

ROWAN COLLEGE
CURRICULUM COMMITTEE

MINOR CHANGE

PROPOSAL TITLE: MOLECULAR GENETICS 0422.450

UNDERGRADUATE GRADUATE 4.0 CREDIT HOURS

SPONSOR(S): GREGORY HECHT

DEPARTMENT & TELEPHONE# BIOLOGICAL SCIENCES x3577

CHECK ONE:

CHANGES IN APPROVED MINORS, SPECIALIZATIONS, CONCENTRATIONS

CATALOGUE DESCRIPTIONS AND/OR PREREQUISITE CHANGES

SMALL CHANGES IN COURSE CONTENT OF EXISTING COURSES WHICH DO NOT SUBSTANTIALLY VARY THE CURRICULUM

CHANGES IN HEGIS NUMBER

STEP #1 (DEPARTMENT)

APPROVED / DATE: 2/4/97

NOT APPROVED / DATE: _____

E. J. Moore 2/4/97
(DEPT. CURRICULUM CHR./ DATE)

E. J. Moore 2/4/97
DEPT. CHR./DATE

STEP #2 (SCHOOL)

DATE REVIEWED 2/6/97

RECOMMEND TO APPROVE

RECOMMEND NOT TO APPROVE

COMMENTS:

K. H. ...
SCHOOL CURRICULUM CHR.

STEP #3 (ACADEMIC DEAN)

RECOMMEND NOT RECOMMENDED

DATE REVIEWED: 4/1/97

[Signature]
DEAN OF SCHOOL SIGNATURE

STEP #4 (CURRICULUM COMMITTEE)

SCC# 96-97-102

DATE RECEIVED: 2-6-97

APPROVED NOT APPROVED

J. Reeves
CURRICULUM COMMITTEE CHR. SIGNATURE

STEP #5 EXE. VP/PROVOST

APPROVED

NOT APPROVED

[Signature]
SIGNATURE/DATE

REGISTRAR'S SIGNATURE/DATE 37 Kelsey

**Rowan College of New Jersey
Department of Biological Sciences**

**Minor Curricular Change:
Add Alternative Prerequisites for Molecular Genetics**

1. Details

a. Change requested:

Currently the prerequisites for Molecular Genetics 0422.450 are Genetics 0422.335 or permission of instructor. Biology I 0414.100 and Biology II 0414.101 are both prerequisites for Genetics. Therefore, students must complete Biology I, Biology II, and Genetics to enroll in Molecular Genetics.

We wish to add Introduction to Biochemistry 0414.440 and Biochemistry I 0414.348 as alternative prerequisites for Molecular Genetics. However, we also wish to retain Biology I and Biology II as prerequisites for Molecular Genetics, neither of which are prerequisites for Introduction to Biochemistry or Biochemistry I.

The new catalog description should read:

0422.450 Molecular Genetics

(Prerequisites: Biology I 0401.100, Biology II 0401.101, and any one of the following: Genetics 0422.335, Introduction to Biochemistry 0414.400, Biochemistry I 0414.348, or permission of the instructor)

This course considers the principal concepts in biochemical genetics which indicate the high degree of chemical diversity present in living organisms.

b. Sponsor: Gregory Hecht, Assistant Professor, Biological Sciences

2. Rationale

a. Statement of "need" for such a change:

Molecular genetics is a field that continues to have a growing impact on a wide range of disciplines in the biological sciences, and therefore the department's Molecular Genetics course is of great value and interest to Biological Sciences majors. Currently the prerequisites for Molecular Genetics are 0422.335 Genetics (which itself has the prerequisites of 0414.100 Biology I and 0414.101 Biology II) or permission of the instructor. Because of the large number of biology majors and the limited number of sections of Genetics, it is difficult for students interested in enrolling in Molecular Genetics to complete the existing prerequisites for the course. Molecular Genetics routinely has seats available.

Molecular Genetics incorporates principles of both genetics and biochemistry. The current prerequisites for Molecular Genetics assumes that students will apply their background from Genetics and "pick up" biochemistry concepts as the course progresses. Conversely, we believe that students with a background in biochemistry will be able to apply their biochemistry knowledge and "pick up" genetics concepts as the course progresses. Therefore, we believe that Introduction to Biochemistry and Biochemistry I are appropriate prerequisites for Molecular Genetics.

b. Statement of curricular effect:

Many students interested in Molecular Genetics also enroll in a biochemistry course in their junior or senior year. Thus, it is expected that more students will be able to enroll for Molecular Genetics because it will be easier to meet the prerequisites. Students who meet the current prerequisites for the course will still be able to enroll in Molecular Genetics after the changes described in this proposal. Molecular Genetics will remain an upper level course in the Department of Biological Sciences.

3. Results of consultation:

All consultation was internal to the department. The changes proposed here were initiated and sponsored by the instructor who teaches the course.

The old catalog description currently reads:

0422.450 Molecular Genetics

(Prerequisites: Genetics 0422.335 or permission of the instructor)

This course considers the principal concepts in biochemical genetics which indicate the high degree of chemical diversity present in living organisms.

The new catalog description should read:

0422.450 Molecular Genetics

(Prerequisites: Biology I 0401.100, Biology II 0401.101, and any one of the following: Genetics 0422.335, Introduction to Biochemistry 0414.400, Biochemistry I 0414.348, or permission of the instructor)

This course considers the principal concepts in biochemical genetics which indicate the high degree of chemical diversity present in living organisms.