3
- BIOL 455 Phycology 3
- ~~BIOL 324 Entomology 3~~
- ~~BIOL 334 Ornithology 3~~
- ~~BIOL 363 Lentic Ecology 3~~
- ~~BIOL 364 Stream Ecology 3~~
- ~~BIOL 455 Phycology 3~~
- ~~BIOL 314 General Ecology 4~~
- ~~BIOL 468 Molecular Biology & Genetics 4~~
- ~~CHEM 341 Organic Chemistry I 3~~
- ~~CHEM 342 Organic Chemistry I Lab 2~~
- ~~MATH 116 Statistics 3~~
- ~~NSCI 201 Essence of Science 3~~
- ~~NSCI 450 Undergraduate Research I 3~~

**Program Selectives (13 credits)**

- ~~BIOL 322 Botany II 4~~
- ~~BIOL 324 Entomology 3~~
- ~~BIOL 334 Ornithology 3~~
- ~~BIOL 363 Lentic Ecology 3~~
- ~~BIOL 364 Stream Ecology 3~~
- ~~BIOL 455 Phycology 3~~

*Handwritten notes on the right side of the page:*

- Drop BIOL 222
- Drop BIOL 322
- Drop BIOL 348
- Drop BIOL 350
- Drop CHEM 121
- Drop CHEM 122
- Drop CHEM 123
- Drop CHEM 124
- Drop PHYS 231
- Drop PHYS 232
- Drop PHYS 234
- Drop PHYS 235
- Drop BIOL 314
- Drop BIOL 468
- Drop CHEM 341
- Drop CHEM 342
- Drop MATH 116
- Drop NSCI 201
- Drop NSCI 450
- Drop BIOL 324
- Drop BIOL 324
- Drop BIOL 334
- Drop BIOL 363
- Drop BIOL 364
- Drop BIOL 455
- Drop BIOL 324
- Drop BIOL 334
- Drop FOSL 210
- Drop TSCI 320
- Drop MATH 220
- Drop MATH 221
- Drop PHYS 231
- Drop PHYS 232
- Drop CHEM 342
- Drop CHEM 344

*Handwritten notes at the bottom right:*

- Drop BIOL 322
- Drop BIOL 324
- Drop BIOL 334
- Drop BIOL 363
- Drop BIOL 364
- Drop BIOL 455
- Drop BIOL 314
- Drop BIOL 468
- Drop CHEM 341
- Drop CHEM 342
- Drop MATH 116
- Drop NSCI 201
- Drop NSCI 450

Total Minimum Credits Required for Degree = 123    Total Minimum Credits Required for Degree = 120

New instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

There are no new instruction resources needed for the proposed program – all the courses are already being taught or have at some time been taught.

Revised: 02/09/00