

## **ATTACHMENT 1: Catalogue Description of new B. S. Requirements**

Here follow 1) proposed catalogue language to replace text appearing on p. 51 of the current edition and 2) a reprint of the subcommittee's November report to this committee.

### **Proposed Catalogue Copy:**

**Bachelor of Arts (B.A.):** Five courses, including one from each of the areas A -D and a fifth course from any area A - E. Courses must be from at least four academic units.

[Here list GER courses, A - E]

### **Bachelor of Science (B.S.):**

1. Completion of a field of concentration (major and related courses) in one of the following departments: [here list B.S. departments]

2. Four courses, including one course from each of areas A-D above. Courses must be from at least four different academic units.

3. Further requirements for B.S. candidates only, as set forth in either of the two plans (A or B) following:

**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, 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

**Plan B.** Certain science 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.

### **November 2006 subcommittee Report:**

**ATTACHMENT 1: B S Degree Requirements -- R Michel**

## **Report of the Subcommittee on the B.S. degree to the CLA&S Courses and Curriculum Committee, November 14, 2006**

### **Introduction**

Further to the last report from this subcommittee, September 12, 2006, the subcommittee has delineated some rules, and the changes that are needed on the C&CC web site to allow for departments to seek approval for new or changed Bachelor of Science degrees as follows:

- The present science and mathematics requirements of MATH, CHEM, BIOL and PHYS will now form the basis of a template that departments will use in developing their new BS degree requirements to the same level of rigor, breadth and depth. Once approved, a department's BS requirements will be listed under that department.
- A new form entitled "Create a new Bachelor of Science Major" will be added to the web site.
- A new, section Y, will be added to the "Instructions for completing CLAS CC&C forms" on the web site. This section will contain the "Statement of Purpose" of a Bachelor of Science in a Major, and the template against which a proposed new BS Major must be compared.
- Existing BS Majors will be "grandfathered" but changes to existing Majors must continue to follow 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.
- The subcommittee recommends that an *ad hoc* subcommittee be formed as needed to review new BS Majors and changes to BS Majors. The subcommittee should be formed of representatives from the MATH, PHYS, CHEM, and at least one of the biological sciences departments, plus two other members of departments with approved BS Majors. Such a subcommittee should work in concert with an official subcommittee of a department that submits a request for approval of a new or changed BS Major.

### **Appendices**

The proposed new form, the proposed new section to be added to the instructions, and the suggested changes to the wording in the catalog are appended.

#### **New form: "Create a new Bachelor of Science Major"**

The following is copied substantially from the existing "Create a Major" form, but modified to apply specifically to the Bachelor of Science Major. There are only two changes to the form. The first is in the heading, which identifies the form to pertain to a new Bachelor of Science Major, and the second is the addition of item 3 in the Justification section.

The present form "Create a Major" should be renamed to "Create a Bachelor of Arts Major".

It is not proposed to make a new "Change a Major" form, because there are proposed below some words to be added to the instructions which would apply to any changes to a Bachelor of Science Major.

However, it is expected that any changes to a Major go through an *ad hoc* Bachelor of Science subcommittee of the College C&CC.

#### **The form:**

University of Connecticut  
College of Liberal Arts and Sciences  
Committee on Curricula and Courses

### **Proposal to Add a new Bachelor of Science Major**

Last revised: Monday November 6, 2006

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**).
4. Attach a "Major Plan of Study" form to this proposal. This form will be used to allow students to check off relevant coursework. It should include the following information at the bottom of the form:  
 Name of Student: \_\_\_\_\_  
 I approve the above program for the (B.A. or B.S.) Major in (insert name)  
 (signed) \_\_\_\_\_ Dept. of (insert name)  
 Major Advisor
5. Dates approved by (see Note Q):  
 Department Curriculum Committee:  
 Department Faculty:
6. Name, Phone Number, and e-mail address of principal contact person:

***Addition to the Instructions:***

The following is the new section Y for the "Instructions for completing CLAS CC&C forms" which can presently be found at: <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)

***The template is as follows:***

Students who wish to apply for a Bachelor of Science degree with a Major in XXXX must satisfy the following 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, 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

**Change to the catalog wording: Page 52.**

Under the section headed Bachelor of Science Only replace the list of courses with:

**Bachelor of Science Only:** There are additional scientific and mathematical requirements for the Bachelor of Science that differ among Majors, as specified in the descriptions of each Major below.

**Change to the catalog wording: Page 58**

The following change should appear as the last paragraph of the Individualized Major section on page 58.

***Individualized Major***

Students who wish to apply for a Bachelor of Science degree must satisfy the following additional scientific and mathematical requirements:

All of the following:

One of the Chemistry Sequences:

CHEM 124Q, 125Q, 126Q

CHEM 127Q, 128Q

CHEM 129Q, 130Q

CHEM 137Q, 138Q

One of the following:

BIOL 107, 108, 110

One of the Physics Sequences:

PHYS 121Q, 122Q

PHYS 131Q, 132Q

PHYS 141Q, 142Q

PHYS 151Q, 152Q

One of the Mathematics Sequences:

MATH 112Q, 113Q, 116Q

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

MATH 243Q, 244Q

***Other Changes to catalog wording:***

As the mathematics and science requirements will no longer be on page 52, the catalog may have to be changed for each grandfathered department in its' departmental section. The catalog editor will make the changes in consultation with departments as necessary.