12/5/2019 APPROVED BY SENATE 02/10/2020

Date Submitted: 11/04/19 3:47 pm

Viewing: 0335 : Chemistry Minor

Last edit: 12/05/19 11:26 am

Changes proposed by: Amy Elli

Chemistry Minor

Catalog Pages Using this Program

In Workflow

- 1. U Program Review
- 2. 1413 Head
- 3. SOCS Head
- 4. KV Dean
- 5. University Librarian
- 6. Provost
- 7. Senate EPC
- 8. Senate
- 9. U Senate Conf
- 10. Board of Trustees
- 11. IBHE
- 12. DMI

Approval Path

- 1. 11/04/19 4:15 pm
 Deb Forgacs
 (dforgacs):
 Approved for U
 Program Review
- 2. 11/04/19 4:27 pm Scott Silverman (sks): Approved for 1413 Head
- 3. 12/04/19 9:06 am Cheryl Kappes (dambache): Approved for SOCS Head
- 4. 12/04/19 8:55 pm Kelly Ritter (ritterk): Approved for KV Dean
- 5. 12/04/19 9:15 pm
 John Wilkin
 (jpwilkin):
 Approved for
 University
 Librarian

6. 12/05/19 9:56 am
Kathy Martensen
(kmartens):
Approved for
Provost

Proposal Type

Proposal Type:

Minor (ex. European Union Studies)

This proposal is

for a:

Revision

Proposal Title:

if this proposal is one piece of a multi-element change please include the other impacted programs here. example: A BS revision with multiple concentration revisions

Revision to the Chemistry Minor

Is this program

No

available on

campus and online?

Official Program

Chemistry Minor

Name

Banner/Codebook

Name

Chemistry

Program Code: 0335

Major Minor 0335 Conc

Code Code Degree

Code

EP Control

EP.20.71

Number

Senate Approval

Date

Senate

Conference

Approval Date

BOT Approval

Date

IBHE Approval

Date

Effective Date:

Effective Catalog F

Fall 2020

Term

Sponsor College Liberal Arts & Sciences

Sponsor Chemistry

Department

Sponsor Name Scott K. Silverman Sponsor Email

sks@illinois.edu

College Contact Kelly Ritter College Contact

Email

ritterk@illinois.edu

Is this program interdisciplinary?

No

Is this minor?

A Comprehensive study in a single discipline

Academic Level Undergraduate

CIP Code

Program Description and Justification

Justification for proposal change:

We are requesting to modify the description of courses that may or may not be used to complete the Chemistry minor, as listed at http://catalog.illinois.edu/undergraduate/las/minors/chemistry/
Currently, the Chemistry minor text at the above URL states as follows:
Choose two 3-4 credit hour courses from the List of Advanced Courses
Approved for Chemistry Minor Credit (300- and 400-level Chemistry courses, not research or independent study, 3 hours credit or more) 1
As part of a routine evaluation of our department's undergraduate degree requirements, the department's Courses & Curricula Committee made the following three assessments.

1. The committee assessed that the following sentence should be added to the main paragraph: "The two courses to be taken should be from different subdisciplines of chemistry." This stipulation has always been the department's intention and in practice is usually the case for Chemistry minors, and adding this sentence will ensure the intended outcome in all cases. The reason for requiring two different subdisciplines is that a

Chemistry minor should have reasonable breadth of advanced knowledge in

chemistry. This objective cannot properly be reached if a Chemistry minor's only two advanced Chemistry courses are in the same subdiscipline of chemistry. Examples of subdisciplines in Chemistry include analytical chemistry, inorganic chemistry, organic chemistry, and physical chemistry. Each advanced Chemistry course is readily associated with exactly one of these subdisciplines. Therefore, any Chemistry minor (especially with routine advice through the SCS Advising Office) should have no difficulty ensuring that their two chosen advanced Chemistry courses are from different subdisciplines

2. The committee assessed that of the ten CHEM courses listed in footnote 1, all but CHEM 492 can be deleted, because all but CHEM 492 are already excluded by the existing wording "(...not research or independent study, 3 hours credit or more)". Therefore, listing these courses in footnote 1 is redundant and confusing.

CHEM 315, 420, 445, and 447 are each only 2 credit hours.

CHEM 494 is only 1 credit hour.

CHEM 397, 496, 497, and 499 are each "research, individual, or independent study".

3. Finally, the committee assessed that CHEM 495 (Teaching Secondary Chemistry, 4 hours) should be added to the footnote 1 list, because this course is intended specifically for undergraduates who are working toward high school teaching certification, and therefore it is inappropriate for broader Chemistry minor credit.

Combining these three considerations, our request is to modify the relevant text to read as follows:

Choose two 3-4 credit hour courses from the List of Advanced Courses Approved for Chemistry Minor Credit (300- and 400-level Chemistry courses, not research or independent study, 3 hours credit or more).1 The two courses to be taken should be from different subdisciplines of chemistry.

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

Enrollment

Will the department limit enrollment to the minor?

No

Describe how the department will monitor the admission to/enrollment in the minor.

no specific admission requirements for the minor.

Are there any prerequisites for the proposed minor?

No

Describe how this revision will impact enrollment and degrees awarded.

The department does not envision any impact on the number of minors awarded.

Delivery Method

This program is available:

Face-to-Face

Other than certification via the students' degree audits, is there any additional planned mechanism to award/honor successful completion of the minor?

No

Budget

Are there No

budgetary

implications for

this revision?

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?

No

Additional Budget Information

Attach File(s)

Resource Implications

Facilities

Will the program require new or additional facilities or significant improvements to already existing facilities?

No

Technology

Will the program need additional technology beyond what is currently available for the unit?

No

Non-Technical Resources

Will the program require additional supplies, services or equipment (non-technical)?

No

Resources

Library Resources

Describe your proposal's impact on the University Library's resources, collections, and services. If necessary please consult with the appropriate disciplinary specialist within the University Library.

The department does not envision any impact on library resources with this proposed revision.

Instructional Resources

Will there be any reduction in other course offerings, programs or concentrations by your department as a result of this new program/proposed change?

No

Does this new program/proposed change result in the replacement of another program?

No

Does the program include other courses/subjects impacted by the creation/revision of this program?

No

Financial Resources

How does the unit intend to financially support this proposal?

Will the unit need to seek campus or other external resources?

No

Attach letters of support

Program Regulation

Describe how the program is aligned with or meets licensure, certification, and/or entitlement requirements, if applicable.

Briefly describe the plan to assess and improve student learning, including the program's learning objectives; when, how, and where these learning objectives will be assessed; what metrics will be used to signify student's achievement of the stated learning objectives; and the process to ensure assessment results are used to improve student learning.

Is the career/profession for graduates of this program regulated by the State of Illinois?

No

Program of Study

"Baccalaureate degree requires at least 120 semester credit hours or 180 quarter credit hours and at least 40 semester credit hours (60 quarter credit hours) in upper division courses" (source:

https://www.ibhe.org/assets/files/PrivateAdminRules2017.pdf). For proposals for new bachelor's degrees, if this minimum is not explicitly met by specifically-required 300- and/or 400-level courses, please provide information on how the upper-division hours requirement will be satisfied.

An undergraduate minor should consist of at least 16 - and no more than 21 hours - of course work, with at least 6 hours of 300- or 400- level courses. Except clearly remedial offerings, prerequisite courses within the sponsoring unit count towards the total; prerequisite courses outside the sponoring unit do not count toward this total. The unit sponsoring the minor and that unit's college may set educationally necessary prerequisites for eligibility for the minor within these constraints. Does this proposal meet these criteria?

Yes

All proposals must attach the new or revised version of the Academic Catalog program of study entry. Contact your college office if you have questions.

Revised programs <u>Chemistry minor comparison.docx</u>

Attach a side-by-side comparison with the existing program AND, if the revision references or adds "chose-from" lists of courses students can select from to fulfill requirements, a listing of these courses, including the course rubric, number, title, and number of credit hours.

Catalog Page Text

Catalog Page Text: Description of program for the catalog page. This is not official content, it is used to help build the catalog pages for the program. Can be edited in the catalog by the college or department.

Chemistry Minor

For advising see the Chemistry Overview Section.

Statement for Programs of Study Catalog

Course List

Code Title Hours
Choose one group of Chemistry courses below 8-10
CHEM 102 General Chemistry I

CHEM 103 General Chemistry Lab I
CHEM 104 General Chemistry II
CHEM 105 General Chemistry Lab II

M.

or

Code	Title	Hours
<u>CHEM 202</u>	Accelerated Chemistry I	
<u>CHEM 203</u>	Accelerated Chemistry Lab I	
<u>CHEM 204</u>	Accelerated Chemistry II	
<u>CHEM 205</u>	Accelerated Chemistry Lab II	
<u>CHEM 232</u>	Elementary Organic Chemistry I	3 or
		4
or <u>CHEM 236</u>	Fundamental Organic Chem I	
<u>CHEM 233</u>	Elementary Organic Chem Lab I	2
or <u>CHEM 237</u>	Structure and Synthesis	

Choose two 3-4 credit hour courses from the List of Advanced Courses Approved for Chemistry 6-8 Minor Credit (300- and 400-level Chemistry courses, not research or independent study, 3 hours credit or more). The two courses to be taken should be from different subdisciplines of Chemistry. 1

Total Hours 19-24

1 The following courses may not be used to complete the minor: <u>CHEM 492</u>, <u>CHEM 495</u>. Chemistry Minor For advising see the Chemistry Overview Section.

EP Documentation

Attach

Rollback/Approval

Notices

DMI Documentation

Attach Final

Approval Notices

Attached

Document

Justification for

this request

Program Reviewer

Comments

Key: 270

Current		Proposed			
Chemistry Minor		Chemistry Minor			
For advising see the <u>Chemistry Overview Section</u> .		For advising see the <u>Chemistry Overview</u> <u>Section</u> .			
]	Hours			
Choose one group of Chemistry courses below 8-10		8-10	Choose one group of Chemistry courses 8-10		
<u>CHEM 102</u>	General Chemistry I		below CHEM 102	Cananal Chamistury I	
<u>CHEM 103</u>	General Chemistry Lab I		CHEM 102 CHEM 103	General Chemistry I General Chemistry	
<u>CHEM 104</u>	General Chemistry II		CHEM 104	Lab I General Chemistry II	
<u>CHEM 105</u>	General Chemistry Lab II		<u>CHEM 105</u>	General Chemistry Lab II	
or			or		
<u>CHEM 202</u>	Accelerated Chemistry I		<u>CHEM 202</u>	Accelerated Chemistry I	
<u>CHEM 203</u>	Accelerated Chemistry Lab I		<u>CHEM 203</u>	Accelerated Chemistry Lab I	
<u>CHEM 204</u>	Accelerated Chemistry II		<u>CHEM 204</u>	Accelerated Chemistry II	
<u>CHEM 205</u>	Accelerated Chemistry Lab II		<u>CHEM 205</u>	Accelerated Chemistry Lab II	
<u>CHEM 232</u>	Elementary Organic Chemistry I	3 or 4	<u>CHEM 232</u>	Elementary Organic Chemistry I	3 or 4
or <u>CHEM 236</u>	Fundamental Organic Chem I		or <u>CHEM 236</u>	Fundamental Organic	Chem I
<u>CHEM 233</u>	Elementary Organic A	2	<u>CHEM 233</u>	Elementary Organic Chem Lab I	2
or CHEM 237			or CHEM 237	Structure and Synthesi	İS
or <u>CHEM 237</u> Structure and Synthesis Choose two 3-4 credit hour courses from the List of Advanced Courses Approved for Chemistry Minor Credit (300- and 400-level Chemistry courses, not research or independent study, 3 hours credit or more) Total Hours 19-24		Choose two 3-4 credit hour courses from the List of Advanced Courses Approved for Chemistry Minor Credit (300- and 400-level Chemistry courses, not research or independent study, 3 hours credit or more). The two courses to be taken should be from different subdisciplines of Chemistry ¹			
¹ The following courses may not be used to			Total Hours		19-24
complete the minor: <u>CHEM 315</u> , <u>CHEM 397</u> , <u>CHEM 420</u> , <u>CHEM 445</u> , <u>CHEM 447</u> , <u>CHEM 492</u> , <u>CHEM 494</u> , <u>CHEM 496</u> , <u>CHEM 497</u> and <u>CHEM 499</u> .			¹ The following courses may not be used to complete the minor: <u>CHEM 492</u> , CHEM 495.		