

MICHIGAN STATE UNIVERSITY

Report of
THE UNIVERSITY COMMITTEE ON CURRICULUM
to the Faculty Senate
November 16, 2021

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 16, 2021

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. Any items not approved by the Faculty Senate will be reported to the appropriate college and department or school.
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

November 16, 2021

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 **Agribusiness Management** in the Department of Agricultural, Food, and Resource Economics.
 - a. Under the heading **Requirements for the Bachelor of Science Degree in Agribusiness Management** make the following changes:
 - (1) In item 1., delete paragraph three:

The completion of the Agribusiness Management mathematics requirement may also satisfy the College of Agriculture and Natural Resources and the University mathematics requirement.
 - (2) In item 3. a. delete the following course:

MTH	124	Survey of Calculus I	3
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Add the following course:

SCM	304	Survey of Supply Chain Management	3
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 - (3) Delete item 3.g. and reletter item 3.h. to 3.g.

Effective Spring 2022.

2. Change the requirements for the **Bachelor of Science** degree in **Environmental Economics and Management** in the Department of Agricultural, Food, and Resource Economics.
 - a. Under the heading **Requirements for the Bachelor of Science Degree in Environmental Economics and Management** make the following changes:
 - (1) In item 3. a. delete the following course:

MTH	124	Survey of Calculus I	3
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Add the following course:

SCM	304	Survey of Supply Chain Management	3
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 - (2) Delete item 3. g. and reletter item 3.h. to 3.g.

Effective Spring 2022.

3. Change the requirements for the **Bachelor of Science** degree in **Food Industry Management** in the Department of Agricultural, Food, and Resource Economics.

- a. Under the heading **Requirements for the Bachelor of Science Degree in Food Industry Management** make the following changes:

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

MTH 124 Survey of Calculus I 3

Add the following course:

SCM 304 Survey of Supply Chain Management 3

- (2) Delete item 3. g. and reletter item 3.h. to 3.g.

Effective Spring 2022.

COLLEGE OF ARTS AND LETTERS

1. Change the requirements for the **Bachelor of Arts** degree in **Art History and Visual Culture** in the Department of Art, Art History, and Design.

- a. Under the heading **Requirements for the Bachelor of Arts Degree in Art History and Visual Culture** make the following changes:

- (1) In item 2., change paragraph three to the following:

The completion of requirement 3. c. referenced below satisfied the College requirement for a cognate.

- (2) In item 3. a. (2) add the following course under *Asian*:

HA 262 Buddhist Art and Architecture Across Asia 3

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

HA 209 Ancient Art 3

- (4) In item 3. a. (5) delete the following course:

HA 463 Japanese Art 4

- (5) Change item 3. c. to the following:

A cognate of 15 credits from outside the student's major selected from areas such as museum studies, literature, a second language, material culture, or film studies. The cognate must be approved by the history of art advisor.

- (6) Delete item 3. d.

Effective Spring 2022.

2. Change the requirements for the **Minor in Art History and Visual Culture** in the Department of Art, Art History, and Design.

a. Under the heading **Requirements for the Minor in Art History and Visual Culture** make the following change:

- (1) In item 2., add the following course:

HA	262	Buddhist Art and Architecture Across Asia	3
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Effective Spring 2022.

3. Change the requirements for the **Bachelor of Fine Arts** degree in **Graphic Design** in the Department of Art, Art History, and Design.

a. Under the heading **Requirements for the Bachelor of Fine Arts Degree in Graphic Design** make the following changes:

- (1) In item 3. a. (2) in the *Electronic Art and Intermedia* area, add Studio Art 384 and Studio Art 385.

- (2) Replace item 3. a. (3) with the following:

Five of the following Graphic Design electives: Graphic Design 303, 462, 465, 466, 467, 468, and 491 (15 credits).

Effective Spring 2022.

ELI BROAD COLLEGE OF BUSINESS

1. Change the requirements for the **Master of Business Administration** degree in the Eli Broad College of Business. The University Committee on Graduate Studies (UCGS) approved this request at their October 18, 2021 meeting.

The concentrations in the Master of Business Administration degree 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 Business Administration Degree** make the following changes:

- (1) In item 1. a., delete the following courses:

MBA	820	Marketing Management	1.5
MBA	821	Introduction to Supply Chain Management Concepts	1.5
MBA	822	Corporate Investment Decisions	1.5
MBA	830	Marketing Strategy Execution	1.5
MBA	831	Supply Chain Management Applications	1.5
MBA	832	Corporate Financing Decisions	1.5
MBA	846	MBA Executive Lecture Series	1.0

Add the following courses:

MBA	820	Marketing Management	3
MBA	821	Introduction to Supply Chain Management Concepts	3
MBA	822	Corporate Investment Decisions	3
MBA	846	Executive Lecture Series	1 to 2

Effective Spring 2022.

2. Change the name of the **Minor in Hospitality Real Estate** to **Real Estate** in the School of Hospitality Business. The University Committee on Undergraduate Education (UCUE) approved this request at its October 7, 2021 meeting.

Students admitted to the major prior to Summer 2022 will be awarded a Minor in Hospitality Real Estate.

Students admitted to the major Summer 2022 and forward will be awarded a Minor in Real Estate.

Effective Summer 2022.

3. Change the requirements for the **Minor in Real Estate** in the School of Hospitality Business. The University Committee on Undergraduate Education (UCUE) approved this request at its October 7, 2021 meeting.

- a. Under the heading **Admission** make the following changes:

(1) Change item 1. to 'Completion of 28 credits'.

(2) Delete item 2. d. (Statistics courses)

- b. Under the heading **Minor in Real Estate** replace the entire entry with the following:

Students must complete all of the following courses (16 or 18 credits):

HB	273	Hospitality Business Analytics	3
Or			
ITM	209	Business Analytics and Information Systems	3
HB	282	Real Estate Principles	3
FI	311	Financial Management	3
Or			
FI	320	Introduction to Finance	3
HB	470	Real Estate Asset Management	3
FI	355	Financial Modeling	3
Or			
HB	472	Real Estate Financial Modeling	1
HB	474	Real Estate Valuation	3

Effective Summer 2022.

COLLEGE OF EDUCATION

1. Change the requirements for **Doctor of Education** degree in the College of Education. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

- a. Under the heading **Admission** delete the following statement from paragraph two:

, and submit scores earned on the Graduate Record Examination (GRE).

Effective Spring 2022.

2. Change the requirements for **Educational Specialist** degrees in the College of Education. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

- a. Under the heading **Admission** delete the following:

Scores for the Graduate Record Examination (GRE) General Test are required at the time the application for admission to an educational specialist program is submitted. This examination must have been taken no longer than five years prior to the application for admission. At the discretion of the department, applicants may be admitted on a provisional basis pending the required Graduate Record Examination General Test scores. Students thus admitted on a provisional basis must take the Graduate Record Examination General Test within a specified time period after enrollment in order to be considered for admission to regular status.

The Miller Analogies Test may be substituted for the Graduate Record Examination General Test by students in K–12 Educational Administration.

Effective Spring 2022.

3. Change the requirements for **Doctor of Philosophy** degrees in the College of Education. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

- a. Under the heading **Admission** delete the following:

Scores for the Graduate Record Examination General Test are required at the time the application for admission to a doctoral program is submitted. This examination must have been taken no longer than five years prior to the application for admission. At the discretion of the department, applicants may be admitted on a provisional basis pending the required Graduate Record Examination scores. Students who are thus admitted on a provisional basis must take the Graduate Record Examination General Test within a specified time period after enrollment in order to be considered for admission to regular status.

Effective Spring 2022.

4. Change the requirements for the **Bachelor of Arts** degree in **Special Education** in the Department of Counseling, Educational Psychology and Special Education. The Teacher Education Council (TEC) approved this request at its October 11, 2021 meeting.

- a. Under the heading **Admission**, delete the following:

In addition to general admission requirements, applicants applying for admission to the Teacher Certification Program with a major in special education must also complete one or two supervised pre-admission experiences totaling at least 42 hours in the area of learning disabilities. Prospective special education students are strongly encouraged to talk with special education faculty about the potential value of sites for securing the required experience. Applicants to the special education program must submit a form verifying completion of the experience with the completed application. Only students who have completed the required experience will be considered for admission.

Effective Spring 2022.

5. Change the requirements for the **Master of Arts** degree in **Special Education** in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

a. Under the heading **Requirements for the Master of Arts Degree in Special Education** make the following changes:

(1) Under the heading **Learning Disabilities - Master of Arts** delete item 1., and replace with the following:

1. All of the following courses (21 credits):

CEP	801A	Collaboration and Consultation in Special Education	3
CEP	802A	Reflection and Inquiry in Teaching Special Education I: Mild Impairments	3
CEP	803A	Assessment of Students with Mild Disabilities	3
CEP	804B	Advanced Diagnosis and Remediation for Students With Literacy Disabilities	3
CEP	842	Content-Area Instruction for Students with Mild Disabilities	3
CEP	850	Technology for Students with Disabilities	3
		Elective in TE or CEPSE	3
2. One of the following courses (3 credits):

CEP	804A	Literacy Instruction for Students with Mild Disabilities	3
TE	846	Accommodating Differences in Literacy Learners	3
3. Two of the following courses (6 credits):

CEP	840	Policies, Practices, and Perspectives in Special Education	3
CEP	841	Classroom and Behavior Management in the Inclusive Classroom	3
CEP	844	Applied Behavior Analysis for Teachers	3

(2) Under the heading **Learning Disabilities - Master of Arts with a Learning Disabilities Endorsement** make the following changes:

(a) Change the total credits from '36' to 30'.

(b) In item 1., delete the following courses:

CEP	804A	Literacy Instruction for Students with Mild Disabilities	3
CEP	894G	Special Education Practicum: Children and Youth with Learning Disabilities	3
TE	846	Accommodating Differences in Literacy Learners	3

(c) Add the following:

2. One of the following courses (3 credits):

CEP	802A	Reflective and Inquiry in Teaching Special Education I: Mild Impairments	3
TE	846	Accommodating Differences in Literacy Learners	3

Effective Spring 2022.

6. Eliminate the hybrid offering for the **Master of Arts** degree in **Higher Adult and Lifelong Education** in the Department of Educational Administration. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

Because of low enrollments, the HALE faculty have decided to no longer offer the Hybrid (2288) program for new students, as most choose to enroll into the existent fully online (6734) program. New admits are enrolling under the 6734 (online) program code. Only 5 students have enrolled in the 2288 program over the past 5 years, with the last enrolled student graduating Spring 2021.

Effective Spring 2022.

JAMES MADISON COLLEGE

1. Change the requirements for the **Bachelor of Arts** degree in **James Madison College [Comparative Cultures and Politics]**. The Teacher Education Council (TEC) approved this request at its October 11, 2021 meeting.
 - a. Under the heading **Requirements for the Bachelor of Arts Degree in James Madison College** make the following changes:
 - (1) Under the heading **Comparative Cultures and Politics** add the following course in item 1. b. under both the *Comparative Studies* group and *Transnational Studies* group:

MC	338	Environmental Justice and Global Change	4
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Effective Spring 2022.

COLLEGE OF MUSIC

1. Change the requirements for the **Doctor of Musical Arts** in **Collaborative Piano** in the College of Music. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.
 - a. Under the heading **Requirements for the Doctor of Musical Arts Degree in Collaborative Piano** replace item 5. a. and b. with the following:
 - a. Complete 24 credits of Music 996 Doctoral Recital Performance. These credits must include at least six semesters of instruction in collaborative piano, 3 credits of instruction in applied piano (1 credit for each of three semesters), 4 credits of instruction in piano performance (1 credit for each of four semesters), 2 credits of instruction in chamber music (1 credit for each of two semesters), and 4 credits of collaborative performance of vocal repertoire (2 credits for each of two semesters). These requirements may be met concurrently.
 - b. Perform five public collaborative recitals that have been approved by a committee of faculty from the student's piano area, two of which must be presented within two consecutive semesters, excluding summers. Two of the recitals must be instrumental recitals; two of the recitals must be vocal recitals. The fifth recital may be either an instrumental, vocal, or chamber recital. A recording of each of the five recitals must be submitted to the Office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record.

Effective Fall 2022.

2. Change the requirements for the **Doctor of Musical Arts** degree in **Music Composition** in the College of Music. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

- a. Under the heading **Requirements for the Doctor of Musical Arts Degree in Music Composition** replace item 4. b. with the following:

Complete an original music composition under the guidance of a faculty member in the composition area that is acceptable to the student's guidance committee. A copy of the dissertation must be submitted to the office of the Associate Dean for Graduate Studies and will be retained as part of the permanent degree record.

Effective Spring 2022.

3. Change the requirements for the **Master of Music** degree in **Music Performance** in the College of Music. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

- a. Under the heading **Requirements for the Master of Music Degree in Music Performance** replace the entire entry with the following:

The student must meet the requirements for one of the following three broad areas of music performance: instrumental music, instrumental specialist, or vocal music.

Instrumental Music

The student must meet the requirements for one of the following five major areas of instrumental music: piano, brass instruments, stringed instruments, woodwind instruments, or percussion instruments:

1. **Piano**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

CREDITS

- a. Complete the following course (14 credits):
MUS 896 Master's Performance 14
These credits must include at least 6 credits of instruction in piano (1 to 2 credits for each of four semesters), 4 credits of piano performance (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters).
- b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits)
- c. Complete 4 to 6 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896.
- d. Perform a piano recital under the guidance of the student's applied music instructor and approved by a committee from the piano area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record.
- e. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the piano area, and a faculty member from either the music theory or musicology area.

2. **Brass Instruments**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

CREDITS

- a. Complete the following course (14 credits):
MUS 896 Master's Performance 14

- These credits must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters).
- b. Complete 6 credits in musicology at the 400-level or above and two courses in musicology (4 to 6 credits) at the 400-level or above. (10 to 12 credits)
 - c. Complete 4 to 6 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896.
 - d. Perform a recital on the student's major instrument under the guidance of the student's applied music instructor and approved by a committee from the brass area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record.
 - e. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the brass area, and a faculty member from either the music theory or musicology area.

3. **Stringed Instruments**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

CREDITS

- a. Complete the following course (14 credits):
MUS 896 Master's Performance 14
These credits must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters).
- b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits)
- c. Complete 4 to 6 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896.
- d. Perform a recital on the student's major instrument under the guidance of the student's applied music instructor and approved by a committee from the string area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record.
- e. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the string area, and a faculty member from either the music theory or musicology area.

4. **Woodwind Instruments**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

CREDITS

- a. Complete the following course (14 credits):
MUS 896 Master's Performance 14
These credits must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters).
- b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits)
- c. Complete 4 to 6 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896.
- d. Perform a recital on the student's major instrument under the guidance of the student's applied music instructor and approved by a committee from the woodwind area in a pre-recital hearing. A recording of the

recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record.

- e. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the woodwind area, and a faculty member from either the music theory or musicology area.

5. **Percussion Instruments**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

- | | CREDITS |
|---|---------|
| a. Complete the following course (14 credits): | |
| MUS 896 Master's Performance | 14 |
| These credits must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters). | |
| b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits) | |
| c. Complete 4 to 6 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896. | |
| d. Perform a percussion recital under the guidance of the student's applied music instructor and approved by a committee from the percussion area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record. | |
| e. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the percussion area, and a faculty member from either the music theory or musicology area. | |

Instrumental Specialist

The student must meet the requirements for one of the following three major specialties: brass instruments specialist, stringed instruments specialist, or woodwind instruments specialist:

1. **Brass Instruments Specialist**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

- | | CREDITS |
|---|---------|
| a. Complete both of the following courses (16 credits): | |
| MUS 847 Secondary or Specialist Emphasis: Brass | 2 |
| MUS 896 Master's Performance | 14 |
| Each of the 2 credits of MUS 847 is associated with instruction in one of the student's two required secondary instruments. The 14 credits of MUS 896 must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters). | |
| b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits) | |
| c. Complete 2 to 4 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896. | |
| d. Present a performance on each of the student's two required secondary instruments. The performance must be acceptable to a committee of faculty in the area of brass instruments. | |
| e. Perform a recital on the student's primary instrument under the guidance of the student's applied music instructor and approved by a committee from the brass area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for | |

- Graduate Studies and will be retained by the College as part of the permanent degree record.
- f. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the brass area, and a faculty member from either the music theory or musicology area.

2. **Stringed Instruments Specialist**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

- | | CREDITS |
|--|---------|
| a. Complete both of the following courses (15 credits): | |
| MUS 846 Secondary or Specialist Emphasis: String | 1 |
| MUS 896 Master's Performance | 14 |
| The credit of MUS 846 is associated with instruction in the student's required secondary instrument. The 14 credits of MUS 896 must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters). | |
| b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits) | |
| c. Complete 3 to 5 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896. | |
| d. Present a performance on the student's required secondary instrument. The performance must be acceptable to a committee of faculty in the area of stringed instruments. | |
| e. Perform a recital on the student's primary instrument under the guidance of the student's applied music instructor and approved by a committee from the string area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree recording. | |
| f. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the string area, and a faculty member from either the music theory or musicology area. | |

3. **Woodwind Instruments Specialist**

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

- | | CREDITS |
|---|---------|
| a. Complete both of the following courses (17 credits): | |
| MUS 848 Secondary or Specialist Emphasis: Woodwind | 3 |
| MUS 896 Master's Performance | 14 |
| Each of the 3 credits of MUS 848 is associated with instruction in one of the student's three required secondary instruments. The 14 credits of MUS 896 must include at least 6 credits of instruction in the major instrument (1 to 2 credits for each of four semesters), 4 credits of major ensemble (1 credit for each of four semesters), and 4 credits of instruction in chamber music (1 credit for each of four semesters). | |
| b. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits) | |
| c. Complete 1 to 3 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896. | |
| d. Present a performance on each of the student's three required secondary instruments. Each of the three performances must be acceptable to a committee of faculty in the area of woodwind instruments. | |
| e. Perform a recital on the student's primary instrument under the guidance of the student's applied music instructor and approved by a committee from the woodwind area in a pre-recital hearing. A recording | |

of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree recording.

- f. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the woodwind area, and a faculty member from either the music theory or musicology area.

Vocal Music

The program is available only under Plan B (without thesis). A total of 30 credits is required for the degree. The student's program of study must be approved by the student's academic advisor. The student must meet the requirements specified below:

- | | CREDITS |
|---|---------|
| 1. Complete both of the following courses (11 credits): | |
| MUS 435 Opera Theatre | 1 |
| MUS 896 Master's Performance | 10 |
| The credits of MUS 896 must include at least 8 credits of instruction in voice (2 credits for each of four semesters) and 2 credits of major ensemble (1 credit each of two semesters) | |
| 2. Complete 6 credits in musicology at the 400-level or above and two courses in music theory (4 to 6 credits) at the 400-level or above. (10 to 12 credits) | |
| 3. Complete 7 to 9 credits of elective courses in music at the 400-level or above, exclusive of additional credits in MUS 896. | |
| 4. Complete one semester of study each in French, German, and Italian. Credits in courses in a foreign language may not be counted toward the requirements for the Master of Music degree. Courses completed as part of an undergraduate degree program may be used to satisfy this requirement. | |
| 5. Perform a vocal recital under the guidance of the student's applied music instructor and approved by a committee from the vocal arts area in a pre-recital hearing. A recording of the recital must be submitted to the office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree recording. | |
| 6. Complete the final oral certifying examination administered by a committee consisting of the student's applied music instructor, another member from the vocal arts area, and a faculty member from either the music theory or musicology area. | |

- b. Delete the section **Academic Standards**.

Effective Fall 2022.

4. Change the requirements for the **Doctor of Musical Arts** degree in **Music Performance** in the College of Music. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.
 - a. Under the heading **Requirements for the Doctor of Musical Arts Degree in Music Performance** replace items 4. a. and b. with the following:
 - a. Complete 24 credits of Music 996 Doctoral Performance.
 - 1) For those students whose major instrument is piano, these credits must include at least six semesters of instruction in applied piano, four semesters of instruction in chamber music (1 credit for each of four semesters), and four semesters of instruction in piano performance (1 credit for each of four semesters). These requirements may be met concurrently.
 - 2) For those students whose major instrument is a stringed, brass, woodwind or percussion instrument, these credits must include at least six semesters of instruction in the major instrument, six semesters of instruction in band or orchestra (1 credit for each of six semesters), and four semesters of instruction in chamber music (1 credit each of four semesters). These requirements may be met concurrently.
 - 3) For those students whose major instrument is voice, these credits must include at least six semesters of instruction in voice and two semesters of instruction in opera theater, chamber music, or choir (1-2 credits for each).

- b. Perform four public recitals that have been approved in a pre-recital hearing by a committee of faculty from the student's area. Three of the recitals must be solo recitals, two of which must be presented within two consecutive semesters, excluding summers. The fourth recital must be a chamber music recital. For those students whose major instrument is a stringed, woodwind, brass or percussion instrument, a mock audition for a professional orchestra or wind ensemble, as outlined in the Graduate Handbook, may substitute for one solo recital with the prior approval of the applied teacher and the area chair. For those students whose major instrument is voice, a significant opera role, as determined by the faculty of the voice area, may substitute for the chamber music recital. A second significant opera role may substitute for one of the solo recitals. A recording of each of the four recitals, mock auditions, or opera roles must be submitted to the Office of the Associate Dean for Graduate Studies and will be retained by the College as part of the permanent degree record.

Effective Fall 2022.

COLLEGE OF NATURAL SCIENCE

1. Change the requirements for the **Bachelor of Science** degree in **Human Biology** in the College of Natural Science.
- a. Under the heading **Requirements for the Bachelor of Science Degree in Human Biology** make the following changes:
- (1) Delete item 3. a. (4).
- (2) Add the following item 3. g. (3):
- | | | | |
|-----|-----|---------------------------------------|---|
| PHY | 221 | Studio Physics for Life Scientists I | 4 |
| PHY | 222 | Studio Physics for Life Scientists II | 4 |
- (3) Renumber items 3. g. (3), (4), and (5) to 3. g. (4), (5), and (6) respectively.
- (4) In item 3. i., delete the following courses:
- | | | | |
|------|-----|---------------------------------|--------|
| IBIO | 483 | Environmental Physiology (W) | 4 |
| NSC | 496 | Directed Study in Human Biology | 1 to 3 |
| NSC | 497 | Internship in Human Biology | 1 to 3 |
| NSC | 498 | Research in Human Biology | 1 to 3 |

Effective Spring 2022.

2. Change the requirements for the **Bachelor of Science** degree in **Environmental Biology/Microbiology** in the Department of Microbiology and Molecular Genetics.
- a. Under the heading **Requirements for the Bachelor of Science Degree in Environmental Biology/Microbiology** replace item 3. with the following:
- a. The following courses outside the Department of Microbiology and Molecular Genetics (61 to 70 credits):
- (1) One of the following, either a. or b. (4 or 6 credits):
- | | | | | |
|-----|-----|-----|----------------------------|---|
| (a) | BMB | 461 | Advanced Biochemistry I | 3 |
| | BMB | 462 | Advanced Biochemistry II | 3 |
| (b) | BMB | 401 | Comprehensive Biochemistry | 4 |

(2)	All of the following courses (18 credits):			
	CSS	210	Fundamentals of Soil Science	3
	ENE	280	Principles of Environmental Engineering and Science	3
	GLG	201	The Dynamic Earth	4
	GLG	421	Environmental Geochemistry	4
	IBIO	355	Ecology	3
	IBIO	355L	Ecology Laboratory (W)	1
(3)	One of the following groups of courses (6 or 9 credits):			
(a)	BS	161	Cell and Molecular Biology	3
	BS	162	Organismal and Population Biology	3
(b)	LB	144	Biology I: Organismal Biology	4
	LB	145	Biology II: Cell and Molecular Biology	5
(c)	BS	181H	Honors Cell and Molecular Biology	3
	BS	182H	Honors Organismal and Population Biology	3
(4)	One of the following courses (2 credits):			
	BS	171	Cell and Molecular Biology Laboratory	2
	BS	172	Organismal and Population Biology Laboratory	2
	BS	191H	Honors Cell and Molecular Biology Laboratory	2
	BS	192H	Honors Organismal and Population Biology Laboratory	2
	This requirement is waived for students who selected item (3) (b) above			
(5)	One of the following groups of courses (9 or 10 credits):			
(a)	CEM	141	General Chemistry	4
	CEM	142	General and Inorganic Chemistry	3
	CEM	161	Chemistry Laboratory I	1
	CEM	162	Chemistry Laboratory II	1
(b)	LB	171	Principles of Chemistry I	4
	LB	172	Principles of Chemistry II	4
	LB	171L	Introductory Chemistry Laboratory I	1
	LB	172L	Principles of Chemistry II – Reactivity Laboratory	1
(c)	CEM	151	General and Descriptive Chemistry	4
	CEM	152	Principles of Chemistry	3
	CEM	161	Chemistry Laboratory I	1
	CEM	162	Chemistry Laboratory II	1
(d)	CEM	181H	Honors Chemistry I	4
	CEM	182H	Honors Chemistry II	4
	CEM	185H	Honors Chemistry Laboratory	2
(6)	One of the following groups of courses (8 credits):			
(a)	CEM	251	Organic Chemistry I	3
	CEM	252	Organic Chemistry II	3
	CEM	255	Organic Chemistry Laboratory	2
(b)	CEM	351	Organic Chemistry I	3
	CEM	352	Organic Chemistry II	3
	CEM	355	Organic Chemistry Laboratory I	2
(7)	One of the following (3 or 4 credits):			
	MTH	132	Calculus I	3
	LB	118	Calculus I	4
	MTH	152H	Honors Calculus I	3
(8)	One of the following (3 credits):			
	STT	231	Statistics for Scientists	3
	STT	421	Statistics I	3
	MTH	133	Calculus II	3
(9)	One of the following groups of courses (8 or 10 credits)			
(a)	PHY	231	Introductory Physics I	3
	PHY	232	Introductory Physics II	3
	PHY	251	Introductory Physics Laboratory I	1
	PHY	252	Introductory Physics Laboratory II	1
(b)	PHY	241	Physics for Cellular and Molecular	

			Biologists I	4
	PHY	242	Physics for Cellular and Molecular Biologists II	4
	PHY	251	Introductory Physics Laboratory I	1
	PHY	252	Introductory Physics Laboratory II	1
(c)	PHY	183	Physics for Scientists and Engineers I	4
	PHY	184	Physics for Scientists and Engineers II	4
	PHY	191	Physics Laboratory for Scientists, I	1
	PHY	192	Physics Laboratory for Scientists, II	1
(d)	LB	273	Physics I	4
	LB	274	Physics II	4
(e)	PHY	193H	Honors Physics I-Mechanics	4
	PHY	294H	Honors Physics II- Electromagnetism	4
	PHY	191	Physics Laboratory for Scientists, I	1
	PHY	192	Physics Laboratory for Scientists, II	1
b.	The following courses in the Department of Microbiology and Molecular Genetics (19 credits):			
(1)	All of the following courses (13 credits):			
	MMG	301	Introductory Microbiology	3
	MMG	302	Introductory Laboratory for General and Allied Health Microbiology	1
	MMG	421	Prokaryotic Cell Physiology	3
	MMG	425	Microbial Ecology	3
	MMG	431	Microbial Genetics	3
(2)	One of the following courses (3 credits):			
	MMG	408	Advanced Microbiology Laboratory (W)	3
	MMG	494	Summer Undergraduate Research Institute in Genomics (W)	3
(3)	One of the following two options (3 credits):			
(a)	MMG	491	Current Topics in Microbiology and Molecular Genetics	3
(b)	MMG	492	Undergraduate Research Seminar	1
	One of the following courses:			
	MMG	499	Undergraduate Research	2
	MMG	499H	Honors Research	2
(c)	MMG	493	Professional Internship in Microbiology and Molecular Genetics	3
	The completion of either of these three options fulfills the department's capstone course requirement.			
c.	One course from two of the following areas (6 to 8 credits):			
(1)	CSS	455	Pollutants in the Soil Environment	3
(2)	FOR	340	Forest Ecology	3
	PLB	402	Biology of Fungi	4
(3)	FSC	440	Food Microbiology	3
(4)	GEO	206	Physical Geography	3
	GEO	221	Introduction to Geographic Information	3
(5)	GLG	435	Geomicrobiology	4
(6)	MMG	445	Microbial Biotechnology (W)	3
(7)	FOR	466	Natural Resource Policy	3
	IBIO	446	Environmental Issues and Public Policy	3
(8)	FW	420	Stream Ecology	3
	FW	472	Limnology	3
(9)	MMG	433	Microbial Genomics	3
	PLB	400	Introduction to Bioinformatics	3
(10)	IBIO	357	Global Change Biology (W)	3

3. Change the requirements in the **Bachelor of Science** degree in **Genomics and Molecular Genetics** in the Department of Microbiology and Molecular Genetics.

a. Under the heading **Requirements for the Bachelor of Science Degree in Microbiology and Molecular Genetics** make the following changes:

(1) In item 3. a. (4) (d) delete the following course:
 CEM 186H Honors Chemistry Laboratory II 2

(2) In item 3. a. (6) delete the following course:
 ZOL 341 Fundamental Genetics 4

Add the following course:

IBIO 341 Fundamental Genetics 4

(3) Replace item 3. a. (7) with the following:

One of the following groups of courses (8 to 10 credits)

- | | | | | |
|-----|-----|------|--|---|
| (a) | PHY | 231 | Introductory Physics I | 3 |
| | PHY | 232 | Introductory Physics II | 3 |
| | PHY | 251 | Introductory Physics Laboratory I | 1 |
| | PHY | 252 | Introductory Physics Laboratory II | 1 |
| (b) | LB | 273 | Physics I | 4 |
| | LB | 274 | Physics II | 4 |
| (c) | PHY | 183 | Physics for Scientists and Engineers I | 4 |
| | PHY | 184 | Physics for Scientists and Engineers II | 4 |
| | PHY | 191 | Physics Laboratory for Scientists, I | 1 |
| | PHY | 192 | Physics Laboratory for Scientists, II | 1 |
| (d) | PHY | 193H | Honors Physics I – Mechanics | 4 |
| | PHY | 294H | Honors Physics II – Electromagnetism | 4 |
| | PHY | 191 | Physics Laboratory for Scientists, I | 1 |
| | PHY | 192 | Physics Laboratory for Scientists, II | 1 |
| (e) | PHY | 241 | Physics for Cellular and Molecular Biologists I | 4 |
| | PHY | 242 | Physics for Cellular and Molecular Biologists II | 4 |
| | PHY | 251 | Introductory Physics Laboratory I | 1 |
| | PHY | 252 | Introductory Physics Laboratory II | 1 |

(4) In item 3. b. make the following changes:

(a) Change the total credits from '19' to '19 to 20'.

(b) In item (2) change the total credits from '3' to '3 or 4'.

(c) In item (2) change the credits of 'MMG 334' from '3' to '4'.

(d) In item (2) add the following course:

MMG 494 Summer Undergraduate Research Institute in Genomics (W) 3

(5) Change item 3. b. (3) to the following:

One of the following three options (3 credits):

- | | | | | |
|-----|-----|------|---|---|
| (a) | MMG | 491 | Current Topics in Microbiology and Molecular Genetics | 3 |
| (b) | MMG | 492 | Undergraduate Research Seminar | 1 |
| | | | One of the following courses: | |
| | MMG | 499 | Undergraduate Research | 2 |
| | MMG | 499H | Honors Research | 2 |

(c) MMG 493 Professional Internship in Microbiology and Microbiology and Molecular Genetics 3
The completion of Microbiology 491, 493; or Microbiology 492 and 499 or 499H, fulfills the department's capstone course requirement.

(6) In item 3. c. delete the following courses:

CSS 441 Plant Breeding and Biotechnology 3
PLB 400 Introduction to Bioinformatics 3
ZOL 445 Evolution (W) 3

Add the following courses:

ANS 404 Introduction to Quantitative Genetics 3
CMSE 201 Computational Modeling and Data Analysis I 4
CMSE 202 Computational Modeling and Data Analysis II 4
CMSE 410 Bioinformatics and Computational Biology 3
CMSE 411 Computational Medicine 3
CSS 451 Biotechnology Applications for Plant Breeding and Genetics 3
IBIO 445 Evolution (W) 3

Effective Spring 2022.

4. Change the requirements in the **Bachelor of Science** degree in **Microbiology** in the Department of Microbiology and Molecular Genetics.

a. Under the heading **Requirements for the Bachelor of Science Degree in Microbiology** make the following changes:

(1) In item 3. a. (4) (d) delete the following course:

CEM 186H Honors Chemistry Laboratory II 2

(2) Add item 3. a. (6) (e):

PHY 241 Physics for Cellular and Molecular Biologists I 4
PHY 242 Physics for Cellular and Molecular Biologists II 4
PHY 251 Introductory Physics Laboratory I 1
PHY 252 Introductory Physics Laboratory II 1

(3) In item 3. b. (1) change the total credits from '13' to '10' and delete the following course:

MMG 408 Advanced Microbiology Laboratory (W) 3

(4) Renumber item 3. b. (2) to item 3. b. (3).

(5) Add a new item 3. b. (2):

One of the following courses (3 credits):
MMG 408 Advanced Microbiology Laboratory (W) 3
MMG 494 Summer Undergraduate Research Institute in Genomics (W) 3

(6) Change item 3. b. (3) to the following:

One of the following, either (a), (b), or (c) (3 credits):
(a) MMG 491 Current Topics in Microbiology and Molecular Genetics 3
(b) MMG 492 Undergraduate Research Seminar 1

- and
One of the following courses:
- | | | | |
|-----|----------|---|---|
| | MMG 499 | Undergraduate Research | 2 |
| | MMG 499H | Honors Research | 2 |
| (c) | MMG 493 | Professional Internship in Microbiology
and Molecular Genetics | 3 |
- The completion of Microbiology 491, 493, or Microbiology 492 and 499 or 499H, fulfills the department's capstone course requirement.

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

	MMG 463	Medical Microbiology	3
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Add the following courses:

	MMG 365	Medical Microbiology	3
	MMG 465	Advanced Medical Microbiology	3

Effective Spring 2022.

5. Change the requirements in the **Doctor of Philosophy** degree in **Microbiology and Molecular Genetics** in the Department of Microbiology and Molecular Genetics. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.

- a. Under the heading **Admission** replace the entire entry with the following:

Admission to the Doctor of Philosophy degree in Microbiology and Molecular Genetics is through the BioMolecular Science Gateway – First Year (BMS). The successful applicant will typically have: a bachelor's degree (four-year or equivalent) or Master of Science degree that includes course work that demonstrates proficiency in math and science; a grade point average of 3.50 or above; significant research experience equivalent to a minimum of one full-time summer research experience or four semesters of part-time research experience; and strong letters of reference.

- b. Under the heading **Requirements for the Doctor of Philosophy Degree in Microbiology and Molecular Genetics** replace the entire entry with the following:

The student must:

1. Complete a minimum of four graduate courses (excluding topics and seminar courses) covering the areas of genetics, microbiology, and biochemistry. At least two of these courses must be offered by the Department of Microbiology and Molecular Genetics.
 - a. One course must focus on Molecular Biology or Genetics and include one of the following courses or an approved equivalent as approved by the Director of Graduate Studies.

	BMB 801	Molecular Biology	3
	MMG 833	Microbial Genetics	3
	MMG 835	Eukaryotic Molecular Genetics	3
 - b. One course must focus on Cell Biology or Cell Physiology and include one of the following courses or an approved equivalent as approved by the Director of Graduate Studies.

	BMB 802	Metabolic Regulation and Signal Transduction	3
	MMG 801	Integrative Microbial Biology	4
	MMG 825	Cell Structure and Function	3
 - c. Other approved course electives include:

	BMB 803	Protein Structure and Function	2
	BMB 805	Protein Structure, Design, and Mechanism	3
	MMG 813	Molecular Virology	3
	MMG 851	Immunology	3
	MMG 861	Advanced Microbial Pathogenesis	3

2. Complete three special topics graduate seminar courses (MMG 803, MMG 991 or other departmental seminar courses as approved by the Director of Graduate Studies chosen to increase the breadth and depth of knowledge in your field.
3. Pass a comprehensive examination that includes a written research proposal, public seminar and oral examination with the student's guidance committee.
4. Complete 24 credits of MMG 999 Doctoral Dissertation Research.
5. Submit a dissertation and a publishable manuscript based on original research and representing a new and significant contribution to knowledge.

All doctoral students in microbiology and molecular genetics are required to participate in laboratory teaching through enrollment of 1 credit of MMG 892 and are expected to attend departmental seminars through enrollment in 4 credits of MMG 892. In addition, all students must participate in the Work in Progress (WiPs) seminar series.

Effective Spring 2022.

6. Change the requirements for the **Doctor of Philosophy** degree in **Plant Biology** in the Department of Plant Biology. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.
 - a. Under the heading **Requirements for the Doctor of Philosophy Degree in Plant Biology** make the following changes:
 - (1) In item 1. a. delete the following course:

PLB	804	Frontiers in Plant Biology	2
-----	-----	----------------------------	---
 - (2) Replace item 1. c. delete the following courses:

ZOL	891	Current Topics in Ecology and Evolution	1
ZOL	895	Seminar	1

Add the following courses:

IBIO	891	Current Topics in Ecology and Evolution	1
IBIO	895	Seminar	1

Effective Spring 2022.

COLLEGE OF NURSING

1. Change the requirements for the **Doctor of Philosophy** degree in **Nursing**. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.
 - a. Under the heading **Requirements for the Doctor of Philosophy Degree in Nursing** make the following changes:
 - (1) In item 1. change the total credits from '66' to '65'.
 - (2) Under the **Course Requirements** in item 3., change the credits from '3' to '1 to 3'.

Effective Spring 2022.

COLLEGE OF OSTEOPATHIC MEDICINE

1. 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 October 18, 2021 meeting.
 - a. Under the heading **Requirements for the Doctor of Osteopathic Medicine Degree** make the following changes:
 - (1) Under the heading **PreClerkship Curriculum** make the following changes:
 - (a) Change the total credits from '98' to '100' and add the following course:

OST	559	Pediatrics IV	1
-----	-----	---------------	---
 - (b) Delete the following course:

OST	580	Respiratory System	6
-----	-----	--------------------	---

Add the following course:

OST	580	Respiratory System	7
-----	-----	--------------------	---
 - (2) Under the heading **Clerkship Curriculum** make the following changes:
 - (a) Under the heading *Required Clinical Clerkship Core Rotation Courses* change 'OST 653' to 'OSS 653'.
 - (b) Under the heading *Required clinical elective clerkship rotation courses* add the following courses:

OST	622	Addiction Medicine	3
OST	623	Board Preparation	1 to 6
OST	624	Essentials in Diabetes	3

Effective Spring 2022.

COLLEGE OF SOCIAL SCIENCE

1. Change the requirements in the **Graduate Specialization in International Development** in the College of Social Science. The University Committee on Graduate Studies (UCGS) approved this request at its October 18, 2021 meeting.
 - a. Under the heading **Requirements for the Graduate Specialization in International Development** replace the entire entry with the following:

Any course that was used to satisfy the requirements for the undergraduate Specialization in International Development may not be used to satisfy the requirements for the Graduate Specialization in International Development. The student's program of study must be approved by the graduate student advisor for international development and must meet the requirements specified below.

The student must complete 12 credits as outlined below:

 - (1) Complete two of the Core Courses listed below. Only one of the courses may be at the 400-level (6 credits).
 - (2) Complete at least two additional courses of at least 3 credits each, which are relevant to international development, either from the Core Courses listed below or from applicable courses selected in consultation with the international development advisor. (6 credits)

Core Courses:

AFRE	817	Political Economy of Agricultural Trade Policy	3
AFRE	861	Agriculture in Economic Development	3
ANP	436	Globalization and Justice: Issues in Political and Legal Anthropology	3
CSUS	826	International Development Theory and Practice	3
CSUS	848	Community-Based Natural Resource Management in International Development	3
EAD	947	Comparative International Education Policy	3
EAD	972	International and Comparative Issues in Higher and Adult Education	3
EC	410	Issues in the Economics of Developing Countries	3
EC	840	International Trade: Theory and Commercial Policy	3
FOR	833	Human Dimensions of Forest Carbon Management	3
FOR	835	Forest Carbon Policy, Economics and Finance	3
GEO	816	The World System of Cities	3
GEO	872	Seminar in Human Geography	3
PHL	452	Ethics and Development	3
SOC	852	Migration and Social Change	3
TE	923	Comparative Perspectives on Curriculum, Instruction, and Teacher Education	3
WS	403	Women and Change in Developing Countries	3

Effective Spring 2022.

2. Change the requirements for the **Bachelor of Science** degree in **Economic Geography** in the Department of Geography, Environment, and Spatial Sciences.

- a. Under the heading **Requirements for the Bachelor of Arts Degree in Economic Geography** make the following changes:

- (1) In item 3., change the total credits from '42 or 43' to '43 or 44'.

- (2) In item 3. d., change the total credits from '6' to '7' and add the following course:

GEO	221L	Introduction to Geographic Information Laboratory	1
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- (3) In item 3. e., add the following courses:

GEO	410	Geography of Food and Agriculture	3
GEO	436	Spatial Analysis of Populations	3
GEO	498	Internship in Geography	3

- (4) In item 3. h., delete the following courses:

AFRE	320	Environmental Economics	3
EC	306	Comparative Economic Systems	3
UP	314	Methods for Investigation of Urban Systems	4
UP	353	Land Use Planning	4

Add the following courses:

AFRE	265	Ecological Economics	3
AFRE	360	Environmental Economics	3
CSUS	273	Introduction to Travel and Tourism	3
EC	202	Introduction to Macroeconomics	3
UP	458	Housing and Real Estate Development	3
UP	478	Urban Transportation Planning	3
UP	488	The Sustainable and Climate Resilient City	3

Effective Fall 2022.

3. Change the requirements for the **Minor in Geographic Information Science** in the Department of Geography, Environment, and Spatial Sciences.

a. Under the heading **Requirements for the Minor in Geographic Information Science** make the following changes:

(1) Delete item 2.

(2) Renumber item 3. to item 2. and make the following changes:

(a) Change the total credits from '14' to '17'.

(b) Delete the following courses:

GEO	419	Application of Geographic Information Systems to Natural Resources Management	4
GEO	423	Cartographic Design and Production	4
GEO	428	Digital Terrain Analysis	4

Add the following courses:

GEO	326	Cartographic Design and Production	4
GEO	428	Digital Terrain Analysis	3
GEO	429	Geoprocessing	3
GEO	490	Independent Study	3
GEO	498	Internship in Geography	3

(3) Replace the note in item 2. with the following:

Both GEO 490 and 498 must include geographic information science, remote sensing, or cartography content to fulfill this requirement. Prior to enrolling in a section of either of these courses, the student must obtain approval from an undergraduate academic advisor in the Department of Geography, Environment, and Spatial Sciences.

Effective Fall 2022.

4. Change the requirements for the **Bachelor of Arts** degree in **History Education**. The Teacher Education Council (TEC) approved this request at its October 11, 2021 meeting.

a. Under the heading **Requirements for the Bachelor of Arts Degree in History Education** make the following changes:

(1) In item 6. delete the following course:

TE	250	Human Diversity, Power and Opportunity in Social Institutions	3
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Add the following course:

TE	101	Social Foundations in Justice and Equity In Education	3
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Effective Spring 2022.

COLLEGE OF VETERINARY MEDICINE

1. Change the requirements for the **Bachelor of Science** degree in **Veterinary Nursing** in the College of Veterinary Medicine.

a. Under the heading **Admission**, in paragraph four, change item 1. to the following:

Completion of at least 28 credits of the University graduation requirements or transfer equivalents including:

b. Under the heading **Requirements for the Bachelor of Science Degree in Veterinary Nursing** make the following changes:

(1) In item 1., change paragraph three to the following:

The University's Tier II writing requirement for the Veterinary Nursing major is met by completing the following courses: Veterinary Medicine 410 and 412. Those courses are referenced in items 2. a. below.

(2) In item 2., change the total credits from '102 credits' to '90 to 97 credits'.

(3) In item 2. a. change the total credits from '72 credits' to '75 credits'.

(4) In item 2. a., add the following to the existent list of courses:

and

One of the following courses (3 credits)

VM	414	Veterinary Nursing Clerkship in Equine Medicine and Surgery	3
VM	415	Veterinary Nursing Clerkship in Food Animal and Equine Medicine and Surgery	3
VM	450	Veterinary Nursing Clerkship in Emergency Medicine	3
VM	451	Veterinary Nursing Clerkship in Cardiology	3
VM	452	Veterinary Nursing Clerkship in Neurology	3
VM	453	Veterinary Nursing Clerkship in Ophthalmology	3
VM	454	Veterinary Nursing Clerkship in Critical Care	3
VM	458	Veterinary Nursing Clerkship in Companion Animal Diagnostic Ultrasound	3
VM	466	Veterinary Nursing Clerkship in Large Animal Anesthesia	3
VM	470	Veterinary Nursing Clerkship in Food Animal Medicine	3
VM	480	Veterinary Nursing Clerkship in Clinical Pathology	3
VM	482	Veterinary Nursing Clerkship in Necropsy	3
VM	483	Veterinary Nursing Clerkship in Biomedical Research	3
VM	484	Veterinary Nursing Clerkship in Zoo and Wildlife Medicine	3
VM	486	Veterinary Nursing Clerkship in Clinical Parasitology	3
VM	490	Veterinary Nursing Clerkship in Special Problems	3

(5) In item 2. b., renumber item (3) to item (4).

(6) Add the following item (3) in item 2. b.:

(3)	MTH	103A	College Algebra I	3
	MTH	103B	College Algebra II	3
			and	
			One of the following:	
	MTH	101	Quantitative Literacy I	3
	MTH	102	Quantitative Literacy II	3
	MTH	114	Trigonometry	3
	MTH	201	Elementary Mathematics for Teachers I	3
	STT	200	Statistical Methods	3
	STT	201	Statistical Methods	4

(7) Replace item 2. c. with the following:

One of the following options, 15 credits from Elective Group 1 or 15 credits from Elective Group 2. Courses used to satisfy requirement 2. a. above may not be used to fulfill this requirement.

- (1) **Veterinary Nursing Elective Group 1:**
- | | | | |
|----|-----|---|---------|
| VM | 414 | Veterinary Nursing Clerkship in Equine Medicine and Surgery | 3 to 6 |
| VM | 415 | Veterinary Nursing Clerkship in Food Animal and Equine Medicine and Surgery | 3 to 6 |
| VM | 450 | Veterinary Nursing Clerkship in Emergency Medicine | 3 |
| VM | 451 | Veterinary Nursing Clerkship in Cardiology | 3 |
| VM | 452 | Veterinary Nursing Clerkship in Neurology | 3 |
| VM | 453 | Veterinary Nursing Clerkship in Ophthalmology | 3 |
| VM | 454 | Veterinary Nursing Clerkship in Critical Care | 3 |
| VM | 458 | Veterinary Nursing Clerkship in Companion Animal Diagnostic Ultrasound | 3 |
| VM | 466 | Veterinary Nursing Clerkship in Large Animal Anesthesia | 3 |
| VM | 470 | Veterinary Nursing Clerkship in Food Animal Medicine | 3 to 6 |
| VM | 480 | Veterinary Nursing Clerkship in Clinical Pathology | 3 |
| VM | 482 | Veterinary Nursing Clerkship in Necropsy | 3 |
| VM | 483 | Veterinary Nursing Clerkship in Biomedical Research | 3 to 12 |
| VM | 484 | Veterinary Nursing Clerkship in Zoo and Wildlife Medicine | 3 to 12 |
| VM | 486 | Veterinary Nursing Clerkship in Clinical Parasitology | 3 |
| VM | 490 | Veterinary Nursing Clerkship in Special Problems | 3 to 12 |
- (2) **Veterinary Nursing Elective Group 2.** Complete 15 credits in courses from one of the following concentrations. All course selections must be approved by the Veterinary Nursing Program.
- Business Communication**
- | | | | |
|------|-----|--|---|
| ACC | 230 | Survey of Accounting Concepts | 3 |
| AFRE | 100 | Decision-making in the Agri-Food System | 3 |
| AFRE | 130 | Farm Management I | 3 |
| AFRE | 203 | Data Analysis for the Agri-Food system | 3 |
| AFRE | 222 | Agribusiness and Food Industry Sales | 3 |
| AFRE | 232 | Commodity Marketing I | 3 |
| AFRE | 240 | Food Product Marketing | 3 |
| AFRE | 315 | Labor and Personnel Management in Agri-Food System | 3 |
| AFRE | 327 | Global Agri-Food Industries and Markets | 3 |
| AFRE | 435 | Financial Management in the Agri-Food System | 3 |
| COM | 100 | Human Communication | 3 |
| COM | 225 | An Introduction to Interpersonal Communication | 3 |
| COM | 240 | Introduction to Organizational Communication | 4 |
| EC | 201 | Introduction to Microeconomics | 3 |
| EC | 202 | Introduction to Macroeconomics | 3 |
| EAD | 315 | Student Leadership Training | 3 |
| FI | 320 | Introduction to Finance | 3 |
| HRLR | 211 | Introduction to Organizational Leadership | 3 |
| HRLR | 311 | Applied Organizational Leadership | 3 |
- General Animal Science**
- | | | | |
|-----|------|---|---|
| ANS | 110 | Introductory Animal Agriculture | 3 |
| ANS | 110L | Introductory Animal Agriculture Laboratory | 1 |
| ANS | 134 | Dairy Production I | 3 |
| ANS | 200C | Dairy Cattle Genetics and Evaluation | 2 |
| ANS | 200E | Introductory Animal Welfare Assessment | 1 |
| ANS | 201 | Animal Products | 3 |
| ANS | 201L | Animal Products Laboratory | 1 |
| ANS | 210 | Introduction to Disciplines in Animal Agriculture | 3 |
| ANS | 211 | Animal and Product Evaluation | 3 |
| ANS | 222 | Introductory Beef Cattle Management | 3 |
| ANS | 234 | Dairy Production II | 3 |

ANS	252	Introduction to Management of Avian Species	3
ANS	262	Introductory Sheep Management	3
ANS	272	Introductory Swine Management	3
ANS	305	Applied Animal Behavior	3
ANS	305L	Applied Animal Behavior Laboratory	1
ANS	307	Animal Reproduction	3
ANS	309	Animal Health and Disease Management	3
ANS	313	Principles of Animal Feeding and Nutrition (W)	4
ANS	314	Genetic Improvement of Domestic Animals (W)	4
ANS	334	Dairy Management I	3
ANS	401	Ethical Issues in Animal Agriculture	1
ANS	407	Food and Animal Toxicology	3
ANS	413	Non-Ruminant Nutrition	4
ANS	418	Animal Agriculture and the Environment	3
ANS	422	Advanced Beef Cattle Feedlot Management	3
ANS	425	Animal Biotechnology	3
ANS	427	Environmental Toxicology and Society	3
ANS	442	Advanced Horse Management	3
ANS	445	Equine Exercise Physiology	4
ANS	455	Avian Physiology	4
ANS	472	Advanced Swine Management	3
ANS	480	Animal Systems in International Development	3
ANS	483	Ruminant Nutrition	3
General Zoo and Wildlife			
EPI	390	Disease in Society: Introduction to Epidemiology and Public Health	4
FW	101	Fundamentals of Fisheries and Wildlife Ecology and Management	3
FW	110	Conservation and Management of Marine Resources	3
FW	181	Introduction to Science, Technology, the Environment and Public Policy	3
FW	364	Ecological Problem Solving	3
FW	413	Wildlife Research and Management Techniques	3
FW	423	Principles of Fish and Wildlife Disease	3
FW	423L	Principles of Fish and Wildlife Disease Laboratory	1
FW	424	Population Analysis and Management	4
FW	444	Conservation Biology	3
FW	449	Wildlife Policy	3
FW	491	Special Topics in Fisheries and Wildlife	1 to 3
IBIO	313	Animal Behavior	3
IBIO	341	Fundamental Genetics	4
IBIO	355	Ecology	3
IBIO	355L	Ecology Laboratory (W)	1
IBIO	369	Introduction to Zoo and Aquarium Science	3
IBIO	408	Histology	4
IBIO	413	Laboratory in Behavioral Neuroscience (W)	4
IBIO	415	Ecological Aspects of Animal Behavior (W)	3
NEU	300	Neurobiology	3
Sustainability and Policy			
AFRE	100	Decision-making in the Agri-Food System	3
AFRE	206	World Food, Population and Poverty	3
ANR	250	Global Issues in Agriculture and Natural Resources	3
ANS	124	Introduction to Sustainable Agriculture and Food Systems	2
ANS	418	Animal Agriculture and the Environment	3
ANS	424	Sustainable Agriculture and Food Systems: Integration and Synthesis	3
ANS	480	Animal Systems in International Development	3
CSS	101	Introduction to Crop Science	3
CSS	120	Issues in Food and Agriculture	3
CSS	124	Introduction to Sustainable Agriculture and Food Systems	1
CSS	222	New Horizons in Biotechnology	2

EC	201	Introduction to Microeconomics	3
EC	202	Introduction to Macroeconomics	3
EPI	390	Disease in Society: Introduction to Epidemiology and Public Health	4
FW	434	Human Dimensions of Fisheries and Wildlife Management (W)	3
FW	445	Biodiversity Conservation Policy and Practice	3
IBIO	446	Environmental Issues and Public Policy	3
HRT	251	Organic Farming Principles and Practices	3
PHL	380	Nature of Science	3
SOC	161	International Development and Change	3
SOC	252	Introduction to Environmental Sociology	3
Pharmacology and Toxicology			
ANS	407	Food and Animal Toxicology	3
ANS	427	Environmental Toxicology and Society	3
BMB	200	Introduction to Biochemistry	4
EPI	390	Disease in Society: Introduction to Epidemiology and Public Health	4
NEU	300	Neurobiology	3
PHL	380	Nature of Science	3
PHM	350	Introductory Human Pharmacology	3
PHM	351	Fundamentals of Drug Safety	3
PHM	431	Pharmacology of Drug Addiction	3
PHM	450	Introduction to Chemical Toxicology	3
Ecology and Resource Management			
AFRE	265	Ecology and Economics	3
ANS	124	Introduction to Sustainable Agriculture and Food Systems	2
ANS	418	Animal Agriculture and the Environment	3
FOR	419	Applications of Geographic Information Systems to Natural Resources Management	4
FW	181	Introduction to Science, Technology, the Environment and Public Policy	3
FW	364	Ecological Problem Solving	3
FW	413	Wildlife Research and Management Techniques	3
FW	417	Wetland Ecology and Management	3
FW	423	Principles of Fish and Wildlife Disease	3
FW	423L	Principles of Fish and Wildlife Disease Laboratory	1
FW	424	Population Analysis and Management	4
FW	434	Human Dimensions of Fisheries and Wildlife Management (W)	3
FW	463	Wildlife Disease Ecology	3
IBIO	355	Ecology	3
IBIO	355L	Ecology Laboratory (W)	1
Animal Management			
AFRE	130	Farm Management I	3
ANS	110	Introductory Animal Agriculture	3
ANS	110L	Introductory Animal Agriculture Laboratory	1
ANS	134	Dairy Production I	3
ANS	222	Introductory Beef Cattle Management	3
ANS	233	Dairy Feed Management	3
ANS	234	Dairy Production II	3
ANS	252	Introduction to Management of Avian Species	3
ANS	262	Introductory Sheep Management	3
ANS	272	Introductory Swine Management	3
ANS	309	Animal Health and Disease Management	3
ANS	334	Dairy Management I	2
ANS	401	Ethical Issues in Animal Agriculture	1
ANS	422	Advanced Beef Cattle Feedlot Management	3
ANS	442	Advanced Horse Management	3
ANS	472	Advanced Swine Management	3
Animal Products and Nutrition			
ANS	110	Introductory Animal Agriculture	3
ANS	201	Animal Products	3

ANS	201L	Animal Products Laboratory	1
ANS	211	Animal and Product Evaluation	3
ANS	233	Dairy Feed Management	3
ANS	313	Principles of Animal Feeding and Nutrition (W)	4
ANS	407	Food and Animal Toxicology	3
ANS	413	Non-Ruminant Nutrition	4
ANS	483	Ruminant Nutrition	3

Effective Spring 2022.

PART II - NEW COURSES

DEPARTMENT OF ART, ART HISTORY, AND DESIGN

- HA 262 Buddhist Art and Architecture Across Asia
Fall of even years. 3(3-0) P: Completion of Tier I Writing Requirement RB: HA 101 and HA 102
Historical, iconographic, stylistic, architectural, and technical studies of the most important
Buddhist monuments in Asia.
Effective Spring 2022

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

- BMB 370 Introductory Biochemistry Laboratory
Fall of every year. Spring of every year. 3(2-3) P: {(MTH 116 or LB 117) or (MTH 103 and MTH
114)} and (BS 171 or BS 191H or LB 145) and (CEM 162 or CEM 185H or LB 172L) 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.
Basic quantitative laboratory introducing biochemical methods and principles for the study
of proteins and nucleic acids using data analysis.
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 Summer 2022

DEPARTMENT OF COMMUNITY SUSTAINABILITY

- CSUS 400 Topics in Environmental Justice
Fall of every year. Spring of every year. 3(3-0) P: ((CSUS 200 and CSUS 300) or approval of
department) and completion of Tier I writing requirement
Historical and contemporary sociopolitical conditions facilitating the rise of environmental
justice movements domestically and abroad. Race and Environmental Racism. Industrial
and waste siting, land grabs, water crisis, climate justice, food sovereignty. Environmental
justice activism including logic models and theories of change, participatory community
research, economic viability and democracy.
Effective Summer 2022

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

- HDFS 438 Applied Resource Management Practicum
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: HDFS 238 R: Open to
juniors or seniors in the College of Social Science.
Strategies and techniques to apply resource management with individuals, households,
and communities.
Effective Fall 2022

MSU COLLEGE OF LAW

- LAW 811G Global Food Laws: Role of the International Agencies
On Demand. 0 to 6 credits. R: Open to law advanced students in the MSU College of Law.
Roles of the World Trade Organization, World Health Organization, Food and Agriculture
Organization, other international agencies in global food laws, including food safety and
international food trade disputes.
Effective Spring 2022

DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS

- MMG 493 Professional Internship in Microbiology and Molecular Genetics
Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: Completion of Tier I Writing Requirement
R: Open to sophomores or juniors or seniors in the Department of Microbiology and Molecular Genetics. Approval of department.
Professional work experience in a private or public sector organization related to the student's major.
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 Summer 2021
- MMG 494L Summer Undergraduate Research Institute in Genomics (W)
Summer of every year. 3(2-12) P: (Completion of Tier I Writing Requirement) and (MMG 301 and MMG 302) RB: MMG 431 or IBIO 341 R: Open to undergraduate students in the Environmental Biology/Microbiology Major or in the Genomics and Molecular Genetics Major or in the Microbiology Major. Not open to students with credit in MMG 408 or MMG 434.
Directed independent research in teams using state-of-the-art genetic and genomic methods. Offered first half of semester.
Effective Summer 2021

COLLEGE OF OSTEOPATHIC MEDICINE

- OST 625 Introduction to Military Medicine Elective
On Demand. 6 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: Medical students on HPSP scholarship R: Open to graduate students in the College of Osteopathic Medicine.
Provides osteopathic medical students with an introduction to military medicine capabilities and operations.
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 Summer 2022
- OST 626 Special Topics in Healthcare Ethics: Case Studies
Fall of every year. Spring of every year. Summer of every year. 3(3-0) R: Open to graduate students in the College of Osteopathic Medicine. Approval of college.
Increasing the knowledge of healthcare ethics and application to case studies.
Exploration of the evaluation and critical appraisal of ethical issues in patient cases.
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 2022
- OST 627 Fundamentals of Health Policy and Advocacy
Fall of every year. Spring of every year. Summer of every year. 3(3-0) R: Open to graduate students in the College of Osteopathic Medicine. Approval of college.
Legislative, media and organizational opportunities for physician advocacy.
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 2022

PART III – COURSE CHANGES

DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEMS

ACC 807

~~Financial Statement Analysis~~

~~Using Financial Statement Data for Decision-Making - An Analytics Approach~~

~~Fall of every year. Spring of every year. 3(3-0) P: MBA 802 or ACC 301 RB: It is recommended that MBA students take ACC 805 prior to enrollment in this course. RB: Intermediate financial accounting R: Open to master's students in the Accounting major and open to MBA students or approval of department. R: Open to master's students in the Accounting Major or approval of department.~~

~~Concepts of financial analysis using U.S. and international accounting information. Cash flow and earnings based models for business valuation, and supply of and demand for accounting information in financial markets. Frameworks and methodologies for profitability and credit risk analyses. Tools and technologies to extract large scale financial statement information for valuation and decision-making. Emphasis on using big data from real world to improve critical thinking in making investment decisions.~~
~~Effective Fall 2010 Effective Summer 2022~~

ACC 808

~~Contemporary Financial Reporting Decisions~~

~~Analyzing Financial Reporting Decisions~~

~~Fall of every year. Spring of every year. 3(3-0) P: ACC 301 RB: Undergraduate degree in accounting. RB: Intermediate level financial accounting R: Open to master's students in the Accounting Major or approval of department.~~

~~Framework for making professional judgments and decisions about accounting for contemporary financial reporting issues. Conceptual framework, standard setting, accounting for financial instruments, foreign subsidiaries, and hedging. Analytical frameworks to discuss financial reporting issues along with the development of accounting standards for various topics. Standard setting process and FASB's conceptual framework. Economics of, accounting for, and valuation of financial instruments and derivatives.~~
~~Effective Fall 2010 Effective Summer 2022~~

ACC 814

~~Advanced Auditing~~

~~Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: ACC 411 R: Open to master's students in the Accounting Major or approval of department.~~

~~Economic, regulatory and technology environments as it relates to auditing in the public and private sectors. Risk analysis, professional standards, audit evidence gathering and evaluations, accounting and auditing research and decision making. Economic, regulatory and technology environments relating to auditing in the public and private sectors. Risk analysis, professional standards, audit evidence gathering and evaluations, accounting and auditing research and decision making. Data visualization and analytics tools used in auditing. Statistical methods for sample selection and analysis. Risk assessment of information produced by the entity and end user computing systems.~~
~~Effective Fall 2010 Effective Summer 2022~~

ACC 821

~~Enterprise Database Systems~~

~~Fall of every year. 3(3-0) Interdepartmental with Information Technology Management. R: Open to master's students in the Accounting Major or approval of department. Not open to students with credit in ACC 321.~~

~~Management of information in business organizations. Conceptual modeling of transaction process systems, workflow systems and enterprise wide networks of value added activities. Integration of decision support and policy level systems with economic event processing systems. Evolution of accounting systems. Design of accounting information systems. Storage and retrieval of accounting information. Management of information in business organizations. Conceptual modeling of transaction process systems, workflow systems and enterprise-wide networks of value-added activities. Integration of decision support and policy level systems with economic event processing systems. Evolution of accounting systems.~~
~~Effective Fall 2010 Effective Spring 2022~~

- ACC 822 Information Systems Project Management
Fall of every year. Spring of every year. 1 to 3 credits. Interdepartmental with Information Technology Management. ~~R: Open to graduate students in the Accounting major and open to MBA students or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Management of information system projects. Modeling of business processes. Management of project scope, time and costs. Planning and control of projects. Program and portfolio management. Consulting issues for effective project management.~~
Management of information system projects. Management of project scope, time, cost and quality. Optimization of project resources. Planning and control of projects. Program and portfolio management. Consulting issues for effective project management. Waterfall, lean and agile methodologies are discussed.
~~Effective Fall 2013~~ Effective Summer 2022
- ACC 823 Advanced Enterprise Database Systems
~~Fall of every year. Spring of every year.~~ 3(3-0) Interdepartmental with Information Technology Management. ~~P: ACC 321 or ACC 821 or ITM 824~~ P: ACC 321 or ACC 821 R: Open to graduate students in the Accounting Major or approval of department.
Architecture of enterprise information. Semantic and syntactic modeling of enterprise economic phenomena, relational database technology and database design for business systems, business process analysis patterns and implementation compromises.
~~Effective Fall 2010~~ Effective Summer 2022
- ACC 824 Governance and Control of Enterprise Systems
Fall of every year. ~~Spring of every year.~~ 3(3-0) Interdepartmental with Information Technology Management. ~~R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Governance and control of information technologies. Identification and valuation of key information and communication technologies, frameworks for assessing information system risk, information system auditing, and international standards for information technology governance and control.~~ Governance and control of information technologies. Design and control of IT general controls. Modeling and forecasting system IT internal control performance. Identification and valuation of key information and communication technologies. Frameworks for assessing information system risk and cybersecurity. Information system auditing, and international standards for information technology governance and control. Cyber security.
~~Effective Fall 2010~~ Effective Summer 2022
- ACC 825 Object-Oriented Business Information Systems
~~Fall of every year. Spring of every year.~~ 3(3-0) Interdepartmental with Information Technology Management. ~~P: ACC 321 or ACC 824~~ P: (ACC 321 or ACC 821) and ACC 823 R: Open to graduate students in the Accounting Major or approval of department.
~~Analysis and design of object oriented business systems. Unified modeling language descriptions of business phenomena and rules, object oriented programming, use case analysis and specifications, and XML tag sets for transactions and reporting.~~ Design of object-oriented business systems. Object-oriented programming of accounting classes and methods. Unified modeling language descriptions of business phenomena and rules. Integration of navigational and specificational programming languages.
~~Effective Fall 2010~~ Effective Summer 2022
- ACC 826 Enterprise Information Systems
Spring of every year. 3(3-0) Interdepartmental with Information Technology Management. ~~R: Open to graduate students in the Accounting major or in the Master of Business Administration in Business Administration or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
Enterprise resource planning (ERP) systems. ERP implementation issues and success factors. Use of enterprise systems, and exploring future directions in ERP systems.
~~Effective Summer 2014~~ Effective Summer 2022

- ACC 827 Accounting Analytics
Fall of every year. Spring of every year. Summer of every year. 3(3-0) Interdepartmental with Information Technology Management. P: (ACC 321 or ACC 821) and ACC 411 ~~R: Open to master's students in the Accounting Major.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Develop an accounting analytics mindset. Determine and apply appropriate data analytic techniques based upon the accounting environment and situation. Use data visualization, predictive analytics and other analytics software as appropriate. Data visualization, predictive analytics, time series analysis, machine learning, supervised and unsupervised learning, association analysis, and other analytics techniques as appropriate to accounting environment and situation.~~
Effective Spring 2024 Effective Summer 2022
- ACC 830 Tax Research
Fall of every year. 3(3-0) P: ACC 331 ~~R: Open to master's students in the Accounting major and open to MBA students or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Writing and presentation techniques of tax research. Tax practice and procedure, and partnership taxation. Case studies focused on online tax research techniques. Emphasis on effectively organizing and presenting research results.~~
Effective Fall 2010 Effective Summer 2022
- ACC 833 Federal Income Taxation of Corporations and Shareholders
~~Fall of every year. Spring of every year. Summer of every year.~~ 3(3-0) P: ACC 331 ~~R: Open to master's students in the Accounting major and open to MBA students or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~The Federal income taxation of corporations and shareholders resulting from operations, distributions, formations, liquidation, and reorganizations. Taxation of pass through entities. Federal taxation of corporations, shareholders and related financial accounting implications over the life cycle of a corporation. Data mining and data visualization techniques to analyze and understand data. Statistical analysis and forecasting.~~
Effective Fall 2010 Effective Summer 2022
- ACC 836 U. S. Taxation of Multinational Transactions
Spring of every year. 3(3-0) P: ACC 331 RB: ACC 833 ~~R: Open to master's students in the Accounting major and open to MBA students or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
Federal income taxation of transactions by U.S. persons outside the United States, and of investments by foreign persons in the U.S.
Effective Fall 2010 Effective Summer 2022
- ACC 841 ~~Strategic Management Controls Systems~~
The Role of Accounting in Strategy Implementation
~~Fall of every year. Spring of every year.~~ 1 to 3 credits. P: (MBA 812 or ACC 341) and (MGT 409 or (MBA 850 or concurrently)) ~~R: Open to master's students in the Accounting Major and open to MBA students or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Management accounting concepts for strategic management and business unit management. Performance measurement, planning and budgeting, and control system design. Strategic management control systems and accounting data supporting the design, implementation, monitoring, and continuous assessment of business strategies. Emerging risks and opportunities are also evaluated.~~
Effective Fall 2016 Effective Summer 2022

- ACC 843 Value Chain Accounting and Analytics
Fall of every year. ~~Summer of every year.~~ 1 to 3 credits. P: (MBA 812 or ACC 341) and (MBA 804 or MKT 317) ~~R: Open to master's students in the Accounting Major and open to MBA students or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Design and use of managerial accounting systems to support operational decisions in complex, real world settings, using analytical techniques and real data.~~ Design and use of managerial accounting systems to support operational decisions in complex, real-world settings, using analytical techniques and real data. Data mining and visualization with financial and nonfinancial information. Statistical distributions and regression analyses in the context of managerial accounting systems.
~~Effective Spring 2016~~ Effective Summer 2022
- ACC 850 ~~Accounting for Multiunit Enterprises~~
~~Accounting and Tax Implications of Mergers and Acquisitions~~
Fall of every year. ~~Spring of every year.~~ 3(3-0) P: ACC 301 and ACC 331 ~~R: Open to graduate students in the Accounting major or approval of department.~~ R: Open to master's students in the Accounting Major or approval of department.
~~Financial reporting and tax issues related to business combinations and divestitures and the resulting consolidated reporting of the multi-unit enterprise's financial and tax information.~~ Analysis of tax and financial accounting issues involved in business acquisitions. Post-acquisition tax and financial reporting of the combined entity.
SA: ACC 450
~~Effective Fall 2010~~ Effective Summer 2022

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

- BMB 470 Advanced Molecular Biology Laboratory
Fall of every year. 4(2-4) ~~P: CEM 262 and BMB 461~~ P: BMB 370 and BMB 461 RB: BMB 462 R:
Open to 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.
Methods of molecular biology and the underlying principles on which these methods are
based.
SA: BCH 472, BMB 472
~~Effective Fall 2024~~ Effective Fall 2023
- BMB 471 Advanced Biochemistry Laboratory
Spring of every year. 4(2-4) ~~P: BMB 461 and CEM 262 and CMSE 201~~ P: BMB 370 and BMB 461
and CMSE 201 R: Open to 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.
Biochemical methods and principles used in the study of enzymes (proteins),
carbohydrates, lipids, and cell organelles.
SA: BCH 471
~~Effective Spring 2022~~ Effective Fall 2023
- BMB 829 ~~Methods of Macromolecular Analysis and Synthesis~~
~~Special Problems in Macromolecular Analysis and Synthesis~~
Fall of every year. ~~2(2-0)~~ 1 credit. A student may earn a maximum of 5 credits in all enrollments for
this course. ~~RB: BMB 462 or concurrently~~ RB: BMB 461 and BMB 462
~~Techniques of isolation and characterization of macromolecules. Computer use in
structure function analysis of macromolecules.~~ Techniques of isolation and
characterization of macromolecules. Topics may vary.
SA: BCH 829
~~Effective Fall 2004~~ Effective Fall 2022

DEPARTMENT OF COMMUNITY SUSTAINABILITY

CSUS 429 Program Evaluation for Community Sustainability
Fall of every year. 3(3-0) ~~P: ((MTH 103) and (STT 200 or STT 201)) or (MTH 103 and MTH 114) or MTH 116 or MTH 124) and ((CSUS 200 or EEM 255) and completion of Tier I writing requirement)~~
P: (((MTH 103) or (MTH 103A and MTH 103B)) and (STT 200 or STT 201) and MTH 114) or (MTH 116 or MTH 124)) and (CSUS 200 and completion of Tier I writing requirement)
Concepts, theories, and procedures in program evaluation. Practical methods and skills to plan and implement evaluations of community, agriculture, and natural resources programs.
SA: ACR 415
~~Effective Spring 2019~~ Effective Summer 2022

SCHOOL OF HOSPITALITY BUSINESS

HB 210 Casino Operations and Management
~~Fall of every year.~~ Spring of every year. 3(3-0) R: Open to students in the Hospitality Business Major.
Social issues of gaming, casino games of chance, management controls and marketing plans.
~~Effective Summer 2024~~ Effective Summer 2022

HB 273 Hospitality Business Analytics
Fall of every year. Spring of every year. 3(3-0) ~~P: CSE 101 or CSE 102 P: CSE 102~~ RB: Basic Microsoft Excel Skills ~~R: Open to students in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.~~ R: Open to students in the Hospitality Business Major or in the Real Estate Minor. Not open to students with credit in ITM 209.
Quantitative and analytical skills used to communicate key business information effectively. Study of how business modeling and data analytics can increase decision making efficacy. Course topics include but are not limited to sensitivity and scenario analysis, financial modeling and forecasting, and applied business statistics methods.
SA: HB 473
~~Effective Summer 2024~~ Effective Summer 2022

HB 282 ~~Hospitality Real Estate~~
Real Estate Principles
Fall of every year. Spring of every year. 3(3-0) ~~R: Open to students in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.~~ R: Open to students in the Hospitality Business Major or in the Real Estate Minor.
Process of planning and developing a commercial real estate project: conceptualization and planning, feasibility, commitment, design layout and construction, and management and operation.
SA: HB 473
~~Effective Summer 2024~~ Effective Summer 2022

HB 337 Hospitality Information Systems
Fall of every year. Spring of every year. 3(3-0) ~~P: CSE 101 or CSE 102~~ P: CSE 102 R: Open to juniors or seniors in the Hospitality Business Major.
Technology for gathering, analyzing, storing and communicating information within the hospitality industry.
~~Effective Summer 2020~~ Effective Summer 2022

HB 345L Hospitality Food Production Systems Lab
Fall of every year. Spring of every year. 1(0-2) ~~P: HB 345 or concurrently~~ P: HB 265 R: Open to juniors or seniors in the Hospitality Business Major.
Practical applications of organization in food and beverage operations. Product knowledge, especially purchasing, storing, preparing, and production in food service operations. Menu development and recipe management.
~~Effective Summer 2024~~ Effective Summer 2022

- HB 380 Event Planning and Management
Fall of every year. 3(3-0) ~~P: HB 280~~ R: Open to juniors or seniors in the Hospitality Business Major.
Identify the logistical steps for planning an event. The relationship between the goal and objectives for holding an event. Pre-event planning and project management. Understand the detailed components of creating an event.
~~Effective Summer 2024~~ Effective Summer 2022
- HB 405 Hospitality Foodservice Cost Control
Fall of every year. ~~Spring of every year. 3(3-0) P: (HB 265) and ((HB 302 or concurrently) or (ACC 202 or concurrently) or (ACC 230 or concurrently))~~ ~~P: HB 265~~ R: Open to juniors or seniors in the Hospitality Business Major.
Design of food and beverage control systems, emphasis on product purchasing (policies, suppliers, selection and evaluation, determination of quality and quantity, ethics and use of technology), inventory management and issuing systems, revenue control procedures and equipment.
~~Effective Summer 2024~~ Effective Summer 2022
- HB 411 Hospitality Beverages
Fall of every year. Spring of every year. 3(3-0) RB: Must be 21 years of age R: Open to juniors or seniors in the Hospitality Business Major. Approval of school.
~~Evaluation and selection of hospitality beverages. Geographical origins of beverages, beverage production, quality assessment, matching beverages with food, health and social considerations. Geographical origins of beverages, beverage production, quality assessment, matching beverages with food, health, and social considerations. Evaluation and selection of hospitality beverages. Service procedures. Industry statistics and trends.~~
~~Effective Summer 2020~~ Effective Summer 2022
- HB 411L Hospitality Beverages Lab
Fall of every year. Spring of every year. 1(0-2) ~~P: HB 411 or concurrently~~ RB: Must be 21 years of age R: Open to juniors or seniors in the Hospitality Business Major. Approval of school.
~~Practical application of topics discussed in hospitality beverages. Evaluation and selection of hospitality beverages. Geographical origins and methods of production of beverages. Quality assessment of different varieties and types. Economic implications and financial aspects relating to hospitality operations. Discussion of health implications and pairings with food. Safe service and menu pricing of alcoholic and non-alcoholic beverages within a hospitality establishment. Evaluation of cost and visual, aroma, and flavor attributes.~~
~~Effective Fall 2024~~ Effective Summer 2022
- HB 425 Golf Operations and Management
Fall of every year. Spring of every year. 3(3-0) ~~P: HB 420~~ R: Open to juniors or seniors or graduate students.
Golf course operations including human resource management, golf course and facility design, equipment, pro shop operations, golf cart fleet and tee sheet management. Golf tournament and outing planning and operations, common golf course legal issues, sustainable golf course maintenance and how the weather impacts the industry. Current trends and strategies in golf facility marketing and advertising. Importance of hospitality in golf operations as well as strategic food and beverage selection.
~~Effective Fall 2024~~ Effective Summer 2022
- HB 437 Hospitality Revenue Management
Fall of every year. Spring of every year. 3(3-0) ~~P: ((HB 273 or concurrently) or (ITM 200 or concurrently)) and (HB 375 or MKT 300 or MKT 327)~~ ~~P: (HB 273 or ITM 209) and (MKT 327 or MKT 300)~~ R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor. R: Open to juniors or seniors in the Hospitality Business Major or in the Real Estate Minor.
Exposure to key management and marketing issues relating to the effective implementation of revenue management. The relationships between the revenue management function and other functions or departments in the hospitality organization. The role and job responsibilities of a revenue manager. The identification of distribution channels that hospitality organizations may use to distribute their inventory.
~~Effective Summer 2020~~ Effective Summer 2022

- HB 470 ~~Hospitality Asset Management~~
Real Estate Asset Management
Fall of every year. Spring of every year. 3(3-0) ~~P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320)~~ P: (HB 273 or ITM 209) and (FI 320 or FI 311) R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Real Estate Minor.
Market forces effecting consumer and business spending applied to the management of real estate assets. Theoretical analyses, practical analyses, and hospitality industry specific cases requiring the use of spreadsheet software and technical writing skills. Application of operations expertise to capital investment and disposition decisions. Management contracts, franchise agreements, capital budgets, capital markets, capital structures, labor, market cycles, and brand decisions.
~~Effective Fall 2021~~ Effective Summer 2022
- HB 472 ~~Hospitality Financial Modeling~~
Real Estate Financial Modeling
Fall of every year. Spring of every year. 1(1-0) ~~P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320)~~ P: (HB 273 or ITM 209) and (FI 320 or FI 311) R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Real Estate Minor.
Design and development of computer spreadsheet-based models to analyze real estate investment financial strategies and valuation issues.
~~Effective Fall 2021~~ Effective Summer 2022
- HB 474 ~~Hospitality Valuation~~
Real Estate Valuation
Fall of every year. Spring of every year. 3(3-0) ~~P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320)~~ P: (HB 273 or ITM 209) and (FI 320 or FI 311) R: ~~Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Real Estate Minor.~~ Open to juniors or seniors in the Hospitality Business Major or in the Real Estate Minor.
Financial management principles for real estate appraisal and valuation considering perspectives of brokers, consultants, developers, and investors. Theoretical and practical analyses with hospitality industry cases using spreadsheet software and technical writing. Capital markets, capital structures, discounted cash flow, internal rate of return, leverage, and net present value.
~~Effective Fall 2021~~ Effective Summer 2022
- HB 482 ~~Advanced Hospitality Finance~~
Spring of every year. 3(3-0) ~~P: (HB 273 or ITM 209) and (HB 311 or FI 311 or FI 320)~~ P: (HB 273 or ITM 209) and (FI 320 or FI 311) R: ~~Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Real Estate Minor.~~ Open to juniors or seniors in the Hospitality Business Major or in the Real Estate Minor.
Financial analysis regarding the financial viability of hospitality companies. Choosing between investment alternatives, financing, and financial restructuring.
~~Effective Spring 2022~~ Effective Summer 2022

DEPARTMENT OF MARKETING

- MKT 351 Retail Management
Fall of every year. Spring of every year. Summer of every year. 3(3-0) Interdepartmental with Food Industry Management. P: MKT 300 or MKT 327 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management or in the Food Industry Management major and open to students in the Food Industry Management Specialization.
Domestic and international retailing structure, environment, and development. Managerial strategy. Locational, purchasing, organizational, personnel and promotional techniques. Retail budgeting and control. Social and ethical considerations.
SA: MSC 351
DELETE COURSE
Effective Fall 2021

PROGRAM IN MATHEMATICS EDUCATION

- MTHE 999 Doctoral Dissertation Research
Fall of every year. Spring of every year. Summer of every year. 1 to 24 credits. ~~A student may earn a maximum of 30 credits in all enrollments for this course.~~ A student may earn a maximum of 36 credits in all enrollments for this course. RB: MTHE 926 and MTHE 927 and MTHE 954
Doctoral dissertation research.
Request the use of the Pass-No Grade (P-N) system.
SA: SME 999
~~Effective Summer 2014~~ Effective Spring 2022

DEPARTMENT OF MEDIA AND INFORMATION

- MI 839 ~~Game and Film Design Studio I~~
Game and Project Design Studio I
Fall of every year. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department.
~~Design principles for the creation of transmedia (games, film, websites, etc.). Design and development studio course focused on the creation of fictional storytelling projects across media projects.~~ Design and development studio course focused on the creation of projects (games, applications, websites, video, etc.) that can take a wide variety of forms, from physical games to virtual reality.
SA: TC 839
~~Effective Fall 2017~~ Effective Summer 2022

- MI 846 ~~Game and Film Design Studio II~~
Game and Project Design Studio II
Spring of every year. 3(3-0) RB: MI 839 R: Open to graduate students in the College of Communication Arts and Sciences or approval of department.
~~Design principles for the creation of transmedia (games, film, websites, etc.). Design and development studio course focused on the creation of fictional storytelling projects across media projects.~~ Continuation of design and development studio course focused on the creation of projects (games, applications, websites, video, etc.) that can take a wide variety of forms, from physical games to virtual reality.
~~Effective Fall 2017~~ Effective Summer 2022

DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS

- MMG 433 ~~Microbial Genomics~~
Genomics (W)
Spring of every year. 3(3-0) ~~P: (MMG 434)~~ P: MMG 431 RB: (MMG 421 or BMB 461) and CSE 101
~~Structure of microbial genomes and implications for growth and evolution of bacteria and fungi. Computer analysis of genome sequence databases. Applications to gene expression and phylogenetic analysis.~~ High-throughput DNA sequencing and the study of genome structure, replication, evolution. Application of bioinformatics analyses for functional annotation, genetic diversity, ecology, and human health.
~~Effective Fall 2015~~ Effective Summer 2022

COLLEGE OF MUSIC

- MUS 125 ~~Glee Club, Men and Women~~
Glee Club
Fall of every year. Spring of every year. 1(0-3) A student may earn a maximum of 10 credits in all enrollments for this course.
Rehearsal and performance of broad range of choral literature chosen from medieval period to the present.
~~Effective Fall 2015~~ Effective Fall 2022

- MUS 849 Piano Performance
Fall of every year. Spring of every year. 1(1-0) A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to graduate students in the College of Music.
Critique and analysis of individual performances of piano literature in a group setting.
DELETE COURSE
Effective Fall 2022
- MUS 850A Piano
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in piano. R: Open to master's students in the Master of Music in Music Education or in the Master of Music in Music Performance.
Private instruction in piano.
DELETE COURSE
Effective Fall 2022
- MUS 851 Voice
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in voice. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in voice.
DELETE COURSE
Effective Fall 2022
- MUS 852A Violin
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in violin. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in violin.
DELETE COURSE
Effective Fall 2022
- MUS 852B Viola
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in viola. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in viola.
DELETE COURSE
Effective Fall 2022
- MUS 852C Cello
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in cello. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in cello.
DELETE COURSE
Effective Fall 2022
- MUS 852D Double Bass
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in double bass. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in double bass.
DELETE COURSE
Effective Fall 2022
- MUS 852E Harp
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
Private instruction in harp
DELETE COURSE
Effective Fall 2022

- MUS 853A Flute
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in flute. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in flute.
DELETE COURSE
Effective Fall 2022
- MUS 853B Oboe
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in oboe. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in oboe.
DELETE COURSE
Effective Fall 2022
- MUS 853C Clarinet
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in clarinet. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in clarinet.
DELETE COURSE
Effective Fall 2022
- MUS 853D Saxophone
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in saxophone. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in saxophone.
DELETE COURSE
Effective Fall 2022
- MUS 853E Bassoon
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in bassoon. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in bassoon.
DELETE COURSE
Effective Fall 2022
- MUS 854A Trumpet
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in trumpet. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in trumpet.
DELETE COURSE
Effective Fall 2022
- MUS 854B Horn
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in horn. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in horn.
DELETE COURSE
Effective Fall 2022
- MUS 854C Trombone
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in trombone. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in trombone.
DELETE COURSE
Effective Fall 2022

- MUS 854D Euphonium
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in euphonium. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in euphonium.
DELETE COURSE
Effective Fall 2022
- MUS 854E Tuba
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in tuba. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in tuba.
DELETE COURSE
Effective Fall 2022
- MUS 855 Percussion
Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 18 credits in all enrollments for this course. RB: Emphasis in percussion. R: Open to master's students in the Master of Music in Music Performance.
Private instruction in percussion.
DELETE COURSE
Effective Fall 2022
- MUS 856 Chamber Music
Fall of every year. Spring of every year. 1 to 2 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open to graduate students in the College of Music.
Performance of chamber music under faculty direction.
DELETE COURSE
Effective Fall 2022
- MUS 896 ~~Master's Recital Performance~~
Master's Performance
Fall of every year. Spring of every year. Summer of every year. 1 to 10 credits. ~~A student may earn a maximum of 12 credits in all enrollments for this course. A student may earn a maximum of 20 credits in all enrollments for this course. R: Open to master's students in the Music Performance major. R: Open to master's students in the Music Performance major and open to master's students in the Collaborative Piano Major and open to master's students in the Jazz Studies Major.~~
Directed experience in recital performance in partial fulfillment of Plan B master's degree requirements for master's students in performance. Directed experience in solo, chamber, and ensemble performance in partial fulfillment of Plan B master's degree requirements for master's students in performance.
~~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 Fall 2019~~ Effective Fall 2022
- MUS 996 ~~Doctoral Recital Performance~~
Doctoral Performance
Fall of every year. Spring of every year. Summer of every year. 1 to 24 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open to doctoral students in the College of Music.
~~Directed experience in recital performance in partial fulfillment of requirements for the Doctor of Musical Arts degree. Directed experience in solo, chamber, and ensemble performance in partial fulfillment of requirements for the Doctor of Musical Arts degree.~~
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 Fall 2019~~ Effective Fall 2022

DEPARTMENT OF PHYSICS AND ASTRONOMY

AST 410 Senior Thesis
Fall of every year. Spring of every year. ~~Summer of every year.~~ 1 to 4 credits. A student may earn a maximum of 5 credits in all enrollments for this course. ~~P: (AST 301) and completion of Tier I writing requirement.~~ P: (AST 304 or AST 308) and completion of Tier I writing requirement
~~Design and execute an original experiment or computation. A written and oral report of the research is required. Capstone course for undergraduate astrophysics majors requiring an in-depth investigation of an astronomical topic.~~
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 2013~~ Effective Spring 2022

DEPARTMENT OF PLANT BIOLOGY

PLB 105 Plant Biology
Fall of every year. Spring of every year. Summer of every year. 3(3-0)
~~Plant structure, function, development, genetics, diversity and ecology.~~ Plant structure, function, development, genetics, diversity and ecology. Offered first half of semester.
SA: BOT 105
~~Effective Fall 2014~~ Effective Spring 2022

DEPARTMENT OF THEATRE

THR 419 Projection Design for Live Performance
Spring of every year. 3(2-2) Interdepartmental with Media and Information. A student may earn a maximum of 6 credits in all enrollments for this course. ~~P: (THR 219) or (THR 337 or MI 337 or MI 344) P: (THR 211 or THR 212 or THR 214 or THR 216 or THR 219) or (MI 337 or DS 341) RB: THR 211 or THR 211L or THR 212 or THR 212L or THR 214 or THR 214L or THR 216 or THR 216L~~ RB: THR 211 or THR 212 or THR 214 or THR 216
Creating projection performance media through script, technology advancements, and production analysis. Practical application through digital rendering, video production and software exploration.
~~Effective Fall 2017~~ Effective Summer 2021