PROPOSAL SCC #01-02- J/6

CURRICULUM PROPOSAL FORM 2001-2002

NEW PROGRAMS, MAJOR PROGRAM REVISIONS, AND PROGRAM NAME CHANGES PROCESS C

*DEADLINES: Deadline dates for 2001/2002 submissions: Regular proposals: October 19, 2001 to be implemented in Fall 2002; Short-Term proposals: December 7, 2001 to be implemented in Fall, 2002; Regular proposals February 15, 2002 to be implemented in Spring, 2003; March 22, 2002 for short-term courses to be implemented in Spring 2003.

PROPOSAL TITLE: Change in the Requirements for the Minor in Biology

SPONSOR(S): J. Scott, Associate Professor

DEPARTMENT: Biological Sciences

COLLEGE: Liberal Arts & Sciences
   IF LAS CHECK ONE: _____History/Humanities  XX Math/Sciences  ____Social/Behavioral Sciences

Check One: XX Undergraduate  _____Graduate

The attached NEW PROGRAM/MAJOR PROGRAM REVISION/PROGRAM NAME CHANGE proposal is best described by the item(s) checked.

___ New degree program
___ New Certificate of Graduate Study Program
___ New major
___ New minor
___ New concentration, specialization, or track
XX Major changes to degree requirements, major, minor, or certificate program.
___ Changes to name of college, school, department or degree
___ Quasi Curricular

DEPARTMENT
(Signature indicates approval)  10-15-01
Dept/ Curriculum Chair/ Date

Chairperson/ Date  10-15-01
2. Details:

a. Title: Change in requirements for the minor in Biology

b. Change Requested:

Current requirements:
Biology I & II (0401.100 & 0401.101),
Introductory Botany (0402.200) OR Plant Diversity (0402.201)
Genetics (0422.335)
Cell Biology (0401.430), and
one Biology elective, 300-level or above

Proposed requirements:
Biology I & II (0401.100 & 0401.101), and 4 additional Biology courses, at least 3 of which must be 300-level or above; these 4 courses must represent at least 3 of the 5 curricular “banks”.
(Some Biology courses are placed in more than 1 bank; students may count a course towards fulfillment of only 1 bank.)

c. Sponsors:

Department of Biological Sciences
J. Scott, Undergraduate Academic Program Advisor

d. Rationale:

The Department recognizes the increasing interdisciplinary nature of the Biological Sciences. The proposed changes to the minor reflect our intention of developing students’ capacity for career flexibility and adaptability.

e. Statement of Curricular Effect:

The changes proposed may result in a greater number of students choosing to obtain a minor in Biology. The proposed changes for the minor provide more choices for the student than the current requirements. For example, the choice of an ecology/environmental course, instead of the currently-required botany or cell biology course, may be more appealing to some students.

f. Suggested Time of Implementation:

The Department proposes that the changes proposed become effective for in-coming freshmen entering Rowan University during or after the Fall 2002 semester and for transfer students entering Rowan University during or after the Fall 2004 semester.
CHANGE IN REQUIREMENTS FOR
THE MINOR IN BIOLOGY

1. Abstract:

Recently, the Department grouped most* of its upper-level course (500-level courses) into five curricular “banks”: Botany, Zoology, Cellular/Molecular, and Ecology/Environmental. Biology majors must take one course from a minimum of four out of the five banks prior to graduation. The change in the requirements for the minor reflects the grouping of five curricular banks.

This proposal does not seek to change the number of credits required for the minor in Biology. Thus, this proposal is not expected to affect the requirements for Biology majors. The Department wishes to implement this plan in Fall '04 for transfer students. Students enrolling after this date will have the option to be either “grandfathered” (permitting them to continue to meet the current requirements) or to complete the minor under the new requirements.

Transfer courses will be evaluated on a case-by-case basis.

*The following courses have not been placed into bank:

Human Biology (0401.110)
Natural Resources (0420.100)
General Biology: Human Focus (0401.113)
General Biology: Environmental Focus (0401.112)
Essentials of Biology (0401.105)
Independent Study (0401.450)
Biology Lab/Field Research (0401.475)
Special Topics (0401.440)
g. Resource Requirements (library, space, and computing):

The Department does not anticipate that implementation of the changes described in this proposal will alter the Department’s current needs in these areas.

h. Recommended Library Resources:

The Department does not anticipate that implementation of the changes described in this proposal will alter the Department’s current needs in the area of library resources.

i. Staffing:

Since the number of students we anticipate in the program is still small, the Department does not anticipate that implementation of the changes described in this proposal will alter the Department’s current staffing requirements.

3. Results of Consultation:

The Department of Chemistry and Physics was consulted. A copy of their letter of support is attached to this curriculum proposal.
CATALOG DESCRIPTION

Current Description:

The Minor consists of 23-24 semester hours (a minimum of 8 of these must be taken at Rowan University). Biology I and II are the only prerequisites for the courses listed, and they may be taken in any order. In keeping with the policy of the Biological Sciences Major, any Biology grade below a C- will not count within the Minor.

0401.100-101  Biology I and II
0402.200  Introductory Botany OR 0402.201  Plant Diversity
0422.335  Genetics
0401.430  Cell Biology
Biology elective, 300-level or above

Revised Description:

The minor in Biology consists of 23-24 semester hours (a minimum of 8 of these must be taken at Rowan University). The upper-level courses may be taken in any order. In keeping with the policy of the Biological Sciences Major, any Biology grade below a C- will not count within the minor.

0401.100-101  Biology I and II
4 additional Biology courses, at least 3 of which must be 300-level or above; these 4 courses must represent at least 3 of the 5 curricular “banks”
(Some Biology courses are placed in more than one bank; students may count a course towards fulfillment of only 1 bank.)
PROGRAM GUIDE
MINOR IN BIOLOGY

Transfer* Rowan

Biology I 4 s.h. ______
Biology II 4 s.h. ______

Biology Electives: (4 courses, at least 3 of which are 300-400 level; at least 1 course from each of 2 banks**)

from the Botany bank.......................... 3 or 4 s.h. ______
from the Zoology bank.......................... 3 or 4 s.h. ______
from the Anatomy/Physiology bank........... 3 or 4 s.h. ______
from the Cellular/Molecular bank............ 3 or 4 s.h. ______
from the Ecology/Environ./Evolution bank... 3 or 4 s.h. ______
Other***........................................ 3 or 4 s.h. ______

Total credits (≥ 23 s.h.) ______

* At least 8 s.h. of biology courses must be from Rowan University
** A list of courses assigned to each bank appears on the Department web site: rowan.edu/biology
*** May be a course in a previously-selected bank, or a transfer course for which there is no Rowan University equivalent. The latter must be approved by the Biological Sciences Department.
Dr. Joanne Scott  
Biological Sciences  
Rowan University  

Dear Dr. Scott,  
I have read and I endorse the proposal to change the requirements for the Minor in Biology. I think that the request is reasonable and will meet the current needs of chemistry and physics students who may want a minor in Biology.  

Sincerely.  

Eduardo V. Flores  
Chair of Dept. of Chemistry and Physics  
October 8, 2001
Dr. Joanne Scott  
Biological Sciences  
Rowan University

Dear Dr. Scott,
I have read and I endorse the proposal to change the requirements for the Minor in Biology. I think that the request is reasonable and will meet the current needs of chemistry and physics students who may want a minor in Biology.

Sincerely,

Eduardo V. Flores  
Chair of Dept. of Chemistry and Physics  
October 8, 2001
Dear Dr. Faison:

Several weeks ago Dr. Phil Lewis, Chairperson of the Curriculum Committee, contacted me and said that the Provost's Office had asked the following question:

"Do Bio I and II include general introductory information on all banks?"

I immediately replied to that question by sending an e-mail to Dr. Lewis, requesting that he forward the information to the Provost's Office. Apparently he did not forward the information.

Biology I and II constitute an extensive survey of all topics in biology. Students taking these courses are [theoretically] prepared to take almost every other course offered by the Biological Sciences Department, with only a few exceptions: (The courses in Human Genetics and Molecular Genetics have Genetics as a prerequisite. Introduction to Virology has the prerequisite of EITHER Genetics, Cell Biology, OR Microbiology. These 3 courses are 400- and 500-level,.)

There are a few courses in the Department without prerequisites, but the courses that do have prerequisites have Bio I and II as the prerequisites. Bio I and II are "survey courses", and the objectives of those courses are specifically to prepare students to take upper-level biology courses in all areas of biology.

If there are further questions regarding this issue, please contact me directly. I have taught Bio I and Bio II for the past 13 1/2 years, and am very familiar with the syllabus for each of these courses.
The proposal to change the requirements for the Minor in Biology was an attempt to make it easier for non-majors, giving them a broad range of Biology Electives to choose from, rather than making each student take specific courses for the Minor.