

**MICHIGAN STATE UNIVERSITY**

**Report of**  
**THE UNIVERSITY COMMITTEE ON CURRICULUM**  
**to the Faculty Senate**  
**Actions by UCC**  
**November 21, 2024**

*The effective date for new programs subject to Statewide Academic Program review is implemented in accordance with the Statewide Academic Program Review calendar.*

MICHIGAN STATE UNIVERSITY  
University Committee on Curriculum

November 21, 2024

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:<sup>1</sup>

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:<sup>1</sup>

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.

<sup>1</sup>One 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

November 21, 2024

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 ARTS AND LETTERS**

1. Establish a **Undergraduate Certificate** (Type 2) in **Arts and Cultural Management** in the College of Arts and Letters. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its October 10, 2024 meeting.

- a. **Background Information:**

The multidisciplinary Undergraduate Certificate in Arts and Cultural Management will provide undergraduates with opportunities not only to improve skills related to the MSU Liberal Learning Goals (analytical thinking, integrated reasoning, and communication, in particular) but also to pursue theoretical and practical training related to the management of and advocacy for arts and cultural organizations and/or entrepreneurial artistic careers. Successfully managing arts and cultural organizations requires understanding highly variable leadership styles related to working with highly diverse populations (other organization members, artists, board members, community volunteers, donors, etc.). Today's arts and cultural organizations also look for knowledge and skills related to promoting the organization in digital forums and within various social networks. Students who have practical work experience in the arts and cultural sphere are also highly sought after, which allows them to participate in critical analyses and production of arts and cultural management projects (e.g., preparation for board meetings, coordination of volunteer contributions, event planning; production of promotional materials and campaigns, etc.).

Students best served by this undergraduate certificate will be those committed to working within arts and cultural environments, which will require a solid theoretical and practical background in the arts and culture but will also profit from a secondary focus on managing such organizations. Informing our work to develop this certification are the careers of recent arts and humanities alums now working with such organizations as the Make a Wish Foundation, IndieSpace NYC, Y No Habia Luz, Detroit Symphony Orchestra, PYO Music Institute, Getty Museum, Belle Isle Conservancy, Impression 5 Science Center, Cirque du Soleil, Cranbrook Academy of Art, Community Action House, and Child and Family Charities.

The Undergraduate Certificate in Arts and Cultural Management curriculum will focus on the changes in cultural life with its complex patterns of cultural production in the arts and humanities and on a solid knowledge of arts management within highly variable arts and humanities organizations. The wide array of such organizations on the MSU campus, including the Abrams Planetarium, Eli and Edythe Broad Art Museum, MSU Libraries, MSU Museum, W.J. Beal Botanical Garden, and Wharton Center for Performing Arts, are complemented by the equally rich array of arts and cultural organizations in Lansing, such as the Arts Council of Greater Lansing, Lansing Art Gallery, Reach Studio Art Center, Impression 5 Science Center, India Cultural Society, Michigan Council of Arts and Culture, and the Michigan Humanities Council. Faculty who will be drawn from across MSU departments have long-term, strong relationships with those who are already involved in arts and cultural management within such institutions, and we anticipate drawing both guest speakers and workshop presenters, as well as supporting the development of new experiential learning and job shadowing opportunities in these institutions.

b. **Academic Programs Catalog Text:**

The Undergraduate Certificate in Arts and Cultural Management is a multidisciplinary program, which is administered by the College of Arts and Letters, and is available as an elective to students enrolled in bachelor’s degree programs at Michigan State University. It provides students with theoretical and practical training for managing and advocating arts and cultural organizations and/or the industry dimensions of an artistic and humanistic entrepreneurial career. Students will engage with promotion, leadership, budgeting, and strategies through participation in coursework, experiential learning opportunities, internship and volunteer positions, and other co-curricular activities that allow them to participate in critical analysis and production of arts and cultural management projects.

Students interested in completing the Undergraduate Certificate in Arts and Cultural Management should consult an academic advisor in the College of Arts and Letters.

The undergraduate certificate is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Students may not obtain both a certificate and minor in Arts and Cultural Management. Students who begin the certificate and want to continue engagement with a minor should speak with an advisor, who will drop them from the certificate program and add them to the minor. With approval of the department and college that administers the student's degree program, the courses that are used to satisfy the undergraduate certificate may also be used to satisfy the requirements for the bachelor's degree.

**Requirements for the Undergraduate Certificate in Arts and Cultural Management**

CREDITS

Students must complete 10 credits from the following:

1. The following course (3 credits):
 

	ACM	271	Introduction to Arts and Cultural Management	3
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2. A minimum of 6 credits from the following courses:
 

	ACM	461	Financial Management and Planning of Arts, Cultural and Museum Management	3
	ACM	462	Marketing and Public Relations in Arts, Cultural, and Museum Management	3
	ACM	463	Event Production and Planning for Arts and Culture	3
	ACM	464	Education and Outreach for Arts and Cultural Management	3
	ACM	465	Leadership and Innovation for Arts, Cultural and Museum Management	3
	ACM	466	Facilities and Operations for Arts and Cultural Management	3
	ACM	467	Development and Fundraising for Arts, Cultural Management, and Museums	3
	ACM	469	Advocating for Arts and Cultural Organizations	3
	ACM	480	Arts and Cultural Experience	1
	ACM	491	Special Topics in Arts and Cultural Management	1 to 4
	ACM	496	Arts and Cultural Management Internship	1 to 3
	MUSM	480	Museums and Cultural Experience	1
	MUSM	485	Foundations of Museum Studies	3
	MUSM	492	Special Topics in Museum Studies	1 to 3
	MUSM	494	Museum Exhibitions: Theory and Development	3
	THR	316	Stage Management	3
	THR	467	Production Management	3

The maximum amount of credits allowed in ACM 480 and MUSM 480 is 6 credits. Other management-focused or arts and humanities courses may be substituted with the approval of the academic advisor.
3. One of the following experience courses (1 credit):
 

	ACM	480	Arts and Cultural Experience	1
	MUSM	480	Museums and Cultural Experience	1

4. **A Capstone Experience**

A final evaluation or portfolio review is required for students in the Undergraduate Certificate in Arts and Cultural Management as a capstone to the program after completing the final course in the certificate. The evaluation or review is administered by the Director of Arts, Cultural Management, and Museum Studies in collaboration with core faculty members of the Arts, Cultural Management, and Museum Studies program. Students in the program will work with the Director of Arts, Cultural Management, and Museum Studies and the program's academic advisor throughout their course work to gain guidance on portfolio creation and requirements.

Effective Spring 2025.

2. Establish a **Undergraduate Certificate** (Type 2) in **Museum Studies** in the College of Arts and Letters. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its October 10, 2024 meeting.

a. **Background Information:**

The Undergraduate Certificate in Museum Studies will provide undergraduate students at MSU with opportunities to pursue theoretical and practical training related to the management of and advocacy for arts and cultural organizations and/or entrepreneurial artistic careers. Successfully managing museums and cultural organizations requires understanding highly variable leadership styles related to working with highly diverse populations (other organization members, artists, board members, community volunteers, donors, etc.). Today's museums and cultural organizations also seek knowledge and skills related to promoting the organization in digital forums and social networks. Students who have practical work experience in the heritage and cultural sphere are also highly sought after, which allows them to participate in critical analyses and production of museum and cultural management projects (e.g., preparation for board meetings, coordination of volunteer contributions, event planning; production of promotional materials and campaigns, etc.).

Students best served by this undergraduate certificate will be those committed to working within museum and cultural environments who will require a solid theoretical and practical background in the arts and culture but will also profit from a secondary focus on managing such organizations. Informing our work to change this certification are the careers of recent arts and humanities alums now working with such organizations as the Make a Wish Foundation, IndieSpace NYC, Y No Habia Luz, Detroit Symphony Orchestra, PYO Music Institute, Getty Museum, Belle Isle Conservancy, Impression 5 Science Center, Cirque du Soleil, Cranbrook Academy of Art, Community Action House, and Child and Family Charities.

The Undergraduate Certificate in Museum Studies curriculum will focus on the changes in cultural life with its complex patterns of cultural production in the arts and humanities and on a solid knowledge of arts management within highly variable arts and humanities organizations. The wide array of such organizations on the MSU campus, including the Abrams Planetarium, Eli and Edythe Broad Art Museum, MSU Libraries, MSU Museum, W.J. Beal Botanical Garden, and Wharton Center for Performing Arts, are complemented by the equally rich array of arts and cultural organizations in Lansing, such as the Arts Council of Greater Lansing, Lansing Art Gallery, Reach Studio Art Center, Impression 5 Science Center, India Cultural Society, Michigan Council of Arts and Culture, and the Michigan Humanities Council. Faculty who will be drawn from across MSU departments have long-term, strong relationships with those who are already involved in museum and cultural management within such institutions, and we anticipate drawing both guest speakers and workshop presenters, as well as supporting the development of new experiential learning and job shadowing opportunities in these institutions.

b. **Academic Programs Catalog Text:**

The Undergraduate Certificate in Museum Studies is a multidisciplinary program, which is administered by the College of Arts and Letters, and is available as an elective to students enrolled in bachelor's degree programs at Michigan State University. It provides students with theoretical and practical training for managing and advocating museum and cultural organizations and/or the industry dimensions of an artistic and humanistic entrepreneurial career. Students will engage with promotion, leadership, budgeting, and strategies through participation in coursework, experiential learning opportunities, internship and volunteer positions, and other co-curricular activities that allow them to participate in critical analysis and production of museum and cultural management projects.

Students interested in completing the Undergraduate Certificate in Museum Studies should consult an academic advisor in the College of Arts and Letters.

The undergraduate certificate is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. Students may not obtain both a certificate and minor in Museum Studies. Students who begin the certificate and want to continue engagement with a minor should speak with an advisor, who will drop them from the certificate program and add them to the minor. With approval of the department and college that administers the student's degree program, the courses that are used to satisfy the undergraduate certificate may also be used to satisfy the requirements for the bachelor's degree.

**Requirements for the Undergraduate Certificate in Museum Studies**

			CREDITS
Students must complete 10 credits from the following:			
1.	The following course (3 credits):		
	MUSM 485	Foundations of Museum Studies	3
2.	A minimum of 6 credits from the following courses:		
	ACM 271	Introduction to Arts and Cultural Management	3
	ACM 480	Arts and Cultural Experience	1
	MUSM 480	Museums and Cultural Experience	1
	MUSM 487	Museums, Arts and Culture in the Digital Future	3
	MUSM 488	Museum Curatorial Practices	3
	MUSM 489	Museum Collections Management and Care	3
	MUSM 492	Special Topics in Museum Studies	1 to 3
	MUSM 494	Museum Exhibitions: Theory and Development	3
	MUSM 496	Museum Studies Internship	1 to 3
	MUSM 497	Practicum in Museum Studies	1 to 3
	MUSM 498	Learning and Experience in Museums	3
	THR 467	Production Management	3

The maximum amount of credits allowed in ACM 480 and MUSM 480 is 6 credits. Other management-focused or arts and humanities courses may be substituted with the approval of the academic advisor.

- 3. One of the following experience courses (1 credit):
  - ACM 480 Arts and Cultural Experience 1
  - MUSM 480 Museums and Cultural Experience 1

4. **A Capstone Experience**

A final evaluation or portfolio review is required for students in the Undergraduate Certificate in Museum Studies as a capstone to the program after completing the final course in the certificate. The evaluation or review is administered by the Director of Arts, Cultural Management, and Museum Studies in collaboration with core faculty members of the Arts, Cultural Management, and Museum Studies program. Students in the program will work with the Director of Arts, Cultural Management, and Museum Studies and the program's academic advisor throughout their course work to gain guidance on portfolio creation and requirements.

Effective Spring 2025.

**ELI BROAD COLLEGE OF BUSINESS**

- 1. Establish a **Undergraduate Certificate** (Type 2) in **Brand Marketing** in the Department of Department of Marketing. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its October 10, 2024 meeting.

a. **Background Information:**

Through conversations with an alumnus and 20+ year professional in the field of marketing/advertising, the faculty in the department of marketing have agreed that now is the right time to begin an undergraduate certificate program that brings three top MSU academic programs together: Advertising, Marketing and Packaging. The program will educate students in these three key areas of Brand Management/Marketing with an emphasis on packaged goods and

will prepare students to successfully navigate the recruitment/interview process required for employment in this highly selective field.

The industry is moving away from hiring MBAs into Brand Management positions and is now seeking the less expensive undergraduate. With highly ranked programs in Advertising and Packaging and a very strong business college, our university is uniquely positioned to offer academic preparation for those interested in pursuing Brand Management positions within the Consumer Packaged Goods industry. The Department of Marketing has taken a leadership role in establishing a new course and collaborating with the Department of Advertising and Public Relations and the School of Packaging in order to establish this new certificate program and will be the academic department in which the certificate program is housed. No other university that we are aware of offers a certificate or degree program which brings together knowledge from these three academic areas (marketing, advertising and packaging).

Through this certificate program, students will have an immersive learning experience on brand management/marketing which integrates fundamental principles from marketing, advertising and packaging elective courses with industry concepts. In the capstone course (MKT 475 – Brand Marketing), students will have the opportunity to apply these approaches to a real-life business case on brand management/marketing while receiving guidance from a panel of leading companies.

Obtaining the certificate will equip students with networking, mentoring and practical skills/knowledge that can be applied in real work settings of brand management/marketing.

The department has already invited students from advertising management and packaging to participate in the newly developed Brand Marketing course (MKT 475 – currently MKT 491).

b. **Academic Programs Catalog Text:**

The Undergraduate Certificate in Brand Marketing, which is administered by the Department of Marketing, is designed to develop the knowledge and skills necessary to thrive in the field of Brand Management/Marketing.

The undergraduate certificate is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University in marketing, advertising management or packaging. With approval of the department and college that administers the student's degree program, the courses that are used to satisfy the undergraduate certificate may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the undergraduate certificate should consult the undergraduate advisor in the Department of Marketing.

**Admission**

To be considered for admission into the certificate program, students must have completed and obtained a grade of 3.0 in MKT 300 Managerial Marketing, only offered to undergraduate business college students. Packaging and Advertising Management students must complete and obtained a grade 3.0 MKT 327 Introduction to Marketing, offered to non-business students.

All students must:

1. complete an application, including a statement of purpose and a resume. Applications must be received by the Department of Marketing by March 15 for fall semester admission and by October 1 for the spring semester admission.
2. agree to allow the selection committee to review the student's grades. Interviews will be held by the selection committee.

Admission to the certificate program is limited and competitive and is not guaranteed. Meeting the minimum standards does not guarantee admission. The applicant's overall record is considered, including the student's statement of objectives and extra-curricular activities. Admission is subject to space availability.

**Requirements for the Undergraduate Certificate in Brand Marketing**

CREDITS

Students must complete 9 credits from the following:

1. The following courses (9 credits):

ADV	330	Advertising Management Strategy	3
MKT	475	Brand Marketing	3
PKG	430	Packaging for Fast Moving Consumer Goods	3
2. Attendance to the Professional Development Series for Brand Marketing through the Russell Palmer Career Management Center.

Effective Spring 2025.

**COLLEGE OF COMMUNICATION ARTS AND SCIENCES**

1. Delete the curriculum and degree requirements for the **Master of Arts** degree in **Public Relations** in the Department of Advertising and Public Relations. 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 2020. No students are to be readmitted to the program effective Spring 2020. Effective Fall 2024, coding for the program will be discontinued and the program will no longer be available in the Department of Advertising and Public Relations. Students who have not met the requirements for the Master of Arts Degree in Public Relations through the Department of Advertising and Public Relations prior to Fall 2024 will have to change their major.

Note: This program has been in moratorium since Spring 2020.

2. Change the requirements for the **Bachelor of Arts** degree in **Journalism** in the School of Journalism.

*The concentrations in the Bachelor of Arts degree in Journalism 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 Arts Degree in Journalism** make the following changes:

- (1) In item 3. c., under the heading **Information Graphics** delete the following course:

JRN	487	Creative Journey Education Abroad	6
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- (2) In item 3. c., under the heading **International Reporting** delete the following courses:

JRN	483	Photo Communication in Europe	6
JRN	487	Creative Journey Education Abroad	6

- (3) In item 3. c., under the heading **Media Design** delete the following course:

JRN	487	Creative Journey Education Abroad	6
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- (4) In item 3. c., under the heading **Photojournalism** delete the following course:

JRN	483	Photo Communication in Europe	3
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- (5) In item 3. c., under the heading **Writing, Reporting and Editing** delete the following course:

JRN	420	Capital News Service	3
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Add the following course:

JRN 420 Capital News Service 4

Effective Spring 2025.

**COLLEGE OF EDUCATION**

1. Change the requirements for the **Doctor of Philosophy** degree in **Counselor Education and Supervision** in the Department of Counseling, Educational Psychology, and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its November 18, 2024 meeting.

*The optional concentration in the Doctor of Philosophy Degree in Counselor Education and Supervision is noted on the student’s academic record when the requirements for the degree have been completed.*

- a. Under the heading **Requirements for the Doctor of Philosophy Degree in Counselor Education and Supervision** add the following optional concentration:

***Optional Concentration in Rehabilitation and Disability***

The optional concentration in Rehabilitation and Disability is available for doctoral students in the Doctor of Philosophy Degree program in Counselor Education and Supervision involving additional course work. The concentration prepares students with the knowledge, skills and attitudes needed to collaborate in a professional relationship with people who have disabilities. Students must be in good standing and are expected to declare their interest in pursuing the concentration by the end of the Spring semester of their first year in the Counselor Education and Supervision doctoral program. This provides sufficient time to complete the concentration requirements, within the context of the doctoral curriculum, in a timely manner and have the concentration officially listed on their transcript. Note: Students who are interested in pursuing the Certified Rehabilitation Counselor (CRC) credential should discuss additional requirements with their advisor or program director.

CREDITS

Students must complete the following:

1. Rehabilitation and Disability Advance Professional Seminars (6 credits):
 

CEP 964	Practice and Profession of Rehabilitation Counseling	3
CEP 965	Psychosocial Bases of Rehabilitation and Disability	3
2. At least one of the following specialized/applied rehabilitation disability courses (3 credits):
 

CEP 864	Career Development	3
CEP 868	Medical Aspects of Disabilities	3
CEP 873	Employment Strategies for People with Disabilities	3
CEP 864	Career Development	3
CEP 877	Assessment in Counseling	3

Another course with prior approval of the doctoral program director and advisor 3

These courses must be at least at the master’s level. If students have taken a rehabilitation counseling or disability related course from another institution, transfer credit can be considered, subject to program approval.
3. All of the following clinical courses (9 credits):
 

CEP 944B	Teaching Internship	3
CEP 944C	Clinical Counseling Internship	3
CEP 944D	Clinical Supervision Internship	3

Clinical courses are already required for the PhD program. However, the concentration requires that the student focus within each clinical course on Rehabilitation and Disability content.
4. Relevant Milestones. Apprenticeship topic and Dissertation topic should be related to rehabilitation and disability.

Effective Spring 2025.

2. Change the requirements for the **Master of Science** degree in **Kinesiology** in the Department of Kinesiology. The University Committee on Graduate Studies (UCGS) approved this request at its November 18, 2024 meeting.

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

- a. Under the heading **Requirements for the Master of Science Degree in Kinesiology** make the following change:

- (1) Delete the following concentration:  
Student Athlete Development

Effective Fall 2025.

### **COLLEGE OF ENGINEERING**

1. Change the requirements for the **Bachelor of Science** degree in **Applied Engineering Sciences** in the College of Engineering.

*The concentrations in the Bachelor of Science degree in Applied Engineering Sciences 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 Applied Engineering Sciences** make the following changes:

- (1) In item 3. d. make the following changes:  
(a) In the **Business Law** concentration change the total credits from '16 or 17' to '15 or 16' and delete the following course from item 1.:

PHY	192	Physics Laboratory for Scientists, II	1
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- (b) In the **Computer Science** concentration in item 2., delete the following courses:

CSE	404	Introduction to Machine Learning	3
CSE	440	Introduction to Artificial Intelligence	3
CSE	471	Media Processing and Multimedia Computing	3
CSE	472	Computer Graphics	3
CSE	482	Big Data Analysis	3

Add the following course:

CSE	380	Information Management and the Cloud	3
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Effective Fall 2025.

2. Change the requirements for the **Minor in Energy** in the College of Engineering.

- a. Under the heading **Requirements for the Minor in Energy** make the following changes:

- (1) In item 5., delete the following course:

EEP	255	Ecological Economics	3
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Add the following course:

AFRE	265	Ecological Economics	3
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- (2) In item 6., delete the following courses:

EEM	320	Environmental Economics	3
GLG	301	Geology of the Great Lakes Region	3

Add the following courses:

AFRE	360	Environmental Economics	3
GLG	203	Geology of the Great Lakes Region	3

Effective Fall 2025.

### **COLLEGE OF NATURAL SCIENCE**

1. Change the requirements for the **Bachelor of Science** degree in **Biochemistry and Molecular Biology** in the Department of Biochemistry and Molecular Biology.

- a. Under the heading **Requirements for the Bachelor of Science Degree in Biochemistry and Molecular Biology** make the following changes:

- (1) In item 3. a. (8) (b) delete the following courses:

PHY	241	Physics for Cellular and Molecular Biologists I	4
PHY	242	Physics for Cellular and Molecular Biologists II	4

Add the following courses:

PHY	193H	Honors Physics I – Mechanics	4
PHY	294H	Honors Physics II – Electromagnetism	4

Effective Fall 2025.

2. Change the requirements for the **Bachelor of Science** degree in **Biochemistry and Molecular Biology/Biotechnology** in the Department of Biochemistry and Molecular Biology.

- a. Under the heading **Requirements for the Bachelor of Science Degree in Biochemistry and Molecular Biology/Biotechnology** make the following changes:

- (1) In item 3. a. (8) (d) delete the following courses:

PHY	241	Physics for Cellular and Molecular Biologists I	4
PHY	242	Physics for Cellular and Molecular Biologists II	4

Add the following courses:

PHY	193H	Honors Physics I – Mechanics	4
PHY	294H	Honors Physics II – Electromagnetism	4

- (2) In item 3. a. (9) delete the following course:

MMG	408	Advanced Microbiology Laboratory (W)	3
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Add the following course:

MGI	408	Advanced Microbiology Laboratory (W)	3
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Effective Fall 2025.

3. Change the requirements for the **Bachelor of Science** degree in **Biomedical Laboratory Science** in the Biomedical Laboratory Diagnostics Program.
- a. Under the heading **Requirements for the Bachelor of Science Degree in Biomedical Laboratory Science** make the following changes:
- (1) In item 3. a. (1) delete the following courses:
- |     |      |                                 |   |
|-----|------|---------------------------------|---|
| MMG | 365  | Medical Microbiology            | 3 |
| MMG | 365L | Medical Microbiology Laboratory | 1 |
- Add the following courses:
- |     |      |                                 |   |
|-----|------|---------------------------------|---|
| MGI | 365  | Medical Microbiology            | 3 |
| MGI | 365L | Medical Microbiology Laboratory | 1 |
- (2) In item 3. a. (6) delete the following courses:
- |     |     |                              |   |
|-----|-----|------------------------------|---|
| MMG | 201 | Fundamentals of Microbiology | 3 |
| MMG | 301 | Introductory Microbiology    | 3 |
- Add the following courses:
- |     |     |                              |   |
|-----|-----|------------------------------|---|
| MGI | 201 | Fundamentals of Microbiology | 3 |
| MGI | 301 | Introductory Microbiology    | 3 |
- b. In item 3. c. make the following changes:
- (1) In the **Medical Microbiology** concentration under (1) delete the following courses:
- |     |      |  |   |
|-----|------|--|---|
| MMG | 461  | `Molecular Pathogenesis                  | 3 |
| MMG | 465  | Advanced Medical Microbiology            | 3 |
| MMG | 465L | Advanced Medical Microbiology Laboratory | 2 |
- Add the following courses
- |     |      |  |   |
|-----|------|--|---|
| MGI | 461  | `Molecular Pathogenesis                  | 3 |
| MGI | 465  | Advanced Medical Microbiology            | 3 |
| MGI | 465L | Advanced Medical Microbiology Laboratory | 2 |
- (2) In the **Medical Microbiology** concentration under (2) delete the following courses:
- |     |     |                               |   |
|-----|-----|-------------------------------|---|
| HM  | 801 | Introduction to Public Health | 3 |
| MMG | 413 | Virology                      | 3 |
| MMG | 421 | Prokaryotic Cell Physiology   | 3 |
| MMG | 431 | Microbial Genetics            | 3 |
- Add the following courses:
- |     |     |                               |   |
|-----|-----|-------------------------------|---|
| PH  | 801 | Introduction to Public Health | 3 |
| MGI | 413 | Virology                      | 3 |
| MGI | 421 | Prokaryotic Cell Physiology   | 3 |
| MGI | 431 | Microbial Genetics            | 3 |
- (3) In the **Hematology and Hemostatis** concentration under (3) delete the following course:
- |     |     |                         |   |
|-----|-----|-------------------------|---|
| MMG | 409 | Eukaryotic Cell Biology | 3 |
|-----|-----|-------------------------|---|
- Add the following course:
- |     |     |                         |   |
|-----|-----|-------------------------|---|
| MGI | 409 | Eukaryotic Cell Biology | 3 |
|-----|-----|-------------------------|---|

- (4) In the **Medical Laboratory Science** concentration delete the following courses:
- |     |      |  |   |
|-----|------|--|---|
| MMG | 465  | Advanced Medical Microbiology            | 3 |
| MMG | 465L | Advanced Medical Microbiology Laboratory | 2 |
- Add the following courses
- |     |      |  |   |
|-----|------|--|---|
| MGI | 465  | Advanced Medical Microbiology            | 3 |
| MGI | 465L | Advanced Medical Microbiology Laboratory | 2 |
- (5) Delete the **Advanced Biomedical Technologies** concentration.

Effective Fall 2025.

4. Change the requirements for the **Bachelor of Science** degree in **Medical Laboratory Science** in the Biomedical Laboratory Diagnostics Program.
- a. Under the heading **Admission** make the following changes:
- (1) In paragraph two, replace item 3. with the following:
3. Have completed BMB 401, MGI 365, MGI 365L, BLD 324, and BLD 434.
- b. Under the heading **Requirements for the Bachelor of Science Degree in Medical Laboratory Science** make the following changes:
- (1) In item 4. a. (1) delete the following courses:
- |     |      |  |   |
|-----|------|--|---|
| MMG | 365  | Medical Microbiology                     | 3 |
| MMG | 365L | Medical Microbiology Laboratory          | 1 |
| MMG | 465  | Advanced Medical Microbiology            | 3 |
| MMG | 465L | Advanced Medical Microbiology Laboratory | 2 |
- Add the following courses:
- |     |      |  |   |
|-----|------|--|---|
| MGI | 365  | Medical Microbiology                     | 3 |
| MGI | 365L | Medical Microbiology Laboratory          | 1 |
| MGI | 465  | Advanced Medical Microbiology            | 3 |
| MGI | 465L | Advanced Medical Microbiology Laboratory | 2 |
- (2) In item 4. a. (6) delete the following courses:
- |     |     |                              |   |
|-----|-----|------------------------------|---|
| MMG | 201 | Fundamentals of Microbiology | 3 |
| MMG | 301 | Introductory Microbiology    | 3 |
- Add the following courses:
- |     |     |                              |   |
|-----|-----|------------------------------|---|
| MGI | 201 | Fundamentals of Microbiology | 3 |
| MGI | 301 | Introductory Microbiology    | 3 |
- c. Under the heading **Academic Standards** replace the first sentence with the following:
- To progress to the clinical phase of the curriculum, students must earn a grade-point average of 2.50 or higher in MGI 465, MGI 465L, BLD 402, BLD 424, BLD 424L, BLD 430, BLD 435, and BLD 435L.

Effective Fall 2025.

5. Change the requirements for the **Bachelor of Science** degree in **Physiology** in the Department of Physiology.
- a. Under the heading **Requirements for the Bachelor of Science Degree in Physiology** make the following changes:
- (1) Replace item 6. a. with the following:

PHY	221	Studio Physics for Life Scientists I	4
PHY	222	Studio Physics for Life Scientists II	4

Effective Spring 2025.

### **COLLEGE OF OSTEOPATHIC MEDICINE**

1. Establish a **Undergraduate Certificate** (Type 2) in **Global Health** in the College of Osteopathic Medicine. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its October 24, 2024 meeting.

a. **Background Information:**

The idea for this certificate originated from the Global Health Studies Program (College of Osteopathic Medicine) and the Global and International Studies major (College of Social Science). The master's and graduate certificate programs in Global Health launched in 2019 and there has been an increasing demand for global health courses by both professional and undergraduate students. In 2023, the Global Health Studies Program launched the undergraduate course OST 402 (recently changed to OST 450) Introduction to Global Health which immediately filled and became the only required course in the new Global Health concentration within the Global and International Studies major (College of Social Science). There is interest in packaging two new courses with the existing OST 450 as a transcriptable certificate for undergraduate students who have an interest in global health, similar to the undergraduate certificate in public health.

MSU has a long history of engagement globally, especially in the areas of health. Health related majors are some of the most popular at MSU (e.g. human biology, psychology, kinesiology, etc.). There has been a significant growing interest nationally and internationally in global health, even prior to the COVID-19 pandemic (Drain, et al. 2017). The current programs in global health offered by the College of Osteopathic Medicine include faculty from across the university (representing over 7 colleges) and from partnering international universities, highlighting the excellent, globally-engaged faculty. Given the popularity of the new graduate and professional global health programs, the strength of MSU in health given our four health related colleges, offering an undergraduate certificate in global health at MSU provides a market advantage responding to student interest.

The College of Osteopathic Medicine, home of the Institute for Global Health, offers over 15 international education abroad courses to undergraduate, graduate, and professional students. The Global Health Studies Program in the College of Osteopathic Medicine is home to the new M.S. and Graduate Certificate in Global Health, and the Certificate in Global Health for D.O. students.

b. **Academic Programs Catalog Text:**

The Undergraduate Certificate in Global Health provides the introduction to global health. It explores the history, values, and functions of global health and how travel, trade, and other aspects of globalization contribute to health, disease, and health disparities. Students will examine the connections between human health and environmental health, including considerations of water, sanitation, air quality, urbanization, and ecosystem health. Students learn how to apply an interdisciplinary or interprofessional lens to the evaluation of policies and interventions that seek to solve major population health concerns and achieve health equity.

Students interested in completing the Undergraduate Certificate in Global Health should consult an academic advisor in the College of Osteopathic Medicine.

The undergraduate certificate is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University. With approval of the department and college that administers the student's degree program, the courses that are used to satisfy the undergraduate certificate may also be used to satisfy the requirements for the bachelor's degree.

**Requirements for the Undergraduate Certificate in Global Health**

			CREDITS
Students must complete 9 credits from the following:			
OST	450	Introduction to Global Health	3
OST	451	Global Health Research Methods	3
OST	452	Introduction to One Health	3

Effective Spring 2025.

2. Change the requirements for the **Professional Program in Osteopathic Medicine** leading to the Doctor of Osteopathic Medicine degree the College of Osteopathic Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its November 18, 2024 meeting.

- a. Under the heading **Requirements for the Doctor of Osteopathic Medicine Degree** make the following changes:

- (1) Under **Preclerkship Curriculum** make the following changes:

- (a) Change the total credits from '95' to '91'.
- (b) Under the clinical experience requirement, add the following courses:

FCM	671	Pathway to Family Medicine I	1
OST	586	Community-Based Service Learning	1

- (2) Under **Clerkship Curriculum** make the following changes:

- (a) Under the rotation courses delete the following:

OST	689	Global Health Haiti – Clinical Immersion	1 to 20
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- (b) Change the credits of RAD 610 from '1 to 20' to '3'.
- (c) Under the rotation courses, add the following courses:

ORT	644	Sports Medicine Clerkship	1 to 20
ORT	656	Orthopedic Clerkship	1 to 20

Delete the following courses:

OSS	644	Sports Medicine Clerkship	1 to 20
OSS	656	Orthopedic Clerkship	1 to 20

- (d) Under the rotation courses are credited toward the non-clinical requirement, make the following changes:

- (i) Add the following course:

OST	605	Preparing for Practice	1.5
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- (ii) Change the credits of OST 620 from '2 or 3' to '1.5'.
- (iii) Change the credits of OST 624 from '3' to '1.5 to 3'.

Effective Spring 2025.

### COLLEGE OF SOCIAL SCIENCE

1. Delete the curriculum and degree requirements for the **Graduate Specialization in Forensic Science** in the School of Criminal Justice. 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 2024. No students are to be readmitted to the program effective Spring 2024. Effective Spring 2025, coding for the program will be discontinued and the program will no longer be available in the School of Criminal Justice. Students who have not met the requirements for the Graduate Specialization in Forensic Science through the School of Criminal Justice prior to Spring 2025 will have to change their specialization.

Note: This program has been in moratorium since Spring 2024.

2. Change the administrative responsibility for the **Minor in International Development** from the College of Social Science to the Department of Anthropology.  
  
Effective Fall 2025.
3. Change the administrative responsibility for the **Minor in Peace and Justice Studies** from the College of Social Science to the Department of Anthropology.  
  
Effective Fall 2025.
4. Change the administrative responsibility for the **Minor in Race and Ethnicity in the United States** from the College of Social Science to the Department of Anthropology.  
  
Effective Fall 2025.
5. Change the administrative responsibility for the **Minor in Law, Justice, and Public Policy** from the College of Social Science to the School of Criminal Justice.  
  
Effective Fall 2025.
6. Change the administrative responsibility for the **Minor in African Studies** from the College of Social Science to the Department of History.  
  
Effective Fall 2025.
7. Change the administrative responsibility for the **Minor in Asian Pacific and American Studies** from the College of Social Science to the Department of History.  
  
Effective Fall 2025.
8. Change the administrative responsibility for the **Minor in Asian Studies** from the College of Social Science to the Department of History.  
  
Effective Fall 2025.
9. Change the administrative responsibility for the **Minor in Latin American and Caribbean Studies** from the College of Social Science to the Department of History.  
  
Effective Fall 2025.
10. Change the administrative responsibility for the **Minor in Cities: Environment, Design and Society** from the College of Social Science to the Department of History.  
  
Effective Fall 2025.

11. Change the requirements in the **Minor in Leadership of Organizations** in the School of Human Resources and Labor Relations.

a. Under the heading **Requirements for the Minor in Leadership of Organizations** make the following changes:

(1) In item 3. delete the following course:

WS	404	Women and the Law in the United States	3
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Add the following course:

WS	201	Introduction to Women's and Gender Studies	3
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Effective Fall 2025.

12. Change the administrative responsibility for the **Minor in Youth and Society** from the College of Social Science to the Department of Human Development and Family Studies.

Effective Fall 2025.

13. Change the administrative responsibility for the **Minor in Human Behavior and Social Services** from the College of Social Science to the School of Social Work.

Effective Fall 2025.

14. Change the **Graduation Requirements for the Bachelor of Arts and the Bachelor of Science** degrees in the **College of Social Science**.

a. Under the heading **Breadth Requirement**, replace paragraph one with the following:

The College of Social Science requires each student to complete a breadth requirement. The requirement can be fulfilled by completing any of the following:

(1) completion of a College of Social Science interdisciplinary minor; (2) completion of a second degree or additional major in the College of Social Science; (3) completion of a disciplinary minor in one of the academic units of the College of Social Science; or (4) completion of a second degree or additional major or minor outside of the College of Social Science. Students can apply a maximum of 2 courses within their College of Social Science major unit to the list being used for the breadth requirement (e.g., minor or second major within or outside of the College of Social Science).

Effective Fall 2025.

## **PART II - NEW COURSES**

### **DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING**

- CE 801 Nonlinear Structural Mechanics  
Spring of odd years. 3(3-0) RB: Basic knowledge on the design of steel (CE405) and concrete structures (CE406), matrix methods of structural analysis (CE400), background in differential equations.  
Theory and methods related to the nonlinear behavior and analysis of structures with focus on line-type elements in two dimensions. Inelastic behavior of structural materials. Stability of structures. Nonlinear behavior and analysis of members and structural systems. Methods for iterative solution strategies and use of special computer software.  
Effective Spring Semester 2025

### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

- CSE 914 Formal Methods in Software Development  
Fall of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P: CSE 814 RB: Undergraduate courses in software engineering and in logic. R: Open to graduate students in the Department of Computer Science and Engineering.  
Current research in selected areas of software engineering such as: approaches for the incorporation of formal methods in software development; current projects using formal methods in software engineering; object-oriented analysis and development techniques; and approaches for the incorporation of user-interface analysis and design in software development.  
Effective Spring Semester 2025

### **DEPARTMENT OF ENTOMOLOGY**

- ENT 478 Integrated Pest Management (W)  
Spring of odd years. 3(3-0) Interdepartmental with Crop and Soil Sciences, Forestry, Horticulture P: (ENT 404 or ENT 470 or PLP 405) and completion of Tier I writing requirement  
Theory, philosophy and application of pest management focusing on agricultural and natural systems.  
Effective Spring Semester 2025

### **DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE**

- FCM 671 Pathway to Family Medicine I  
Spring of every year. 1(1-0) R: Open to graduate-professional students in the College of Osteopathic Medicine. Approval of department.  
Longitudinal primary care clinical experience.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Spring Semester 2026
- FCM 672 Pathway to Family Medicine II  
Fall of every year. 1(1-0) P: FCM 671 R: Open to graduate-professional students in the College of Osteopathic Medicine. Approval of department.  
Longitudinal primary care clinical experience.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Fall Semester 2026
- FCM 673 Pathway to Family Medicine III  
Spring of every year. 1(1-0) P: FCM 671 and FCM 672 R: Open to graduate-professional students in the College of Osteopathic Medicine. Approval of department.  
Longitudinal primary care clinical experience.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Spring Semester 2027

- FCM 674      Family Medicine Scholarly Activity  
Fall of every year. Spring of every year. Summer of every year. 1(1-0) P: FCM 671 and FCM 672 and FCM 673 R: Open to graduate-professional students in the College of Osteopathic Medicine. Approval of department.  
    Longitudinal primary care clinical experience.  
    Request the use of the Pass-No Grade (P-N) system.  
    Effective Fall Semester 2027

### **DEPARTMENT OF HISTORY**

- HST 342      Modern Eastern Europe  
Fall of every year. 3(3-0)  
    Roots of national and social conflict in the lands between Germany and Russia, from the Baltic to the Balkans, in the 19th and 20th centuries. Formation of independent states, the rise and collapse of Communism, and ethnic tensions in former Yugoslavia.  
    Effective Spring Semester 2025

### **MSU COLLEGE OF LAW**

- LAW 525C      Rights, Risks, and Remedies in Private Law  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law.  
    Investigation of theoretical issues and current debates underlying the jurisprudence of private law, including torts, contracts, property, and remedies. Philosophical, economic, and other interdisciplinary approaches will be brought to bear on legal doctrine and policy.  
    Effective Spring Semester 2025
- LAW 530V      The Criminal Jury Today  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law.  
    Functions and performance of the contemporary criminal jury system.  
    Effective Spring Semester 2025
- LAW 542B      Children's Law and Policy  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law. Not open to students with credit in LAW 541F.  
    Central themes and controversies in children's law and policy in the United States, situating those topics in their historical, theoretical, and social contexts.  
    Effective Spring Semester 2025
- LAW 545R      International Criminal Law Colloquium  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law.  
    International criminal and humanitarian law from global practitioners and scholars in the field.  
    Effective Spring Semester 2025
- LAW 591J      Public Speaking for Lawyers  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law.  
    Strategic interviewing and negotiation skills, the significance of nonverbal body language, effective ways to present a client's "story," and persuasive oral argument techniques.  
    Effective Spring Semester 2025
- LAW 594C      Dispute Resolution and Contract Drafting Seminar  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law. Not open to students with credit in LAW 501J or LAW 601 or LAW 594A.  
    Introduction to certain drafting principles and related dispute resolution options for contract drafters.  
    Effective Spring Semester 2025
- LAW 600K      Advanced Persuasive Techniques  
On Demand. 0 to 6 credits. R: Open to students in the MSU College of Law. Not open to students with credit in LAW 623B or LAW 623C or LAW 623D or LAW 623E or LAW 623M or LAW 623N.  
    Expansion of persuasive writing skills through preparation of practice-ready documents.  
    Effective Spring Semester 2025

### **DEPARTMENT OF MARKETING**

MKT 475 Brand Marketing  
Fall of every year. Spring of every year. 3(3-0) P: MKT 300 or MKT 327 R: Approval of department.  
Integration of fundamental marketing principles with brand management concepts, with application to a real-life case. Development of networking, mentoring and practical skills and knowledge.  
Effective Fall Semester 2024

### **COLLEGE OF MUSIC**

MUS 973 Readings in Music Theory  
On Demand. 2(2-0) A student may earn a maximum of 8 credits in all enrollments for this course. P: MUS 872 or MUS 873 or MUS 869 or MUS 875 or MUS 879 or approval of college R: Open to graduate students in the College of Music.  
Exploration of current research trends in music theory. Critical readings of published articles and books. Formulation of independent research projects culminating in a term paper similar in scope to a conference presentation or article.  
Effective Spring Semester 2025

### **COLLEGE OF OSTEOPATHIC MEDICINE**

OST 605 Preparing for Practice  
Fall of every year. Spring of every year. Summer of every year. 1.5(1.5-0) R: Open to graduate-professional students in the College of Osteopathic Medicine or approval of college.  
Comprehensive review of the various types of healthcare insurance systems in the United States to gain the knowledge required to navigate the complexities of these systems in their future medical practices.  
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 2024

### **DEPARTMENT OF POLITICAL SCIENCE**

PLS 120 Introduction to Law  
Fall of every year. Spring of every year. 3(3-0)  
Understanding the American legal system. Sources and interpretation of law in the United States.  
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

### **DEPARTMENT OF STATISTICS AND PROBABILITY**

STT 470 Modern Regression Modeling  
Spring of every year. 3(3-0) P: (STT 442 or STT 380 or approval of department) and (STT 180 or CMSE 201 or CSE 231)  
Building, understanding, and using predictive models. Fundamentals of simple and multiple linear regression models and their application in both a Bayesian and Frequentist paradigm. Assessing validity of model assumptions. Other regression models including logistic regression, Poisson models, Quasi-Poisson models, and other generalized linear models.  
Effective Spring Semester 2025

## **PART III – COURSE CHANGES**

### **DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEMS**

- ITM 917      Research Methods in Information Systems  
Fall of every year. 3(3-0) RB: (MSC 905) or graduate courses in Philosophy of Science, Intermediate Statistics. R: Open to graduate students in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the College of Communication Arts and Sciences or approval of college.  
Research methodologies utilized to study information systems phenomena from social science, computational science, and clinical approaches. Critique information systems literature from various methodological perspectives.  
**DELETE COURSE**  
Effective Fall Semester 2024

### **THE ELI BROAD COLLEGE OF BUSINESS**

- BUS 100      Business Major and Career Exploration  
Fall of every year. 1(1-0) ~~R: Open to undergraduate students in the Business—Admitted major or approval of college.~~ R: Open to undergraduate students in the Accounting major or in the Business - Admitted major or in the Finance Major or in the Human Resource Management Major or in the Management Major or in the Marketing Major or in the Supply Chain Management Major or approval of college.  
Introduction to different types of careers in business. Interaction with industry professionals regarding how to launch and sustain a fulfilling and productive business career. Self-assessments guiding students toward a career target, major and minor selections, and a strategic degree completion plan.  
Effective Fall Semester 2025
- MBA 808      Leadership and Teamwork  
Fall of every year. 1 to 3 credits. R: Open to MBA students.  
~~Understanding team management and leadership through experiential and skill-based learning. Effective communication, including the use of electronic communication technologies for team development and maintenance. Active practice of teamwork, communication, and leadership skills.~~ Understanding team management and leadership through experiential and skill-based learning. Effective communication, including the use of electronic communication technologies for team development and maintenance. Active practice of teamwork, communication, and leadership skills. Offered first half of semester.  
Effective Fall Semester 2024

### **DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE**

- MSE 862      Dislocation Theory  
~~Fall of every year.~~ Spring of odd years. 3(3-0) R: Open to graduate students in the College of Engineering.  
Advanced theory of dislocations and other crystal defects in metals, ceramics, aggregates and ordered compounds. Elasticity theory of straight dislocations, dislocation strain energy, mobility, obstacle interactions, reactions, and core effects.  
SA: MSM 862  
Effective Spring Semester 2025

### **COLLEGE OF ENGINEERING**

- AESC 110      AES as a Profession  
Fall of every year. ~~4(4-0)~~ 1(0-2) R: Open to undergraduate students in the College of Engineering.  
Introduction to the profession of applied engineering sciences. Case studies of engineering and business problems with emphasis in the AESC concentrations. Exploration of career opportunities and ethical framework for the profession are explored.  
Effective Fall Semester 2025

**DEPARTMENT OF KINESIOLOGY**

- KIN 802 Athletic Training Practicum I  
Summer of every year. 2(1-2)-P: ~~KIN 804~~ R: Open to students in the Athletic Training Major.  
~~Integration of learning with the associated psychomotor skills required for the practice of athletic training. Implementation of emergency action plans, preventative measures, emergency trauma, and record keeping practices in a clinical field experience under the direct supervision of a preceptor.~~ Emphasizes implementation of emergency action plans, preventative measures, emergency trauma, and record keeping practices in a clinical field experience under the direct supervision of a preceptor.  
Effective Summer Semester 2025
- KIN 803 Athletic Training Practicum II  
Fall of every year. 2(1-2)-P: ~~KIN 800 and KIN 801 and KIN 802~~ R: Open to students in the Athletic Training Major.  
~~Practicum experiences to integrate learning with the associated psychomotor skills. Anatomical palpations, emergency procedures, and clinical practices.~~ Emphasizes anatomical palpations, emergency procedures, and clinical practices in a clinical field experience under the direct supervision of a preceptor.  
Effective Summer Semester 2025
- KIN 804 Athletic Training Practicum III  
Spring of every year. 2(1-2)-P: ~~KIN 803 and KIN 832 and KIN 833~~ R: Open to students in the Athletic Training Major.  
~~Clinical practicum experiences for learning psychomotor skills related to Athletic Training. Lower extremity injuries, lower extremity modalities and rehabilitation, and clinical practices in a clinical field experience.~~ Emphasizes lower extremity injuries, lower extremity modalities and rehabilitation, and clinical practices in a clinical field experience under the direct supervision of a preceptor.  
Effective Summer Semester 2025
- KIN 805 Athletic Training Practicum IV  
Summer of every year. 1(0-2)-P: ~~KIN 804 and KIN 836 and KIN 838~~ R: Open to students in the Athletic Training Major.  
~~Clinical practicum experiences to integrate learning with the associated psychomotor skills. Emphasizes general medical conditions and clinical practices in a clinical field experience.~~ Emphasizes general medical conditions and clinical practices in a clinical field experience under the direct supervision of a preceptor.  
Effective Summer Semester 2025
- KIN 806 Athletic Training Practicum V  
Fall of every year. 2(1-2)-P: ~~KIN 805 and KIN 836 and KIN 838~~ R: Open to students in the Athletic Training Major.  
~~Clinical practicum experiences in learning with the associated psychomotor skills required for athletic training. Upper extremity injuries, upper extremity modalities and rehabilitation, general medical conditions, pharmacology, and clinical practices.~~ Emphasizes upper extremity injuries, upper extremity modalities and rehabilitation, general medical conditions, pharmacology, and clinical practices in a clinical field experience under the direct supervision of a preceptor.  
Effective Summer Semester 2025
- KIN 807 Athletic Training Practicum VI  
Spring of every year. 3(0-6)-P: ~~KIN 806 and KIN 883 and KIN 884 and KIN 885~~ R: Open to students in the Athletic Training Major.  
~~Clinical practicum experiences for learning with the associated psychomotor skills required for the practice of athletic training. Immersive clinical field experience under the direct supervision of a preceptor.~~ Capstone clinical practicum experiences under the direct supervision of a preceptor.  
Effective Summer Semester 2025

- KIN 832 Lower Body Physical Assessment  
Fall of every year. 3(2-2)-P: ~~KIN 800 and KIN 801 and KIN 802~~ R: Open to students in the Athletic Training Major.  
~~Principles of lower body physical assessment. Mechanisms of injury, the evaluation process, and testing leading to diagnosis of lower body injuries.~~ Analyzes principles of lower body physical assessment. Investigates mechanisms of injury, the evaluation process, and testing leading to diagnosis of lower body injuries.  
Effective Summer Semester 2025
- KIN 833 Therapeutic Interventions I  
Fall of every year. 3(2-2)-P: ~~KIN 800 and KIN 801 and KIN 802~~ R: Open to students in the Athletic Training Major.  
~~Development, implementation, and evaluation of treatment plans. Therapeutic modalities and rehabilitation interventions for treating lower body injuries and general health conditions.~~ Evidence based approaches to therapeutic interventions. Develops, implements, and evaluates treatment plans using therapeutic modalities and rehabilitation interventions in the treatment of lower body injuries and general health conditions. Establishes an evidence-based approach to therapeutic interventions use in patient treatment.  
Effective Summer Semester 2025
- KIN 834 Evidence Based Practice in Athletic Training  
Fall of every year. 3(3-0)-P: ~~KIN 800 and KIN 801 and KIN 802~~ R: Open to students in the Athletic Training Major.  
~~Methods for critically evaluating the quality of clinical research, implanting outcomes assessment techniques, and developing interventions to improve the delivery of primary healthcare in athletic training practice.~~ Examines methods for critically evaluating the quality of clinical research, implanting outcomes assessment techniques, and developing interventions to improve the delivery of primary healthcare in athletic training practice.  
Effective Summer Semester 2025
- KIN 835 Pharmacology for Athletic Trainers  
Spring of every year. 3(3-0)-P: ~~KIN 832 and KIN 833~~ R: Open to students in the Athletic Training Major.  
~~Application of pharmacology to Athletic Training clinical practice. Drug related side effects when a negative reaction is occurring, and managing instances of drug abuse in athletes.~~ Application of pharmacology in clinical practice through real-life scenarios—assisting patients who are taking new medications, recognizing drug-related side effects when a negative reaction is occurring, and managing instances of drug abuse.  
Effective Summer Semester 2025
- KIN 838 ~~General Medical Conditions for Athletic Trainers~~ General Medical Conditions  
Spring of every year. 3(2-2)-P: ~~KIN 832 and KIN 833 and KIN 834~~ R: Open to students in the Athletic Training Major.  
~~General medical conditions from the athletic training perspective. Diagnosis and treatment of patients in daily clinical practice.~~ Basic understanding of general medical conditions from the athletic training perspective. Information for entry-level certified athletic trainers to diagnose and treat patients in daily clinical practice.  
Effective Summer Semester 2025
- KIN 883 ~~Health Care Administration for Athletic Trainers~~ Health Care Administration  
Fall of every year. 3(3-0)-P: ~~KIN 835 and KIN 836 and KIN 837 and KIN 838~~ R: Open to students in the Athletic Training Major.  
~~Professional management and administrative issues in athletic training. Planning, design, development, organization, implementation, direction, and evaluation of health care programs.~~ Current issues in athletic training related to professional conduct and practice. Professional management and administrative issues in athletic training, including the planning, design, development, organization, implementation, direction, and evaluation of a health care program. Current issues in athletic training related to professional conduct and practice.  
Effective Summer Semester 2025

- KIN 884 Spine Evaluations and Advanced Rehabilitation  
Fall of every year. 3(2-2) R: Open to students in the Athletic Training Major.  
~~Techniques of manual clinical evaluation of the spine. Correction skills for spinal dysfunctions.~~ Techniques of manual clinical evaluation of the spine and correction skills for spinal dysfunctions.  
Effective Summer Semester 2025
- KIN 886 Psychology of Sports Injury and Rehabilitation  
~~Spring of every year. Fall of every year. 2(2-0) P: KIN 883 and KIN 884 and KIN 885 R: Open to students in the Athletic Training Major.~~  
Psychology of injury that may affect athletes. Risk, culture, pain science, adherence to rehabilitation regimens, the relationship between psychological factors and clinical outcomes, and referrals for additional support. Public health perspectives on the psychology of athletes, such as risk culture, pain science, adherence to rehabilitation regimens, the relationship between psychological factors and clinical outcomes, and referrals for additional support.  
Effective Summer Semester 2025
- KIN 887 Performance Enhancement in Sport  
Spring of every year. 1(1-0) ~~P: KIN 883 and KIN 884 and KIN 885~~ R: Open to students in the Athletic Training Major.  
~~Athletic trainer's roles in modifying nutritional behaviors of athletes. Achieving peak performance in athletes by training and consumption of nutrients. Pre-game and post-game meals.~~ Achievement of athletic peak performance through training and eating a balanced diet. Special attention to carbohydrates, proteins, dairy, fats, vitamins and minerals.  
Effective Summer Semester 2025
- KIN 888 Seminar in Athletic Training  
Spring of every year. 3(2-2) ~~P: KIN 836 and KIN 837~~ R: Open to students in the Athletic Training Major.  
~~Scientific writing and clinical research. Case reports, critically appraised topics (CATs), or research projects to address health-related problems in Athletic Training.~~ Scientific writing and implementation of clinical research methods. Development of products such as case reports, critically appraised topic (CAT), or research project to address health-related problems in athletic training.  
Effective Summer Semester 2025

### COLLEGE OF OSTEOPATHIC MEDICINE

- OST 523 Neurological System  
Spring of every year. ~~4(8-4)~~ 6(6-0) R: Open to graduate-professional students in the College of Osteopathic Medicine.  
Neurological system with integration of basic science and clinical neurology and ophthalmology.  
Clinical approach to neuromusculoskeletal conditions from osteopathic perspective.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Spring Semester 2025
- OST 620 Patient Safety and Quality Improvement  
Fall of every year. Spring of every year. Summer of every year. ~~2 to 3 credits. 1.5 to 3 credits.~~ A student may earn a maximum of 4 credits in all enrollments for this course. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open to students in the College of Osteopathic Medicine.  
Foundations of patient safety and quality improvement incorporating Institute for Healthcare Improvement's (IHI) certification.  
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 Spring Semester 2025

- OST 624      Essentials of Diabetes  
Fall of every year. Spring of every year. Summer of every year. ~~3(3-0)~~ 1.5 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open to graduate students in the College of Osteopathic Medicine. Approval of college.  
Knowledge of the pathophysiology, clinical research and treatment in the care of patients with all types of diabetes.  
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

### **DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY**

- PHM 422      Fundamentals of Neuropharmacology  
Spring of every year. ~~2(2-0)~~ 3(3-0) Interdepartmental with Neuroscience P: NEU 301 or PSL 250 or PSL 310 or PSL 431 P: NEU 301 or PSL 250 or PSL 310 or PSL 431 or approval of department R: ~~Open to juniors or seniors or approval of department.~~ R: Open to juniors or seniors in the Pharmacology and Toxicology Minor or in the Pharmacology and Toxicology Major or approval of department.  
Mechanisms and uses of action of drugs on neurons and neuron-controlled activities  
Effective Spring Semester 2025

- PHM 854      Leadership and Team-Building for Biomedical Research  
Spring of every year. 2(2-0) RB: Experience supervising others and/or participation in workplace teams is strongly suggested. R: Open to graduate students. Not open to students with credit in PHM 454.  
Evaluation of current leadership methods. Models of leadership. Practice of specific skills and development of a plan to increase their influence and extend learning beyond the class.  
Effective Spring Semester 2025

### **DEPARTMENT OF PLANT, SOIL AND MICROBIAL SCIENCES**

- PLP 881      Molecular and Biochemical Plant Pathology  
~~Spring of even years.~~ Fall of even years. ~~3(2-2)~~ 3(3-0) RB: BMB 462 and IBIO 341 and PLB 415  
Biochemical and molecular bases of host-pathogen interactions. Mechanisms of pathogenicity and the nature of disease resistance.  
SA: BOT 881  
Effective Fall Semester 2025

### **DEPARTMENT OF ROMANCE AND CLASSICAL STUDIES**

- PRT 250      Intensive Intermediate Portuguese  
~~Spring of every year.~~ Fall of every year. Spring of every year. 5(5-0) P: PRT 150 or PRT 102 P: PRT 150 RB: Solid background in another Romance language ~~Not open to students with credit in PRT 201 or PRT 202.~~  
Continued development of listening, speaking, reading, writing skills, and cultural knowledge.  
Effective Summer Semester 2025

### **DEPARTMENT OF STATISTICS AND PROBABILITY**

- STT 465      Bayesian Statistical Methods  
Fall of every year. 3(3-0) Interdepartmental with Epidemiology ~~P: STT 442~~ P: STT 442 or STT 380  
Probability, belief, and exchangeability. Objective, subjective, and empirical Bayes approaches. Applications to one-parameter models, linear regression models, and multivariate normal models. Hierarchical modeling. Computational methods.  
Effective Spring Semester 2025