

TITLE Philosophy of Science Requirement for Biochemistry Majors

Sponsor(s) Robert Newland *e-mail: newland@rowan.edu*
e-mail:
e-mail:

DEPARTMENT Chemistry & Biochemistry
College CLAS

If **LAS-check:** History/Humanities Social/Behavioral Sciences

Math/Science

UNDERGRADUATE GRADUATE

New non gen-ed Major

Short-Term non gen-ed

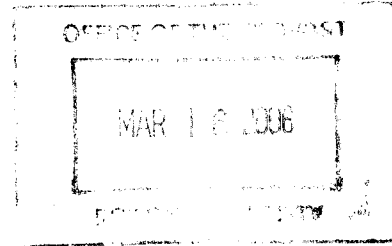
Minor curricular changes (fewer than three) to:

Existing non gen-ed course

Non gen-ed degree requirements

Major

Minor, special certificate program



Signatures Required: representing app

Newland @ rowan
Harrold @ rowan

Department Chair:

Department CURRICULUM Chair:

Academic DEAN:

e
ite: 10/13/05
ite: 10/13/05
ite: 10-5-05

COLLEGE CURRICULUM COMMITTEE:

18 Nov 2005

Signature: College Curriculum Chair

Signature: SENATE CURRICULUM CHA

Comments:

Signature: Executive Vice President/Provost:

[Signature]
Date: 3/16/06

Approved:
Not Approved:

Signature: REGISTRAR

Date: 3/21/06

Course Description Received & Approved
Hegis Taxonomy & Course #

Notification Forward:

- SCC CHAIR
- IR
- CAP
- Registrar
- Academic Dean
- Department Chair
- VP/Student Affairs
- Other-

Trans. 3/29/06

Minor Curricular Change Proposal

Philosophy of Science for Biochemistry Majors

Department of Chemistry and Biochemistry

1. Details

a. Change requested:

Replace a free choice in the History, Humanities, Languages general education requirement to specify the Philosophy of Science course (1509.369).

b. Sponsors:

Robert Newland, Department of Chemistry and Biochemistry.

2. Rationale

a. Need:

The biochemistry curriculum was designed following the recommendations of the American Society for Biochemistry and Molecular Biology. In these recommendations there is no mention of the goal of a broad understanding of the interaction of science and society. However, biochemistry and the technology it generates profoundly influence society and societal understanding of biochemistry can equally affect the field's accomplishments. The one course that could ensure students have a fundamental understanding of these important relationships is the Philosophy of Science. Students are already strongly advised to enroll in this course but many miss this opportunity.

In addition there is no Writing Intensive course specified by the curriculum and requiring this course would deal with this omission.

b. Statement of Curricular effect:

The largest effect will be felt by the Department of Philosophy and Religion. However, since we already recommend this course the additional student count should require only one extra section each year at most. We expect students to enroll in this course in their junior year so the initial effect will not occur until the class of 2010 reaches their junior year in 2009.

3. Results of consultation:

Letters from the Chair of Biological Sciences and Philosophy and Religion are attached.

September 28, 2005

Professor Robert Newland
Chair, Department of Chemistry
Rowan University

Dear Bob,

Our department has considered your decision to require Philosophy of Science of all of your majors. We are unanimously agreed that this would be a good thing for our department and our students as well as for your students. We understand that adding this requirement will generate a demand for at least 15 additional seats in the class every year. It will mean adding a section. Matt Lund, who teaches the course for us, is eager to have more scientists in the class, and is willing to teach two sections of it in one semester.

I trust that as demand for this course grows, we will have your support in the future in seeking an additional hire to meet the demand.

Sincerely,

David Clowney
Chair, Department of Philosophy and Religion

Rowan University
Campbell Library

Library Resources Form

Department/School: College of Liberal Arts & Sciences/ Dept. of Philosophy & Religion

Proposed by: Dr. Robert Newland, Dept. of Chemistry & Biochemistry

Program Title: Requiring course 1509.369 "Philosophy of Science – WI" as part of both the Chemistry and Biochemistry curricula (previously only recommended)

Anticipated Date for Course/Program Offering: Fall 2009

Resources that should be acquired

No additional resources are needed at this time.

Resources available in the Campbell Library

The library has 339 books under the subject heading "Science Philosophy", of which 33 were published within the last 5 years.

List key periodical resources

Campbell Library subscribes to the online journal database JStor, which includes archival (back issues up to about 5 years ago) full-text access to 9 key journals in the field of history and philosophy of science: British Journal for the Philosophy of Science; Isis (the journal of the History of Science Society); Notes and Records of the Royal Society of London; Osiris; Philosophy of Science; Proceedings of the Biennial Meeting of the Philosophy of Science Association; Science and Technology Studies; Science, Technology and Human Values; and Social Studies of Science. Current access to Isis, Osiris, and Philosophy of Science is available through Academic Search Premier.

Campbell Library also has online access to Humanities Full-Text from Wilson, which includes current access to philosophical journals such as The Humanist, Diogenes, and the Journal of Medicine and Philosophy.

Librarian remarks

Given the library's current book holdings and online journal access, the plan to make this course required for Chemistry and Biochemistry majors can be supported.

Denise A. Brush
Library Liaison
9/20/05

Subject: Re: Support letter

Date: Tuesday, October 4, 2005 5:31 PM

From: Gregory Hecht <hecht@rowan.edu>

To: R Newland Newland@exchange55.rowan.edu

Cc: Gregory Hecht hecht@rowan.edu

Category: Chairs

October 4, 2005

MEMO TO: Robert Newland, Chair Chemistry & Biochemistry

From: Gregory Hecht, Interim Chair Biological Sciences

Re: Chem/Biochem & Philosophy of Science

Bob:

I am happy to voice my support for the curricular proposal that you sent me, "Philosophy of Science for Biochemistry Majors." I think the proposed change is very appropriate for the Biochemistry program. In fact, we will be proposing a similar change for our own B.S. Biology program.

Thanks for consulting, and please feel free to let me know if there is anything more you need from me in support of this proposal.