MICHIGAN STATE UNIVERSITY

Report of

THE UNIVERSITY COMMITTEE ON CURRICULUM

to the Faculty Senate

Actions by UCC

May 1, 2025

September 16, 2025

TO: Faculty Senate

This report is prepared and distributed for the following purposes:

- 1. To report new academic programs, changes in academic programs, discontinuations of academic programs, new courses, permanent changes in courses, and deletions of courses.
- 2. To notify the initiating colleges, schools, and departments of approval by the University Committee on Curriculum of their requests for new academic programs, changes in academic programs, discontinuations of academic programs, new courses, permanent changes in courses, and deletions of courses.
- 3. To provide information to members of the faculty in each department about academic programs and courses in all colleges, departments, and schools of the University.

Reports of the University Committee on Curriculum to the Faculty Senate are organized as follows:

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES:

Organized by colleges in alphabetical order. For a given college, academic units are organized in alphabetical order. For a given academic unit, degrees, majors, and specializations are organized in alphabetical order.

PART II - NEW COURSES:1

Organized by academic units in alphabetical order; All-University courses appear last. For a given academic unit, courses are organized according to the names associated with course subject codes, in alphabetical order. Courses with the same subject code are in numerical order.

PART III - COURSE CHANGES:1

Organized by academic units in alphabetical order; All-University courses appear last. For a given academic unit, courses are organized according to the names associated with course subject codes, in alphabetical order. Courses with the same subject code are in numerical order.

Not all of the above categories, and not all of the colleges and academic units, will necessarily appear in any given Senate Report.

¹One or more of the abbreviations that follow may be included in a course entry:

P: = Prerequisite monitored in SIS

C: = Corequisite R: = Restriction

RB: = Recommended background

SA: = Semester Alias

MICHIGAN STATE UNIVERSITY

September 16, 2025

TO: Faculty Senate

FROM: University Committee on Curriculum

SUBJECT: New Academic Programs and Program Changes:

New Courses and Course Changes

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

- 1. Change the requirements for the **Bachelor of Science** degree in **Applied Conservation Biology** in the Department of Fisheries and Wildlife.
 - a. Under the heading Requirements for the Bachelor of Science Degree in Applied Conservation Biology make the following changes:

(1)	Replace item 3. d. with the following:					
	Two of CEM CEM LB LB	following 141 161 171 171L	courses (5 credits): General Chemistry Chemistry Laboratory I Principles of Chemistry I Principles of Chemistry Laboratory I	4 1 4 1		
(2)	In item	3. f. dele	te the following course:			
	STT	464	Statistics for Biologists	3		
(3)	In item	3. g. add	the following course:			
	PHL	214	Indigenous Philosophy	3		
(4)	In item	3. m. del	ete the following course:			
	IBIO	353	Marine Biology	4		
	Add the following course:					
	FW	353	Marine Biology (W)	3		
(5)	In item 3. o. add the following course with FW 417:					
	and FW	417L	Wetland Ecology and Management Lab	1		
(6)	In item	3.p. dele	te the following courses:			
	ANP ANP	443 486	Human Adaptability Environmental Archaeology	3 3		
(7)	In item	3.r. add 1	the following course:			
	FW	494	Marine Biology and Ecosystem Experience	1 to		

1 to 3

- 2. Change the requirements for the **Bachelor of Science** degree in **Aquatic Ecology and Management** in the Department of Fisheries and Wildlife.
 - a. Under the heading Requirements for the Bachelor of Science Degree in Aquatic Ecology and Management make the following changes:

(1)	Replace item 3. c. with the following:			
	Two of t CEM CEM LB LB	following 141 161 171 171L	courses (5 credits): General Chemistry Chemistry Laboratory I Principles of Chemistry I Principles of Chemistry Laboratory I	4 1 4 1
(2)	In item 3	3. g. dele	te the following course:	
	STT	464	Statistics for Biologists	3
(3)	In item 3	3. h. add	the following course:	
	PHL	214	Indigenous Philosophy	3
(4)	In item :	3. j. add t	he following course with FW 417:	
	and FW	417L	Wetland Ecology and Management Lab	1
(5)	In item 3	3. k. dele	te the following courses:	
	IBIO MMG	353 425	Marine Biology (W) Microbial Ecology	4 3
	Add the	following	g courses:	
	FW MGI	353 425	Marine Biology (W) Microbial Ecology	3 3
(6)	In item 3. p. delete the following courses:			
	ANP ANP	443 486	Human Adaptability Environmental Archaeology	3 3
(7)	In item :	3. q. add	the following course:	

Effective Fall 2025.

FW

- 3. Change the requirements for the **Bachelor of Science** degree in **Fish Ecology and Management** in the Department of Fisheries and Wildlife.
 - a. Under the heading Requirements for the Bachelor of Science Degree in Fish Ecology and Management make the following changes:
 - (1) Replace item 3. d. with the following:

494

Two of	following	g courses (5 credits):	
CEM	141	General Chemistry	4
CEM	161	Chemistry Laboratory I	1
LB	171	Principles of Chemistry I	4
LB	171L	Principles of Chemistry Laboratory I	1

Marine Biology and Ecosystem Experience

3

(2)	In item 3. g. delete the following course:				
	STT	464	Statistics for Biologists	3	
(3)	In item	3. h. add	I the following course:		
	PHL	214	Indigenous Philosophy	3	
(4)	In item 3. k., change the credits from '6' to '6 or 7' and add the following course with FW 417:				
	and FW	417L	Wetland Ecology and Management Lab	1	
(5)	In item	3. n. dele	ete the following courses:		
	ANP ANP	443 486	Human Adaptability Environmental Archaeology	3 3	
(6)	In item 3. o. add the following course:				
	FW	494	Marine Biology and Ecosystem Experience	1 to 3	

Effective Fall 2025.

- 4. Change the requirements for the **Bachelor of Science** degree in **Wildlife Ecology and Management** in the Department of Fisheries and Wildlife.
 - a. Under the heading Requirements for the Bachelor of Science Degree in Wildlife Ecology and Management make the following changes:
 - (1) In item 3. a. change the total credits from '34' to '35' and add the following course: FW 417L Wetland Ecology and Management Lab 1 (2) Replace item 3. d. with the following: Two of following courses (5 credits): CEM 141 General Chemistry 4 Chemistry Laboratory I CEM 161 1 Principles of Chemistry I LB 171 4 171L Principles of Chemistry Laboratory I (3) In item 3. f. delete the following course: 3 STT 464 Statistics for Biologists (4) In item 3. g. add the following course: PHL 214 Indigenous Philosophy 3 (5) In item 3. n. delete the following courses:
 - (6) In item 3. o. add the following course:

443

486

ANP

ANP

FW 494 Marine Biology and Ecosystem Experience 1 to 3

Human Adaptability

Environmental Archaeology

- 5. Change the requirements for the **Bachelor of Science** degree in **Forestry** in the Department of Forestry.
 - a. Under the heading Requirements for the Bachelor of Science Degree in Forestry make the following changes:
 - (1) In item 1., replace paragraph two with the following:

The University's Tier II writing requirement for the Forestry major is met by completing Forestry 340L, 406L and 468. Those courses are referenced in item 3. a. below.

(2) In item 1., replace paragraph three with the following:

Students who are enrolled in the Forestry major leading to the Bachelor of Science degree in the Department of Forestry may complete an alternative track to Integrative Studies in Biological and Physical Sciences that consists of the following courses: Forestry 175 and Chemistry 141 and 161.

(3) In item 1., replace paragraph four with the following:

The completion of Chemistry 161 satisfies the laboratory requirement. Forestry 175, and Chemistry 141 and 161 may be counted toward both the alternative track and the requirements for the major referenced in item 3. below.

(4) In item 2., delete the following:

The completion of Mathematics 124 or 132 satisfies the College's mathematics requirement.

(5) In item 3. a., add the following course:

FOR 175 Tree Biology 4

Delete the following courses:

PLB 105 Plant Biology 3 PLB 106 Plant Biology Laboratory 1

(6) Delete item 3. b. and reletter items 3. b. through 3. f. respectively.

Effective Fall 2025.

- Change the requirements of the Bachelor of Science degree in Packaging in the School of Packaging. The University Committee on Undergraduate Education (UCUE) approved this request at its April 10, 2025 meeting.
 - a. Under the heading **Admission**, replace item 2. b. with Mathematics 132.
 - b. Under the heading Requirements for the Bachelor of Science Degree in Packaging make the following changes:
 - (1) In item 3. b., update 'MMG 201' to 'MGI 201'.

- 7. Change the requirements for **Bachelor of Science** degree in **Sustainable Parks**, **Recreation and Tourism** in the Department of Community Sustainability.
 - a. Under the heading Requirements for the Bachelor of Science Degree in Sustainable Parks, Recreation and Tourism replace item 3. with the following:

The following requirements for the major (45 to 49 credits): All of the following courses (26 credits): 3 CSUS 200 Introduction to Sustainability CSUS 273 Introduction to Travel and Tourism 3 CSUS 276 Sustaining Our National Parks and Recreation Lands 3 3 CSUS 300 Theoretical Foundations of Sustainability 3 CSUS 301 Community Engagement for Sustainability (W) CSUS 429 Program Evaluation for Community Sustainability 3 433 Grant Writing and Fund Development 3 CSUS CSUS 476 Natural Resource Recreation Management 4 Capstone in Community Sustainability 1 CSUS 492 One of the following courses (3 or 4 credits): b. FOR 419 Application of Geographic Information Systems to Natural Resources Management 4 **GEO** 221 Introduction to Geographic Information 3 C. Six of the following courses (18 to 21 credits): CSUS 426 Conservation Planning and Adaptive Management 3 CSUS Non-Profit Organizational Management for 430 3 Community Sustainability CSUS Community-Based Environmental and Sustainability 445 3 Education CSUS 472 Designing and Managing Programmed Experiences 3 CSUS Social Entrepreneurship and Community Sustainability 473 3 CSUS 477 Nature-based Tourism 3 CSUS 493 Professional Internship in Community Sustainability 3 to 6 Management Skills and Processes MGT 325 d. Choose any three courses from the following Thematic Areas (5 to 9 credits): Aquatic Ecologies 3 CSUS 354 Water Resources Management CSUS 3 453 Watershed Planning and Management FW Conservation and Management of Marine Resources 110 3 FW Great Lakes: Biology and Management 3 207 Environmental Policy 3 AFRE 265 **Ecological Economics** History of Environmental Thought and Sustainability 3 CSUS 310 464 Environmental and Natural Resources Policy CSUS 3 in Michigan 465 CSUS Environmental and Natural Resource Law 3 SOC 478 Climate Change and Society 3 General Ecology and Biology FW 101 Fundamentals of Fisheries and Wildlife Ecology 3 and Management PLB 105 Plant Biology 3 PLB Plant Biology Laboratory 106 1 PLB 218 Plants of Michigan 3 Management Foundations Survey of Accounting Concepts 3 ACC 230 The World of Advertising ADV 200 2 CAS 114 Creativity and Innovative Entrepreneurship 3 Introduction to Finance FΙ 320 3 Introduction to Business Law GBL 323 3 MKT 327 Introduction to Marketing 3 PR 260 Principles of Public Relations 3 Terrestrial Ecologies 3 CSS 210 Fundamentals of Soil Science **FOR** 101 Michigan Forests 3

FOR	202	Introduction to Forestry	3
FOR	204	Forest Vegetation	3
FOR	215	Introduction to Wildland Fire	2
FOR	222	Forestry Field Methods	2

Effective Fall 2025.

- Change the requirements for the Master of Arts degree in Environmental Design in the School of Planning, Design and Construction. The University Committee on Graduate Studies (UCGS) approved this request at its April 21, 2025 meeting.
 - a. Under the heading **Admission** replace item 3. with the following:
 - a portfolio of design work.
 - b. Under the heading **Requirements for the Master of Arts Degree in Environmental Design** replace the entire entry with the following:

Students in the Master of Arts in Environmental Design must complete a total of 30 credits for the degree under either Plan A (with thesis) or Plan B (without thesis). A minimum of 15 of those credits must be at the 800-level or above, distributed as follows:

				CREDITS
1.	All of the	ne follow	ring core courses (12 credits):	
	IDES	892	Research Fundamentals in Environmental Design	3
	LA	816	Environmental Design Theory	3
	LA	817	Environmental Design Studio	3
	LA	883	Environmental Design Seminar	3
2.	Guideo	delective	e courses related to the student's area of design interest, ch	osen in

For **Plan A**, students must complete a minimum of 6 and a maximum of 9 credits of Master's Thesis Research (LA 899) They must also prepare a written thesis and pass an oral examination.

For **Plan B**, students must complete 6 credits of Master's Research (LA 898). They must also complete either a major planning or design project or pass a comprehensive examination.

Effective Fall 2025.

RESIDENTIAL COLLEGE IN THE ARTS AND HUMANITIES

 Change the requirements for the Bachelor of Arts degree in the Arts and Humanities in the Residential College in the Arts and Humanities.

consultation with the student's academic advisor.

- a. Under the heading Requirements for the Bachelor of Arts Degree in the Residential College in the Arts and Humanities make the following changes:
 - (1) Replace item 2. f. with the following:

Completion of the language and cultural studies requirement by completing RCAH 235 Foundations of Language and Culture Studies, and one of the following two options:

- (1) Participate in an approved language-intensive study abroad program
- (2) Complete one of the following combinations of language and cultural studies courses:
 - a. Complete 2 years of language courses in no more than two languages and complete one of the approved cultural courses from the list maintained by the student's academic advisor.

- Complete 1 year of language courses in a single language and three of the approved cultural courses from the list maintained by the student's academic advisor.
- c. Complete a minor in one of the approved area studies programs as approved by the student's academic advisor.
- (2) Delete item 2. h.:

Students must attend 12 separate sessions of the College Colloquium, with 6 of those sessions occurring in the first year of the student's major within the Residential College in the Arts and Humanities.

Effective Fall 2025.

COLLEGE OF ARTS AND LETTERS

1. Establish an **Undergraduate Certificate** in **Reflective Leadership in the Arts and Humanities** in the College of Arts and Letters. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 20, 2025 meeting.

a. Background Information:

Since its inception in the College of Arts and Letters, the Citizen Scholars Program has operated as a one-of-a-kind program that invites students in the arts and humanities to put their values, knowledge, and skills into action to lead us toward a more just, inclusive, and open society.

Former CAL Dean Chris Long founded the Citizen Scholars Program in 2016. Since then, the program has supported dozens of students in studying abroad, taught interesting and interdisciplinary courses, and offered engaging extracurricular and cocurricular programming to support students in realizing their academic and professional goals. An undergraduate certificate in Reflective Leadership in the Arts and Humanities will "encourage more engagement with and support for the undergraduate mission through incentives that provide more robust rewards for undergraduate teaching and experiential learning."

Over the years, though, how the program offers and supports these opportunities and efforts has been inconsistent. The inconsistency was exacerbated by Covid-19, which made recruitment hard to do and community hard to make. Consequently, the program was "paused" during the 22-23 academic year.

With a new leadership team in place, the program has sought out feedback from past Citizen Scholars, newly recruited Citizen Scholars, adjacent programs from across the university, CAL donors, and faculty and advisors from across the disciplines in the College of Arts and Letters. Over and over, the feedback focused on the need for structure and predictability. There was also a strong desire to have the program "outlast" the program leader/director (as the program turned over leadership four times in four years). Students also expressed a desire to receive a credential that demonstrated their willingness to pursue additional academic opportunities.

An undergraduate certificate in "Reflective Leadership in the Arts and Humanities," was the outcome of these conversations and research. The undergraduate certificate not only provides the structure students want and need and the predictability necessary for supporting students in the academic professional endeavors, but a framework for increasing student recruitment and the visibility of the arts and humanities on campus.

b. Academic Programs Catalog Text:

The Undergraduate Certificate in Reflective Leadership in the Arts and Humanities is a multidisciplinary program administered through the Citizen Scholars Program in the College of Arts and Letters at Michigan State University. The program provides high-impact learning experiences and mentoring focused on leadership development, reflective practice, and ethical community-engagement that prepare students to tackle today's most pressing issues and problems from an arts and humanities perspective.

Admission

Grades or grade-point average are not considered for admission. First-year, second year, and transfer students in the College of Arts and Letters are invited to apply to the Citizen Scholars Program via an online application. The application contains several questions asking students to reflect on their experiences in the arts and humanities and to look ahead to their goals in the College of Arts and Letters. After completing the application, admission into the program will be determined by the Citizen Scholars Leadership Team (the Director and Program Graduate Assistants). The applicants' responses will be assessed by how effectively they connect their experiences and interest in the arts and humanities with the program mission and learning goals. Additionally, consideration is given to the following: distribution of majors from across the College of Arts and Letters and interest in pursuing leadership opportunities in the arts and humanities.

Requirements for the Undergraduate Certificate in Reflective Leadership in the Arts and Humanities

		CREDITS	3
Stude	ents must complete the following experiences totaling 9 credits:		
1.	The following course:		
	AL 270 Creating Meaningful Impact	2	
2.	The College of Arts and Letters Experiential Learning Requirement	3	
3.	Community-Engaged Learning Projects	1	
4.	Mentoring, Coaching, and Leadership	1	
5.	The following course:		
	AL 460 Advanced Career Strategies for Arts and Letters	1	
6.	The Citizen Scholars Reflective Presentation as the Capstone Experience	1	

Effective Fall 2025.

- Change the requirements for the Bachelor of Arts degree in Studio Art in the Department of Art, Art History, and Design.
 - a. Under the heading Requirements for the Bachelor of Arts Degree in Studio Art make the following change:
 - (1) In item 3. a. (2), under Three Dimensional Area, Sculpture, add Studio Art 352.
 - (2) In item 3. a. (3) under Sculpture, add Studio Art 352.

- 3. Change the requirements for the **Bachelor of Fine Arts** degree in **Studio Art** in the Department of Art, Art History, and Design.
 - a. Under the heading Requirements for the Bachelor of Fine Arts Degree in Studio Art make the following changes:
 - (1) In item 3. a. (2), under Three Dimensional Area, Sculpture, add Studio Art 352.
 - (2) In item 3. a. (3) make the following changes:
 - (a) Under Electronic Art and Intermedia add Studio Art 488.
 - (b) Under Sculpture, add Studio Art 352.

(c) Under Studio Art Senior Project courses and Internships, Electronic Art and Intermedia delete Studio Art 488.

Effective Fall 2025.

- Change the requirements for the Bachelor of Arts degree in Japanese in the Department of Linguistics, Languages, and Cultures. The Teacher Education Council (TEC) approved this request at its April 17, 2025 meeting.
 - Under the heading Requirements for the Bachelor of Arts Degree in Japanese make the following changes:
 - (1) In item 3. a., replace the note following the course list with the following:

Students who place out of any of these courses may take additional electives from item 3. c. below to make-up for deficient credits in this requirement. Students may also consult with the program advisor and director to determine other courses to make up for deficient credits. Course work used to make-up deficient credits must be approved by the student's academic advisor.

(2) In item 3. b. add the following note:

Both JPN 369 and JPN 469 must be completed at MSU and cannot be replaced by courses completed through Education Abroad in Japan. Students planning to pursue Education Abroad in Japan are encouraged to complete JPN 369 before departure.

(3) Replace item 3. c. with the following:

Three of the following courses with at least one course at the 300- or 400-level (9 credits): JPN 260 Japanese Cinema Studies in Japanese Language JPN 3 350 3 3 JPN Gender and Sexuality in Japan 370 JPN 371 Edo Period Literature and Visual Culture JPN 460 Media and Digital Culture in Japan 3 Topics in Japanese Studies JPN 491

Students enrolled in an Education Abroad program in Japan may, with program approval, complete up to one 3-credit course (or equivalent) per term on a Japan-related topic to satisfy this requirement.

Effective Fall 2025.

ELI BROAD COLLEGE OF BUSINESS

Delete the curriculum and degree requirements for the Graduate Specialization in Business Concepts for Environmental Sustainability and Conservation in the Eli Broad College of Business and Graduate School of Management. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Spring 2021. No students are to be readmitted to the program effective Spring 2021. Effective Summer 2024, coding for the program will be discontinued and the program will no longer be available in the Eli Broad College of Business and Graduate School of Management. Students who have not met the requirements for the Graduate Specialization in Business Concepts for Environmental Sustainability and Conservation through the Eli Broad College of Business and Graduate School of Management prior to Summer 2024 will have to change their specialization.

Note: This program has been in moratorium since Spring 2021.

2. Delete the curriculum and degree requirements for the **Minor** in **Retail Management** in the Department of Management. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Summer 2023. No students are to be readmitted to the program effective Summer 2023. Effective Fall 2026, coding for the program will be discontinued and the program will no longer be available in the Department of Management. Students who have not met the requirements for the Minor in Retail Management through the Department of Management prior to Fall 2026 will have to change their minor.

Note: This program has been in moratorium since Summer 2023.

COLLEGE OF COMMUNICATION ARTS AND SCIENCES

- Change the requirements for the Minor in Advertising Analytics in the Department of Advertising and Public Relations.
 - a. Under the heading Requirements for the Minor in Advertising Analytics make the following changes:
 - (1) In item 1., delete the following courses:

480

ADV MI	442 250	Digital Analytics Introduction to Applied Programming	3
Add the	following	g courses:	
ADV	362	Digital Analytics	3

Effective Spring 2026.

ADV

 Change the requirements for the Bachelor of Arts degree in Advertising Creative in the Department of Advertising and Public Relations

Advanced Digital Analytics

The concentrations in the Bachelor of Arts degree in Advertising Creative will be noted on the student's academic record when the requirements for the degree have been completed.

- a. Under the heading **Requirements for the Bachelor of Arts Degree in Advertising Creative** make the following change:
 - (1) In item 3. d. under **Art Direction** delete the following course:

ADV 225 Basic Skills for Advertising Careers 3

COLLEGE OF ENGINEERING

- Change the requirements for the Minor in Smart Agricultural Systems in the Department of Biosystems and Agricultural Engineering.
 - Under the heading Requirements for the Minor in Smart Agricultural Systems make the following changes:
 - (1) In item 2., delete the following courses:

ECE	416	Digital Control	3
ECE	417	Robotics	3

Add the following courses:

ECE	416	Digital Control	4
ECE	417	Robotics	4
FOR	419	Applications of GIS to Natural Resources Management	4
TNG	335	Computer Security Fundamentals	3
TNG	355	Networks and Network Security	3
TNG	440	Robotics, Automation, and Controls	3

(2) Delete the following statement:

At least 10 unique credits counted towards the requirements for a student's minor must not be used to fulfill the requirements for that student's major.

Effective Spring 2026.

2. Change the requirements in the **Bachelor of Science** degree in **Computer Science** in the Department of Computer Science and Engineering.

The concentrations in the Bachelor of Science degree in Computer Science are noted on the student's academic record when the requirements for the degree have been completed.

- a. Under the heading **Requirements for the Bachelor of Science Degree in Computer Science** make the following changes:
 - (1) In item 3. a., under **Bioscience** change the "MMG" courses to "MGI".
 - (2) Under the **Concentrations in Computer Science** make the following changes:
 - (a) Under **Multimedia and Graphics** delete the following course:

MI 337 Compositing and Special Effects 3

Add the following course:

THR 337 Compositing and Special Effects for Stage and Screen 3

COLLEGE OF HUMAN MEDICINE

 Change the administrative responsibility for the Master of Public Health degree in Public Health from the College of Human Medicine to the Department of Public Health. The University Committee on Graduate Studies (UCGS) approved this request at its April 21, 2025 meeting.

Effective Summer 2025.

2. Change the administrative responsibility for the **Graduate Certificate** in **Public Health** from the College of Human Medicine to the Department of Public Health. The University Committee on Graduate Studies (UCGS) approved this request at its April 21, 2025 meeting.

Effective Summer 2025.

LYMAN BRIGGS COLLEGE

 Change the name of the Coordinate Major in Genomics and Molecular Genetics in Lyman Briggs College to Genetics and Genomics.

Effective Fall 2025, no new students are to be admitted to the Coordinate Major in Genomics and Molecular Genetics. Effective Fall 2025, no students are to be readmitted to the Coordinate Major in Genomics and Molecular Genetics. Effective Fall 2025, coding for the Coordinate Major in Genomics and Molecular Genetics will be discontinued and the program will no longer be available in Lyman Briggs College. Effective Fall 2025, students admitted to the Coordinate Major will be awarded a LB Bachelor of Science Degree in Genetics and Genomics.

- 2. Change the requirements for the **Minor** in **Bioethics** in Lyman Briggs College.
 - a. Under the heading **Requirements for the Minor in Bioethics** make the following changes:
 - (1) Replace item 1. with the following:

The following course (2 credits):
LB 240 Bioethics: Theories and Methods 2

(2) Add the following new item 2., and renumber respectively.

One of the following courses (4 credits)

LB 326A Medicine and Health – Arts and Humanities (W) 4

LB 326B Medicine and Health – Social Sciences (W) 4

PHL 344 Ethics Issues in Health Care 4

(3) In item 3., delete the following courses and note the 'Courses used in Requirement 2. cannot be applied to these 15 credits':

ANP	423	Psychological Anthropology	3
ANP	471	The Anthropology of Alternative Medicine	3
ANS	427	Environmental Toxicology and Society	3
HNF	375	Community Nutrition	3
PHL	444	Philosophical Issues in Biomedicine	4
PHL	485	Philosophy of Social Science	3

COLLEGE OF NATURAL SCIENCE

- Change the requirements for the Admission to the College in Natural Science in the College of Natural Science. The University Committee on Undergraduate Education (UCUE) approved this request at its April 10, 2025 meeting.
 - Under the heading Admission to the College of Natural Science replace item 3. with the following:

Medical Laboratory Science majors are admitted at the senior level each fall semester. For specific details see the program statement in the Biomedical Laboratory Diagnostics Program section.

Effective Fall 2025.

Delete the curriculum and degree requirements for the Bachelor of Science degree in Biological Science Secondary Education in the College of Natural Science. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Fall 2023. No students are to be readmitted to the program effective Fall 2023. Effective Fall 2030, coding for the program will be discontinued and the program will no longer be available in the College of Natural Science. Students who have not met the requirements for the Bachelor of Science Degree in Biological Science Secondary Education through the College of Natural Science prior to Fall 2030 will have to change their major.

Note: This program has been in moratorium since Fall 2023.

3. Delete the curriculum and degree requirements for the **Bachelor of Science** degree in **Physical Science Secondary Education** in the College of Natural Science. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Fall 2023. No students are to be readmitted to the program effective Fall 2023. Effective Fall 2030, coding for the program will be discontinued and the program will no longer be available in the College of Natural Science. Students who have not met the requirements for the Bachelor of Science Degree in Physical Science Secondary Education through the College of Natural Science prior to Fall 2030 will have to change their major.

Note: This program has been in moratorium since Fall 2023.

4. Delete the curriculum and degree requirements for the **Dual Major Doctor of Philosophy** degree in **Quantitative Biology** in the College of Natural Science. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Spring 2018. No students are to be readmitted to the program effective Spring 2018. Effective Fall 2025, coding for the program will be discontinued and the program will no longer be available in the College of Natural Science. Students who have not met the requirements for the Dual Major Doctor of Philosophy Degree in Quantitative Biology through the College of Natural Science prior to Fall 2025 will have to change their major.

Note: This program has been in moratorium since Spring 2018.

5. Delete the curriculum and degree requirements for the Disciplinary Teaching Minor available for secondary certification in Biology in the College of Natural Science. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Fall 2023. No students are to be readmitted to the program effective Fall 2023. Effective Fall 2030, coding for the program will be discontinued and the program will no longer be available in the College of Natural Science. Students who have not met the requirements for the Disciplinary Teaching Minor in Biology through the College of Natural Science prior to Fall 2030 will have to change their minor.

Note: This program has been in moratorium since Fall 2023.

- 6. Change the requirements for the Bachelor of Science degree in Biochemistry and Molecular Biology in the Department of Biochemistry and Molecular Biology.
 - Under the heading Requirements for the Bachelor of Science Degree in Biochemistry and a. Molecular Biology make the following changes:
 - In item 3. a. change the total credits from '58 to 64' to '59 to 66'. (1)
 - (2) Replace item 3. a. (5) with the following:

One course from each of the following groups of courses (7 or 8 credits): CEM 251 Organic Chemistry I 4 (a) CEM 351 Organic Chemistry I 4 Organic Chemistry LB 271 3 CEM 252 Organic Chemistry II 4 (b) Organic Chemistry II CEM 352

Effective Spring 2026.

- 7. Change the requirements for the Bachelor of Science degree in Biochemistry and Molecular Biology/Biotechnology in the Department of Biochemistry and Molecular Biology.
 - Under the heading Requirements for the Bachelor of Science Degree in Biochemistry and Molecular Biology/Biotechnology make the following changes:
 - In item 3. a. change the total credits from '63 to 71' to '64 to 73'. (1)
 - In item 3. a. (3) (b) change the credits of 'CEM 142 and CEM 152' from '3' to '4'. (2)
 - Replace item 3. a. (5) with the following: (3)

CEM

One course from each of the following groups of courses (7 or 8 credits): CEM 251 Organic Chemistry I 4 CEM 351 Organic Chemistry I 4 LB 271 Organic Chemistry 3 Organic Chemistry II (b) CEM 252 4

Organic Chemistry II

- 352 (4) In item 3. a. (9) change 'CSS 451' to 'CROP 451'.
- (5) In item 3. a. (10) change 'CSS 350' to 'CROP 350'.

- 8. Delete the curriculum and degree requirements for the **Disciplinary Teaching Minor** available for secondary certification in **Chemistry** in the Department of Chemistry. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

 No new students are to be admitted to the program effective Fall 2023. No students are to be readmitted to the program effective Fall 2023. Effective Fall 2030, coding for the program will be discontinued and the program will no longer be available in the Department of Chemistry. Students who have not met the requirements for the Disciplinary Teaching Minor in Chemistry through the Department of Chemistry prior to
 - Note: This program has been in moratorium since Fall 2023.

Fall 2030 will have to change their minor.

- Delete the curriculum and degree requirements for the Disciplinary Teaching Minor available for secondary certification in Earth Science in the Department of Earth and Environmental Sciences. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.
 No new students are to be admitted to the program effective Fall 2023. No students are to be readmitted to the program effective Fall 2023. Effective Fall 2030, coding for the program will be discontinued and the program will no longer be available in the Department of Earth and Environmental Sciences. Students who have not met the requirements for the Disciplinary Teaching Minor in Earth Science through the Department of Earth and Environmental Sciences prior to Fall 2030 will have to change their minor.
 Note: This program has been in moratorium since Fall 2023.
- Change the requirements for the Bachelor of Science degree in Integrative Biology in the Department of Integrative Biology.
 - a. Under the heading **Requirements for the Bachelor of Science Degree in Integrative Biology** make the following changes:
 - (1) Replace item 3. c. with the following:

All of the following courses (10 credits):

CEM 251 Organic Chemistry I 4

CEM 252 Organic Chemistry II 4

CEM 255 Organic Chemistry Laboratory 2

- (2) In item 3. g., change 'MMG 301' to 'MGI 301'.
- (3) In item 3. i., change 'MMG 409' to 'MGI 409'.
- (4) In item 3. I. change 'MMG 302' to 'MGI 302'.

Effective Spring 2026.

11. Change the requirements for the **Bachelor of Science** degree in **Zoology** in the Department of Integrative Biology.

The concentrations in the Bachelor of Science degree in Zoology are noted on the student's academic record when the requirements for the degree have been completed.

- Under the heading Requirements for the Bachelor of Science Degree in Zoology make the following changes:
 - (1) In item 3. g. **Animal Behavior and Neurobiology** concentration, make the following changes:
 - (a) In item (3) (a) delete the following course:

IBIO 306 Invertebrate Biology 4

Add the following course:

NEU 306 Invertebrate Biology

4

- (2) In item 3. g. **Marine Biology** concentration, make the following changes:
 - (a) In item (2) (b) change 'MMG 425' to 'MGI 425'.

Effective Fall 2025.

- Change the requirements for the Bachelor of Arts degree in Mathematics in the Department of Mathematics. The Teacher Education Council (TEC) approved this request at its April 17, 2025 meeting.
 - Under the heading Requirements for the Bachelor of Arts Degree in Mathematics make the following changes:
 - (1) In item 1., replace paragraph two with the following:

The University's Tier II writing requirement for the Mathematics major is met by completing Mathematics 496 and Mathematics 309 or 310 or 418H. Those courses are referenced in item 3. below.

- (2) In item 3. a. (1) make the second sentence its own item (2) and renumber items (2) and (3) respectively.
- (3) In item 3. a. (3), delete the following course:

PHY 173 Studio Physics for Scientists and Engineers I

5

(4) In item 3. a. add the following item (5):

A minimum of 6 credits beyond the university requirements in courses from the College of Arts and Letters or the College of Social Science approved by the student's academic advisor.

- (5) Delete item 3. b. and reletter items 3. c. and 3. d. respectively.
- (6) In item 3. b. (4) delete the following sentence:

Students in the teacher certification program may substitute Mathematics 396 Capstone in Mathematics for Secondary Education for Mathematics 496.

(7) Replace item 3. b. (5) with the following:

A total of 27 credits in approved Mathematics courses at the 300–level or above. At least 4 of the approved Mathematics courses must be at the 400–level or above. Students may use no more than one of MTH 309, 314, 317H to satisfy this requirement. One course from a list of approved cognates available in the Department of Mathematics may be used to satisfy this requirement. Statistics and Probability 351 or 430 or 441 may be substituted for one 300-level mathematics course. The 300-400 level courses referenced in item 3. c. partially

satisfy this requirement. Students with credit in MTH 235 prior to entering the Mathematics major, only need 24 credits to fulfill this requirement.

(8) In item 3. b. (8) delete the following:

Students in the teacher certification program must take either Mathematics 330 or 432. Students not in the teacher certification program must take Mathematics 340 or 347H.

Students not in the teacher certification program with prior credit in Mathematics 235 may substitute an approved 400-level Mathematics course for Mathematics 340.

(9) In item 3. c. delete the following course:

CMSE 202 Computational Modeling and Data Analysis II

Add the following course:

CMSE 201 Computational Modeling and Data Analysis I 4

Effective Fall 2025.

- 13. Change the requirements for the **Bachelor of Science** degree in **Mathematics** in the Department of Mathematics. The Teacher Education Council (TEC) approved this request at its April 17, 2025 meeting.
 - a. Under the heading **Requirements for the Bachelor of Science Degree in Mathematics** make the following changes:
 - (1) In item 1., replace paragraph two with the following:

The University's Tier II writing requirement for the Mathematics major is met by completing Mathematics 496 and Mathematics 309 or 310 or 418H. Those courses are referenced in item 3. c. below.

- (2) In item 3. a. (1) make the second sentence its own item (2) and renumber items (2) and (3) respectively.
- (3) In item 3. a. (4), delete the following item (d):

PHY 173 Studio Physics for Scientists and Engineers I 5
PHY 174 Studio Physics for Scientists and Engineers II 5

- (4) Delete item 3. b. and reletter items 3. c. and 3. d. respectively.
- (6) In item 3. b. (4) delete the following sentence:

Students in the teacher certification program may substitute Mathematics 396 Capstone in Mathematics for Secondary Education for Mathematics 496.

(7) Replace item 3. b. (5) with the following:

A total of 27 credits in approved Mathematics courses at the 300–level or above. At least 4 of the approved Mathematics courses must be at the 400–level or above. Students may use no more than one of MTH 309, 314, 317H to satisfy this requirement. One course from a list of approved cognates available in the Department of Mathematics may be used to satisfy this requirement. Statistics and Probability 351 or 430 or 441 may be substituted for one 300-level mathematics course. The 300-400 level courses referenced in item 3. b. partially

satisfy this requirement. Students with credit in MTH 235 prior to entering the Mathematics major, only need 24 credits to fulfill this requirement.

(8) In item 3. b. (8) delete the following:

Students in the teacher certification program must take either Mathematics 330 or 432. Students not in the teacher certification program must take Mathematics 340 or 347H. Students not in the teacher certification program with prior credit in Mathematics 235 may substitute an approved 400-level Mathematics course for Mathematics 340.

(9) In item 3. c. delete the following course:

Add the following course:

CMSE 201 Computational Modeling and Data Analysis I

Effective Fall 2025.

Delete the curriculum and degree requirements for the **Disciplinary Teaching Minor** available for secondary certification in **Physics** in the Department of Physics and Astronomy. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Fall 2023. No students are to be readmitted to the program effective Fall 2023. Effective Fall 2030, coding for the program will be discontinued and the program will no longer be available in the Department of Physics and Astronomy. Students who have not met the requirements for the Disciplinary Teaching Minor in Physics through the Department of Physics and Astronomy prior to Fall 2030 will have to change their minor.

Note: This program has been in moratorium since Fall 2023.

COLLEGE OF SOCIAL SCIENCE

- Change the requirements for the Bachelor of Arts degree in Political Science (General) in the Department of Political Science.
 - a. Under the heading Requirements for the Bachelor of Arts Degree in Political Science (General) make the following changes:
 - (1) In item 3. e., add the following course:

PLS 120 Introduction to Law

3

(2) In item 3. g., under American Politics delete the following course:

PLS 322 Comparative Legal Systems

3

Add the following course under Comparative Politics:

PLS 322 Comparative Legal Systems

3

Effective Fall 2025.

- Change the requirements for the Bachelor of Arts degree in Political Science-Prelaw in the Department of Political Science.
 - a. Under the heading Requirements for the Bachelor of Arts Degree in Political Science-Prelaw make the following changes:
 - (1) In item 3. a. delete the following course:

PLS 100 Introduction to American Politics

3

Add the following course:

PLS 120 Introduction to Law

3

3

3

(2) In item 3. c., change the requirement to 'Two of the following courses (6 credits):' and add the following course:

PLS 322 Comparative Legal Systems

(3) In item 3. f., add the following course:

PLS 100 Introduction to American Politics

- (4) In item 3. g., change the requirement from 'four' to 'three' courses for a total of 9 credits.
- (5) In item 3. h., under **Comparative Politics**, add the following course:

PLS 322 Comparative Legal Systems 3

Effective Fall 2025.

3. Change the name of the **Bachelor of Arts** degree in **Public Policy** in the Department of Political Science to **Political Science-Public Policy**.

Effective Spring 2026, no new students are to be admitted to the Bachelor of Arts Degree in Public Policy. Effective Spring 2026, no students are to be readmitted to the Bachelor of Arts Degree in Public Policy. Effective Spring 2026, coding for the Bachelor of Arts Degree in Public Policy will be discontinued and the program will no longer be available in the Department of Political Science. Effective Spring 2026, students admitted to the Bachelor of Arts Degree in Political Science-Public Policy will be awarded a Bachelor of Arts Degree in Political Science-Public Policy.

- 4. Change the requirements for the **Bachelor of Arts** degree in **World Politics** in the Department of Political Science.
 - a. Under the heading Requirements for the Bachelor of Arts Degree in World Politics make the following changes:
 - (2) Under item 3. a. (4) add the following course:

PLS 322 Comparative Legal Systems

Effective Fall 2025.

5. Delete the curriculum and degree requirements for the **Graduate Certificate** in **Animal Studies: Social Science and Humanities Perspectives** in the Department of Sociology. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Spring 2025. No students are to be readmitted to the program effective Spring 2025. Effective Fall 2025, coding for the program will be discontinued and the program will no longer be available in the Department of Sociology. Students who have not met the requirements for the Graduate Certificate in Animal Studies: Social Science and Humanities Perspectives through the Department of Sociology prior to Fall 2025 will have to change their certificate.

Note: This program has been in moratorium since Spring 2025.

PART II - NEW COURSES

DEPARTMENT OF ADVERTISING AND PUBLIC RELATIONS

ADV 480 Advanced Digital Analytics

Fall of every year. 3(3-0)

Analyzing data and the process behind the choices that are made in analysis. Includes simulated and real-world data and explores how different digital processes function and how to analyze and interpret these data. Analyze various kinds of quantitative data and effectively communicate the results of analyses.

Effective Fall Semester 2025

DEPARTMENT OF ANESTHESIA

ANES 619 Introduction to Anesthesiology - An Anesthesia Primer

Fall of every year. Spring of every year. Summer of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

Introduction to basic clinical and professional concepts in anesthesiology.

Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2 semesters after

the end of the semester of enrollment.

Effective Summer Semester 2025

ANES 620 Chronic Pain Management

Fall of every year. Spring of every year. Summer of every year. 6(6-0) A student may earn a maximum of 12 credits in all enrollments for this course. P: FM 641 and MED 641 and OGR 641 and PHD 641 and PSC 641 and SUR 642 R: Open to graduate-professional students in the College of Human Medicine.

Clinical rotation in the sub specialty field of chronic pain management.

Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.

Effective Summer Semester 2025

ANES 621 Concepts in Clinical Anesthesiology I

Fall of every year. Spring of every year. Summer of every year. 6(6-0) A student may earn a maximum of 12 credits in all enrollments for this course. P: FM 641 and MED 641 and OGR 641 and PHD 641 and PSC 641 and SUR 642 R: Open to graduate-professional students in the College of Human Medicine.

In-depth clinical experience in the field of anesthesiology for those committed to applying to anesthesiology residency.

Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.

Effective Summer Semester 2025

ANES 622 Concepts in Clinical Anesthesiology II

Fall of every year. Spring of every year. Summer of every year. 6(6-0) A student may earn a maximum of 12 credits in all enrollments for this course. P: ANES 621 R: Open to graduate-professional students in the College of Human Medicine. Approval of department.

Advanced clinical experience in clinical anesthesiology and its subspecialties.

Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.

Effective Summer Semester 2025

DEPARTMENT OF ANIMAL SCIENCE

ANS 200B Introduction to Meat Evaluation

Fall of every year. 2(0-4) RB: ANS 201 and ANS 211

Classifying and grading carcasses, wholesale cuts, and subprimal cuts of beef, pork, and lamb; assessing factors influencing quality, cutability, and value. Field trips required.

assessing factors initideficing quality, cutability, and value.

Effective Fall Semester 2025

ANS 300B Advanced Meat Judging

Fall of every year. Spring of every year. 2(0-4) A student may earn a maximum of 4 credits in all enrollments for this course. P: ANS 200B RB: ANS 201 and ANS 211 R: Not open to freshmen. A student may earn a maximum of 8 credits ANS 200A, ANS 200B, ANS 200C, ANS 200D, ANS 200E, ANS 300A, ANS 300B, ANS 300C, ANS 300D, ANS 300E, ANS 300F.

Classifying and grading carcasses, wholesale cuts, and subprimal cuts of beef, pork, and lamb; assessing factors influencing quality, cutability, and value to rank exhibits. Out of state travel required to intercollegiate judging competitions. Field trips required.

Effective Fall Semester 2025

THE ELI BROAD COLLEGE OF BUSINESS

PIM 873A Current Business Issues: Finance

Fall of every year. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to MBA students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Master of Business Administration in Integrative Management.

REINSTATEMENT Perspectives on current and emerging topics.

Effective Fall Semester 2025

PIM 881 Leadership Communications

Summer of every year. 1 to 3 credits. R: Open to students in the Master of Business Administration in Integrative Management.

REINSTATEMENT

Development of managerial level business communication skills. Communication strategy development. Message creation and delivery of messages in oral and written form.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 5 semesters after the end of the semester of enrollment.

Effective Summer Semester 2025

DEPARTMENT OF FAMILY MEDICINE

FM 622 Health Care among Immigrant and Refugee Populations

Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: FM 641 or MED 641 or PHD 641 R: Open to graduate-professional students in the College of Human Medicine.

Patient-centered and community-based experience with health care focused on refugee populations.

Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.

Effective Summer Semester 2025

FM 660 Family Medicine Clerkship for Global Learners

Fall of every year. Spring of every year. Summer of every year. 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R. Approval of college.

Clinical clerkship in which students engage in care of patients in a primary care setting under the supervision of attending physicians, and learn about common and important clinical problems in the outpatient primary care setting.

Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 1 semester after

the end of the semester of enrollment.

Effective Spring Semester 2025

MSU COLLEGE OF LAW

LAW 505K Alternative Dispute Resolution: Approaches to Conflict Resolution

On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law.

Negotiation, mediation, arbitration, hybrid ADR processes, and ADR systems design. Discussion of dispute resolution law, theory and policy, with some exposure to advocacy in negotiation and mediation.

SA: LAW 505C

Effective Spring Semester 2026

LAW 619A Politics and Equality: Who Decides--Courts, Legislatures, Executives, or the People?

On Demand. 0 to 6 credits. P: LAW 500N R: Open to students in the MSU College of Law.

Historical and contemporary role of judicial and non-judicial institutions that that compete to define equality norms.

Effective Spring Semester 2026

DEPARTMENT OF LINGUISTICS, LANGUAGES AND CULTURES

JPN 210 Tadoku: Extensive Reading in Japanese

Fall of every year. 1 credit. A student may earn a maximum of 8 credits in all enrollments for this course. RB: Some Japanese language preparation and ability to read at least hiragana and katakana.

Reading Japanese language texts using the "tadoku" (extensive reading) method. Students explore reading materials in Japanese, at their own level and pace, to improve reading

confidence and fluency.
Effective Fall Semester 2025

JPN 370 Gender and Sexuality in Japan

Fall of odd years. 3 credits.

History, development and transformations of gender and sexuality in Japan from 11th century to present. Possible topics include: gender and writing in premodern literature, male-male love in medieval Buddhism, modernity and homosocial literary narratives; post-war manga and Japanese feminisms. Taught in English.

Effective Fall Semester 2025

JPN 371 Edo Period Literature and Visual Culture

Fall of even years. 3 credits.

History, development and major themes of in Japanese literature and visual culture from 1600 until the late 1800s. Possible topics include: woodblock printing and literacy; Ihara Saikaku and the "Floating World"; early modern comic books; ghosts and 19th century Kabuki. Taught in English.

Effective Fall Semester 2026

DEPARTMENT OF MATHEMATICS

MTH 913 Group Theory II

Spring of odd years. 3(3-0) RB: MTH 912

REINSTATEMENT Groups of Lie type, linear groups, locally finite groups, free groups and free products, the

subgroup theorems.

Effective Spring Semester 2025

DEPARTMENT OF PHILOSOPHY

PHL 484 Philosophy of Biological Science

Spring of every year. 3(3-0) RB: Three courses in biological science or two PHL courses.

REINSTATEMENT Philosophical and methodological issues in biology. Topics such as functional explanation,

classification, the structure of evolutionary theory, reductionism, observation and measurement, or value-neutrality.

DEPARTMENT OF TEACHER EDUCATION

TE 813 Restorative Practices in Education

Fall of every year. 3(3-0) RB: Course intended for classroom teachers, educational administrators, and others interested in the building of inclusive school communities.

History and philosophy of restorative justice and restorative practices. Practices that provide students with voice, foster an inclusive community, and ensure consistency in restorative processes. Methods for repairing harm when relational trust is compromised. Creation of a safe environment for learning.

Effective Fall Semester 2025

TE 814 Equity-Centered and Trauma-Informed Pedagogy

Spring of every year. 3(3-0) RB: Course intended for classroom teachers, educational administrators, and others interested in the building of inclusive school communities.

Impact of trauma on students learning. Exploration of trauma-informed teaching practices that support equitable learning environments.

Effective Spring Semester 2026

PART III - COURSE CHANGES

DEPARTMENT OF ADVERTISING AND PUBLIC RELATIONS

ADV 442

ADV 362 Digital Analytics

Fall of every year. Spring of every year. 3(3-0) P: ADV 342 or concurrently RB: (STT 201) or other introductory statistics course R: Open to students in the Department of Advertising and Public Relations.

Data collection, analysis and reporting on cross- or multi-channel media analytics in order to inform strategic advertising and public relations decision making. Evaluate impact of integrated communication decisions.

SA: ADV 442

Effective Spring Semester 2026

ADV 450 Portfolio Presentation

Fall of every year. Spring of every year. 1(0-2) A student may earn a maximum of 3 credits in all enrollments for this course. P: ADV 422 or ADV 428 P: (ADV 422 or concurrently) or (ADV 428 or concurrently) R: Open to students in the Advertising Creative major. R: Open to students.

Editing past work for professional presentation. Strengthening, expanding, and finalizing individual portfolios for career enhancement. Critique by professionals.

Effective Fall Semester 2025

PR 310

Diversity, Equity, and Inclusion in Public Relations and Advertising Fall of every year. Spring of every year. 3(3-0)—P: PR 260 or concurrently

Exploration of issues pertaining to diversity, equity and inclusion (DEI) as they impact the practice of public relations and advertising within the United States and globally. Effective cross-cultural communication practices.

Effective Fall Semester 2025

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

BMB 469

Special Topics in Biochemistry

Fall of every year. Spring of every year. On Demand. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P: BMB 461 and BMB 462 P: BMB 461 R: Open to juniors or seniors in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology major or in the Lyman Briggs Biochemistry and Molecular Biology Coordinate Major or in the Lyman Briggs-Biochemistry/Biotechnology Coordinate Major or approval of department. R: Open to juniors or seniors in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology Biochemistry and Molecular Biology Coordinate Major or in the Lyman Briggs-Biochemistry/Biotechnology Coordinate Major or approval of department.

Special topics in biochemistry and molecular biology including biological computing, bioinformatics, biotechnology, genomics or other current topics.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.

BMB 479 Special Topics in Biochemistry II

Fall of every year. Spring of every year. Summer of every year. On Demand. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. A student may earn a maximum of 8 credits in all enrollments for this course. P: BMB 461 R: Open to undergraduate students in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology major or in the Lyman Briggs Biochemistry and Molecular Biology Coordinate Major or in the Lyman Briggs-Biochemistry/Biotechnology Coordinate Major or approval of department.

Special topics in biochemistry and molecular biology Special topics in biochemistry and molecular biology focusing on methods and technical aspects/innovations in the field.

Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.

Effective Fall Semester 2025

BMB 495 Undergraduate Seminar (W)

Spring of every year. Fall of every year. Spring of every year. 2(2-0) P: (BMB 462 or concurrently) and Completion of Tier I Writing Requirement—R: Open to students in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology/Biotechnology Major or in the Lyman Briggs Biochemistry and Molecular Biology Coordinate Major or in the Lyman Briggs—Biochemistry/Biotechnology Coordinate Major.

Extension and synthesis of concepts of biochemistry. Relationships to societal issues.

SA: BCH 495

Effective Fall Semester 2025

DEPARTMENT OF CHEMISTRY

CEM 311 Inorganic Chemistry

Spring of every year. Fall of every year. Spring of every year. 3(3-0) 4(4-0) P: CEM 142 or CEM 152 or CEM 182H or LB 172 RB: CEM 384

Basic symmetry, molecular orbital theory, and valence bond theory applications to inorganic systems. Physical properties and reactivity of transition metal systems. Effective Spring Semester 2026

DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

GLG 446 Ecosystems Modeling, Water and Food Security Sustainable Food Systems

Fall of every year. 3(3-0) R: Open to juniors or seniors or approval of department.

Impacts of climate variability and change on water availability, food security and global environmental change. Integrated models to identify adaption and mitigation strategies to such changes and to enhance the efficiency of natural resources use.

Effective Spring Semester 2026

GLG 481 Reservoirs and Aquifers

Fall of every year. 3(2-2) P: GLG 431 or concurrently

Principles of the origin and evolution of porous media. Porosity and permeability of sediments and sedimentary rocks. Computing techniques for evaluating reservoirs and aquifers. Field trip required.

DELETE COURSE

DEPARTMENT OF LINGUISTICS. LANGUAGES AND CULTURES

JPN 369 Japanese Literary and Cultural Studies I

Fall of every year. Spring of every year. 3(3-0)-P: ((JPN 200 or JPN 202) or approval of department) and completion of Tier I writing requirement P: Completion of Tier I Writing Requirement RB: Completion of Tier I Writing Requirement.

Critical concepts and tools necessary to analyze discourses on Japanese culture and literature. Key issues in Japanese studies, including the emergence of pre-modern and modern literary genres and styles, the canonization of national literature, and the nature of translation and transformation. Taught in English and Japanese. Critical concepts and tools necessary to analyze discourses on Japanese culture and literature. Key issues in Japanese studies, including the emergence of pre-modern and modern literary genres and styles, the canonization of national literature, and the nature of translation and transformation. Taught in English.

Effective Fall Semester 2025

COLLEGE OF NATURAL SCIENCE

QB 830 Special Topics in Quantitative Biology

Fall of every year. Spring of every year. 1 to 3 credits. RB: Calculus II R: Open to undergraduate students or approval of college.

Selected topics in quantitative biology are covered at an advanced level, to include student presentations of the primary literature

Request the use of the Pass-No Grade (P-N) system.

DELETE COURSE

Effective Fall Semester 2026

DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

PHM 321 Common Drugs

Spring of every year. Fall of every year. Spring of every year. 3(3-0) P: (PSL 250) or (PSL 431 and PSL 432) or PSL 310 R: Open to juniors or seniors or approval of department.

Introduction to commonly used drugs. Emphasis on over-the-counter medications and frequently prescribed prescription drugs. Selected natural products also will be covered. How commonly used drugs affect the body to treat or cure various conditions and how the body handles drugs. Principles of appropriate drug use and consequences of misuse. Effective Fall Semester 2025

DEPARTMENT OF PHYSICS AND ASTRONOMY

PHY 252 Introductory Physics Laboratory II

Fall of every year. Spring of every year. Summer of every year. 1(0-2) P: (PHY 251 or PHY 191 or LB 273) and ((PHY 184 or concurrently) or (PHY 184B or concurrently) or (PHY 232C or concurrently) or (PHY 242 or concurrently) or (PHY 294H or concurrently)) P: (PHY 251 or PHY 191) and ((PHY 184 or concurrently)) or (PHY 232 or concurrently) or (PHY 294H or concurrently)) Not open to students with credit in LB 274 or PHY 192. Not open to students with credit in PHY 192.

Laboratory exercises involving simple electromagnetic and optical systems. Effective Summer Semester 2025

PHY 862 Accelerator Systems

Spring of every year. Fall of every year. 3(3-0) RB: PHY 422 and PHY 482 R: Open to graduate students in the College of Engineering or in the College of Natural Science.

Introduction to large accelerator systems, including the physics and engineering of accelerators and key components of accelerators.

PHY 863 Special Topics in Accelerator Physics

On Demand. Spring of odd years. 2(2-0) 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Department of Physics and Astronomy or approval of department.

> Advanced topics in accelerator science. Effective Spring Semester 2027

PHY 864 Accelerator Technology

Spring of every year. Spring of even years. 3(3-0) RB: PHY 422 and PHY 482 R: Open to graduate students in the College of Engineering or in the College of Natural Science.

> Key technologies for modern accelerators such as magnets, the normal conducting and super conducting radio frequency cavities, charged particle sources, diagnostic instruments.

Effective Fall Semester 2025

DEPARTMENT OF PHYSIOLOGY

Neuroscience is changing the administrative responsibility from the College of Natural Science to the Department of Physiology

NEU 101 Frontiers in Neuroscience

Fall of every year. Spring of every year. 1(1-0) R: Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Coordinate Major.

Introduction to the field of neuroscience and recent trends in neuroscience research, including an overview of careers with a degree in neuroscience. Campus and internet resources to achieve academic success and career goals.

Request the use of the Pass-No Grade (P-N) system.

Effective Fall Semester 2025

NEU 300 Neurobiology

Fall of every year. Spring of every year. 3(3-0) Interdepartmental with Integrative Biology P: (BS 162) or LB 144 or BS 182H) and (BS 161 or LB 145 or BS 181H) R: Not open to freshmen or sophomores and not open to students in the Program in Neuroscience and not open to students in the Lyman Briggs Neuroscience Major.

Structure and function of nerve cells and nervous systems.

SA: ZOL 402

Effective Fall Semester 2025

NEU 301 Introduction to Neuroscience I

Fall of every year. 3(3-0) P: (BS 161 or BS 181H or LB 145) and (BS 162 or BS 182H or LB 144) RB: PSY 101 R: Open to undergraduate students in the Program in Neuroscience or in the Lyman Briggs Neuroscience Coordinate Major.

Survey of the field of neuroscience, including molecular, cellular, and autonomic, sensory and motor systems.

Effective Fall Semester 2025

NEU 302 Introduction to Neuroscience II

Spring of every year. 3(3-0) P: NEU 301 RB: PSY 101 R: Open to undergraduate students in the Lyman Briggs College or in the College of Natural Science or in the Program in Neuroscience.

Survey of brain-based behavioral and cognitive systems and related human diseases.

Effective Fall Semester 2025

NEU 304 Neuroanatomy

Summer of every year. 3(3-0) P: Completion of Tier I Writing Requirement R: Not open to freshmen. Approval of department; application required.

Structure and basic function of human nervous system, including the influence of art and cultural values on neuroanatomical knowledge throughout history.

NEU 306 History of Neuroscience

Summer of every year. 3(3-0) P: Completion of Tier I Writing Requirement R: Not open to freshmen. Approval of department; application required.

Specific topics in the history of neuroscience with an emphasis on the influence of cultural values on theories and discoveries.

Effective Fall Semester 2025

NEU 307 Topics in History of Neuroscience (W)

Summer of every year. 3(3-0) P: Completion of Tier I Writing Requirement R: Not open to freshmen. Approval of department; application required.

> Independent library research and group tutorial work aimed at critical analysis of the role that cultural values and historical events played in the specific topic investigated.

Effective Fall Semester 2025

NEU 310 Psychology and Biology of Human Sexuality

Spring of even years. 3(3-0) Interdepartmental with Integrative Biology, Psychology P: (PSY 101 or concurrently) and ((BS 161 or concurrently) or (BS 162 or concurrently) or (LB 144 or concurrently) or (LB 145 or concurrently) or (BS 181H or concurrently) or (BS 182H or concurrently)) Not open to students with credit in HDFS 445.

> Sexual behavior from biological, psychological and neuroscience perspectives. Sexual differentiation of the body. Role of hormones in development and reproduction in humans and other animals. Human sexual orientation. Fertility and contraception. Sexual disorders. Sexually transmitted diseases.

Effective Fall Semester 2025

NEU 311L Neuroscience Laboratory (W)

Fall of every year. Spring of every year. 2(1-3) P: ((NEU 301 or concurrently) and completion of Tier I writing requirement) and (STT 201 or STT 231 or STT 421) and (BS 171 or BS 191H or LB 145) RB: PSY 101 R: Open to undergraduate students in the Program in Neuroscience or in the Lyman Briggs Neuroscience Coordinate Major.

> Overview of neuroscience research methodology, including experimental design, data analysis, and presentation of results.

Effective Fall Semester 2025

NEU 401 Cellular and Molecular Neuroscience

Fall of every year. Spring of every year. 3(3-0) P: NEU 301 and NEU 302 R: Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Coordinate Major.

> In-depth examination of cellular and molecular mechanisms that regulate function of neurons of the autonomic, sensory, motor, and central nervous systems.

Effective Fall Semester 2025

NEU 402 Behavioral and Cognitive Neuroscience

Fall of every year. Spring of every year. 3(3-0) P: NEU 301 and NEU 302 R: Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Coordinate Major.

> In-depth examination of neuronal mechanisms that regulate behavior, learning, cognition, and human disease

Effective Fall Semester 2025

NEU 403 Communication in Neuroscience (W)

Fall of every year. Spring of every year. 3(3-0) P: (NEU 301 and NEU 302) and completion of Tier I writing requirement R: Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Coordinate Major.

> In-depth exploration of contemporary areas of neuroscience, emphasizing scientific literacy and effective written and oral communication.

NEU 415 Neuroinformatics and Quantitative Reasoning

Fall of every year. 3(3-0) P: ((NEU 301 and (NEU 302 or concurrently)) and completion of Tier I writing requirement) and (MTH 124 or MTH 132 or MTH 152H or LB 118) and (STT 201 or STT 231 or STT 421 or PSY 295) R: Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Coordinate Major.

Quantitative reasoning and statistical methods for querying internet databases and understanding basic neuroscience models

Effective Fall Semester 2025

NEU 416 Development of the Nervous System Through the Lifespan

Fall of every year. 3(3-0) Interdepartmental with Integrative Biology P: NEU 302 or IBIO 300 or PSY 209 RB: IBIO 341 R: Open to undergraduate students in the Program in Neuroscience or in the Department of Integrative Biology or in the Department of Psychology or in the Lyman Briggs Neuroscience Major or in the Lyman Briggs Zoology Coordinate Major.

Development of neurons and their connections, roles of both genetics and behavioral experience in shaping the mammalian nervous system.

Effective Fall Semester 2025

NEU 417 Instrumental Methods of Analysis in Neuroscience

Spring of every year. 3(3-0) Interdepartmental with Chemistry P: {{(CEM 251 and CEM 252) or (CEM 351 and CEM 352)} and (PHY 231 and PHY 232)} or (PHY 183 and PHY 184) or (PHY 193H and PHY 294H) or (LB 273 and LB 274) RB: NEU 301 or CEM 262

Design, operational principles and practical application of modern instrumental methods used for the separation, identification and quantification of neurochemical species in neuroscience. Application of methods of chemical analysis to study neurosignaling, chemical composition in single secretory cells, chemical structure of cells and tissues. Effective Fall Semester 2025

NEU 420 Neurobiology of Disease

Spring of every year. 3(3-0) P: NEU 301 and NEU 302 R: Open to undergraduate students in the Program in Neuroscience or in the Lyman Briggs Neuroscience Coordinate Major.

Genetic, molecular, cellular, systems, and behavioral abnormalities that contribute to the manifestation of neurologic and psychiatric diseases and disorders that affect the nervous system.

Effective Fall Semester 2025

NEU 430 Genomics of Brain Development, Learning, and Behavior

Summer of every year. 3(3-0) P: (IBIO 341) and (NEU 302 or concurrently) RB: PSY 209

Role of genes in brain development and function. Issues in behavioral and psychiatric genetics.

Effective Fall Semester 2025

NEU 440 Synaptic Transmission

Spring of even years. 3(3-0) P: NEU 301 R: Open to undergraduate students in the Neuroscience Major or in the Lyman Briggs Neuroscience Major.

Chemical and electrical aspects of nerve impulse transmission at synaptic and neuroeffector junctions. Influence of drugs.

Effective Fall Semester 2025

NEU 450 The Autonomic Nervous System

Fall of every year. 3(3-0) P: (NEU 301) and ((PSL 310 or concurrently) or (PSL 431 or concurrently)) R: Open to undergraduate students in the Neuroscience Major.

Examination of the functional anatomy and physiology of the three autonomic nervous systems (enteric; parasympathetic; sympathetic)

NEU 460 Current Approaches in Molecular and Cellular Neuroscience

Spring of every year. 3(3-0) P: (NEU 301 and NEU 302) and ((PSL 310 or concurrently)) or (PSL 431 or concurrently)) R: Open to students in the Lyman Briggs Neuroscience Coordinate Major or in the Neuroscience Major.

Investigation of the molecular and cellular pathways that allow neurons to connect and communicate, including the latest tools and technologies used to understand how complex molecular machinery within neuronal membranes interact with electrical potentials. Effective Fall Semester 2025

NEU 490 Special Problems in Neuroscience

Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. P: (PSY 101 and NEU 301) and (STT 201 or STT 231 or STT 421) RB: NEU 302 and NEU 311L R: Open to juniors or seniors. Approval of department. A student may earn a maximum of 15 credits A student may earn a maximum of 15 credits in NEU 490 and NEU 492.

Students work under the direction of a faculty member on a selected research problem. Effective Fall Semester 2025

NEU 492 Special Topics in Neuroscience

Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: PSY 101 R: Open to sophomores or juniors or seniors in the Neuroscience Major or in the Lyman Briggs Neuroscience Coordinate Major. Approval of department. A student may earn a maximum of 15 credits in NEU 490 and NEU 492.

Current topics proposed by faculty that supplement regular course offerings.

Effective Fall Semester 2025

NEU 499 Neuroscience Senior Research Thesis

On Demand. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: (NEU 490) and completion of Tier I writing requirement R: Open to seniors in the Neuroscience Major. Approval of department.

Independent research mentored by a neuroscience faculty member and conducted in their laboratory.

Effective Fall Semester 2025

RESIDENTIAL COLLEGE IN THE ARTS AND HUMANITIES DEAN

RCAH 235

Introduction to Language and Culture Studies Foundations of Language and Culture Studies
Fall of every year. Spring of every year. 4(4-0) P: RCAH 150 R: Open to undergraduate students in the Residential College in the Arts and Humanities.

Introduction to basic theories and methods in language and culture studies. Foundation for understanding the relationship between language and culture. Examines how language and culture are linked to identity formation and how we interact with the world. Effective Fall Semester 2025

COLLEGE OF VETERINARY MEDICINE

VM 140 Pharmacology for Veterinary Nurses

Fall of every year. 2(2-0) 3(3-0) P: {(MTH 101 and MTH 103) or MTH 103} and (MTH 114 or MTH 116 or MTH 124 or MTH 132 or MTH 152H) P: {(MTH 103B or MTH 103 or MTH 116 or MTH 124 or LB 118) or MTH 103} and (MTH 114 or MTH 116 or MTH 124 or MTH 132 or MTH 152H) R: Approval of college.

Fundamentals of characteristics, classification and usage of veterinary pharmaceuticals. Introduction to and application of dosage and formulation calculations. Effective Fall Semester 2025