
Memorandum

To: Academic Policies Council
From: Lawrence Fuller, Chemistry Dept Chair
Date: 11/22/2013
Re: Program changes to:
BA Chemistry
BS Track I – Chemistry

We are replacing & updating our Physical Chemistry Laboratory courses (CHE 341L & CHE 342L) as suggested by the American Chemical Society 5 year accreditation review dated 18 November 2011. We are replacing both of them with a new, single and redesigned comprehensive laboratory course.

This new and updated course: CHE 343L – Comprehensive Physical Chemistry Laboratory was submitted to UCC on 21 Sept 2013. This is a one credit 4 contact hour laboratory course that will replace CHE 341L & CHE 342L in all our chemistry programs. We anticipate that this course will be offered in both the fall and spring semesters. Currently enrolled students will be able to complete the major with CHE 341L.

We are also giving our students another laboratory option CHE 462L that can be taken in the spring semester.

There are no new resources needed to implement any of these changes.

Current Chemistry B.A.

Proposed Changes to Chemistry B.A.

Chemistry Major-B.A. Degree

53 cr

Chemistry Major-B.A. Degree

52 cr

A. Core Requirements

CHE 111/212 - General Chemistry 8
CHE 322 - Analytical Chemistry 4
CHE 331/332 - Organic Chemistry 8
CHE 341/342 - Physical Chemistry 6
CHE 341L/342L - Physical Chemistry Lab 2
Select one of the following three choices: 4

1. CHE 425 - Instrumental Analysis
2. CHE 451/451L - Inorganic Chemistry and Lab
3. CHE 461/461L - Biochemistry and Lab

Select one of the following two choices: 2

CHE 494 - Capstone Research
CHE 498 - Internship

B. Cognate Requirements

MAT 210 - Calculus I 4
MAT 220 - Calculus II 4
MAT 318 - Statistics in the Sciences 3
One of the following two sequences: 8

PHY 112/213 - General University Physics
PHY 111/212 - General College Physics

A. Core Requirements

CHE 111/212 - General Chemistry 8
CHE 322 - Analytical Chemistry 4
CHE 331/332 - Organic Chemistry 8
CHE 341/342 - Physical Chemistry 6
CHE 341L or 343L - Physical Chemistry Lab 1
Select one of the following three choices: 4

1. CHE 425 - Instrumental Analysis
2. CHE 451/451L - Inorganic Chemistry and Lab
3. CHE 461; and 461L or 462L - Biochemistry and Lab

Select one of the following two choices: 2

CHE 494 - Capstone Research
CHE 498 - Internship

B. Cognate Requirements

MAT 210 - Calculus I 4
MAT 220 - Calculus II 4
MAT 318 - Statistics in the Sciences 3
One of the following two sequences: 8

PHY 112/213 - General University Physics
PHY 111/212 - General College Physics

Current Chemistry Major B.S. Degree

Chemistry Major – B.S. Degree

70-78cr

American Chemical Society certification requirements are satisfied in the B.S. Chemistry degree curriculum in Arts and Sciences.

Track I - Chemistry

A. Core Requirements (48 cr)

CHE 111/212 - General Chemistry	8
CHE 322 - Analytical Chemistry	4
CHE 331/332 - Organic Chemistry	8
CHE 341/342 - Physical Chemistry	6
CHE 341/342L - Physical Chemistry Lab	2
CHE 425 - Instrumental Analysis	4
CHE 434L - Advanced Chemistry Lab	1
CHE 451 - Inorganic Chemistry	3
CHE 461 - Biochemistry	3
CHE 494 Capstone Research	2

Chemistry electives under advisement, must be from two areas of Chemistry
Select one of the following two choices:

- CHE 451L – Inorganic Lab or
- CHE 461L – Biochemistry Lab

B. Cognate Requirements (22 cr)

MAT 210 – Calculus I	4
MAT 220 – Calculus II	4
MAT 318 – Statistics in the Sciences	3
PHY 112/213 – General University Physics	8
Physics elective, under advisement	3

Proposed changes

Chemistry Major – B.S. Degree

69cr

American Chemical Society certification requirements are satisfied in the B.S. Chemistry degree curriculum in Arts and Sciences.

Track I - Chemistry

A. Core Requirements (47 cr)

CHE 111/212 - General Chemistry	8
CHE 322 - Analytical Chemistry	4
CHE 331/332 - Organic Chemistry	8
CHE 341/342 - Physical Chemistry	6
CHE 341L or 343L - Physical Chemistry Lab	1
CHE 425 - Instrumental Analysis	4
CHE 434L - Advanced Chemistry Lab	1
CHE 451 - Inorganic Chemistry	3
CHE 461 - Biochemistry	3
CHE 494 Capstone Research	2

Chemistry electives under advisement, must be from two areas of Chemistry
Select one of the following choices:

- CHE 451L – Inorganic Lab or
- CHE 461L – Biochemistry Lab
- CHE 462L – Biochemistry Lab

B. Cognate Requirements (22 cr)

MAT 210 – Calculus I	4
MAT 220 – Calculus II	4
MAT 318 – Statistics in the Sciences	3
PHY 112/213 – General University Physics	8
Physics elective, under advisement	3