



State of Rhode Island and Providence Plantations
RHODE ISLAND BOARD OF EDUCATION
80 Washington Street
Providence, Rhode Island 02903-3400

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July 16, 2015

Barbara S. Cottam
Chair

June 10, 2015

Council on Elementary and
Secondary Education

To: Council on Postsecondary Education

Daniel P. McConaghy
Chair

From: Commissioner Jim Purcell, Ed.D.

Amy Beretta, Esq.

Subject: Notice from the University of Rhode Island: creation of the General Track for the B.S. in Cell and Molecular Biology and creation of the CMB Course Code

Colleen A. Callahan, Ed.D.

The University of Rhode Island has submitted a Notice of Change announcing their intent to make two separate changes in the Department of Cell and Molecular Biology (CMB) which is in the College of Environment and Life Sciences:

Karin Forbes

Jo Eva Gaines

1. To consolidate the Biochemistry (BCH) and Microbiology (MIC) course codes in the Department of Cell and Molecular Biology into one CMB course code. Additionally, there will be the elimination of some classes as part of this change due to being cross-listed or duplicative.
2. To create a General Track in the BS degree in CMB, as an option in addition to the existing tracks in Biochemistry, Biotechnology, and Microbiology.

Marta V. Martinez

Lawrence Purtill

Joyce L. Stevos, Ph.D.

Council on Postsecondary
Education

William Foulkes
Chair

Rationale

Historically, courses in the CMB Department had Biochemistry (BCH) and Microbiology (MIC) course codes. However, the names of the major, degree, and graduate specialty now all share the CMB name and therefore it makes sense for the course codes to be CMB. In conjunction with the course code name change, four courses are being deleted from the current BCH or MIC course listings. Three of the BCH classes are being replaced by their MIC counterpart and given a CMB course code. The other course is cross-listed with the Biology Department, and will be deleted to avoid duplication.

Michael Bernstein

Dennis Duffy, Esq.

The Honorable Thomas Izzo

Judy Ouellette

Kerry I. Rafanelli, Esq.

URI wants to offer a general track in the CMB major to allow students more flexibility in choosing courses. Currently the CMB major has tracks in biochemistry, biotechnology, and microbiology. The tracks share many courses in common but also have specific concentration requirements. The general track would allow students to take courses from the concentration courses in the other tracks thereby customizing their degree in CMB with classes supporting their specific interests and without the restrictions of the existing tracks. Additionally, the general track would be a good starting place for students who are unsure which track is of the greatest interest; students could begin in the general track and take courses in each field, then shift to a specialized track once they discover their interests.

John J. Smith, Jr.

Dr. Jeffery A. Williams

Curriculum

The course code changes and the deletion of cross-listed and duplicative courses does not change the curriculum for the three original tracks in the CMB degree. The curriculum for the general track shares the same core courses as the other tracks; however of the 30 credits in the concentration, 14-15 credits can be selected from 400 and 500-level CMB courses or BIO 341 or 437 giving students wider choice in concentration and the 17 elective courses. The breakdown of the 120-credit general track is as follows:

General Education Requirements	(28 credits + 11 basic sciences credits)
Introductory Professional Courses	(7 credits)
Basic Sciences	(38 credits including the 11 mentioned above)
Concentration	(30 credits)
Free Electives	(17 credits)

Students

Students who are likely to be attracted to the CMB general track are those who want the flexibility to customize their degree plan. The students may be interested in this track because there is a greater opportunity for selecting courses according to their interests, advanced education or career plans. The proposal notes that students will still get excellent training in cell and molecular biology without specializing in one of the other tracks.

Institutional Role

The Cell and Molecular Biology Department should expect an increase in enrollment due to the general track being an attractive option for students who want a solid education in cell and molecular biology but do not want the specialization of the other tracks. The change of all course codes within Cell and Molecular Biology to CMD will making the program requirements easier to understand.

Interinstitutional Considerations

In Rhode Island, several colleges and universities offer Bachelor of Science degrees in Biology with courses, tracks, or concentrations in areas of cell and molecular biology. Nationally, other colleges and universities have degrees in Cell and Molecular Biology including the University of Maine and the University of New England. The addition of a general track to URI's B.S. in Cell and Molecular Biology could prove to be attractive to regional applicants and result in increased interest in URI by prospective students.

Employment

Graduates with a BS degree in Cell and Molecular Biology have a multitude of options. According to the Bureau of Labor Statistics, about 39 percent of all biological scientists worked for the government at various levels. According to information from URI, students who graduate with a BS degree in Cell and Molecular Biology are prepared for laboratory or administrative positions in biotechnology and the biomedical/pharmaceutical industries, health care and agencies of the federal government including the Department of Agriculture, Environmental Protection Agency, and Food and Drug Administration. For those students seeking further and professional education, the BS in Cell and Molecular Biology is considered an excellent foundation for an advanced degree or dental, medical or veterinary schools. The requirements of the CMB degree satisfies the pre-health graduate school requirements and is excellent preparation for the medical college admission test (MCAT).

Staff review

OPC staff reviewed the Notice of Change from URI announcing their intent to consolidate the Biochemistry (BCH) and Microbiology (MIC) course codes in the Department of Cell and Molecular Biology into one CMB course code, and to create a General Track in the BS degree in Cell and Molecular Biology. The academic changes presented are within the mission, role and scope of the University and do not require Council approval.