# 2. Report & Recommendations of the B.S. Subcommitee, April 2007

Further to the minutes of the Committee on Curricula and Courses meeting dated 13 February 2007, the following is a proposed statement of college policies and procedures to govern implementation and maintenance of the new regulations set forth in the minutes of the above meeting with respect to review and evaluation of proposed B.S. programs of study, and changes to existing B.S. programs of study.

### The BS requirements are as follows:

#### Plan A.

Additional scientific and mathematical requirements: all of the following:

One of the Chemistry Sequences: (8-10 cr)

CHEM 124Q, 125Q, 126Q

CHEM 127Q, 128Q

CHEM 129Q, 130Q

CHEM 137Q, 138Q

One of the following: (4 cr)

BIOL 107, 108

One of the Physics Sequences: (8 cr)

PHYS 121Q, 122Q

PHYS 131Q, 132Q

PHYS 141Q, 142Q

PHYS 151Q, 152Q

One of the Mathematics Sequences: (8-12 cr)

MATH 112Q, 113Q, 116Q

MATH 115Q (or 135Q), 116Q (or 136Q)

MATH 243Q, 244Q

### Plan B.

Certain departments have prescribed, as suitable to the B.S. program in their disciplines, an alternative schedule of requirements similar in scale to those in Plan A. Such alternative departmental schedules may in whole, but not in part, be substituted for Plan A. These alternative departmental requirements are specified in the descriptions of each Major below, and set forth in the major plan of study in each such department.

### Template for Proposed BS degree requirements:

- The Plan A science and mathematics requirements form a template to be used, by the proposing department, in the development of new or revised departmental BS degree requirements.
  Proposals will be evaluated to ensure that their intent is to attain the same level of rigor, breadth and depth as Plan A. Once approved, a department's BS requirements will be listed under that department.
- The form for applications to create a new BS degree entitled "Create a new Bachelor of Science Major" is on the CC&C web site. (Copy below)
- When a new or revised BS degree is proposed to the Committee on Curricula & Courses by a department, the Chair constitutes a Bachelor of Science subcommittee. The subcommittee is normally composed of representatives from MATH, PHYS, CHEM, and at least one of the biological sciences departments, plus two other members of departments with approved BS Majors, or others appointed by the Chair of CC&C. This subcommittee works in concert with an official subcommittee of a department that submits a request for approval of a new or changed BS Major.

Form: "Create a new Bachelor of Science Major"

University of Connecticut College of Liberal Arts and Sciences

## [Proposed New Form]

## Proposal to Add a new Bachelor of Science Major

Last revised: Monday April 9, 2007

See "Instructions for completing CLAS CC&C forms" for general instructions and specific notes.

- 1. Date:
- 2. Department or Program:
- 3. Title of Bachelor of Science Major:
- 4. Catalog Description of the Major:

Include specific courses and options from which students must choose. Do not include justification here. State number of required credits.

5. Effective Date (semester, year -- see Note R): (Note that changes will be effective immediately unless a specific date is requested.)

#### Justification

- 1. Identify the core concepts and questions considered integral to the discipline:
- 2. Explain how the courses required for the Major cover the core concepts identified in the previous question:
- 3. Explain how the courses required for the proposed Major conform to the Bachelor of Science Statement of Purpose (see instructions, note **Y**). In terms of intellectual rigor, breadth and depth, indicate the substantive equivalencies between courses in the proposed Major and courses in the BS template (see instructions, note **Y**).
- 5. Dates approved by (see <u>Note Q</u>):

Department Curriculum Committee:

Department Faculty:

6. Name, Phone Number, and e-mail address of principal contact person:

### "Instructions for completing CLAS CC&C forms" (Section Y)

http://aurora.clas.uconn.edu/clasccc/instructions.html

Y. Rules for creation of a Bachelor of Science (BS) Major (or change a BS Major). Departments and programs may offer a Major field of study that leads to the conferral of the Bachelor of Science degree.

**Statement of purpose:** A Bachelor of Science degree provides students with comprehensive training for professional advancement in their chosen scientific discipline. A B.S. directed curriculum provides instruction in the fundamental components of research; quantitative skills; deductive and inductive reasoning; experimental methods; statistical analyses; and advanced topics appropriate to the field of study.

The set of courses below must be used as the **template** against which a proposed new BS Major must be compared. It is expected that a new Major would be the same as the **template** in rigor, and similar in number of credits, and breadth and depth of coverage. (Use the Create a new Bachelor of Science Major form)

Any proposed changes to an existing BS Major must continue to adhere to the statement of purpose of a Bachelor of Science program, and must not change the level of rigor, breadth or depth of the existing program. (Use the Change of Major form)

Scientific and mathematical requirements: all of the following:

One of the Chemistry Sequences: (8-10 cr)

CHEM 124Q, 125Q, 126Q

CHEM 127Q, 128Q

CHEM 129Q, 130Q

CHEM 137Q, 138Q

One of the following: (4 cr)

BIOL 107, 108, 110

One of the Physics Sequences: (8 cr)

PHYS 121Q, 122Q

PHYS 131Q, 132Q

PHYS 141Q, 142Q

PHYS 151Q, 152Q

One of the Mathematics Sequences: (8-12 cr)

MATH 112Q, 113Q, 116Q

MATH 115Q (or 135Q), 116Q (or 136Q)

MATH 243Q, 244Q