

Checklist for Curriculum Proposals

- ☒ 1. Are all **signatures on the hard copy of the proposal**?
- ☒ 2. Is the **effective date** correct?
- ☒ 3. Is the **rationale** for the proposal consistent with the changes proposed?
- ☒ 4. Does the proposed **number of credits** match the stated number?
- ☐ NA. 5. Have affected units been identified and contacted? Are required **support letters** attached?
- ☐ NA. 6. Is a resolution necessary? If so, is it attached?
- (Necessary for: establishing a major; disestablishing a major; a name change to any program with permanent status; a name change to a department or college; a transfer or creation of any department; request for permanent status).
- ☒ 7. Are all **courses (required or referenced)** in the UDSIS Inventory or in the approval process? courses being proposed Challenge List
- ☒ 8. Are all **university requirements** correctly specified?
- ____. A. Breadth requirements.
- ____. B. Multicultural requirement.
- ____. C. Writing requirement.
- ____. D. DLE requirement.
- ☒ 9. Are all **college requirements** correctly specified?
- ☒ 10. Is a side-by-side comparison provided?

UNIVERSITY FACULTY SENATE FORMS

Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. A [checklist](#) is available to assist in the preparation of a proposal. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: John L. Burmeister _____ **phone number** 1130 _____

Department: Chemistry & Biochemistry _____ **email address** jlburm@udel.edu

Date: May 30, 2012 _____

Action: Revise major _____
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term 12F _____
(use format 04F, 05W)

Current degree: B.S. in Chemistry
(BS/CHEM) _____
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: B.S. in Chemistry
(BS/CHEM) _____
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name: _____
Proposed new name for revised or new major / minor / concentration / academic unit
(if applicable)

Revising:

Undergraduate major / Concentration: B.S. in Chemistry
(BS/CHEM) _____
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor: _____
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change: _____
(Must attach your Graduate Program Policy Statement)

Graduate Program of Study: _____
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration: _____

Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.

List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)? No new courses required

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None") No new courses required.

Supply support letter from the Library, Dean, and/or Department Chair if needed
(all new majors/minors will need a support letter from the appropriate administrator.) No letter needed

Supply a resolution for all new majors/programs; name changes of colleges, departments, degrees; transfer of departments from one college to another; creation of new departments; requests for permanent status. See example of resolutions. No resolution needed

Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education: <http://www.ugs.udel.edu/gened/> No explanation needed

Identify other units affected by the proposed changes:
(Attach permission from the affected units. If no other unit is affected, enter "None") None

Describe the rationale for the proposed program change(s):
(Explain your reasons for creating, revising, or deleting the curriculum or program.)

When the FYE requirement was first instituted in 05F, most departments opted to rely on UNIV-101 to satisfy the requirement. We, instead, created our Freshman Majors Seminar. In 09F, we decided to incorporate the Freshman Majors Seminar as a 1-credit component in a 3-credit offering of CHEM-115 Introduction to Chemical Sciences course for all of our majors (BA/CHEM, BA/XCE, BS/CHEM and BS/BIOC). This has proved to be both a pedagogical and administrative mistake. Our majors' peers were taking FYE courses that were almost invariably P/F, and sometimes zero credit, courses. Accordingly, a significant number of CHEM-115 registrants have treated the course as though it were P/F, rather than a standard graded 3-credit course. We have therefore decided to go back to square one, i.e., reinstitute CHEM-164-Freshman Majors Seminar as our FYE course and cut back CHEM-115 Introduction to Chemical Sciences to a required 2-credit course for our BS/Chemistry and BS/Biochemistry majors. (CHEM-115 was initially approved as a variable (1-3) credit course.)

Program Requirements:
(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.) See example of side by side.

DEGREE: BACHELOR OF SCIENCE
MAJOR: CHEMISTRY

CURRICULUM		CREDITS
UNIVERSITY REQUIREMENTS		
<u>ENGL 110</u>	Critical Reading and Writing (minimum grade C-)	3
<u>First Year Experience</u> (FYE)		0-4

[University Breadth Requirement](#) 12

Up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy the College of Arts and Sciences Breadth Requirements.

[Discovery Learning Experience \(DLE\)](#) 3

[Multi-cultural Course](#) 3

COLLEGE REQUIREMENTS

Writing: (minimum grade C-) 3

A second writing course involving significant writing experience including two papers with a combined minimum of 3,000 words to be submitted for extended faculty critique of both composition and content. This course must be taken after completion of 60 credit hours. Appropriate writing courses are normally designated in the semester's Registration Booklet. (See list of courses approved for [Second Writing Requirement](#).)

[ENGL 410](#) highly recommended.

Foreign Language: 0-12

Completion of the intermediate-level course (107 or 112) in a modern foreign language. Number of credits needed and initial placement will depend on number of years of high school study of foreign language. Students with four or more years of high school work in a single modern foreign language may attempt to fulfill the requirement in that language by taking an exemption examination.

COLLEGE OF ARTS AND SCIENCES BREADTH REQUIREMENTS (minimum grade C-)

The College Breadth Requirements are in addition to the University Breadth Requirement. Up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy these College of Arts and Sciences Breadth Requirements.

A total of twenty-one credits from Groups A, B and C is required with a minimum of six credits in each group. The six credits from each group could be from the same area. 21

Group A Creative Arts and Humanities

Group B History and Cultural Change

Group C Social and Behavioral Sciences

MAJOR REQUIREMENTS

Minimum 46 credits total in CHEM

CHEM 115	Introduction to Chemical Sciences	3 2
CHEM 111/CHEM 112	General Chemistry	6
CHEM 120	Quantitative Chemistry	3
CHEM 164	Freshman Majors Seminar (FYE)	1
CHEM 331/CHEM 332	Organic Chemistry	6
CHEM 333/CHEM 334	Organic Chemistry Majors Laboratory I and II	4
CHEM 443/CHEM 445	Physical Chemistry and Laboratory	4
CHEM 437/CHEM 438	Instrumental Methods and Laboratory	4
CHEM 527	Introductory Biochemistry	3
or		
CHEM 641	Biochemistry	3
CHEM 444/CHEM 446	Physical Chemistry and Laboratory	4
CHEM 457/CHEM 458	Inorganic Chemistry and Laboratory	4
CHEM 465	Seminar (two semesters, fall and spring)	2
Advanced Chemistry course at 600-level or higher		3
CHEM 468	Undergraduate Research (optional)	3
MATH 241/MATH 242/ MATH 243	Analytic Geometry and Calculus A, B and C	12
PHYS 201/PHYS 202	Introductory Physics I and II	8
or		
PHYS 207/PHYS 208	Fundamentals of Physics I and II	8

Strongly Recommended:

[MATH 302](#) Ordinary Differential Equations I 3

ELECTIVES

After required courses are completed sufficient elective credits must be taken to meet the minimum credit requirement for the degree.

CREDITS TO TOTAL A MINIMUM OF

124

ROUTING AND AUTHORIZATION:

(Please do not remove supporting documentation.)

Department Chairperson _____ Date 5/31/12

Dean of College _____ Date _____

Chairperson, College Curriculum Committee _____ Date _____

Chairperson, Senate Com. on UG or GR Studies _____ Date _____

Chairperson, Senate Coordinating Com. _____ Date _____

Secretary, Faculty Senate _____ Date _____

Date of Senate Resolution _____ Date to be Effective _____

Registrar _____ Program Code _____ Date _____

Vice Provost for Academic Affairs & International Programs _____ Date _____

Provost _____ Date _____

Board of Trustee Notification _____ Date _____

Revised 02/09/2009 /khs