UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN SENATE
COMMITTEE ON EDUCATIONAL POLICY
(Final; Information)

EP.21.131 Report of Administrative Approvals through April 19, 2021

Senate committees are authorized to act for and in the name of the Senate on minor matters. Below is a listing of the administrative approvals the Senate Committee on Educational Policy approved at its meeting on April 19, 2021. Additional information for each approval is attached.

A. Undergraduate Programs

1) Computer Science + Linguistics, BSLAS -- in keeping with the Computer Science, BS, revisions approved as EP.21.075, revise the Mathematical Foundations list to include MATH 257, Linear Algebra with Computational Applications (3 hours) as an “or” choice with MATH 225, Introductory Matrix Theory (2 hours). In the list of Required Computer Science Coursework, replace CS 125, Introduction to Computer Science (4 hours) and CS 126, Software Design Studio (3 hours) with CS 124, Introduction to Computer Science I (3 hours) and CS 128, Introduction to Computer Science II (3 hours); add CS 222, Software Design Lab (1 hour); replace CS 241, System Programming (4 hours) with CS 240, Introduction to Computer Systems (3 hours); and update the description of the two 400-level CS courses to select from “Any two 400-level CS courses except CS 491” to “Any two 400-level CS courses above CS 403 except CS 421 and CS 491.” There is no change to the total hours required for the degree.

2) Chemistry, BS – in the Core Chemistry list, which requires 37 total hours, replace CHEM 152, College Success in Chemistry (1 hours) with CHEM 150, First Semester Success in Chemistry (1 hour), and update the number of elective hours from 29 to 30. There is no change to the total hours required for the degree.

B. Graduate Programs

1) Crop Sciences, MS – in the Thesis Option, remove the presentation requirement for CPSC 598, Seminar (4 hours), clarify that the 20 hours of 500-level electives are to include at least 4 hours of graded coursework at the 500-level other than CPSC 599 and are to be chosen in consultation with the faculty advisor. In the Non-Thesis Option, remove the presentation requirement for CPSC 598, Seminar (0-4 hours). Revise the electives requirement from 30 hours to a range of 27-31 hours (which would vary depending on the number of hours of credit CPSC 598 is taken for), clarifying that these 500-level electives are to include at least 4 hours of graded coursework at the 500-level and are to be chosen in consultation with the faculty advisor. From the “Other Requirements” table, remove the 5 hour minimum hours to be taken within the unit. The total number of hours required for the degree is unchanged.

2) Crop Sciences, PhD – in the list of requirements for both those entering with an approved master’s degree and those entering with an approved bachelor’s degree, update the Thesis Research listing to remove PLPA 599, as this course is no longer offered. There is no change to the total hours required.
3) **Bioinformatics, MS** – in the list of Biology electives from which students are to choose one course/4 hours, add CPSC 554, Quantitative Genetics and Genomics (3 hours). There is no change to the total hours required for the degree.

4) **Joint Program: African Studies, MA and Library and Information Science, MS** – in both the Thesis and Non-Thesis Options, remove IS 501, Reference and Information Services (4 hours) and IS 502, Libraries, Information and Society (2 or 4 hours) and add IS 505, Information Organization and Access (4 hours), and IS 510, Libraries, Information and Society (4 hours). There is no change to the total hours required for the degree.

5) **Joint Program: History, MA and Library and Information Science, MS** – remove IS 501, Reference and Information Services (4 hours) and IS 502, Libraries, Information and Society (2 or 4 hours) and add IS 505, Information Organization and Access (4 hours), and IS 510, Libraries, Information and Society (4 hours). There is no change to the total hours required for the degree.

6) **Joint Program: Russian, East European, & Eurasian Studies, MA and Library and Information Science, MS** – remove IS 501, Reference and Information Services (4 hours) and IS 502, Libraries, Information and Society (2 or 4 hours) and add IS 505, Information Organization and Access (4 hours), and IS 510, Libraries, Information and Society (4 hours). There is no change to the total hours required for the degree.
10KV5351BSLA: COMPUTER SCIENCE & LINGUISTICS, BSLAS

In Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1864 Head (jyoon@illinois.edu)
3. 1434 Head (namato@illinois.edu; vmahesh@illinois.edu; egunter@illinois.edu)
4. KP Committee Chair (bsnewell@illinois.edu; danko@illinois.edu; kcp@illinois.edu; jmakela@illinois.edu)
5. KP Dean (candyd@illinois.edu)
6. SLCL Head (ldelgado@illinois.edu)
7. KV Dean (las-catalog@illinois.edu)
8. University Librarian (jpwilkin@illinois.edu)
9. Provost (kmartens@illinois.edu)
10. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
11. Senate (jtempel@illinois.edu)
12. U Senate Conf (none)
13. Board of Trustees (none)
14. IBHE (none)
15. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Wed, 07 Apr 2021 16:38:46 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Thu, 08 Apr 2021 14:16:17 GMT
   James Hye Suk Yoon (jyoon): Approved for 1864 Head
3. Thu, 08 Apr 2021 17:38:33 GMT
   Elsa Gunter (egunter): Approved for 1434 Head
4. Thu, 08 Apr 2021 17:41:35 GMT
   Brooke Newell (bsnewell): Approved for KP Committee Chair
5. Thu, 08 Apr 2021 17:42:12 GMT
   Candy Deaville (candyd): Approved for KP Dean
6. Mon, 12 Apr 2021 13:34:45 GMT
   Luisa-Elena Delgado (ldelgado): Approved for SLCL Head
7. Mon, 12 Apr 2021 16:05:52 GMT
   Kelly Ritter (ritterk): Approved for KV Dean
8. Mon, 12 Apr 2021 16:07:34 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
   Kathy Martensen (kmartens): Approved for Provost

History
1. Feb 22, 2019 by Deb Forgacs (dforgacs)

Date Submitted: Wed, 07 Apr 2021 12:57:19 GMT

Viewing: 10KV5351BSLA : Computer Science & Linguistics, BSLAS
Changes proposed by: Amy Elli

Proposal Type

Proposal Type:
Major (ex. Special Education)
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*

Administrative approval: Revision to the BSLAS in Computer Science & Linguistics, College of Liberal Arts & Sciences

**EP Control Number**

EP21.131

**Official Program Name**

Computer Science & Linguistics, BSLAS

**Effective Catalog Term**

Fall 2021

**Sponsor College**

Liberal Arts & Sciences

**Sponsor Department**

Linguistics

**Sponsor Name**

James Yoon, Professor and Dept Head

**Sponsor Email**

jyoon@illinois.edu

**College Contact**

Kelly Ritter

**College Contact Email**

ritterk@illinois.edu
Program Description and Justification

Justification for proposal change:

In the CS component, the proposal involves changes to three aspects. The first is a reorganization of the material in the introductory course sequence. The second is adding an alternative to the require systems programming courses, allowing for the flexibility to choose two elective courses in computer science at the senior level. The third is to incorporate an option of a new linear algebra course, MATH 257, into the linear algebra requirement for the program.

These changes are broadly shared, with some degree-specific modifications the suite of undergraduate programs including Computer Science:

- 10KP0112BS: Computer Science, BS
- 10KL5623BS: Computer Science + Crop Sciences, BS
- 10KL5864BS: Computer Science & Animal Sciences, BS
- 10KR5639BS: Computer Science + Music, BS
- 10KT5673BS: Computer Science & Advertising, BS
- 10KV0468BSLA: Statistics & Computer Science, BSLAS
- 10KV1438BSLA: Mathematics & Computer Science, BSLAS
- 10KV5348BSLA: Computer Science & Anthropology, BSLAS
- 10KV5349BSLA: Computer Science & Astronomy, BSLAS
- 10KV5350BSLA: Computer Science & Chemistry, BSLAS
- 10KV5351BSLA: Computer Science & Linguistics, BSLAS
- 10KV5667BSLA: Computer Science & Economics, BSLAS
- 10KV5676BSLA: Computer Science & Geography & Geographic Information Science, BSLAS
- 10KV5679BSLA: Computer Science & Philosophy, BSLAS
- JP10KL5903BS & 10KS5903MS: JP: Computer Science + Crop Sciences, BS & Crop Sciences, MS

In more detail:

1) (CS 125(4cr) Introduction to Computer Science + CS 126(3cr) Software Design Studio) -> (CS 124(3cr) Introduction to Computer Science I + CS 128(3cr) Introduction to Computer Science II + CS 222(1cr) Software Design Lab), CS 242(3cr) Programming Studio -> CS 222(1cr) Software Design Lab, the CS 225 Data Structures prerequisite of CS 125 is replaced with (CS 126 or CS 128) as the programming prerequisite, CS 128 is open to all, CS 222 is restricted to &CS+ programs. The programming prerequisite for CS 173 is changed from CS 125 to (CS 124 or CS 125).

Justification: CS 128 takes about 2/3 of the material from old CS 126 and receives an hour from the old CS 125 topics, with the remaining topics remaining with CS 124. Replacing CS 126 with CS 128 makes the path to CS 225 uniform for all students (except ECE), including &CS+ majors, students wanting to transfer into one of the &CS+ programs. The programming prerequisite for CS 173 is changed from CS 125 to (CS 124 or CS 125).

2) Change the requirements of CS 233(4cr) Computer Architecture and CS 241(4 cr) System Programming to the student's choice or (CS 233 and CS 241) or (CS 240(3 cr) Introduction to Computer Systems and two 400-level CS courses (not including CS 491))

Justification: This option is already a possibility in several of the CS+X degree programs and it allows students in Computer Science + Linguistics to customize their program to better focus on the aspects of CS that impact the areas of Linguistics most in line with their interests.

3) Change the linear algebra requirement from MATH 225 to (Math 225 or Math 257).

Justification: The Math department is developing MATH 257 as the eventual replacement for MATH 415, with the same theoretical content, but with an emphasis on using programming to perform matrix operations instead of calculating them on paper. Students in Linguistics and Computer Science should have the option of a stronger linear algebra class with stronger ties to programming.

**Corresponding Degree**

BSLAS Bachelor of Science in Liberal Arts and Sciences

**Is this program interdisciplinary?**

Yes
Interdisciplinary Colleges and Departments (list other colleges/departments which are involved other than the sponsor chose above)

**College**
Grainger College of Engineering

**Department**
Computer Science

Do you need to add an additional interdisciplinary relationship?
No

**Academic Level**
Undergraduate

Will you admit to the concentration directly?
No

Is a concentration required for graduation?
No

**CIP Code**
110199 - Computer and Information Sciences, Other.

Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No

**Admission Requirements**

Desired Effective Admissions Term
Fall 2021

Is this revision a change to the admission status of the program?
No
Provide a brief narrative description of the admission requirements for this program. Where relevant, include information about licensure requirements, student background checks, GRE and TOEFL scores, and admission requirements for transfer students.

N/A

Describe how critical academic functions such as admissions and student advising are managed.

N/A

**Enrollment**

Describe how this revision will impact enrollment and degrees awarded.

The department does not anticipate any impact to enrollment or degrees awarded.

**Estimated Annual Number of Degrees Awarded**

What is the matriculation term for this program?

Fall

What is the typical time to completion of this program?

4 years

What are the minimum Total Credit Hours required for this program?

120

**Delivery Method**

Is this program available on campus and online?

No

This program is available:

On Campus

**Budget**

Are there budgetary implications for this revision?

No

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

No
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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Attach File(s)
CS_letter_Math_257.pdf

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

N/A

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.

Current collections and services are adequate for the proposed program.
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 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?

no change in support for the major.

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

No

Are you seeking a change in the tuition rate or differential for this program?

No

Program Regulation and Assessment

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

N/A

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.

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

MATH 257 option to 225.pdf
CS LING revisions side-by-side comparative table April2021.xlsx

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

Statement for Programs of Study Catalog

General education: Students must complete the Campus General Education (https://courses.illinois.edu/) requirements including the campus general education language requirement.

Minimum required major and supporting coursework: Normally equates to 66 hours. Twelve hours of 300- and 400-level Anthropology courses must be taken on this campus.

Minimum hours required for graduation: 120 hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 100</td>
<td>Freshman Orientation (recommended)</td>
<td>1</td>
</tr>
<tr>
<td>CS 125</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CS 126</td>
<td>Software Design Studio</td>
<td>3</td>
</tr>
<tr>
<td>CS 124</td>
<td>Introduction to Computer Science I</td>
<td>3</td>
</tr>
<tr>
<td>CS 128</td>
<td>Introduction to Computer Science II</td>
<td>3</td>
</tr>
<tr>
<td>CS 173</td>
<td>Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 225</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>CS 222</td>
<td>Software Design Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

Choose one of the following combinations

8-11

- CS 233
- CS 241

& System Programming

OR

CS 240

Introduction to Computer Systems

& two CS courses at the 400 level above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.

Choose one of the following:

- STAT 200
  - Statistical Analysis
- STAT 212
  - Biostatistics
- CS 361
  - Probability & Statistics for Computer Science
- CS 374
  - Introduction to Algorithms & Models of Computation
- CS 421
  - Programming Languages & Compilers

Mathematics (may also fulfill the General Education Quantitative Reasoning I and II requirements)

- MATH 221
  - Calculus I
  - 4-5
- or MATH 220
  - Calculus
- MATH 225
  - Introductory Matrix Theory
  - 2 or 3
- or MATH 257
  - Linear Algebra with Computational Applications
- MATH 231
  - Calculus II
  - 3

Required Linguistics Coursework - Minimum of 24 hours

- LING 100
  - Intro to Language Science
  - 3
- LING 301
  - Elements of Syntax
  - 3
- LING 307
  - Elmnts Semantics & Pragmatics
  - 3
- LING 406
  - Introduction to Computational Linguistics
  - 3

Advanced Coursework - select at least three of the following
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRST 415</td>
<td>Machine Translation: History and Applications</td>
</tr>
<tr>
<td>LING 490</td>
<td>Special Topics in Linguistics (Check with advisor for appropriate topics. May be repeated to meet this requirement if topics vary)</td>
</tr>
<tr>
<td>CS 446</td>
<td>Machine Learning</td>
</tr>
</tbody>
</table>

**Linguistics Breadth Course**

Any 200-level or higher Linguistics Course (with the exception of ESL and language courses)

1. CS 100 is an orientation course aimed at first-year students, so students who declare the major after the freshman year are not required to complete it.

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**EP Documentation**

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**DMI Documentation**

**Banner/Codebook Name**

BSLAS: Comp Sci & Ling-UlUC

**Program Code:**

10KV5351BSLA

**Degree Code**

BSLAS

**Major Code**

5351

**Program Reviewer Comments**

Kathy Martensen (kmartens) (Thu, 15 Apr 2021 19:39:21 GMT): Administrative approval: No change to total hours required/restriction of student options.

Key: 286
### Key
- **GREEN HIGHLIGHT** = Course addition, requirement replacement or updated hours
- **RED HIGHLIGHT** = Course to be removed from listed requirements.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Current Requirement</th>
<th>Revised Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 100</td>
<td>Freshman Orientation</td>
<td>1</td>
<td>Required</td>
<td>Required</td>
<td>1</td>
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<tr>
<td>CS 125</td>
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<td></td>
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<td>CS 126</td>
<td>Software Design Studio</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 124</td>
<td>Introduction to Computer Science I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 128</td>
<td>Introduction to Computer Science II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 173</td>
<td>Discrete Structures</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 225</td>
<td>Data Structures</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 222</td>
<td>Data Structures</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 233</td>
<td>Computer Architecture</td>
<td>4</td>
<td>Required</td>
<td>Required</td>
<td>4</td>
</tr>
<tr>
<td>CS 241</td>
<td>System Programming</td>
<td>4</td>
<td>Required</td>
<td>Required</td>
<td>4</td>
</tr>
<tr>
<td>CS 361</td>
<td>Probability and Statistics for Computer Science</td>
<td>4</td>
<td>Required</td>
<td>Required</td>
<td>4</td>
</tr>
<tr>
<td>CS 374</td>
<td>Programming Languages and Compilers</td>
<td>3 or 4</td>
<td>Required</td>
<td>Required</td>
<td>3 or 4</td>
</tr>
<tr>
<td>MATH 220</td>
<td>Calculus</td>
<td>5</td>
<td>Required</td>
<td>Required</td>
<td>5</td>
</tr>
<tr>
<td>MATH 221</td>
<td>Calculus</td>
<td>5</td>
<td>Required</td>
<td>Required</td>
<td>5</td>
</tr>
<tr>
<td>STAT 200</td>
<td>Statistical Analysis</td>
<td>3</td>
<td>Required</td>
<td>Required</td>
<td>3</td>
</tr>
<tr>
<td>STAT 212</td>
<td>Biostatistics</td>
<td>3</td>
<td>Required</td>
<td>Required</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one of the following:
- STAT 200 Statistical Analysis
- STAT 212 Biostatistics
- CS 361 Probability and Statistics for Computer Science (recommended)
- CS 374 Programming Languages and Compilers
- MATH 220 Calculus
- MATH 221 Calculus

No changes to the Linguistics course requirements.

Choose one of the following combinations:
- CS 223 Computer Architecture & CS 241 System Programming
- CS 345 Introduction to Computer Systems
- Any two 400-level CS courses above CS 403, excluding CS 421 and CS 491. These two courses must be distinct from all other courses used to fulfill program requirements or options.

Choose one of the following:
- MATH 220 Calculus
- MATH 221 Calculus
- MATH 225 Introductory Math Theory
- MATH 257 Linear Algebra with Computational Applications
Re: Use of Math 257 in Computer Science and related programs

The Mathematics Department, working with the Grainger College of Engineering, has recently created the course MATH 257, *Linear Algebra with Computational Applications*. Quoting from the justification of the approved proposal, “In the future, MATH 257 will replace the MATH 415 requirement in many science and engineering curricula.” With this in mind, the department would be pleased to have Computer Science add MATH 257 as a linear algebra option in their programs, specifically in:

10KP0112BS: Computer Science, BS
10KV1438BSLA: Mathematics & Computer Science, BSLAS
10KV0464BSLA: Statistics & Computer Science, BSLAS
10KV5348BSLA: Computer Science & Anthropology, BSLAS
10KV5349BSLA: Computer Science & Astronomy, BSLAS
10KV5350BSLA: Computer Science & Chemistry, BSLAS
10KV5351BSLA: Computer Science & Linguistics, BSLAS
10KV5667BSLA: Computer Science & Economics, BSLAS
10KV5676BSLA: Computer Science & Geography & Geographic Information Science, BSLAS
10KV5679BSLA: Computer Science & Philosophy, BSLAS
10KR5639BS: Computer Science + Music, BS
10KT5673BS: Computer Science & Advertising, BS
10KL5864BS: Computer Science & Animal Sciences, BS
10KL5623BS: Computer Science + Crop Sciences, BS
JP:10KL5903BS & 10KS5903MS: JP: Computer Science + Crop Sciences, BS & Crop Sciences, MS

As the Mathematics department is reallocating instructional resources from Math 415 to Math 257 as the need shifts, this will not cause any undue difficulties for Mathematics resources.

Sincerely

Randy McCarthy  
Professor of Mathematics  
Dir of Undergraduate Studies in Math  
rmccrthy@illinois.edu
MATH 257: LINEAR ALGEBRA WITH COMPUTATIONAL APPLICATIONS

Completed Workflow
1. 1257 Head (tyson@illinois.edu)
2. KV Dean (las-catalog@illinois.edu)
3. COTE (bmclvngr@illinois.edu)
4. Provost (kmartens@illinois.edu)
5. Registrar (fms-catalog@illinois.edu)
6. Banner (fms-catalog@illinois.edu)

Approval Path
1. Fri, 11 Sep 2020 16:06:49 GMT
   Jeremy Tyson (tyson): Approved for 1257 Head
2. Wed, 07 Oct 2020 15:10:03 GMT
   Kelly Ritter (ritterk): Approved for KV Dean
   Brenda Clevenger (bmclvngr): Approved for COTE
   Kathy Martensen (kmartens): Approved for Provost
   Deb Forgacs (dforgacs): Approved for Registrar
   *system*: Approved for Banner

History
1. Oct 10, 2020 by Alison Champion (abc)

Viewing: MATH 257: Linear Algebra with Computational Applications
Changes proposed by: Alison Champion

General Information
Effective Term:
Fall 2021

College:
Liberal Arts & Sciences

Department/Unit Name (ORG Code):
Mathematics (1257)

Course Subject:
Mathematics (MATH)

Course Number:
257
Course Title:
Linear Algebra with Computational Applications

Abbreviated Title:
Linear Algebra w Computat Appl

Course Description:
Introductory course incorporating linear algebra concepts with computational tools, with real world applications to science, engineering and data science. Topics include linear equations, matrix operations, vector spaces, linear transformations, eigenvalues, eigenvectors, inner products and norms, orthogonality, linear regression, equilibrium, linear dynamical systems and the singular value decomposition.

Justification
Justification for change:
This course was developed in cooperation with Grainger College of Engineering to allow undergraduates to use linear algebra at an earlier stage in their studies and also to incorporate modern computational tools. It contains much of the material from MATH 415 but with computational tools and data science topics. It covers applications and topics not included in MATH 225.

In the future, MATH 257 will replace the MATH 415 requirement in many science and engineering curricula, and it will become a second choice or a replacement in curricula which currently require MATH 225, including most CS+X curricula.

Please Note: a syllabus is required for General Education review:
MATH257 Syllabus.pdf

Course Information
Course Credit

Undergraduate:
3

Registrar Use Only:
Banner Credit:
3

Billable Hours:
3

Grading Type
Letter Grade
Available for DFR:
No

Repeatability
No

Credit Restrictions
Credit Restrictions:
Credit is not given for both MATH 257 and any of MATH 125, MATH 225, MATH 227, MATH 415 or ASRM 406.

Advisory Statements
MATH 220 or MATH 221; CS 101 or equivalent programming experience.

Cross-listing

Class Schedule Information

Fees
No

Course Description in the Catalog Entry
This is how the above information will be represented in the Catalog:

Introductory course incorporating linear algebra concepts with computational tools, with real world applications to science, engineering and data science. Topics include linear equations, matrix operations, vector spaces, linear transformations, eigenvalues, eigenvectors, inner products and norms, orthogonality, linear regression, equilibrium, linear dynamical systems and the singular value decomposition. Course Information: Credit is not given for both MATH 257 and any of MATH 125, MATH 225, MATH 227, MATH 415 or ASRM 406. Students must register for a lecture, a lab, and a discussion section. Prerequisite: MATH 220 or MATH 221; CS 101 or equivalent programming experience.

Additional Course Notes
Students must register for a lecture, a lab, and a discussion section.

Course Detail
Frequency of course:
Every Fall
Every Spring
Every Summer

Duration of the course
Full

Anticipated Enrollment:
800
Expected distribution of student registration:

Freshman:
30%

Sophomore:
50%

Junior:
10%

Senior:
10%

General Education

Additional Course Information
Does this course replace an existing course?
No

Does this course impact other courses?
Yes

Specify the courses affected:
MATH 125, MATH 225, MATH 415, ASRM 406 credit restrictions. This course may also serve as prerequisite for courses currently listing MATH 415 as a prerequisite, both within and outside of MATH rubric courses.

Does the addition of this course impact the departmental curriculum?
No

Has this course been offered as a special topics or other type of experimental course?
Yes

Please indicate the Banner subject, course number, section ID, term and enrollment for each offering:
MATH 299 E1 add-on to Math 415 in Spring 2020, 24;
MATH 415 PL1, Fall 2020, 280.

Will this course be offered on-line?
Face-to-Face

Faculty members who will teach this course:
Philipp Hieronymi
10KV0335BS: CHEMISTRY, BS

Completed Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1413 Head (sks@illinois.edu)
3. SOCS Head (jsweedle@illinois.edu; denzler@illinois.edu)
4. KV Dean (las-catalog@illinois.edu)
5. University Librarian (jpwilkin@illinois.edu)
6. COTE Programs (nilatha@illinois.edu; bmclvngr@illinois.edu)
7. Provost (kmartens@illinois.edu)
8. Senate EPC (bjleman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
9. Senate (jtempel@illinois.edu)
10. U Senate Conf (none)
11. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Tue, 19 Jan 2021 17:10:24 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Tue, 19 Jan 2021 20:46:15 GMT
   Scott Silverman (sks): Approved for 1413 Head
3. Tue, 19 Jan 2021 22:58:24 GMT
   Jonathan Sweedler (jsweedle): Approved for SOCS Head
4. Tue, 19 Jan 2021 22:59:24 GMT
   Kelly Ritter (riterk): Approved for KV Dean
5. Tue, 19 Jan 2021 23:07:28 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
6. Wed, 20 Jan 2021 15:11:02 GMT
   Brenda Clevenger (bmclvngr): Approved for COTE Programs
   Kathy Martensen (kmartens): Approved for Provost
   Barbara Lehman (bjleman): Approved for Senate EPC
9. Tue, 09 Feb 2021 15:34:47 GMT
   Jennifer Roether (jtempel): Approved for Senate
10. Wed, 10 Feb 2021 20:55:23 GMT
    Kathy Martensen (kmartens): Approved for U Senate Conf
11. Thu, 11 Feb 2021 13:37:03 GMT
    Emily Stuby (eastuby): Approved for DMI

History
1. Mar 21, 2019 by Deb Forgacs (dforgacs)
2. Apr 6, 2019 by Deb Forgacs (dforgacs)
3. May 12, 2020 by Amy Elli (amyelli)
4. May 18, 2020 by Deb Forgacs (dforgacs)
5. Feb 11, 2021 by Amy Elli (amyelli)

Date Submitted: Tue, 13 Apr 2021 18:26:36 GMT

Viewing: 10KV0335BS : Chemistry, BS
Changes proposed by: Amy Elli
Proposal Type

Proposal Type:
Major (ex. Special Education)

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

Administrative approval: Proposal to update the BS in Chemistry, College of Liberal Arts & Sciences

EP Control Number
EP:21.131

Official Program Name
Chemistry, BS

Effective Catalog Term
Fall 2021

Sponsor College
Liberal Arts & Sciences

Sponsor Department
Chemistry

Sponsor Name
Scott Silverman

Sponsor Email
sks@illinois.edu

College Contact
Kelly Ritter
Program Description and Justification

Justification for proposal change:

In October 2020, the Department of Chemistry proposed a curriculum revision for the BS in Chemistry and BSLAS in Chemistry degrees. We introduced two new First-Year Experience in Chemistry courses, CHEM 150 (1 hour) and CHEM 152 (1 hour), to replace their special-topics versions CHEM 199FY and CHEM 199L, respectively, each of which had been taught for many years. With this revision, CHEM 150 was made required for all BS and BSLAS freshmen; CHEM 152 was made required for BS freshmen and optional for BSLAS freshmen. The revised curricula were formally approved in February 2021.

CHEM 152 was previously offered in the form of special-topics CHEM 199L, taught since Spring 2004 by Prof. Yi Lu in Chemistry. Our October 2020 curriculum revision proposal was made with the expectation that Prof. Lu would be the essentially permanent annual Spring instructor for CHEM 152. However, in January 2021, Prof. Lu unexpectedly announced that he would be leaving the University of Illinois to move his research group to another university as of September 2021.

This unfortunate situation has led Chemistry to reassess the recently approved curriculum revision in the context of our BS degree program and our ability to provide suitable instructors consistently. We have decided that we cannot consistently offer CHEM 152 every Spring semester, given our faculty instructional obligations along with the consideration that this particular course cannot be taught properly by anyone other than a research-oriented faculty member, given the course content.

As such, we now need to make CHEM 152 optional rather than required for our BS majors (the BS Chemistry degree as well as the Environmental Chemistry Concentration). We want to serve our undergraduate majors in the best possible way, but we cannot do this by having a required course for which we cannot reliably provide a faculty instructor. We will strive to identify an instructor and offer CHEM 152 in Spring semesters, but we cannot be sure that we can do so. Only an “optional” designation, rather than “required”, for CHEM 152 is compatible in a practical sense with this situation.

Because we are removing a recently introduced course requirement that has not yet actually been implemented (CHEM 199L was never required since Spring 2004 through its final offering in Spring 2021, and CHEM 152 has not yet ever been offered), our justification is as described in the response to #1 above. We note that the first-semester course CHEM 150 can readily be adjusted to avoid any reference to a no-longer-required CHEM 152 for BS majors. Furthermore, because CHEM 152 was always optional for BSLAS majors, CHEM 150 retains its full value on a stand-alone basis for both BS and BSLAS majors.

We note that first-year courses offered in other LAS departments, such as BIOC 190 (Biochemistry Orientation), CHBE 121 (CHBE Profession), ECON 198 (Economics at Illinois), PHYS 110 (Physics Careers), and PSYC 102 (Psych Orientation), are all one-semester courses that are not part of a first-year, two-semester sequence. Therefore, even in an academic year in which CHEM 152 cannot be offered, CHEM 150 as a one-semester course is valuable and is in accord with what is done in several other LAS departments.
CIP Code
400501 - Chemistry, General.

Is This a Teacher Certification Program?
Yes

Will specialized accreditation be sought for this program?
No

Admission Requirements

Desired Effective Admissions Term
Fall 2021

Is this revision a change to the admission status of the program?
No

Provide a brief narrative description of the admission requirements for this program. Where relevant, include information about licensure requirements, student background checks, GRE and TOEFL scores, and admission requirements for transfer students.
N/A

Describe how critical academic functions such as admissions and student advising are managed.
N/A

Enrollment

Describe how this revision will impact enrollment and degrees awarded.
The department does not anticipate any impact to enrollment or degrees awarded

Estimated Annual Number of Degrees Awarded

What is the matriculation term for this program?
Fall

What is the typical time to completion of this program?
4 years
What are the minimum Total Credit Hours required for this program?

120 hours

Delivery Method

Is this program available on campus and online?

No

This program is available:

On Campus

Budget

Are there budgetary implications for this revision?

No

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

No

Additional Budget Information

There is no budget implication, other than perhaps a slight reduction in graduate TA usage relative to the situation in which CHEM 152 is required. However, because CHEM 152 was never offered as a required course, the actual budget implication is zero, relative to the situation before CHEM 152 was first proposed.

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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

The original introduction of the CHEM 152 requirement was done with the expectation that Prof. Yi Lu would continue to teach the course, which he had taught as CHEM 199L since Spring 2004. But with Prof. Lu’s departure from Illinois as of the start of Fall 2021, removing the CHEM 152 requirement will leave us with no net teaching impact. SCS Advising is fully aware of this situation and will properly advise all BS majors.

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.

Current collections and services are adequate for the proposed program.

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 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?

There is no financial impact.

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

No
Are you seeking a change in the tuition rate or differential for this program?
No

Program Regulation and Assessment

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

Because we are removing the CHEM 152 requirement that was never actually implemented in the first place, we have no plan to do such an assessment.

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.

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

Chem BS Curriculum Revised March 2021.docx
Chemistry BS Comparative Table Rev March 21.docx

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

Statement for Programs of Study Catalog

General education: Students must complete the Campus General Education (https://courses.illinois.edu/gened/DEFAULT/DEFAULT/requirements including the campus general education language requirement.
Minimum hours required for graduation: 120 hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 150</td>
<td>First Semester Success in Chemistry^2</td>
<td>37</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>College Success in Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 202</td>
<td>Accelerated Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 203</td>
<td>Accelerated Chemistry Lab I</td>
<td></td>
</tr>
<tr>
<td>CHEM 204</td>
<td>Accelerated Chemistry II</td>
<td></td>
</tr>
<tr>
<td>COURSE</td>
<td>TITLE</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CHEM 205</td>
<td>Accelerated Chemistry Lab II³</td>
<td></td>
</tr>
<tr>
<td>CHEM 236</td>
<td>Fundamental Organic Chem I</td>
<td></td>
</tr>
<tr>
<td>CHEM 237</td>
<td>Structure and Synthesis</td>
<td></td>
</tr>
<tr>
<td>CHEM 312</td>
<td>Inorganic Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 315</td>
<td>Instrumental Chem Systems Lab</td>
<td></td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Instrumental Characterization</td>
<td></td>
</tr>
<tr>
<td>CHEM 436</td>
<td>Fundamental Organic Chem II</td>
<td></td>
</tr>
<tr>
<td>CHEM 442</td>
<td>Physical Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 444</td>
<td>Physical Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Principles Lab I</td>
<td></td>
</tr>
</tbody>
</table>

Advanced Chemistry

Chemistry/Biochemistry courses numbered 300 or higher, which must include one from the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 317</td>
<td>Inorganic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 437</td>
<td>Organic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 447</td>
<td>Physical Principles Lab II⁴</td>
</tr>
</tbody>
</table>

Additional laboratory work:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 455</td>
<td>Technqs Biochem &amp; Biotech</td>
</tr>
<tr>
<td>CHEM 317</td>
<td>Inorganic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 437</td>
<td>Organic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 447</td>
<td>Physical Principles Lab II</td>
</tr>
<tr>
<td>CHEM 483</td>
<td>Solid State Structural Anlys⁵</td>
</tr>
</tbody>
</table>

Additional chemistry/biochemistry courses to complete the 11-hour requirement in advanced chemistry

Mathematics:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 220</td>
<td>Calculus</td>
</tr>
<tr>
<td>or MATH 221</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 231</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 241</td>
<td>Calculus III</td>
</tr>
</tbody>
</table>

Physics:¹

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 211</td>
<td>University Physics: Mechanics</td>
</tr>
<tr>
<td>PHYS 212</td>
<td>University Physics: Elec &amp; Mag</td>
</tr>
<tr>
<td>PHYS 214</td>
<td>Univ Physics: Quantum Physics</td>
</tr>
</tbody>
</table>

Technical Electives, including the following

Required Mathematics:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 225</td>
<td>Introductory Matrix Theory⁶</td>
</tr>
<tr>
<td>or MATH 415</td>
<td>Applied Linear Algebra</td>
</tr>
</tbody>
</table>

MATH 285 or equivalent

Strongly Recommended:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 499</td>
<td>Senior Thesis (maximum of 10 hours)</td>
</tr>
</tbody>
</table>

Recommended: basic computer science

Other technical courses chosen from:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chemistry (300 or higher), biochemistry, chemical engineering (200 or higher)</td>
</tr>
<tr>
<td></td>
<td>Courses in life sciences (all courses at 200 or higher)</td>
</tr>
<tr>
<td></td>
<td>Mathematics or computer science above the basic level</td>
</tr>
<tr>
<td></td>
<td>Other courses in the physical and biological sciences and engineering includingCHEM 199⁷</td>
</tr>
</tbody>
</table>

Nontechnical Requirements⁸

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General education:</td>
</tr>
<tr>
<td></td>
<td>Foreign language - three semesters of college study (or three years of high school study) in a single foreign language</td>
</tr>
<tr>
<td></td>
<td>Composition I</td>
</tr>
<tr>
<td></td>
<td>Advanced Composition⁹</td>
</tr>
<tr>
<td></td>
<td>Humanities/Arts to satisfy the campus general education requirements</td>
</tr>
<tr>
<td></td>
<td>Social/Behavioral sciences to satisfy the campus general education requirements</td>
</tr>
</tbody>
</table>

Variable
Cultural Studies to satisfy the campus general education requirement

Free electives

1. Hours given are those typical to meet requirement.
2. On and off-campus transfer students in the BS curriculum may substitute 1 additional hour of 200 level or higher Chemistry (including CHEM 297, CHEM 397, CHEM 496, CHEM 497, or CHEM 499) for CHEM 150. This may not include CHEM 222 or CHEM 223 for students who took the CHEM 102, CHEM 103, CHEM 104 and CHEM 105 sequence instead of CHEM 202, CHEM 203, CHEM 204, and CHEM 205.
3. If necessary, CHEM 102 and CHEM 103, CHEM 104 and CHEM 105, CHEM 222, and CHEM 223 may be substituted for CHEM 202, CHEM 203, CHEM 204, and CHEM 205. Warning: CHEM 222 and CHEM 223 are offered only in the fall semester.
4. The course chosen from CHEM 317, CHEM 437, or CHEM 447 cannot be used to satisfy the additional chemistry lab requirement.
5. Students who present less than 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation must complete two additional courses chosen from the list. Students who will present at least 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation are required to complete only one laboratory course from the list.
6. Students contemplating transfer to the chemical engineering curriculum should choose MATH 415.
7. Three hours maximum credit in CHEM 199. Additional courses in the sciences and engineering can be taken upon the approval of the chair of the chemistry department advising committee. Most approved courses must have a strong technical prerequisite, such as one year of college-level math or science.
8. The requirements for the Campus General Education categories Natural Sciences and Technology and Quantitative Reasoning I and II are fulfilled through required coursework in the curriculum.
9. The courses taken to satisfy Advanced Composition requirement may also be used to partially satisfy one of the core chemistry, advanced chemistry, mathematics, physics, or technical electives requirements (if appropriate), or may be used to partially satisfy the free electives requirements.
10. The courses taken to satisfy Western and/or Non-Western Civilization requirements may also be used to satisfy nontechnical and/or free elective categories.
11. Restrictions: (1) Courses preparatory to or used to satisfy the minimum requirements specified in the above requirements may not be included as free electives. (2) No first-year foreign language course (e.g., 101, 102, or equivalent) may be included unless it is a different language than used to satisfy the foreign language nontechnical requirement.

EP Documentation

DMI Documentation

Banner/Codebook Name
BS: Chemistry - UIUC

Program Code:
10KV0335BS

Degree Code
BS

Major Code
0335

Program Reviewer Comments
Kathy Martensen (kmartens) (Thu, 15 Apr 2021 19:41:03 GMT): Administrative approval: No change in hours required/restriction in options.
Proposal for revised curricula (degree, major, concentration, minor)

Submit completed proposals via email to Associate Dean Kelly Ritter (ritterk@illinois.edu). Please obtain Executive Officer and School Director (if applicable) approval via email and forward with the proposal to LAS.

Proposal Title: Proposal to update the BS in Chemistry to change the new first-year experience course CHEM 152 from required to optional for BS majors

Proposed effective date: Fall 2021 (Proposals may not be implemented until they go through all necessary levels of approval. Proposed changes may not be publicized as final on any web sites, printed documents, etc. until written confirmation of final approval is issued. For LAS units, a fall semester effective term for all curricula will be requested, please indicate the proposed year).

Sponsor(s): (Please include name, title, and email address of a faculty member knowledgeable about the proposal who will serve as the primary contact for the proposal. This person must be authorized to make changes in the proposal on behalf of the department. In case of multiple units, give information for each unit.) Prof. Scott K. Silverman, Associate Head of Budget and Operations, Department of Chemistry, sks@illinois.edu

College contact: Kelly Ritter, Associate Dean for Curricula and Academic Policy, College of Liberal Arts and Sciences, ritterk@illinois.edu

For Minors ONLY-  
1) Is this minor:  
   o A comprehensive study in a single discipline  
   o An interdisciplinary study focusing on a single theme  
   o Exception

PROGRAM DESCRIPTION and JUSTIFICATION

1) Provide a brief description but concise description of your proposal. For example, if proposing revisions to a curriculum, state specifically what is changing. Where applicable, note whether stated program changes include additional requirements in the form of prerequisite courses. Requests for curriculum revisions must be accompanied by a table which clearly outlines the current requirements and the proposed revisions. This information may be submitted as an appendix. See Appendix A for an example. Please provide pertinent information only.

In October 2020, the Department of Chemistry proposed a curriculum revision for the BS in Chemistry and BSLAS in Chemistry degrees. We introduced two new First-Year Experience in Chemistry courses, CHEM
150 (1 hour) and CHEM 152 (1 hour), to replace their special-topics versions CHEM 199FY and CHEM 199L, respectively, each of which had been taught for many years. With this revision, CHEM 150 was made required for all BS and BSLAS freshmen; CHEM 152 was made required for BS freshmen and optional for BSLAS freshmen. The revised curricula were formally approved in February 2021.

CHEM 152 was previously offered in the form of special-topics CHEM 199L, taught since Spring 2004 by Prof. Yi Lu in Chemistry. Our October 2020 curriculum revision proposal was made with the expectation that Prof. Lu would be the essentially permanent annual Spring instructor for CHEM 152. However, in January 2021, Prof. Lu unexpectedly announced that he would be leaving the University of Illinois to move his research group to another university as of September 2021.

This unfortunate situation has led Chemistry to reassess the recently approved curriculum revision in the context of our BS degree program and our ability to provide suitable instructors consistently. We have decided that we cannot consistently offer CHEM 152 every Spring semester, given our faculty instructional obligations along with the consideration that this particular course cannot be taught properly by anyone other than a research-oriented faculty member, given the course content.

As such, we now need to make CHEM 152 optional rather than required for our BS majors (the BS Chemistry degree as well as the Environmental Chemistry Concentration). We want to serve our undergraduate majors in the best possible way, but we cannot do this by having a required course for which we cannot reliably provide a faculty instructor. We will strive to identify an instructor and offer CHEM 152 in Spring semesters, but we cannot be sure that we can do so. Only an “optional” designation, rather than “required”, for CHEM 152 is compatible in a practical sense with this situation.

2) **Provide a justification of the program**, including how your unit decided to create this program, highlights of the program objectives, and the careers, occupations, or further educational opportunities for which the program will prepare graduates, when appropriate.

Because we are removing a recently introduced course requirement that has not yet actually been implemented (CHEM 199L was never required since Spring 2004 through its final offering in Spring 2021, and CHEM 152 has not yet ever been offered), our justification is as described in the response to #1 above. We note that the first-semester course CHEM 150 can readily be adjusted to avoid any reference to a no-longer-required CHEM 152 for BS majors. Furthermore, because CHEM 152 was always optional for BSLAS majors, CHEM 150 retains its full value on a stand-alone basis for both BS and BSLAS majors.

We note that first-year courses offered in other LAS departments, such as BI0C 190 (Biochemistry Orientation), CHBE 121 (CHBE Profession), ECON 198 (Economics at Illinois), PHYS 110 (Physics Careers), and PSYC 102 (Psych Orientation), are all one-semester courses that are not part of a first-year, two-semester sequence. Therefore, even in an academic year in which CHEM 152 cannot be offered, CHEM 150 as a one-semester course is valuable and is in accord with what is done in several other LAS departments.

3) In addition, please provide an answer as to how your undergraduate degree (120 hours of coursework) will satisfy this requirement: IBHE requires that all degree programs contain at least 40 credit hours in upper division courses. Upper division courses have been described as 300- and 400-level coursework and some 200-level courses in which multiple prerequisites are required.
There is no impact on this requirement.

Is this program interdisciplinary? No.

If a proposal for a concentration-

will you admit to the concentration directly? n/a

is a concentration required for graduation? n/a

Will specialized accreditation be sought for this program? No. The BS in Chemistry degree is already certified by the American Chemical Society (ACS).

ADMISSION REQUIREMENTS

1) Desired admissions term: For LAS units, a fall semester effective term for all curricula will be requested, please indicate the proposed year

   Fall, 2021
   Is this revision a change to the admission status of the program? No.

2) Provide a brief narrative description of the admission requirements for this program. Where relevant, include information about licensure requirements, student background checks, GRE and TOEFL scores, and admission requirements for transfer students. (degrees, majors, concentrations ONLY). n/a

3) Describe how critical academic functions such as admissions and student advising are managed. n/a

ENROLLMENT – n/a

1) Describe how this revision will impact enrollment and degrees awarded.

2) Estimated Annual Number of Degrees Awarded (degrees, majors, concentrations ONLY)

   Year 1: 
   Year 5 (or when fully implemented): 

3) What is the matriculation term for this program? Fall OR Spring/summer/other

4) What is the typical time to completion of this program?

   Note: grad certificates require at least 10 weeks. Other examples: BALAS= 4years, MA=2.5 years

5) What are the minimum Total Credit Hours required for this program?

6) Delivery Method, what is the program’s primary delivery method?

   Face to Face; Online & Face to Face; Online Only; Other- specify
   If NOT face to face, please describe the use of this delivery method:
5) MINORS ONLY:

- Will the department limit enrollment in the minor?
- Describe how the department will monitor admission to/enrollment in the minor.
- Are there any prerequisites for the proposed minor? If yes, please list the courses and whether or not these course count in the total hours for the minor.
- Other than certification via the students’ degree audits, is there any additional planned mechanism to award/honor successful completion of the minor? If yes, please describe.

BUDGET

1) Please describe any budgetary implications for this revision- addressing applicable personnel, facilities, technology and supply costs.

2) Will the revision require staffing (faculty, advisors, etc.) beyond what is currently available? If yes, please describe.
   
   No

3) Please provide any additional budget information needed to effectively evaluate the proposal.

   There is no budget implication, other than perhaps a slight reduction in graduate TA usage relative to the situation in which CHEM 152 is required. However, because CHEM 152 was never offered as a required course, the actual budget implication is zero, relative to the situation before CHEM 152 was first proposed.

RESOURCE IMPLICATIONS

1) Facilities- Will the program require new or additional facilities or significant improvements to already existing facilities? If yes, please outline the specific need and Year 1 and Year 5 cost.
   
   No

2) Technology- Will the program need additional technology beyond what is currently available for the unit? If yes, please outline the specific need and Year 1 and Year 5 cost.
   
   No

3) Non-Technical Resources- Will the program require additional supplies, services or equipment (non-technical)? If yes, please outline the specific need and Year 1 and Year 5 cost.
   
   No

RESOURCES

1) Faculty Resources: Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

   The original introduction of the CHEM 152 requirement was done with the expectation that Prof. Yi Lu would continue to teach the course, which he had taught as CHEM 199L since Spring 2004. But with Prof. Lu's departure from Illinois as of the start of Fall 2021, removing the CHEM 152 requirement will leave us with no net teaching impact. SCS Advising is fully aware of this situation and will properly advise all BS majors.
2) 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.

No

3) 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? If yes, please describe.

No

4) Does this new program/proposed change result in the replacement of another program? If yes, please specify the program.

No

5) Does the program include any required or recommended subjects that are offered by other departments? If yes, please list the courses. Explain how these additional courses will be used by the program and provide letters of support from the departments.

No

FINANCIAL RESOURCES

1) How does the unit intend to financially support this proposal?
There is no financial impact (see response to #3 under Budget).

2) Will the unit need to seek campus or other external resources? If yes, please provide a summary of the sources and an indication of the approved support.

No

3) Are you seeking a change in the tuition rate or differential for this program? (degrees, majors, concentrations ONLY) If this program requires a tuition or differential change, initiate a discussion with the LAS curricula contact, LAS budget officer, and LAS Associate Dean.

No

4) Is this program requesting self-supporting status? (degrees, majors and concentrations ONLY)? If yes, please explain.

No

PROGRAM REGULATION & ASSESSMENT

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

Because we are removing the CHEM 152 requirement that was never actually implemented in the first place, we have no plan to do such an assessment.
2) Is the career/profession for graduates of this program regulated by the State of Illinois? If yes, please describe.
No

ACADEMIC CATALOG ENTRY

1) All proposals must submit the major requirements (courses, hours) for the proposed curricula. Please see the University of Illinois Academic Catalog- http://catalog.illinois.edu/ for your unit for an example of the entry.

Core Chemistry

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 150</td>
<td>First Semester Success in Chemistry</td>
</tr>
<tr>
<td>CHEM 202</td>
<td>Accelerated Chemistry I</td>
</tr>
<tr>
<td>CHEM 203</td>
<td>Accelerated Chemistry Lab I</td>
</tr>
<tr>
<td>CHEM 204</td>
<td>Accelerated Chemistry II</td>
</tr>
<tr>
<td>CHEM 205</td>
<td>Accelerated Chemistry Lab II</td>
</tr>
<tr>
<td>CHEM 236</td>
<td>Fundamental Organic Chem I</td>
</tr>
<tr>
<td>CHEM 237</td>
<td>Structure and Synthesis</td>
</tr>
<tr>
<td>CHEM 312</td>
<td>Inorganic Chemistry</td>
</tr>
<tr>
<td>CHEM 315</td>
<td>Instrumental Chem Systems Lab</td>
</tr>
<tr>
<td>CHEM 420</td>
<td>Instrumental Characterization</td>
</tr>
<tr>
<td>CHEM 436</td>
<td>Fundamental Organic Chem II</td>
</tr>
<tr>
<td>CHEM 442</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHEM 444</td>
<td>Physical Chemistry II</td>
</tr>
<tr>
<td>CHEM 445</td>
<td>Physical Principles Lab I</td>
</tr>
</tbody>
</table>

Advanced Chemistry

Chemistry/Biochemistry courses numbered 300 or higher, which must include one from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 317</td>
<td>Inorganic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 337</td>
<td>Organic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 447</td>
<td>Physical Principles Lab II</td>
</tr>
</tbody>
</table>

Additional laboratory work:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 455</td>
<td>Technqs Biochem &amp; Biotech</td>
</tr>
<tr>
<td>CHEM 317</td>
<td>Inorganic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 337</td>
<td>Organic Chemistry Lab</td>
</tr>
<tr>
<td>CHEM 447</td>
<td>Physical Principles Lab II</td>
</tr>
<tr>
<td>CHEM 483</td>
<td>Solid State Structural Anlys</td>
</tr>
</tbody>
</table>

Additional chemistry/biochemistry courses to complete the 11-hour requirement in advanced chemistry

Mathematics: 11-12
MATH 220  Calculus  
or MATH 221  Calculus I  
MATH 231  Calculus II  
MATH 241  Calculus III  
Physics:  
PHYS 211  University Physics: Mechanics  
PHYS 212  University Physics: Elec & Mag  
PHYS 214  Univ Physics: Quantum Physics  
Technical Electives, including the following  
14  
Required Mathematics:  
MATH 225  Introductory Matrix Theory  
or MATH 415  Applied Linear Algebra  
MATH 285 or equivalent  
Strongly Recommended:  
CHEM 499  Senior Thesis (maximum of 10 hours)  
Recommended: basic computer science  
Other technical courses chosen from:  
14  
Chemistry (300 or higher), biochemistry, chemical engineering (200 or higher)  
Courses in life sciences (all courses at 200 or higher)  
Mathematics or computer science above the basic level  
Other courses in the physical and biological sciences and engineering including  
CHEM 199  
Nontechnical Requirements  
Variable  
General education:  
Foreign language - three semesters of college study (or three years of high school study) in a single foreign language  
Composition I  
Advanced Composition  
Humanities/Arts to satisfy the campus general education requirements  
Social/Behavioral sciences to satisfy the campus general education requirements  
Cultural Studies to satisfy the campus general education requirement  
Free electives  
1 Hours given are those typical to meet requirement.  
2 On and off-campus transfer students in the BS curriculum may substitute 1 additional hour of 200 level or higher Chemistry (including CHEM 297, CHEM 397, CHEM 496, CHEM 497, or CHEM 499) for CHEM 150. This may not include CHEM 222 or CHEM 223 for students who took the CHEM 102, CHEM 103, CHEM 104 and CHEM 105 sequence instead of CHEM 202, CHEM 203, CHEM 204, and CHEM 205.
If necessary, CHEM 102 and CHEM 103, CHEM 104 and CHEM 105, CHEM 222, and CHEM 223 may be substituted for CHEM 202, CHEM 203, CHEM 204, and CHEM 205. Warning: CHEM 222 and CHEM 223 are offered only in the fall semester.

The course chosen from CHEM 317, CHEM 437, or CHEM 447 cannot be used to satisfy the additional chemistry lab requirement.

Students who present less than 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation must complete two additional courses chosen from the list. Students who will present at least 6 semester hours credit in a combination of CHEM 397, CHEM 497 and/or CHEM 499 for graduation are required to complete only one laboratory course from the list.

Students contemplating transfer to the chemical engineering curriculum should choose MATH 415.

Three hours maximum credit in CHEM 199. Additional courses in the sciences and engineering can be taken upon the approval of the chair of the chemistry department advising committee. Most approved courses must have a strong technical prerequisite, such as one year of college-level math or science.

The requirements for the Campus General Education categories Natural Sciences and Technology and Quantitative Reasoning I and II are fulfilled through required coursework in the curriculum.

The courses taken to satisfy Advanced Composition requirement may also be used to partially satisfy one of the core chemistry, advanced chemistry, mathematics, physics, or technical electives requirements (if appropriate), or may be used to partially satisfy the free electives requirements.

The courses taken to satisfy Western and/or Non-Western Civilization requirements may also be used to satisfy nontechnical and/or free elective categories.

Restrictions: (1) Courses preparatory to or used to satisfy the minimum requirements specified in the above requirements may not be included as free electives. (2) No first-year foreign language course (e.g., 101, 102, or equivalent) may be included unless it is a different language than used to satisfy the foreign language nontechnical requirement.

2) Include a comparative table of the current and proposed requirements.

After the October 2020 curriculum revision for the BS major, the Core Chemistry and Free Electives requirements were as shown in the table below under Current Requirements. After the current curriculum revision is finalized, the Core Chemistry and Free Electives requirement will be as shown under Proposed Requirements. In summary of the change, the 1 hour of CHEM 152 (listed under Core Chemistry) is replaced with 1 additional hour of Free Elective. All other components of the catalog entry are unchanged.
The Environmental Chemistry Concentration uses the same table of requirements as the BS major itself, along with a separate table on Required Technical Electives that is not impacted by the current proposal.

Comparative Table of Proposed Changes

<table>
<thead>
<tr>
<th>Current Requirements</th>
<th>Current Hours</th>
<th>Proposed Requirements</th>
<th>Proposed Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Chemistry</td>
<td>Total 38</td>
<td>Core Chemistry</td>
<td>Total of 37</td>
</tr>
<tr>
<td>CHEM 150</td>
<td>1</td>
<td>CHEM 150</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 152</td>
<td>1</td>
<td>and 13 other courses</td>
<td>36</td>
</tr>
<tr>
<td>and 13 other courses</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free Electives</td>
<td>29</td>
<td>Free Electives</td>
<td>30</td>
</tr>
</tbody>
</table>
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The Environmental Chemistry Concentration uses the same table of requirements as the BS major itself, along with a separate table on Required Technical Electives that is not impacted by the current proposal.

### Chemistry BS Curriculum

#### Comparative Table of Proposed Changes

<table>
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<tr>
<th>Current Requirements</th>
<th>Current Hours</th>
<th>Proposed Requirements</th>
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</tr>
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<tbody>
<tr>
<td>Core Chemistry</td>
<td>Total 38</td>
<td>Core Chemistry</td>
<td>Total of 37</td>
</tr>
<tr>
<td>CHEM 150</td>
<td>1</td>
<td>CHEM 150 (1)</td>
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<tr>
<td>CHEM 152</td>
<td>1</td>
<td>CHEM 202 (3)</td>
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<tr>
<td>and 13 other courses</td>
<td>36</td>
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<td>CHEM 204 (3)</td>
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<td>CHEM 420 (2)</td>
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<td>Advanced Chemistry:</td>
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<td>Chemistry/Biochemistry courses number 300 or higher which must include one from the following:</td>
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<tr>
<td></td>
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<td>CHEM 317</td>
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<td>CHEM 437</td>
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<td>CHEM 447</td>
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<td>Additional laboratory work:</td>
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<td>BIOC 455</td>
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<td></td>
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<td>CHEM 317</td>
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<td>CHEM 437</td>
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<td>CHEM 447</td>
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<td>CHEM 483</td>
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<tr>
<td>Course</td>
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<tr>
<td>Additional Chemistry/Biochemistry courses to complete the 11 hour</td>
<td>11-12</td>
<td></td>
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<tr>
<td>requirement in advanced Chemistry</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>MATH 220 or MATH 221</td>
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<tr>
<td>MATH 231</td>
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<tr>
<td>MATH 241</td>
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<tr>
<td>Physics</td>
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<tr>
<td>PHYS 211</td>
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<td>PHYS 212</td>
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<tr>
<td>PHYS 214</td>
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<tr>
<td>Technical Electives including the following:</td>
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<td></td>
</tr>
<tr>
<td>Required Mathematics</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MATH 225 or MATH 415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 285 or equivalent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly recommended:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 499</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended basic computer science</td>
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<tr>
<td>Other technical courses chosen from:</td>
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<tr>
<td>Chemistry (300 or higher), biochemistry, chemical engineering (200</td>
<td></td>
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<tr>
<td>or higher)</td>
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<td></td>
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<tr>
<td>Courses in life sciences (all courses are 200 or higher)</td>
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<td></td>
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<tr>
<td>Mathematics or computer science or above the basic level</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Free Electives</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free Electives</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10KS0030MS & 10KS0030MSU: CROP SCIENCES, MS (ON CAMPUS & ONLINE)

In Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1802 Committee Chair (arayburn@illinois.edu)
3. 1802 Head (asdavis1@illinois.edu)
4. KL Committee Chair (npaulson@illinois.edu)
5. KL Dean (aball@illinois.edu)
6. University Librarian (jpwilkin@illinois.edu)
7. Grad_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
8. Provost (kmartens@illinois.edu)
9. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
10. Senate (jtempel@illinois.edu)
11. U Senate Conf (none)
12. Board of Trustees (none)
13. IBHE (none)
14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Fri, 02 Apr 2021 19:26:07 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Mon, 05 Apr 2021 16:56:26 GMT
   Lane Rayburn (arayburn): Approved for 1802 Committee Chair
3. Mon, 05 Apr 2021 18:47:10 GMT
   Adam Davis (asdavis1): Approved for 1802 Head
4. Wed, 07 Apr 2021 16:14:33 GMT
   Nick Paulson (npaulson): Approved for KL Committee Chair
5. Wed, 07 Apr 2021 16:18:02 GMT
   Anna Ball (aball): Approved for KL Dean
6. Wed, 07 Apr 2021 16:34:00 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
7. Mon, 12 Apr 2021 19:41:37 GMT
   Allison McKinney (agrindly): Approved for Grad_College
8. Thu, 15 Apr 2021 19:55:12 GMT
   Kathy Martensen (kmartens): Approved for Provost

History
1. Oct 18, 2019 by Deb Forgacs (dforgacs)
2. Oct 18, 2019 by Deb Forgacs (dforgacs)
3. Oct 27, 2020 by Deb Forgacs (dforgacs)
4. Jan 8, 2021 by Deb Forgacs (dforgacs)

Date Submitted: Fri, 02 Apr 2021 18:04:16 GMT

Viewing: 10KS0030MS & 10KS0030MSU : Crop Sciences, MS (on campus & online)
Changes proposed by: Scott Bartlett

Proposal Type
Proposal Type:
Major (ex. Special Education)
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

Administrative approval: A revision to the MS program.

EP Control Number
EP.21.131

Official Program Name
Crop Sciences, MS (on campus & online)

Effective Catalog Term
Spring 2022

Sponsor College
Agr, Consumer, & Env Sciences

Sponsor Department
Crop Sciences

Sponsor Name
Nathan Schroeder

Sponsor Email
nes@illinois.edu

College Contact
Brianna Gregg

College Contact Email
bjgray2@illinois.edu
Program Description and Justification

Justification for proposal change:

The department has decided to remove the presentation requirement for CPSC 598. Students are still required to attend the seminar, so we had to correct the credit hours.

Added and corrected elective hours.

Removed PLPA 599 since it is a deactivated course (students will now only take CPSC 599).

Please note: For the Non-Thesis Option, the 0 or 4 hours will appear in a red box because the course is 1 credit hour. The 0 is for students in the online MS program since this course is not required for that program. 4 hours is required for students in the on-campus MS program.

Corresponding Degree

MS Master of Science

Is this program interdisciplinary?

No

Academic Level

Graduate

Will you admit to the concentration directly?

No

Is a concentration required for graduation?

No

CIP Code

011102 - Agronomy and Crop Science.

Is This a Teacher Certification Program?

No

Will specialized accreditation be sought for this program?

No

Admission Requirements

Is this revision a change to the admission status of the program?

No
Enrollment

Describe how this revision will impact enrollment and degrees awarded.

There will be no impact on enrollment or degrees awarded.

Estimated Annual Number of Degrees Awarded

What is the matriculation term for this program?

Fall

What is the typical time to completion of this program?

2 years

What are the minimum Total Credit Hours required for this program?

32 credit hours

Delivery Method

Is this program available on campus and online?

Yes

This program is available:

On Campus and Online

Describe the use of this delivery method:

This program is delivered both online and face-to-face.

Budget

Are there budgetary implications for this revision?

No

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

No
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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

This revision will cause no impact on faculty 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.

Current library resources, including collections and services, are sufficient to address the needs of this program 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 the program include other courses/subjects impacted by the creation/revision of this program?
No

Financial Resources

Will the unit need to seek campus or other external resources?
No

Are you seeking a change in the tuition rate or differential for this program?
No

Is this program requesting self-supporting status?
No

Program Regulation and Assessment

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

Thesis-based MS students in Crop Sciences have four learning outcomes (detailed in 2020 updated campus assessment plan) related to critical thinking skills and knowledge development in the field of Crop Sciences. Coursework is evaluated by the instructor via grades and these grades are assessed by the advisor and thesis committee for each students. Each MS thesis student must also complete a thesis defense, which is evaluated by the advisor and thesis committee members for attainment of learning objectives. The thesis committee comprises three faculty members, two of which must be members of the Graduate Faculty. The DGS evaluates the annual self-evaluation and advisor report for adequate progress.

The non-thesis MS programs in Crop Science have four learning outcomes (detailed in 2020 updated campus assessment plan) related to critical thinking skills and knowledge development in the field of Crop Sciences. Coursework is evaluated by the instructor via grades and progress in coursework is evaluated by either the DGS (for on-campus programs) or the Director of Online Programs (for the online MS). On-campus MS students must complete a final exam before graduating that evaluates overall content knowledge and integration of knowledge into a critical thinking platform. Similarly online MS students complete a final exam to evaluate content knowledge.

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.
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

CPSC_MS_side-by-side (4-2-21)_seb.xlsx

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

Statement for Programs of Study Catalog

This degree program can be completed either on campus or online; with or without a thesis, the requirements are listed below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 594</td>
<td>Professional Orientation CPSC</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598</td>
<td>Seminar (required each semester; maximum applied toward degree)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599</td>
<td></td>
</tr>
<tr>
<td>CPSC 599</td>
<td>Thesis Research (minimum applied toward degree)</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total Hours Thesis</td>
<td>32</td>
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Non-Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSC 594</td>
<td>Professional Orientation CPSC</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598</td>
<td>Seminar (required each semester for on-campus MS program; not required for online MS program)</td>
<td>0 or 4</td>
</tr>
<tr>
<td></td>
<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599</td>
<td>30</td>
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<tr>
<td></td>
<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599(elective courses are chosen in consultation with faculty advisor)</td>
<td>27-31</td>
</tr>
<tr>
<td></td>
<td>Total Hours Non-Thesis</td>
<td>32</td>
</tr>
</tbody>
</table>

Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other requirements and conditions may overlap</td>
<td></td>
</tr>
<tr>
<td>Minimum Hours Required Within the Unit: 5</td>
<td></td>
</tr>
<tr>
<td>Minimum 500-level Hours Required overall: 12</td>
<td></td>
</tr>
<tr>
<td>Minimum GPA: 3.0</td>
<td></td>
</tr>
</tbody>
</table>

EP Documentation

DMI Documentation

Banner/Codebook Name

MS:Crop Sciences -UIUC & MS:Crop Sciences Online -UIUC
Program Code:
10KS0030MS & 10KS0030MSU

Major Code
0030

Key: 187
### Crop Sciences, MS (on-campus & online)

<table>
<thead>
<tr>
<th>Type</th>
<th>Current Hours</th>
<th>Revised Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Thesis Option</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thesis Option</td>
<td></td>
<td>Thesis Option</td>
<td></td>
</tr>
<tr>
<td>CPSC 584: Professional Orientation CPSC</td>
<td>1</td>
<td>CPSC 584: Professional Orientation CPSC</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598: Seminar (when presenting)</td>
<td>4</td>
<td>CPSC 598: Seminar (required each semester; maximum applied toward degree)</td>
<td>1</td>
</tr>
<tr>
<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599</td>
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<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599</td>
<td>12</td>
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<tr>
<td>CPSC/PLPA 599: Thesis Research (non-thesis applied toward degree)</td>
<td>12</td>
<td>CPSC 599: Thesis Research (minimum applied toward degree)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Hours Thesis</strong></td>
<td>32</td>
<td><strong>Total Hours Thesis</strong></td>
<td>32</td>
</tr>
<tr>
<td><strong>Non-Thesis Option</strong></td>
<td></td>
<td></td>
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<tr>
<td>Non-Thesis Option</td>
<td></td>
<td>Non-Thesis Option</td>
<td></td>
</tr>
<tr>
<td>CPSC 584: Professional Orientation CPSC</td>
<td>1</td>
<td>CPSC 584: Professional Orientation CPSC</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598: Seminar (when presenting)</td>
<td>1</td>
<td>CPSC 598: Seminar (required each semester for on-campus MS program; not required for online MS program)</td>
<td>1 or 4</td>
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<td>27-31</td>
<td>Electives including at least 4 hours of graded coursework at the 500 level other than CPSC 599</td>
<td>27-31</td>
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<tr>
<td><strong>Total Hours Non-Thesis</strong></td>
<td>32</td>
<td><strong>Total Hours Non-Thesis</strong></td>
<td>32</td>
</tr>
<tr>
<td><strong>Other Requirements</strong></td>
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<td></td>
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</tr>
<tr>
<td>Other Requirements</td>
<td></td>
<td>Other Requirements</td>
<td></td>
</tr>
<tr>
<td>Other requirements and conditions may overlap</td>
<td></td>
<td>Other requirements and conditions may overlap</td>
<td></td>
</tr>
<tr>
<td>Minimum Hours Required Within the Unit</td>
<td>1</td>
<td>Minimum Hours Required Within the Unit</td>
<td>1</td>
</tr>
<tr>
<td>Minimum 500-level Hours Required overall</td>
<td>12</td>
<td>Minimum 500-level Hours Required overall</td>
<td>12</td>
</tr>
<tr>
<td>Minimum GPA</td>
<td>3.0</td>
<td>Minimum GPA</td>
<td>3.0</td>
</tr>
</tbody>
</table>
10KS0030PHD: CROP SCIENCES, PHD

Completed Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)

Approval Path
1. Fri, 17 Jan 2020 18:17:44 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review

History
1. Jan 17, 2020 by Mary Lowry (lowry)

Date Submitted: Fri, 02 Apr 2021 18:07:58 GMT

Viewing: 10KS0030PHD : Crop Sciences, PhD
Changes proposed by: Mary Lowry

Proposal Type

Proposal Type:
Major (ex. Special Education)

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

Administrative approval: A revision to the PhD program.

EP Control Number

EP.21.131

Official Program Name

Crop Sciences, PhD

Effective Catalog Term

Spring 2022

Sponsor College

Agr, Consumer, & Env Sciences
Sponsor Department
Crop Sciences

Sponsor Name
Nathan Schroeder

Sponsor Email
nes@illinois.edu

College Contact
Brianna Gregg

College Contact Email
bjgray2@illinois.edu

Program Description and Justification

Justification for proposal change:
Removed PLPA 599 since it is a deactivated course (students will now only take CPSC 599).

Corresponding Degree
PhD Doctor of Philosophy

Is this program interdisciplinary?
No

Academic Level
Graduate

Will you admit to the concentration directly?
No

Is a concentration required for graduation?
No

CIP Code
011102 - Agronomy and Crop Science.
Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No

Admission Requirements

Is this revision a change to the admission status of the program?
No

Enrollment

Describe how this revision will impact enrollment and degrees awarded.
There will be no impact on enrollment or degrees awarded.

Estimated Annual Number of Degrees Awarded

What is the matriculation term for this program?
Fall

What is the typical time to completion of this program?
4.5 years

What are the minimum Total Credit Hours required for this program?
64 (with master’s) or 96 credit hours (with bachelor’s)

Delivery Method

Is this program available on campus and online?
No

This program is available:
On Campus
Budget

Are there budgetary implications for this revision?
No

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?
No

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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

This revision will cause no impact on faculty 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.

Current library resources, including collections and services, are sufficient to address the needs of this program 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 the program include other courses/subjects impacted by the creation/revision of this program?

No

Financial Resources

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

No

Are you seeking a change in the tuition rate or differential for this program?

No

Is this program requesting self-supporting status?

No

Program Regulation and Assessment

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

PhD students in Crop Sciences have five learning outcomes (detailed in 2020 updated campus assessment plan) related to critical thinking skills and knowledge development in the field of Crop Sciences. Coursework is evaluated by the instructor via grades and these grades are assessed by the advisor and guidance committee for each students. The PhD guidance committees comprise the advisor three other members of the Graduate Faculty, at least two of which are tenured. PhD students without a previous MS complete a qualifying exam that evaluates content knowledge by the student’s guidance committee. All PhD students complete a Preliminary Exam, which includes a written research proposal, that is evaluated by the advisor and guidance committee to assess critical thinking skills, knowledge of the students specific research area, and ability to independently develop a research project. The final exam, including a public presentation, is evaluated by the guidance committee to determine communication skills (both oral and written) and the ability to independently develop and execute a research project.

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.

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.

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

Statement for Programs of Study Catalog

Entering with approved M.S./M.A. degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Graded Coursework approved by the graduate guidance committee not including CPSC 594 or CPSC 598, with a grade point average of at least a B.</td>
<td>12</td>
</tr>
<tr>
<td>CPSC 594</td>
<td>Professional Orientation CPSC (not required if it was taken in fulfillment of the master's degree.)</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598</td>
<td>Seminar (CPSC 598: Graduate Student Seminar (enrollment required each semester)) Maximum applied toward degree</td>
<td>14</td>
</tr>
<tr>
<td>CPSC 599</td>
<td>Thesis Research (minimum applied toward degree)</td>
<td>37</td>
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Other Requirements

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<th>Requirement</th>
<th>Description</th>
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<tbody>
<tr>
<td>Other requirements and conditions may overlap</td>
<td></td>
</tr>
<tr>
<td>64 hours of in-residence credit beyond the M.S.</td>
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</tr>
<tr>
<td>Qualifying Exam Required:</td>
<td>No</td>
</tr>
<tr>
<td>Preliminary Exam Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Final Exam/Dissertation Defense Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Dissertation Deposit Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum GPA:</td>
<td>3.0</td>
</tr>
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</table>

Entering with approved B.S./B.A. degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coursework approved by the graduate guidance committee not including CPSC 594 or CPSC 598, with a grade point average of at least a B.</td>
<td>32</td>
</tr>
<tr>
<td>CPSC 594</td>
<td>Professional Orientation CPSC</td>
<td>1</td>
</tr>
<tr>
<td>CPSC 598</td>
<td>Seminar (Enrollment required each semester) Maximum applied toward degree</td>
<td>14</td>
</tr>
<tr>
<td>CPSC 599</td>
<td>Thesis Research (minimum applied toward degree)</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>96</td>
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Other Requirements
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other requirements and conditions may overlap</td>
<td></td>
</tr>
<tr>
<td>64 hours of in-residence credit beyond the M.S.</td>
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</tr>
<tr>
<td>Minimum 500-level Hours Required Overall:</td>
<td>36</td>
</tr>
<tr>
<td>Qualifying Exam Required:</td>
<td>Yes</td>
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<tr>
<td>Preliminary Exam Required:</td>
<td>Yes</td>
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<tr>
<td>Final Exam/Dissertation Defense Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Dissertation Deposit Required:</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum GPA:</td>
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</table>

**EP Documentation**

**DMI Documentation**

**Banner/Codebook Name**

PHD:Crop Sciences -UIUC

**Program Code:**

10KS0030PHD

**Major Code**

0030

**Program Reviewer Comments**

Allison McKinney (agrindly) (Mon, 12 Apr 2021 19:42:01 GMT): Administratively approved by the Graduate College.

Kathy Martensen (kmartens) (Thu, 15 Apr 2021 19:55:29 GMT): Administrative approval: No change to total hours required/restriction of options.

Key: 186
4026:MS: BIOINFORMATICS, MS

Completed Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1468 Head (kereadel@illinois.edu)
3. LM Dean (kmartens@illinois.edu)
4. University Librarian (jpwilkin@illinois.edu)
5. Grad_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
6. Provost (kmartens@illinois.edu)
7. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
8. Senate (jtempel@illinois.edu)
9. U Senate Conf (none)
10. Board of Trustees (none)
11. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Thu, 22 Oct 2020 19:27:54 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
   Karin Readel (kereadel): Approved for 1468 Head
   Kathy Martensen (kmartens): Approved for LM Dean
4. Thu, 22 Oct 2020 19:45:05 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
5. Tue, 27 Oct 2020 15:21:01 GMT
   Allison McKinney (agrindly): Approved for Grad_College
   Kathy Martensen (kmartens): Approved for Provost
7. Thu, 05 Nov 2020 16:16:44 GMT
   Barbara Lehman (bjlehman): Approved for Senate EPC
8. Tue, 17 Nov 2020 16:31:35 GMT
   Jennifer Roether (jtempel): Approved for Senate
9. Tue, 24 Nov 2020 14:33:07 GMT
   Kathy Martensen (kmartens): Approved for U Senate Conf
10. Tue, 24 Nov 2020 14:35:17 GMT
    Kathy Martensen (kmartens): Approved for Board of Trustees
11. Tue, 08 Dec 2020 19:48:55 GMT
    Emily Stuby (eastuby): Approved for DMI

History
1. Sep 4, 2019 by Mary Lowry (lowry)
2. Sep 4, 2019 by Mary Lowry (lowry)
3. Feb 7, 2020 by Deb Forgacs (dforgacs)
4. Dec 8, 2020 by Karin Readel (kereadel)

Date Submitted: Thu, 01 Apr 2021 19:18:13 GMT

Viewing: 4026:MS : Bioinformatics, MS
Changes proposed by: Karin Readel

Proposal Type

Proposal Type:

Major (ex. Special Education)
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

Administrative approval: addition of CPSC 554 (new course) to Biology core for this program

EP Control Number

EP: 21.131

Official Program Name

Bioinformatics, MS

Effective Catalog Term

Fall 2021

Sponsor College

Provost Academic Programs

Sponsor Department

Informatics

Sponsor Name

Karin Readel

Sponsor Email

kereadel@illinois.edu

College Contact

Karin Readel

College Contact Email

kereadel@illinois.edu
Program Description and Justification

Justification for proposal change:
CPSC has terminated CPSC 564 and replaced it with CPSC 554

Corresponding Degree
MS Master of Science

Is this program interdisciplinary?
No

Academic Level
Graduate

Will you admit to the concentration directly?
No

Is a concentration required for graduation?
No

CIP Code
261103 - Bioinformatics.

Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No

Admission Requirements

Is this revision a change to the admission status of the program?
No

Enrollment

Describe how this revision will impact enrollment and degrees awarded.
N/A
Estimated Annual Number of Degrees Awarded

Year One Estimate
migration

5th Year Estimate (or when fully implemented)
migration

What is the matriculation term for this program?
Fall

What is the typical time to completion of this program?
2 years

What are the minimum Total Credit Hours required for this program?
32 hours

Delivery Method

Is this program available on campus and online?
No

This program is available:
On Campus

Budget

Are there budgetary implications for this revision?
No

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?
No

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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.
N/A

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.
N/A

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 the program include other courses/subjects impacted by the creation/revision of this program?
No
Financial Resources

Will the unit need to seek campus or other external resources?
No

Are you seeking a change in the tuition rate or differential for this program?
Yes

Is this program requesting self-supporting status?
No

Program Regulation and Assessment

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

Covered by each department/concentration.

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.

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.

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

Statement for Programs of Study Catalog
# Thesis or Non-Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Computer Science and Informatics (choose one)</strong></td>
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</tr>
<tr>
<td>CS 411</td>
<td>Database Systems</td>
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<tr>
<td>CS 466</td>
<td>Introduction to Bioinformatics</td>
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<tr>
<td>CS 473</td>
<td>Algorithms</td>
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<tr>
<td>CPSC 565</td>
<td>Perl &amp; UNIX for Bioinformatics</td>
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<td>IS 455</td>
<td>Database Design and Prototyping</td>
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<td>IS 507</td>
<td>Data, Statistical Models and Information</td>
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<td>STAT 428</td>
<td>Statistical Computing</td>
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<td>STAT 440</td>
<td>Statistical Data Management</td>
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<td>STAT 448</td>
<td>Advanced Data Analysis</td>
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<td>STAT 480</td>
<td>Data Science Foundations</td>
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<td>STAT 525</td>
<td>Computational Statistics</td>
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<td></td>
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<td>ANSC 542</td>
<td>Applied Bioinformatics</td>
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<td>CHBE 571</td>
<td>Bioinformatics</td>
<td></td>
</tr>
<tr>
<td>CPSC 567</td>
<td>Bioinformatics &amp; Systems Biol</td>
<td></td>
</tr>
<tr>
<td>CS 466</td>
<td>Introduction to Bioinformatics</td>
<td></td>
</tr>
<tr>
<td>IB 467</td>
<td>Principles of Systematics</td>
<td></td>
</tr>
<tr>
<td>MCB 432</td>
<td>Computing in Molecular Biology</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Biology (choose one)</strong></td>
<td>4</td>
</tr>
<tr>
<td>ANSC 441</td>
<td>Human Genetics</td>
<td></td>
</tr>
<tr>
<td>ANSC 444</td>
<td>Applied Animal Genetics</td>
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<tr>
<td>ANSC 446</td>
<td>Population Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOP 401</td>
<td>Introduction to Biophysics</td>
<td></td>
</tr>
<tr>
<td>BIOP 550</td>
<td>Biomolecular Physics</td>
<td></td>
</tr>
<tr>
<td>CPSC 452</td>
<td>Advanced Plant Genetics</td>
<td></td>
</tr>
<tr>
<td>CPSC 466</td>
<td>Genomics for Plant Improvement</td>
<td></td>
</tr>
<tr>
<td>CPSC 554</td>
<td>Quantitative Genetics and Genomics</td>
<td></td>
</tr>
<tr>
<td>CPSC 563</td>
<td>Chromosomes</td>
<td></td>
</tr>
<tr>
<td>CPSC 566</td>
<td>Plant Gene Regulation</td>
<td></td>
</tr>
<tr>
<td>MCB 400</td>
<td>Cancer Cell Biology</td>
<td></td>
</tr>
<tr>
<td>MCB 450</td>
<td>Introductory Biochemistry</td>
<td></td>
</tr>
<tr>
<td>MCB 501</td>
<td>Advanced Biochemistry</td>
<td></td>
</tr>
<tr>
<td>MCB 502</td>
<td>Advanced Molecular and Cell Biology</td>
<td></td>
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<tr>
<td></td>
<td><strong>Additionally for Thesis Option:</strong></td>
<td>4-8</td>
</tr>
<tr>
<td></td>
<td>Thesis Hours Required</td>
<td>4-8</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>32 or 36</td>
</tr>
</tbody>
</table>

---

**EP Documentation**

---

**DMI Documentation**

---

**Banner/Codebook Name**

Bioinformatics, MS
Program Code:
4026:MS

Degree Code
MS

Major Code
4026

Program Reviewer Comments

Kathy Martensen (kmartens) (Thu, 15 Apr 2021 20:00:27 GMT): Administrative approval: No change to total hours/restriction of options.

Key: 583
JP: 10KS0283MA & 10KS0370MS: JP: AFRICAN STUDIES, MA AND LIBRARY AND INFORMATION SCIENCE, MS

In Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1461 Head (barro@illinois.edu)
3. 1992 Head (knox@illinois.edu)
4. KV Dean (las-catalog@illinois.edu)
5. LP Dean (knox@illinois.edu)
6. University Librarian (jpwilkin@illinois.edu)
7. Grad_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
8. Provost (kmartens@illinois.edu)
9. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
10. Senate (jtempel@illinois.edu)
11. U Senate Conf (none)
12. Board of Trustees (none)
13. IBHE (none)
14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Wed, 07 Apr 2021 16:34:37 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Wed, 07 Apr 2021 17:04:23 GMT
   Maimouna Barro (barro): Approved for 1461 Head
3. Wed, 07 Apr 2021 17:07:02 GMT
   Emily Knox (knox): Approved for 1992 Head
4. Wed, 07 Apr 2021 17:13:02 GMT
   Kelly Ritter (ritterk): Approved for KV Dean
5. Wed, 07 Apr 2021 17:13:25 GMT
   Emily Knox (knox): Approved for LP Dean
6. Wed, 07 Apr 2021 17:17:24 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
7. Mon, 12 Apr 2021 19:43:29 GMT
   Allison McKinney (agrindly): Approved for Grad_College
8. Thu, 15 Apr 2021 20:04:00 GMT
   Kathy Martensen (kmartens): Approved for Provost

History
1. Jul 30, 2020 by Deb Forgacs (dforgacs)

Date Submitted: Wed, 07 Apr 2021 15:21:55 GMT

Changes proposed by: Dustin Janes

Proposal Type

Proposal Type:
Joint Program (ex. Master of Public Health & PhD. in Community Health)
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*

Administrative approval: Update of course numbers from iSchool.

**EP Control Number**

EP21.131

**Official Program Name**

JP: African Studies, MA and Library and Information Science, MS

**Effective Catalog Term**

Spring 2021

**Sponsor College**

Information Science, School of

**Sponsor Department**

Information Sciences

**Sponsor Name**

Emily Knox

**Sponsor Email**

knox@illinois.edu

**College Contact**

Emily Knox

**College Contact Email**

knox@illinois.edu
Program Description and Justification

Justification for proposal change:
Update of course numbers from iSchool.

Is this program interdisciplinary?
No

Identify the existing programs to be joined:

<table>
<thead>
<tr>
<th>Corresponding Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Studies, MA</td>
</tr>
<tr>
<td>Library Information Science, MS (on campus online)</td>
</tr>
</tbody>
</table>

Academic Level
Graduate

CIP Code
050101 & 110401 - 050101 & 110401

Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No

Admission Requirements

Is this revision a change to the admission status of the program?
No

Enrollment

Describe how this revision will impact enrollment and degrees awarded.
Update of course numbers from iSchool; no impact on enrollment or degrees awarded.

Estimated Annual Number of Degrees Awarded
**Delivery Method**

Is this program available on campus and online?

No

This program is available:

On Campus

**Budget**

Are there budgetary implications for this revision?

No

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

No

**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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

Update of course numbers from iSchool; no impact on faculty 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.

Update of course numbers from iSchool; no impact on library resources.

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

No

Financial Resources

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

No

Are you seeking a change in the tuition rate or differential for this program?

Yes

Is this program requesting self-supporting status?

No
Program Regulation and Assessment

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.

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.

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

Statement for Programs of Study Catalog

Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 501</td>
<td>Reference and Information Services</td>
<td>4</td>
</tr>
<tr>
<td>IS 502</td>
<td>Course IS 502 Not Found</td>
<td>2 or 4</td>
</tr>
<tr>
<td>IS 505</td>
<td>Information Organization and Access</td>
<td>4</td>
</tr>
<tr>
<td>IS 510</td>
<td>Libraries, Information and Society</td>
<td>4</td>
</tr>
<tr>
<td>IS 530</td>
<td>Collection Development</td>
<td>4</td>
</tr>
<tr>
<td>IS 590</td>
<td>Advanced Topics in Information Foundations</td>
<td>1 to 4</td>
</tr>
<tr>
<td></td>
<td>LIS elective courses selected in consultation with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>an advisor who is a member of the iSchool faculty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(IS 591, 2 hours and IS 592, up to 4 hours, may</td>
<td></td>
</tr>
<tr>
<td></td>
<td>be included)</td>
<td></td>
</tr>
<tr>
<td>AFST 522</td>
<td>Development of African Studies</td>
<td>4</td>
</tr>
</tbody>
</table>

African language proficiency at level of 6 semesters of course work (includes Arabic) NOTE: Hours for language can’t be applied toward degree requirements, but is included in the calculation of the GPA.

Elective courses from the approved African Studies course list selected in consultation with an advisor who is a member of the African Studies faculty (coursework must be from 3 different disciplines; 8 hours must be at the 500-level, excluding AFST 550 and AFST 599; Maximum 4 hours of AFST 550 may be used) Electives and thesis must total at least 24 hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFST 599</td>
<td>Thesis Research</td>
<td>8</td>
</tr>
</tbody>
</table>

Total Hours 53-56

Other Requirements

Other requirements may overlap

Minimum 500-level Hours Required Overall: 24

Minimum GPA: 3.25
For additional details and requirements, refer to the unit's Graduate Programs of Study (https://ischool.illinois.edu/degrees-programs/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

Non-Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 501</td>
<td>Reference and Information Services</td>
<td>4</td>
</tr>
<tr>
<td>IS 502</td>
<td>Course IS 502 Not Found</td>
<td>2 or 4</td>
</tr>
<tr>
<td>IS 505</td>
<td>Information Organization and Access</td>
<td>4</td>
</tr>
<tr>
<td>IS 510</td>
<td>Libraries, Information and Society</td>
<td>4</td>
</tr>
<tr>
<td>IS 530</td>
<td>Collection Development</td>
<td>4</td>
</tr>
<tr>
<td>IS 590</td>
<td>Advanced Topics in Information Foundations</td>
<td>1 to 4</td>
</tr>
</tbody>
</table>

LIS elective courses selected in consultation with an advisor who is a member of the iSchool faculty. (IS 591, 2 hours and IS 592, up to 4 hours, may be included)

| AFST 522| Development of African Studies                  | 4     |

African language proficiency at level of 6 semesters of course work (includes Arabic) NOTE: Hours for language can't be applied toward degree requirements, but is included in the calculation of the GPA.

Elective courses from the approved African Studies course list selected in consultation with an advisor who is a member of the African Studies faculty (coursework must be from 3 different disciplines; 8 hours must be at the 500-level, excluding AFST 550 and AFST 599; Maximum 4 hours of AFST 550 may be used) Electives and thesis must total at least 24 hours.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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<tbody>
<tr>
<td>Minimum 500-level Hours Required Overall:</td>
<td>24</td>
</tr>
<tr>
<td>Minimum GPA:</td>
<td>3.25</td>
</tr>
</tbody>
</table>

For additional details and requirements, refer to the unit's Graduate Programs of Study (https://ischool.illinois.edu/degrees-programs/) and the Graduate College Handbook (https://grad.illinois.edu/gradhandbook/).

EP Documentation

DMI Documentation

Banner/Codebook Name

NONE: MA Afr St & MS LIS 10KS8127NONE

Program Code:

JP 10KS0283MA & 10KS0370MS

Program Reviewer Comments

Allison McKinney (agrindly) (Mon, 12 Apr 2021 19:43:26 GMT): Administratively approved by the Graduate College.
Kathy Martensen (kmartens) (Thu, 15 Apr 2021 20:01:17 GMT): Administrative approval: No change to total hours required/restriction of options.

Key: 479
JP: 10KS0342MA & 10KS0370MS: JP: HISTORY, MA AND LIBRARY & INFORMATION SCIENCE, MS

In Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1451 Head (drabin@illinois.edu)
3. 1992 Head (knox@illinois.edu)
4. 1992 Head (knox@illinois.edu)
5. LP Dean (knox@illinois.edu)
6. KV Dean (las-catalog@illinois.edu)
7. LP Dean (knox@illinois.edu)
8. University Librarian (jpwilkin@illinois.edu)
9. Grad_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
10. Provost (kmartens@illinois.edu)
11. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
12. Senate (jtempel@illinois.edu)
13. U Senate Conf (none)
14. Board of Trustees (none)
15. IBHE (none)
16. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Wed, 07 Apr 2021 16:34:40 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Wed, 07 Apr 2021 19:25:45 GMT
   Dana Rabin (drabin): Approved for 1451 Head
3. Wed, 07 Apr 2021 19:32:54 GMT
   Emily Knox (knox): Approved for 1992 Head
4. Wed, 07 Apr 2021 19:34:22 GMT
   Emily Knox (knox): Approved for 1992 Head
5. Wed, 07 Apr 2021 19:35:25 GMT
   Emily Knox (knox): Approved for LP Dean
6. Wed, 07 Apr 2021 19:41:10 GMT
   Kelly Ritter (ritterk): Approved for KV Dean
   Emily Knox (knox): Approved for LP Dean
8. Wed, 07 Apr 2021 19:51:48 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
9. Mon, 12 Apr 2021 19:43:44 GMT
   Allison McKinney (agrindly): Approved for Grad_College
10. Thu, 15 Apr 2021 20:05:58 GMT
    Kathy Martensen (kmartens): Approved for Provost

History
1. Sep 21, 2019 by Deb Forgacs (dforgacs)
2. Jun 10, 2020 by Deb Forgacs (dforgacs)

Date Submitted: Wed, 07 Apr 2021 14:31:23 GMT

Changes proposed by: Dustin Janes
Proposal Type

Proposal Type:

Joint Program (ex. Master of Public Health & PhD. in Community Health)

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

Administrative approval: Update of course numbers from iSchool.

EP Control Number

EP:21.131

Official Program Name

JP: History, MA and Library & Information Science, MS

Effective Catalog Term

Spring 2021

Sponsor College

Information Science, School of

Sponsor Department

Information Sciences

Sponsor Name

Emily Knox

Sponsor Email

knox@illinois.edu

College Contact

Emily Knox
Program Description and Justification

Justification for proposal change:
Update of course numbers from iSchool.

Is this program interdisciplinary?
Yes

Interdisciplinary Colleges and Departments (list other colleges/departments which are involved other than the sponsor chose above)

<table>
<thead>
<tr>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Science, School of</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Sciences</td>
</tr>
</tbody>
</table>

Do you need to add an additional interdisciplinary relationship?
No

Identify the existing programs to be joined:

<table>
<thead>
<tr>
<th>Corresponding Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History, MA</td>
</tr>
<tr>
<td>Library Information Science, MS (on campus online)</td>
</tr>
</tbody>
</table>

Academic Level
Graduate

CIP Code
540101 & 110401 - 540101 & 110401

Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No
Admission Requirements

Desired Effective Admissions Term

Fall 2018

Is this revision a change to the admission status of the program?

No

Enrollment

Describe how this revision will impact enrollment and degrees awarded.

Update of course numbers from iSchool; no impact on enrollment or degrees awarded.

Estimated Annual Number of Degrees Awarded

Delivery Method

Is this program available on campus and online?

No

This program is available:

On Campus

Budget

Are there budgetary implications for this revision?

No

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

No

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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

Update of course numbers from iSchool; no impact on faculty 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.

Update of course numbers from iSchool; no impact on library resources.

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 the program include other courses/subjects impacted by the creation/revision of this program?
No
Financial Resources

Will the unit need to seek campus or other external resources?
No

Are you seeking a change in the tuition rate or differential for this program?
Yes

Is this program requesting self-supporting status?
No

Program Regulation and Assessment

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.

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.

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

Statement for Programs of Study Catalog

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 501</td>
<td>Reference and Information Services</td>
<td>4</td>
</tr>
<tr>
<td>IS 502</td>
<td>Course IS 502 Not Found</td>
<td>2 or 4</td>
</tr>
<tr>
<td>IS 505</td>
<td>Information Organization and Access</td>
<td>4</td>
</tr>
<tr>
<td>IS 510</td>
<td>Libraries, Information and Society</td>
<td>4</td>
</tr>
</tbody>
</table>

Elective IS courses, selected in consultation with an advisor who is a member of the iSchool faculty. Electives may include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 591</td>
<td>Advanced Topics in Information Services (2 hours, satisfactory/unsatisfactory)</td>
<td>20-22</td>
</tr>
<tr>
<td>IS 592</td>
<td>Advanced Topics In Information Organizations (up to 4 hours)</td>
<td></td>
</tr>
<tr>
<td>HIST 593</td>
<td>Approaches to History</td>
<td>4</td>
</tr>
</tbody>
</table>
HIST 594  Intro Historical Writing  4

HIST coursework in one of the graduate fields of specialization offered by the department or a constructed field approved by the department, 4 of which must be at the 500-level and 4 of which must be taken as a research seminar.

Electives selected in consultation with an advisor who is a member of the History Department. These may include up to 8 hours for thesis research (HIST 599).

Total Hours:  56

Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Requirement</td>
<td>Students must demonstrate competency in one foreign language appropriate to the main field of study. Credit hours from language courses do not count towards the degree.</td>
</tr>
<tr>
<td>Students in the joint degree must be registered in each program for at least one semester.</td>
<td></td>
</tr>
<tr>
<td>Minimum GPA</td>
<td>3.25</td>
</tr>
</tbody>
</table>

EP Documentation

DMI Documentation

Program Code:

JP: 10KS0342MA & 10KS0370MS

Program Reviewer Comments

Deb Forgacs (dforgacs) (Wed, 07 Apr 2021 14:28:46 GMT): Rollback: requested
Allison McKinney (agrindly) (Mon, 12 Apr 2021 19:43:35 GMT): Administratively approved by the Graduate College.
Kathy Martensen (kmartens) (Thu, 15 Apr 2021 20:05:02 GMT): Administrative approval: No change to total hours required/restriction of options.

Key: 890
JP: 10KS4097MA & 10KS0370MS: RUSSIAN, EAST EUROPEAN, & EURASIAN STUDIES, MA AND LIBRARY & INFORMATION SCIENCE, MS

In Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1553 Head (jwr@illinois.edu)
3. 1992 Head (knox@illinois.edu)
4. KV Dean (las-catalog@illinois.edu)
5. LP Dean (knox@illinois.edu)
6. University Librarian (jpwilkin@illinois.edu)
7. Grad_College (agrindly@illinois.edu; jch@illinois.edu; lowry@illinois.edu)
8. Provost (kmartens@illinois.edu)
9. Senate EPC (bjlehman@illinois.edu; moorhouz@illinois.edu; kmartens@illinois.edu)
10. Senate (jtempel@illinois.edu)
11. U Senate Conf (none)
12. Board of Trustees (none)
13. IBHE (none)
14. DMI (eastuby@illinois.edu; aledward@illinois.edu; dforgacs@illinois.edu)

Approval Path
1. Wed, 07 Apr 2021 16:34:43 GMT
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Wed, 07 Apr 2021 17:04:02 GMT
   John Randolph (jwr): Approved for 1553 Head
3. Wed, 07 Apr 2021 17:07:11 GMT
   Emily Knox (knox): Approved for 1992 Head
4. Wed, 07 Apr 2021 17:12:33 GMT
   Kelly Ritter (ritterk): Approved for KV Dean
5. Wed, 07 Apr 2021 17:13:28 GMT
   Emily Knox (knox): Approved for LP Dean
6. Wed, 07 Apr 2021 17:17:36 GMT
   John Wilkin (jpwilkin): Approved for University Librarian
7. Mon, 12 Apr 2021 19:44:05 GMT
   Allison McKinney (agrindly): Approved for Grad_College
8. Thu, 15 Apr 2021 20:06:58 GMT
   Kathy Martensen (kmartens): Approved for Provost

History
1. Aug 2, 2019 by Deb Forgacs (dforgacs)

Date Submitted: Wed, 07 Apr 2021 14:30:54 GMT

Viewing: JP: 10KS4097MA & 10KS0370MS : Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS
Changes proposed by: Dustin Janes

Proposal Type

Proposal Type:

Joint Program (ex. Master of Public Health & PhD. in Community Health)
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*

Administrative approval: Update of course numbers from iSchool.

EP Control Number

EP21.131

Official Program Name

Russian, East European, & Eurasian Studies, MA and Library & Information Science, MS

Effective Catalog Term

Spring 2021

Sponsor College

Information Science, School of

Sponsor Department

Information Sciences

Sponsor Name

Emily Knox

Sponsor Email

knox@illinois.edu

College Contact

Emily Knox

College Contact Email

knox@illinois.edu
Program Description and Justification

Justification for proposal change:
Update of course numbers from iSchool.

Is this program interdisciplinary?
No

Identify the existing programs to be joined:

<table>
<thead>
<tr>
<th>Corresponding Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russian, East European, Eurasian Studies, MA</td>
</tr>
<tr>
<td>Library Information Science, MS (on campus online)</td>
</tr>
</tbody>
</table>

Academic Level

Graduate

CIP Code

050110 & 110401 - 050110 & 110401

Is This a Teacher Certification Program?
No

Will specialized accreditation be sought for this program?
No

Admission Requirements

Desired Effective Admissions Term
Fall 2018

Is this revision a change to the admission status of the program?
No

Enrollment

Describe how this revision will impact enrollment and degrees awarded.

Update of course numbers from iSchool; no impact to enrollment or degrees awarded.
Estimated Annual Number of Degrees Awarded

Delivery Method

Is this program available on campus and online?
No

This program is available:
On Campus and Online

Describe the use of this delivery method:
LIS portion can be taken online.

Budget

Are there budgetary implications for this revision?
No

Will the program or revision require staffing (faculty, advisors, etc.) beyond what is currently available?
No

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

For each of these items, be sure to include in the response if the proposed new program or change will result in replacement of another program(s). If so, which program(s), what is the anticipated impact on faculty, students, and instructional resources? Please attach any letters of support/acknowledgement from faculty, students, and/or other impacted units as appropriate.

Faculty Resources

Please address the impact on faculty resources including any changes in numbers of faculty, class size, teaching loads, student-faculty ratios, etc. Describe how the unit will support student advising, including job placement and/or admission to advanced studies.

Update of course numbers from iSchool; no impact to faculty 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.

Update of course numbers from iSchool; no impact to library resources.

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

No

Financial Resources

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

No

Are you seeking a change in the tuition rate or differential for this program?

Yes

Is this program requesting self-supporting status?

No
Program Regulation and Assessment

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.

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.

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

Statement for Programs of Study Catalog

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>REES 550</td>
<td>Seminar in REEE Studies</td>
<td>4</td>
</tr>
<tr>
<td>IS 501</td>
<td>Reference and Information Services</td>
<td>4</td>
</tr>
<tr>
<td>IS 502</td>
<td>Course IS 502 Not Found</td>
<td>2 or 4</td>
</tr>
<tr>
<td>IS 505</td>
<td>Information Organization and Access</td>
<td>4</td>
</tr>
<tr>
<td>IS 510</td>
<td>Libraries, Information and Society</td>
<td>4</td>
</tr>
<tr>
<td>IS 530</td>
<td>Collection Development (Section C: REEES Bibliography &amp; Research Methods)</td>
<td>4</td>
</tr>
</tbody>
</table>

Core courses in Russian, East European, or Eurasian Studies, including the thesis option. 24

These credits must be earned in at least three different disciplines outside of REEES, with at least one course at the 500-level in addition to the thesis. Hours for the thesis, REES 599, may be included up to a maximum of 8; these hours cannot be counted towards the IS electives described below.

Elective IS courses, at least 12 hours of which must be at the 500-level. 16-18

These credits should be selected in consultation with an advisor who is a member of the iSchool faculty.

Electives may include:

| IS 585  | Bibliographic Metadata                                      |       |
| IS 591  | Advanced Topics in Information Services                     |       |
| IS 592  | Advanced Topics In Information Organizations                 |       |

Total Credit Hours: 56

Other Requirements

Language Requirement: Third-year competency in Russian or another language of Eastern Europe or Eurasia. Credit hours from language courses do not count towards the degree.
Students in the joint degree must be registered in each program for at least one semester.

Minimum GPA: 3.25

**EP Documentation**

**DMI Documentation**

Program Code:

JP: 10KS4097MA & 10KS0370MS

Program Reviewer Comments

Deb Forgacs (dforgacs) (Wed, 07 Apr 2021 14:28:34 GMT): Rollback requested
Allison McKinney (agrindly) (Mon, 12 Apr 2021 19:43:54 GMT): Administratively approved by the Graduate College.
Kathy Martensen (kmartens) (Thu, 15 Apr 2021 20:06:55 GMT): Administrative approval: No change to total hours/restriction of options.

Key: 834