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 November 9, 2020. Additional information for each approval is attached.

A. Graduate Programs

1) Animal Sciences concentration in the MS in Bioinformatics – in the list of Computer Science and Informatics courses from which students are to choose one course (4 hours), remove IS 542, Research and Inquiry for Youth (4 hours) and add IS 507, Data, Statistical Models and Information. There is no change in total hours required for the program.
10KS5099MS: BIOINFORMATICS: ANIMAL SCIENCES, MS

In Workflow
1. U Program Review (dforgacs@illinois.edu; eastuby@illinois.edu; aledward@illinois.edu)
2. 1538 Committee Chair (adilger2@illinois.edu)
3. 1538 Head (rwjohn@illinois.edu; jrevans@illinois.edu)
4. KL Committee Chair (bjgray2@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; kmartens@illinois.edu; moorhouz@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
   Deb Forgacs (dforgacs): Approved for U Program Review
2. Thu, 22 Oct 2020 21:52:01 GMT
   Anna Dilger (adilger2): Approved for 1538 Committee Chair
3. Mon, 02 Nov 2020 14:57:46 GMT
   Rodney W. Johnson (rwjohn): Approved for 1538 Head
4. Mon, 02 Nov 2020 15:14:25 GMT
   Brianna Gregg (bjgray2): Approved for KL Committee Chair
5. Mon, 02 Nov 2020 15:17:10 GMT
   Anna Ball (aball): Approved for KL Dean
   John Wilkin (jpwilkin): Approved for University Librarian
7. Wed, 04 Nov 2020 18:40:54 GMT
   Allison McKinney (agrindly): Approved for Grad_College
8. Thu, 05 Nov 2020 21:28:20 GMT
   Kathy Martensen (kmartens): Approved for Provost

History
1. Sep 5, 2019 by Mary Lowry (lowry)
2. Sep 6, 2019 by Mary Lowry (lowry)

Date Submitted: Thu, 22 Oct 2020 21:19:54 GMT

Viewing: 10KS5099MS: Bioinformatics: Animal Sciences, MS
Changes proposed by: Sandra Rodriguez-Zas

Proposal Type

Proposal Type:
Concentration (ex. Dietetics)

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: Revise the Animal Sciences concentration in the MS in Bioinformatics to update IS 542 to IS 507

**EP Control Number**

EP:21.024

**Official Program Name**

Bioinformatics: Animal Sciences, MS

**Effective Catalog Term**

Spring 2021

**Sponsor College**

Agr, Consumer, & Env Sciences

**Sponsor Department**

Animal Sciences

**Sponsor Name**

Sandra Rodriguez Zas

**Sponsor Email**

rodrgzszs@illinois.edu

**College Contact**

Brianna Gregg

**College Contact Email**

bjgray2@illinois.edu

**Program Description and Justification**

**Justification for proposal change:**

Update IS 5432 with new number due to the iSchool renumbering their courses
**Corresponding Program(s):**

<table>
<thead>
<tr>
<th>Corresponding Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioinformatics, MS</td>
</tr>
</tbody>
</table>

**Academic Level**
Graduate

**Is This a Teacher Certification Program?**
No

**Will specialized accreditation be sought for this program?**
No

**Enrollment**

Describe how this revision will impact enrollment and degrees awarded.
N/A

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

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

**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

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).

Students and faculty are surveyed about coursework, seminar and research experiences.

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.
## Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>Biology (choose one)</strong></td>
<td></td>
<td>4</td>
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<tr>
<td>ANSC 441</td>
<td>Human Genetics</td>
<td></td>
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<tr>
<td>ANSC 444</td>
<td>Applied Animal Genetics</td>
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<tr>
<td>ANSC 446</td>
<td>Population Genetics</td>
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<tr>
<td>BIOP 401</td>
<td>Introduction to Biophysics</td>
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<tr>
<td>BIOP 550</td>
<td>Biomolecular Physics</td>
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<tr>
<td>CPSC 452</td>
<td>Advanced Plant Genetics</td>
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<tr>
<td>CPSC 466</td>
<td>Genomics for Plant Improvement</td>
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<tr>
<td>CPSC 563</td>
<td>Chromosomes</td>
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<tr>
<td>CPSC 564</td>
<td>Molecular Marker Data Analyses</td>
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<td>CPSC 566</td>
<td>Plant Gene Regulation</td>
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<tr>
<td>MCB 400</td>
<td>Cancer Cell Biology</td>
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<td>MCB 450</td>
<td>Introductory Biochemistry</td>
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<tr>
<td>MCB 501</td>
<td>Advanced Biochemistry</td>
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<td>MCB 502</td>
<td>Advanced Molecular Genetics</td>
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<td><strong>Fundamental Bioinformatics (choose one)</strong></td>
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<td>ANSC 542</td>
<td>Applied Bioinformatics</td>
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<td>ANSC 545</td>
<td>Statistical Genomics</td>
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<td>CHBE 571</td>
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<td>CPSC 567</td>
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<td>CS 466</td>
<td>Introduction to Bioinformatics</td>
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<td>IB 467</td>
<td>Principles of Systematics</td>
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<td>MCB 432</td>
<td>Computing in Molecular Biology</td>
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<td><strong>Computer Science and Informatics (choose one)</strong></td>
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<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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<td>CPSC 565</td>
<td>Perl &amp; UNIX for Bioinformatics</td>
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<tr>
<td>IS 455</td>
<td>Database Design and Prototyping</td>
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<td>IS 542</td>
<td>Research and Inquiry for Youth</td>
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<tr>
<td>IS 507</td>
<td>Data, Statistical Models and Information</td>
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<tr>
<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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<tr>
<td>STAT 480</td>
<td>Data Science Foundations</td>
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<tr>
<td>STAT 525</td>
<td>Computational Statistics</td>
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<td><strong>Graduate seminar (ANSC 590) enrollment is required every semester (max 2 hours can be applied to the degree)</strong></td>
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<tr>
<td><strong>ANSC 599</strong></td>
<td>Thesis Research (min/max applied toward degree)</td>
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<tr>
<td><strong>Electives</strong></td>
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<tr>
<td>Total Hours</td>
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</table>

## Other Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Other Requirements and conditions may overlap</td>
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<tr>
<td>A concentration is required.</td>
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<tr>
<td>Requirement</td>
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<tr>
<td>-------------------------------------------------</td>
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<tr>
<td>Minimum Hours Overall Required Within the Unit</td>
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<tr>
<td>Minimum 500-level Hours Required Overall</td>
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<tr>
<td>A comprehensive oral examination concerning the</td>
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<tr>
<td>Thesis Deposit Required</td>
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<tr>
<td>Minimum GPA</td>
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</tbody>
</table>

**EP Documentation**

**DMI Documentation**

**Banner/Codebook Name**

MS: Bioinformatics: AnSci-UIUC

**Program Code:**

10KS5099MS

**Conc Code**

5099

**Degree Code**

MS

**Major Code**

4026

**Program Reviewer Comments**

Kathy Martensen (kmartens) (Thu, 05 Nov 2020 21:27:45 GMT): Admin approval: No change to total hours required or restriction of student options.

Key: 582