

Submit originals and one copy and electronic copy to Governance/Faculty Senate Office (email electronic copy to jbharvie@alaska.edu)

PROGRAM/DEGREE REQUIREMENT CHANGE (MAJOR)

SUBMITTED BY:

Department	Chemistry & Biochemistry	College/School	CNSM
Prepared by	Tom Green	Phone	474-1559
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See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

PROGRAM IDENTIFICATION:

DEGREE PROGRAM	Major – BS Degree (American Chemistry Society – approved)
Degree Level: (i.e., Certificate, A.A., A.A.S., B.A., B.S., M.A., M.S., Ph.D.)	B.S.

A. CHANGE IN DEGREE REQUIREMENTS: (Brief statement of program/degree changes and objectives)

We have eliminated Chem 324W Advanced Organic Chemistry Laboratory and also incorporated Chem F323 Organic Chemistry Laboratory, 1 credit, into Chem F322 Organic Chemistry II, which becomes 4 credits. We also changed Chem F451 to Chem F351.

B. CURRENT REQUIREMENTS AS IT APPEARS IN THE CATALOG:

- Complete the [general university requirements](#). (As part of the core curriculum requirements, complete: MATH F200X; PHYS F103X and PHYS F104X, or PHYS F211X and PHYS F212X.)
- Complete the [BS degree requirements](#). (As part of the BS degree, complete: MATH F201X. Chemistry foundation courses may be used toward partial fulfillment of the natural science requirement.)
- Complete the program (major) requirements:*
 CHEM F105X--General Chemistry I--4 credits
 CHEM F106X--General Chemistry II--4 credits
 CHEM F202--Basic Inorganic Chemistry --3 credits
 CHEM F212--Chemical Equilibrium and Analysis--4 credits
 CHEM F321--Organic Chemistry I--4 credits
 CHEM F322--Organic Chemistry II--3 credits
 CHEM F324W--Advanced Organic Chemistry Laboratory--3 credits
 CHEM F331--Physical Chemistry I--4 credits
 CHEM F332--Physical Chemistry II--4 credits
 CHEM F434W--Chemistry Capstone Laboratory--3 credits
 CHEM F451--General Biochemistry -- Metabolism--3 credits
 CHEM F481--Seminar--1 credit
 CHEM F482O--Seminar--2 credits
 CHEM F488--Undergraduate Chemistry and Biochemistry Research--3 credits
 MATH F202X--Calculus--4 credits
- Complete two of the following:*
 CHEM F402--Inorganic Chemistry--3 credits
 CHEM F450--General Biochemistry -- Macromolecules --3 credits
 CHEM F314W--Analytical Instrumental Laboratory--3 credits
- Minimum credits required--120 credits

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Dean's Office

College of Natural Science & Mathematics

Governance
9/30/14 TLP

C. PROPOSED REQUIREMENTS AS IT WILL APPEAR IN THE CATALOG WITH THESE CHANGES:
(Underline new wording strike through old wording and use complete catalog format)

1. Complete the general university requirements. (As part of the core curriculum requirements, complete: MATH F200X; PHYS F103X and PHYS F104X, or PHYS F211X and PHYS F212X.)
2. Complete the BS degree requirements. (As part of the BS degree, complete: MATH F201X. Chemistry foundation courses may be used toward partial fulfillment of the natural science requirement.)
3. Complete the program (major) requirements: *
CHEM F105X--General Chemistry I--4 credits
CHEM F106X--General Chemistry II--4 credits
CHEM F202--Basic Inorganic Chemistry --3 credits
CHEM F212--Chemical Equilibrium and Analysis--4 credits
CHEM F321--Organic Chemistry I--4 credits
this should be F325 → CHEM F322--Organic Chemistry II--3 credits
~~CHEM F324W--Advanced Organic Chemistry Laboratory--3 credits~~
CHEM F331--Physical Chemistry I--4 credits
CHEM F332--Physical Chemistry II--4 credits
CHEM F434W--Chemistry Capstone Laboratory--3 credits
CHEM F4351--General Biochemistry -- Metabolism--3 credits
CHEM F481--Seminar--1 credit
CHEM F482O--Seminar--2 credits
CHEM F488--Undergraduate Chemistry and Biochemistry Research--3 credits
MATH F202X--Calculus--4 credits
4. Complete two of the following: *
CHEM F402--Inorganic Chemistry--3 credits
CHEM F450--General Biochemistry -- Macromolecules --3 credits
CHEM F314W--Analytical Instrumental Laboratory--3 credits
5. Minimum credits required--120 credits

D. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

No major impact. Chem 324W is being eliminated so it should free organic chemistry faculty to teach other courses at either the undergraduate or graduate level.

E. IMPACTS ON PROGRAMS/DEPTS:

*What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)*

The change reduces the organic lab credit of our BS ACS certified students by 2 credits. This change will not affect American Chemical Society accreditation since the organic chemistry offerings will still have a substantial lab component. For example, the offerings are similar as the Physical Chemistry offerings (Chem F331 and F332).

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F. IF MAJOR CHANGE - ASSESSMENT OF THE PROGRAM:

Description of the student learning outcomes assessment process.)


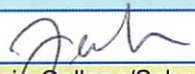
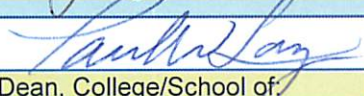
Students will still be able to gain the necessary synthetic organic lab skills through the Chem F321 and Chem F322, which are both 4 credits and include a lab.

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize program/degree change applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you drop a course, is it because the material is covered elsewhere? Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the program is not compromised as a result.

The Advanced Organic Chemistry Laboratory (Chem 324W, 3 credits) is no longer needed to meet the needs of our students. We are adopting a more standard organic chemistry curriculum, where both Chem 321 (Organic Chem I) and Chem 322 (Organic Chem II) are both 4 credits and include 3-hr labs. The proposed change will be able to meet the needs of organic chemistry lab requirements of all of our chemistry majors, as well as pre-professional students and/or biology majors.

APPROVALS: SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	9-18-14
Signature, Chair, Program/Department of:	Chemistry + Biochemistry	
	Date	9-25-14
Signature, Chair, College/School Curriculum Council for:	CNSM	
	Date	9/26/14
Signature, Dean, College/School of:	CNSM	

CHAIR SIGNATURE OBTAINED FOLLOWING APPROVAL BY FACULTY SENATE COMMITTEE

	Date	
Signature, Chair, UAF Faculty Senate ___ Curriculum Review Committee		
___ Graduate Academic and Advisory Committee		