**SHORT REPORT of the UNIVERSITY COMMITTEE ON CURRICULUM (UCC)**

**September 8, 2020**

**To view the full UCC Report visit:** [**www.reg.msu.edu/Read/UCC/fs090820.pdf**](http://www.reg.msu.edu/Read/UCC/fs090820.pdf) **PROGRAM ACTIONS**

Highlights:

Communication Leadership and Strategy, B.A., effective Fall 2020

Cyber Criminology and Cyber Security, Graduate Certificate, effective Fall 2020 Games and Interactive Media, B.A., effective Fall 2020

Information Science, B.A., effective Fall 2020

Music Cognition, Graduate Certificate, effective Fall 2020 Social Science, 3 + 3 Option, effective Fall 2020

**College Department Program Name Award Type Action**

Agriculture and Natural Resources

Agricultural, Food, and Resource Economics

Agricultural, Food, and Resource Economics

M.S.

C

Ph.D.

C

Food Science

Food Science

M.S.

C

Ph.D.

C

Arts and Letters

Second Language Studies

Ph.D.

C

English

English

Ph.D.

C

Literature in English

M.A.

C

Linguistics & Germanic, Slavic, Asian and African Language

German Studies

M.A.

C

Ph.D.

C

Teaching English to Speakers of Other Languages

M.A.

C

Romance and Classical Studies

Italian - Secondary

Disciplinary Teaching Minor

D

Women, Gender and Social Justice

Women's and Gender Studies

B.A.

C

Business

Business Administration

M.B.A.

C

Corporate Master of Business Administration

M.B.A.

D

Hospitality Business

Hospitality Business

B.A.

C

Communication Arts and Sciences

Communication

Communication Leadership and Strategy

B.A.

N

**College Department Program Name Award Type Action**

Communication Arts and Sciences

Media and Information

Games and Interactive Media

B.A.

N

Information Science

B.A.

N

Education

Counseling, Educational Psychology and Special Education

Applied Behavior Analysis in Special Education

Certificate

C

Engineering

Chemical Engineering and Materials Science

Chemical Engineering

M.S.

C

Ph.D.

C

Materials Science and Engineering

Ph.D.

C

Computer Science and Engineering

Computer Science

M.S.

C

Ph.D.

C

Human Medicine

Human Medicine

M.D.

C

Music

Music Cognition

Certificate

N

Natural Science

Genetics and Genome Sciences

M.S.

C

Ph.D.

C

Biochemistry and Molecular Biology

Biochemistry and Molecular Biology

B.S.

C

M.S.

C

Ph.D.

C

Biochemistry and Molecular Biology/Biotechnology

B.S.

C

Biomedical Laboratory Diagnostics Program

Biomedical Laboratory Operations

M.S.

C

Biomedical Laboratory Science

M.A.

C

Clinical Laboratory Sciences

M.S.

C

Chemistry

Chemistry

M.S.

C

Computational Mathematics, Science, and Engineering

Computational Mathematics, Science, and Engineering

Minor

C

Integrative Biology

Integrative Biology

M.S.

C

**College Department Program Name Award Type Action**

Natural Science

Integrative Biology

Integrative Biology

Ph.D.

C

Microbiology and Molecular Genetics

Microbiology and Molecular Genetics

M.S.

C

Osteopathic Medicine

Ostseopathic Medicine

D.O.

C

Pharmacology and Toxicology

Integrative Pharmacology

M.S.

C

Pharmacology and Toxicology

M.S.

C

Ph.D.

C

Safety Pharmacology

Certificate

C

Social Science

Chicano/Latino Studies

Certificate

C

Ph.D.

C

Environmental Science and Policy

Specialization

D

Judicial Administration

M.S.

D

Social Science 3 + 3

Option

N

Criminal Justice

Cyber Criminology and Cyber Security

Certificate

N

History

History

M.S.

C

Ph.D.

C

Human Development and Family Studies

Human Development and Family Studies

Ph.D.

C

Human Resources and Labor Relations

Human Resources and Labor Relations

Ph.D.

C

Planning, Design and Construction

Linked Urban and Regional Planning

B.S./M.U.R.P.

N

Urban and Regional Planning

M.U.R.P.

C

Psychology

Program Evaluation

Certificate

C

M.A.

C

Psychology

M.A.

C

Ph.D.

C

**College Department Program Name Award Type Action**

Social Science

Sociology

Sociology

Ph.D.

C

C = Change D=Deletion N=New

**Totals**

**New:**

**Change:**

7

**Deletion:**

4

51

**COURSE ACTIONS**

**September 8, 2020**

### College Department Subject New Changes Deleted

|  |  |
| --- | --- |
| Agriculture and Natural Resources | Planning, Design, & Construction |
|  | Plant Soil and Microbial Sciences |
| Arts and Letters | English |
|  | Linguistic,Germ,Slavic,Asian&Afr Lg |
| Business | Hospitality Business |
|  | Department of Supply Chain Mgt |
| Communication Arts and Sciences | Communication |
|  | Journalism |
| Education | Kinesiology |
| Human Medicine | Human Medicine Dean |
| Natural Science | Biomedical Laboratory Diagstcs Prog |
|  | Neuroscience Program |
| Osteopathic Medicine | Osteopathic Medical Specialties COM |
|  | Osteopathic Medicine Dean |
| Social Science | Anthropology |
|  | Criminal Justice |
| Economics |
| **Total** |  |

|  |
| --- |
| PDC |
| CSS |
| ENG |
| LLT |
| HB |
| SCM |
| COM |
| JRN |
| KIN |
| HM |
| BLD |
| NEU |
| IM |
| OST |
| ANP |
| CJ |
| EC |

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| 2 |
| 0 |
| 3 |
| 1 |
| 1 |
| 6 |
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| 0 |
| 0 |
| 4 |
| 0 |
| **21** |

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| 0 |
| 3 |
| 0 |
| 4 |
| 30 |
| 1 |
| 0 |
| 1 |
| 0 |
| 5 |
| 1 |
| 0 |
| 0 |
| 1 |
| 2 |
| 5 |
| 1 |
| **54** |

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| 0 |
| 0 |
| 0 |
| 6 |
| 0 |
| **7** |

**INFORMATION ITEMS**

**September 8, 2020**

**Moratorium** –

Moratorium in Conservation Law, Graduate Certificate, UCGS consultation 4/13/20; Provost approved 4/24/20 – Effective Spring 2020 through Fall 2022.

**Discontinuation** –

Italian-Secondary, Disciplinary Teaching Minor, UCUE consultation 2/20/20; Provost approved 3/10/20 – Effective Summer 2020.

Corporate Master of Business Administration, M.B.A., UCGS consultation 2/10/20; Provost approved 3/10/20 – Effective Summer 2020.

Environmental Science and Policy, Graduate Specialization, UCGS consultation 2/10/20; Provost approved 3/10/20 – Effective Fall 2020.

Judicial Administration, Master of Science, UCGS consultation 2/10/20; Provost approved 3/10/20 – Effective Fall 2020.

**Other** – None.

# MICHIGAN STATE UNIVERSITY

### Report of

**THE UNIVERSITY COMMITTEE ON CURRICULUM**

**to the Faculty Senate September 8, 2020**

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

TO: Faculty Senate

MICHIGAN STATE UNIVERSITY

University Committee on Curriculum

September 8, 2020

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

September 8, 2020

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 **Master of Science** degree in **Agricultural, Food and Resource Economics** in the Department of Agricultural, Food, and Resource Economics. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Add the following **Admission** section:

Applications to the Master of Science Degree in Agricultural, Food and Resource Economics are evaluated by an admissions committee formed by the Department Chairperson and chaired by the Graduate Program Director.

Several criteria are used to evaluate applications including:

* + 1. Academic preparation including review of previous degrees and grades, Graduate Record Examination (GRE), and Test of English as a Foreign Language (TOEFL) scores.
    2. Letters of recommendation.
    3. Match between the applicant’s background, interests, and educational objectives, and the department’s research, teaching, and/or outreach programs.
    4. The applicant’s contribution to the diversity and balance of the department’s graduate study body.

Additional details on admission requirements and procedures are outlined on the department Web site at [*http://www.canr.msu.edu/afre/graduate/applying*.](http://www.canr.msu.edu/afre/graduate/applying)

* 1. Under the heading **Requirements for the Master of Science Degree in Agricultural, Food and Resource Economics** make the following changes:

1. Under the heading **Requirements for Both Plan A and Plan B**, replace the entire entry with the following:
   1. Complete a minimum of 3 credits of microeconomic theory in AFRE 805 or its equivalent.
   2. Complete a minimum of 9 credits of quantitative methods by enrollment in AFRE 801 and AFRE 802, or equivalent, and 3 credits of an elective, usually AFRE 835. A grade point average of 3.0 or greater is required in all three quantitative methods courses.
   3. Complete an additional 12 credits of advanced course work at the 800- or 900- level, at least 9 credits must be AFRE courses.
   4. Pass a final oral examination at which the student presents their thesis or research paper results.
   5. Have a grade point average of at least 3.0 in the student’s approved course program before the student can be certified for graduation. Collateral courses are not included in this calculation.
   6. Add the following **Guidance Committee** section:

New students are assigned a temporary major professor by the Graduate Program Director, in consultation with the student and faculty member. The student is responsible for assembling a long-term major professor and guidance committee via consultation with faculty and, if desired, the Graduate Program Director.

Students must have a major professor and guidance committee by the end of their second semester. The guidance committee consists of at least three members, two from the Department of Agricultural, Food and Resource Economics and one from outside the department.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Agricultural, Food and Resource Economics** in the Department of Agricultural, Food, and Resource Economics. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Add the following **Admission** section:

Applications to the Doctor of Philosophy degree in Agricultural, Food and Resource Economics are evaluated by an admissions committee formed by the Department Chairperson and chaired by the Graduate Program Director.

Several criteria are used to evaluate applications including:

* + 1. Academic preparation including review of previous degrees and grades, Graduate Record Examination (GRE), and Test of English as a Foreign Language (TOEFL) scores.
    2. Letters of recommendation.
    3. Match between the applicant’s background, interests, and educational objectives, and the department’s research, teaching, and/or outreach programs.
    4. The applicant’s contribution to the diversity and balance of the department’s graduate study body.

Additional details on admission requirements and procedures are outlined on the department Web site at [*http://www.canr.msu.edu/afre/graduate/applying*.](http://www.canr.msu.edu/afre/graduate/applying)

* 1. Under the heading **Requirements for the Doctor of Philosophy Degree in Agricultural, Food and Resource Economics** replace the entire entry with the following:

A total of 61 credits is required for the degree. The student must:

* + 1. Complete all of the following core courses (16 credits):

AFRE 900A Applied Microeconomics I 3

or

|  |  |  |
| --- | --- | --- |
| AFRE 900B | Applied Microeconomics II | 3 |
| EC 812A | Microeconomics I and its Mathematical Foundations | 4 |
| EC 812B | Microeconomics II | 3 |
| EC 820A | Econometrics IA | 3 |
| EC 820B | Econometrics IB | 3 |

* + 1. Complete 9 credits in one of three major fields in Agricultural, Food and Resource Economics: development economics, environmental and resource economics, or food and agricultural economics.
    2. Complete an additional 12 credits of advanced course work at the 800- or 900- level, at least 6 credits must be AFRE courses.
    3. Complete a minimum of 24 credits of AFRE 999 Doctoral Dissertation Research.
    4. Pass written qualifying examinations in microeconomic theory and econometrics no later than the end of the second year.
    5. Pass the comprehensive examination no later than the end of the third year.
    6. Present and obtain formal approval for the proposed dissertation research by the end of the fourth year.
    7. Pass a final oral examination at which the student presents their dissertation results.
    8. Attend at least 6 AFRE (or joint AFRE-EC) seminars in any single academic year before the end of the fourth year.
    9. Have a grade point average of at least 3.0 in the student’s approved course program before the student can be certified for graduation. Collateral courses are not included in this calculation.
  1. Add the following **Guidance Committee** section:

New students are assigned a temporary major professor by the Graduate Program Director, in consultation with the student and faculty member. The student is responsible for assembling a long-term major professor and guidance committee via consultation with faculty and, if desired, the

Graduate Program Director. Students must have a major professor and guidance committee by the end of their third semester. The guidance committee consists of at least four members, three from the Department of Agricultural, Food and Resource Economics and one from outside the department.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Food Science** in the Department of Food Science and Human Nutrition. The University Committee on Graduate Studies approved this request at its April 13, 2020 meeting.
   1. Under the heading ***FOOD SCIENCE*** replace the entire entry with the following:

### Admission

Admission to the Master of Science Degree in Food Science is based on the following:

* + 1. A detailed review of undergraduate, and where applicable, previous graduate performance.
    2. Graduate Record Examination (GRE) scores.
    3. Letters of recommendation.
    4. Previous research experience.
    5. A letter of intent and research interests.

Applicants should have a minimum grade-point average of 3.0, grades of 3.0 or above in science and mathematics courses, and proficiency in written and spoken English. Applicants should have taken undergraduate course work in physics, inorganic chemistry, organic chemistry, biochemistry, mathematics through integral calculus, and microbiology. It also is desirable for students to have taken upper-level undergraduate course work in food processing, food chemistry, food microbiology, food engineering, and nutrition.

In cases where students entering the master’s program with one or more deficiencies in undergraduate course work, appropriate collateral courses will be recommended by the Graduate Affairs Committee, Director of Graduate Studies, their advisor, and guidance committee. Credits earned in collateral courses do not count toward the minimum credit requirements for a degree.

In addition to meeting the requirements of the university and of the College of Agriculture and Natural Resources, students who are admitted to the master’s degree program in food science must meet the requirements specified below.

### Requirements for the Master of Science Degree in Food Science

The Master of Science Degree in Food Science is available under Plan A (with thesis) or Plan B (without thesis). A total of 32 credits is required for the degree under Plan A or Plan B.

Students must:

1. Complete 16 credits at the 800-level or above. Two courses (6 credits) must be FSC courses excluding FSC 890, 892, 898, and 899. Focus areas of courses will be selected in consultation with the student’s guidance committee.
2. Complete 1 credit of FSC 892 Food Science Seminar, in which students will present one seminar. Students may re-enroll in FSC 892 for a maximum of 2 credits towards the master’s degree.
3. Complete a total of at least 15 credits in upper-level courses in each of the following areas: food processing, food engineering, food chemistry, food safety, and food microbiology. 400-level courses taken in these areas may be counted if approved in advance by the advisor, guidance committee, and Director of Graduate Studies.

#### *Additional Requirements for Plan A*

1. Complete 6 to 10 credits in FSC 899 Master’s Thesis Research.
2. Complete a thesis proposal approved by the guidance committee prior to initiation of research not related to the seminar given in FSC 892.
3. Successfully complete a written thesis, public oral thesis defense, and oral examination with the guidance committee.

#### *Additional Requirements for Plan B*

1. Complete 1 to 5 credits of FSC 898 Master’s Research.
2. Complete an oral examination with the guidance committee.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Food Science** in the Department of Food Science and Human Nutrition. The University Committee on Graduate Studies approved this request at its April 13, 2020 meeting.
   1. Under the heading ***FOOD SCIENCE*** replace the entire entry with the following:

### Admission

Admission to the Doctor of Philosophy Degree in Food Science is based on the following:

* + 1. A detailed review of undergraduate, and where applicable, previous graduate performance.
    2. Graduate Record Examination (GRE) scores.
    3. Letters of recommendation.
    4. Previous research experience.
    5. A letter of intent and research interests.

Applicants should have a minimum grade-point average of 3.0, grades of 3.0 or above in science and mathematics courses, and proficiency in written and spoken English. Applicants should have taken undergraduate course work in physics, inorganic chemistry, organic chemistry, biochemistry, mathematics through integral calculus, and microbiology. It also is desirable for students to have taken upper-level undergraduate course work in food processing, food chemistry, food microbiology, food engineering, and nutrition.

In cases where students entering the doctoral program with one or more deficiencies in undergraduate course work, appropriate collateral courses will be recommended by the Graduate Affairs Committee, Director of Graduate Studies, their advisor, and guidance committee. Credits earned in collateral courses do not count toward the minimum credit requirements for a degree.

Doctoral programs in food science are individualized programs of study formulated among the major advisor, the research guidance committee, and the candidate. The program will be designed to ensure that the student will have comprehensive knowledge of the general field of food science, detailed knowledge of a specialized are in the field, and supportive knowledge of cognitive subjects.

In addition to meeting the requirements of the university and of the College of Agriculture and Natural Resources, students who are admitted to the doctoral degree program in food science must meet the requirements specified below.

### Requirements for the Doctor of Philosophy Degree in Food Science

The Doctor of Philosophy Degree in Food Science typically requires 20 to 36 course credits in addition to 24 research credits of FSC 999 Doctoral Dissertation Research to provide the desired breadth and depth of academic training for the student. In consultation with their major advisor,

members of the research guidance committee, and the Director of Graduate Studies, additional course work may be specified that will benefit the student’s research as well as courses necessary to complete the Ph.D. core requirements, especially for students who have earned a master’s degree in another field. A cumulative grade-point average of 3.0 must be maintained exclusive of collateral and research credits.

Students must:

1. Complete 16 credits, with 12 credits at the 800-level or above, excluding seminar courses. Three courses (9 credits) must be FSC courses in a relevant area of research chosen in consultation with the major advisor and guidance committee. Upper-level undergraduate courses at the 400-level taken may be counted if approved in advance by the advisor, guidance committee, and Director of Graduate Studies.
2. Complete 2 credits of FSC 892 Food Science Seminar in two separate enrollments, in which students will present a seminar.
3. Complete a 1 credit course offered by the department or university on writing a research proposal.
4. Complete at least 1 credit of FSC 891 Selected Topics in Food Science with a Food Science and Human Nutrition faculty member related to graduate teaching orientation.
5. Complete a written dissertation proposal defense (comprehensive examination) and public seminar not related to requirement 2. above, followed by an oral examination with the guidance committee.
6. Completion of a final written dissertation and public oral defense, followed by an oral examination with the guidance committee.
7. Complete 24 credits of FSC 999 Doctoral Dissertation Research.

Effective Fall 2020.

## COLLEGE OF ARTS AND LETTERS

1. Change the requirements for the **Doctor of Philosophy** degree in **Second Language Studies** in the College of Arts and Letters. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in Second Language Studies** make the following changes:
      1. Replace item 2. delete the following course:

LIN 875 Advanced Studies in Computational Linguistics 3

Add the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| LLT | 809 | Teaching Second Language Reading and Writing | 3 |
| LLT | 813 | CALL: Technology-mediated Language Learning |  |
|  |  | and Teaching | 3 |
| LLT | 818 | Eye Tracking in Second Language Acquisition |  |
|  |  | and Bilingualism | 3 |
| LLT | 821 | Individual Differences in Second Language |  |
|  |  | Acquisition | 3 |
| LLT | 823 | Introduction to Corpus Linguistics for Second |  |
|  |  | Language Studies | 3 |
| LLT | 841 | Topics in Second/Foreign Language Learning |  |
|  |  | and Teaching | 3 |
| LLT | 842 | Teaching and Learning Vocabulary in Another |  |
|  |  | Language | 3 |
| LLT | 856 | Language Identity and Ideology in Multilingual |  |
|  |  | Settings | 3 |
| LLT | 870 | Instructed Second Language Acquisition | 3 |

* + 1. Add the following sentence to item 3.:

Each qualifying research paper must be read and approved by two core Second Language Studies faculty members, with any exceptions approved by the Second Language Studies Director.

Effective Fall 2020.

1. Change the requirements for the **Master of Arts** degree in **Literature in English** in the Department of English. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Arts Degree in Literature in English** make the following changes:
      1. Replace item 1. with the following:

Complete the following courses within the first two semesters of enrollment in the program (6 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| ENG | 800 | Studies in Race, Gender, and the Human | 3 |
| ENG | 802 | Literary Criticism and Theory | 3 |

* + 1. In item 2. change the credits from ‘24’ to ‘21’.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **English** in the Department of English. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in English** make the following changes:
      1. Replace item 1. with the following:

Complete all of the following courses within the first four semesters of enrollment in the program (7 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| ENG | 800 | Studies in Race, Gender, and the Human | 3 |
| ENG | 802 | Literary Criticism and Theory | 3 |
| ENG | 820 | Professionalization Seminar | 1 |

* + 1. In item 2., change the credits from ‘21’ to ‘18’.

Effective Fall 2020.

1. Change the requirements in the **Master of Arts** degree in **German Studies** in the Department of Linguistics and Germanic, Slavic, Asian and African Languages. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** delete the following in paragraph one:

1. Have the results of the Graduate Record Examination General Test forwarded to the department.

* 1. Under the heading **Requirements for the Master of Arts Degree in German Studies** make the following change:
     1. In item 1. delete the following course:

GRM 810 Theory and Practice of Teaching German 3

Add the following course:

LLT 807 Language Teaching Methods 3

Effective Fall 2020.

1. Change the requirements in the **Doctor of Philosophy** degree in **German Studies** in the Department of Linguistics and Germanic, Slavic, Asian and African Languages. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** delete the following:

2. Have the results of the Graduate Record Examination General Test forwarded to the department.

Effective Fall 2020.

1. Change the requirements for the **Master of Arts** degree in **Teaching English to Speakers of Other Languages** in the Department of Linguistics and Germanic, Slavic, Asian and African Languages. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Arts Degree in Teaching English to Speakers of Other Languages** make the following changes:
      1. In item 1., change the total credits from ‘24’ to ‘21’ and delete the following course:

LLT 841 Topics in Second/Foreign Language Learning

and Teaching 3

* 1. Under the heading **Additional Requirements for Plan A**, add the following requirement 3.:

3. One TESOL related elective (3 credits).

* 1. Under the heading **Additional Requirements for Plan B**, change item 1. to the following:

1. Two TESOL related electives (6 credits).

Effective Fall 2020.

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

No new students are to be admitted to the program effective Spring 2018. No students are to be readmitted to the program effective Spring 2018. Effective Summer 2020, coding for the program will be discontinued and the program will no longer be available in the College of Arts and Letters. Students who have not met the requirements for the Disciplinary Teaching Minor in Italian through the College of Arts and Letters prior to Sumer 2020 will have to change their minor.

1. Change the requirements for the **Bachelor of Arts** degree in **Women’s and Gender Studies** in the Program in Women, Gender and Social Justice.
   1. Under the heading **Requirements for the Bachelor of Arts Degree in Women’s and Gender Studies** make the following changes:
      1. In item 3. b. delete the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| ANP | 431 | Gender, Environment and Development | 3 |
| FW | 211 | Introduction to Gender and Environmental Issues | 3 |
| MC | 386 | Women and Power in Comparative Perspective | 4 |
| MC | 482 | Gender and Violent Conflict | 4 |
| PHL | 358 | Philosophy, Gender, and Global Development | 3 |
| REL | 331 | Islam and Gender | 3 |

Add the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| ENG | 360 | Studies in Postcolonial and Diaspora Literature (W) | 3 |
| GSAH | 314 | Race, Gender, and Global Identities | 3 |
| HST | 371 | Women and Gender in Asia | 3 |
| PHL | 452 | Ethics and Development | 3 |

* + 1. In item 3. c. under *Gender, Race, Ethnicity, and History* delete the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| HST | 378 | Native Americans in North American History to 1830 | 3 |
| HST | 379 | Native Americans in North American History |  |
|  |  | from 1830 | 3 |
| HST | 410 | History of North American Urbanization | 3 |
| SOC | 216 | Sex and Gender | 3 |
| SOC | 322 | Sociology of Work | 3 |
| WS | 302 | Jewish Women’s Experiences and Writings | 3 |

* + 1. In item 3. c. under *Sexuality and Conflict/Violence* delete the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| COM | 391 | Topics in Verbal, Intercultural, or Gender |  |
|  |  | Communications | 4 |
| MC | 395 | Cultural Dimensions of Public Affairs | 4 |

Add the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| MC | 482 | Gender and Violent Conflict | 4 |
| WS | 424 | Seminar in Queer Studies | 3 |

* + 1. In item 3. c. under *Gender and the Arts and Humanities* delete the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| ENG | 482 | Seminar in Feminist Literary and Cultural Theory | 3 |
| HST | 378 | Native Americans in North American History to 1830 | 3 |
| HST | 379 | Native Americans in North American History |  |
|  |  | from 1830 | 3 |
| REL | 331 | Islam and Gender | 3 |
| WRA | 140 | Writing: Women in America | 4 |
| WS | 302 | Jewish Women’s Experiences and Writings | 3 |

* + 1. In item 3. c. under *Gender Applied: Health, Urban, and Public Policy* delete the following courses:

|  |  |  |
| --- | --- | --- |
| EEP 453 | Women and Work: Issues and Policy Analysis | 3 |
| HDFS 405 | Work and Family | 3 |
| HST 410 | History of North American Urbanization | 3 |

Add the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| WS | 304 | Lesbian, Gay, Bisexual, Transgender, Queer |  |
|  |  | (LGBTQ) and Sexuality | 3 |
| WS | 424 | Seminar in Queer Studies | 3 |

Effective Fall 2020.

## 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 April 13, 2020 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.*

* 1. Under the heading **Requirements for the Master of Business Administration Degree** make the following changes:
     1. In item 1. a., add the following:

|  |  |  |  |
| --- | --- | --- | --- |
| MBA | 802 | Financial Accounting and Reporting Strategy | 1.5 |
| MBA | 804 | Applied Data Analysis for Managers | 1.5 |
| MBA | 808 | Leadership and Teamwork | 1.0 |
| MBA | 812 | Accounting for Decision-Making and Control | 1.5 |
| MBA | 814 | Applied Economics | 1.5 |
| MBA | 816 | Managerial Communication Strategy and Tactics | 1.5 |
| MBA | 817 | Designing and Delivering Impactful Business |  |
|  |  | Presentations | 1.5 |
| MBA | 820 | Marketing Management | 1.5 |
| MBA | 821 | Introduction to Supply Chain Management Concepts | 1.5 |
| MBA | 822 | Corporate Investment Decisions | 1.5 |
| MBA | 823 | Information Technology Strategy | 1.5 |
| MBA | 824 | Managing the Workforce | 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 | 843 | Career Management | 1.0 |
| MBA | 845 | Integrative Action Projects | 4.0 |
| MBA | 846 | MBA Executive Lecture Series | 1.0 |
| MBA | 850 | Strategic Management | 1.5 |

Effective Fall 2020.

1. Delete the curriculum and degree requirements for the **Corporate Master of Business Administration** degree in **Business Administration** in the Eli Broad College of Business and Graduate School of Management. The University Committee on Graduate Studies {UCGS) provided consultative commentary to the Provost after considering this request. The Provost made a determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Spring 2017. No students are to be readmitted to the program effective Spring 2017. Effective Summer 2020, coding for the program will be discontinued and the program will no longer be available in the Eli Broad College of Business and Graduate School of Management. Students who have not met the requirements for the Corporate Master of Business Administration Degree in Business Administration through the Eli Broad College of Business and Graduate School of Management prior to Summer 2020 will have to change their major.

1. Change the requirements of the **Bachelor of Arts** degree in **Hospitality Business** in The School of Hospitality Business. The University Committee on Undergraduate Education (UCUE) approved this request at its March 26, 2020 meeting.
   1. Under the heading **Admission** replace item 2. b. with the following: Statistics 200 or approved substitution.
   2. Under the heading **Requirements for the Bachelor of Arts Degree Hospitality Business** make the following changes:
      1. In item 1., paragraph three, delete Statistics and Probability 201.
      2. Replace item 2. with the following:

The following requirements for the major:

* + - 1. **Hospitality Business Core**. All of the following courses (21 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| ACC | 201 | Principles of Financial Accounting | 3 |
| CSE | 102 | Algorithmic Thinking and Programming | 3 |
| EC | 201 | Introduction to Microeconomics | 3 |
| EC | 202 | Introduction to Macroeconomics | 3 |
| MKT | 327 | Introduction to Marketing | 3 |
| MTH | 103 | College Algebra | 3 |
| STT | 200 | Statistical Methods | 3 |

Students who place into Statistics 200 with a designated score on the Michigan State University mathematics services placement exam and successfully complete Statistics 200 will not be required to complete Mathematics 103.

* + - 1. **Major Field of Concentration**: All of the following courses with a minimum grade-point average of 2.00 (39 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| HB | 105 | Service Management Principles | 2 |
| HB | 201 | Hospitality Professional Development | 1 |
| HB | 203 | Hospitality Communication | 3 |
| HB | 207 | Hospitality Management and Leadership | 3 |
| HB | 237 | Hospitality Lodging Systems | 3 |
| HB | 265 | Hospitality Foodservice Systems | 3 |
| HB | 273 | Hospitality Business Analytics | 3 |
| HB | 302 | Hospitality Managerial Accounting | 3 |
| HB | 307 | Hospitality Human Resources | 3 |
| HB | 311 | Hospitality Finance | 3 |
| HB | 337 | Hospitality Information Systems | 3 |
| HB | 376 | Hospitality Sales Process | 3 |
| HB | 447 | Hospitality Business Law | 3 |
| HB | 489 | Hospitality Business Strategy (W) | 3 |

Students must complete first-level 400-hour internship/professional work experience prior to enrollment in Hospitality Business 307. Students must complete first-and second-level 400-hour internship/professional work experience prior to enrollment in Hospitality Business 489.

* + - 1. One hospitality business international elective course approved by the student's academic advisor (3 credits)
      2. A minimum of 12 credits in hospitality business specialized electives selected from the following:

#### *Events*

|  |  |  |  |
| --- | --- | --- | --- |
| HB | 349 | Hospitality Facilities Management | 3 |
| HB | 380 | Event Planning and Management | 3 |
| HB | 420 | The Business of Golf | 3 |
| HB | 485 | Hospitality Foodservice Operations | 3 |
| ***Food and Beverage*** | | | |
| HB | 345 | Hospitality Food Production Systems | 3 |
| HB | 345L | Hospitality Food Production Systems Lab | 1 |
| HB | 347 | Hospitality Supply Chain Process | 3 |
| HB | 349 | Hospitality Facilities Management | 3 |
| HB | 405 | Hospitality Foodservice Cost Control | 3 |
| HB | 409 | Introduction to Wine | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| HB | 411 | Hospitality Beverages | 3 |
| HB | 485 | Hospitality Foodservice Operations | 3 |
| ***Lodging*** |  |  |  |
| HB | 349 | Hospitality Facilities Management | 3 |
| HB | 437 | Hospitality Revenue Management | 3 |
| ***Real Estate*** | | | |
| HB | 282 | Hospitality Real Estate | 3 |
| HB | 349 | Hospitality Facilities Management | 3 |
| HB | 437 | Hospitality Revenue Management | 3 |
| HB | 482 | Advanced Hospitality Finance | 3 |
| HB | 492 | Hospitality Business Real Estate |  |
|  |  | Professional Skills Workshop | 1 to 3 |
| ***Other*** |  |  |  |
| HB | 100 | Introduction to Hospitality Business | 2 |
| HB | 210 | Casino Operations and Management | 3 |
| HB | 321 | Club Operations and Management | 3 |
| HB | 358 | Hospitality Entrepreneurship | 3 |
| HB | 486 | Advanced Hospitality Marketing | 3 |
| HB | 490 | Hospitality Independent Study | 1 to 3 |
| HB | 491 | Hospitality Current Topics and Trends | 1 to 3 |

Effective Summer 2021.

## COLLEGE OF COMMUNICATION ARTS AND SCIENCES

1. Establish a **Bachelor of Arts** degree in **Communication Leadership and Strategy** in the Department of Communication. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 20, 2020 meeting.

### Background Information:

The Bachelor of Arts degree in Communication Leadership and Strategy (CLS) will train students in the integrated and purposeful use of communication theory and methods, primarily derived from interpersonal, social influence, organizational, and mass communication, as well as research methods, to achieve expansive goals and outcomes in support of organizational grand strategy.

The field involves comprehensive audience and information-environment analysis, and leverages multiple communication competencies to inform, influence, and motivate internal and external stakeholders.

Historically, large organizations hired communication professionals with degrees in specialized areas such as advertising, marketing, or public relations, to manage all their communication needs. In recent years however, as the professional communication field has seen incredible growth in the number of communication platforms available and the accompanying ability of people to interact with corporations and with each other, it has become necessary for corporations to create more complex and comprehensive communication plans than in the past. In fact, several governmental and private sector organizations now employ teams that rely on the expertise of professionals with degrees in advertising, marketing, public relations, digital communication, and communication strategy. The academic community is also adjusting to this new reality. Nine of the 14 Big Ten universities have strategic communication degree programs (e.g., Ohio State, Penn State, Iowa) or strategic communication course sequences/concentrations (e.g., Northwestern, Wisconsin, Rutgers, Illinois). At least two Big Ten schools offer both Public Relations and Strategic Communication programs (Penn State, Rutgers), consistent with proposals being forwarded in Communication Arts and Sciences.

For organizations operating in today’s dynamic information environment, the ability to harness the power of strategic communication is critical to long-term success. Organizational leaders are getting this message. According to LinkedIn, there are currently more than 25,000 vacant positions in the United States with the words “strategic communication” in the title. Approximately 6,000 of those jobs are at the entry level. The position descriptions reveal that employers want communication professionals who can think about broad strategy, but still incorporate, digital campaigns, media outreach, and ad-buys, to address how organizations can effectively maneuver

in the modern information environment. Graduates who have a comprehensive understanding of the complexities of communication will be particularly adept at planning, solving problems, and implementing messaging with the goal of growing an organization and furthering its mission. These graduates are in high demand. Because our program takes a broad approach to communication strategy by integrating leadership, we have named it as such.

According to the 2019 Job Outlook Survey conducted annually by the National Association of Colleges and employers, among the top five attributes employers seek in recently graduated college students are: (1) the ability to communicate effectively to both internal and external audiences; (2) the ability and desire to be problem-solvers and critical thinkers; (3) a willingness to take initiative; and an understanding of analytical/quantitative analyses. These attributes translate to strategic communication and leadership as employers are seeking graduates with advanced communication training, critical thinking skills, and a solid understanding of the importance of strategic communication in meeting organizational challenges and protecting organizational reputations.

For the university, the College of Communication Arts and Sciences, and the Department of Communication, and the undergraduate major in Communication Leadership and Strategy will meet several key objectives. The program will provide a new, complete, and rigorous vision of disciplinary knowledge targeted at an important, high-level profession; align the university’s communication related offerings with those of other Big Ten universities/competitors (e.g. Penn State, Ohio State, Iowa); elevate the reputation and visibility the department and college and coalesce existing degree offerings around this new idea; address the growing communication strategy requirements of employers; address the growing concern of declining enrollments in the Communication major; and update the Department of Communication curriculum with an eye toward student and employer needs while remaining true to the core expertise of the department.

The degree program will provide students with a foundational base of knowledge and abilities that go far beyond tactical communication tasks and responsibilities. The program of study will equip students with the skills necessary to conduct rapid evaluations of issues and organizational communication challenges, analyze the demographics of target audiences, craft campaign materials that are rooted in communication theory, and assess the effectiveness of strategic communication efforts. More importantly, the program will give students the ability to develop, execute, and evaluate long-range communication strategy for the organizations they serve and causes they support.

These skills are all cultivated to prepare graduates to take on advanced roles in communication and respond to the needs of a wide range of employers seeking visionary strategic communication leadership.

### Academic Programs Catalog Text:

The goal of the major in Communication Leadership and Strategy is to train students in the communication principles, strategies, and initiatives used to further an organization’s goals, mission, or values. It is a multidisciplinary professional communication field, drawing upon communication practices found in related disciplines, including interpersonal, organization, and mass communication and research analytics. The major is designed to equip students to: engage in comprehensive audience and information-environment analysis, use excellent interpersonal, organizational and leadership skills with diverse audiences, conduct formative and post-campaign research, understand social media analytics, engage in rapid response crisis communication for organizations, and create strategic plans that leverage multiple communication competencies to inform, influence, and motivate internal and external stakeholders. Undergraduate work in strategic communication creates greater awareness of large-scale organizational goals and how to use communication, leadership, and strategy to achieve them. Students will learn how to integrate various vertical communication functions such as public relations, information operations, analytics, and advertising into overall grand strategy. Majors will commonly pursue careers in strategic communication, information operations, political strategy, or corporate communication.

### Requirements for the Bachelor of Arts Degree in Communication Leadership and Strategy

* + 1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of the catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Communication Leadership and Strategy.

The University's Tier II writing requirement for the Communication Leadership and Strategy major is met by completing one of the following courses: Communication 475 or 480. Those courses are referenced in item 3. below.

* + 1. The requirements of the College of Communication Arts and Sciences for the Bachelor of Arts degree.
    2. The following requirements for the major:

CREDITS

* + - 1. All of the following courses (38 credits):

b.

|  |  |  |  |
| --- | --- | --- | --- |
| COM | 100 | Human Communication | 3 |
| COM | 225 | An Introduction to Interpersonal |  |
|  |  | Communication | 3 |
| COM | 240 | Introduction to Organizational |  |
|  |  | Communication | 4 |
| COM | 275 | Effects of Mass Communication | 3 |
| COM | 280 | Principles, Practices and Ethics of |  |
|  |  | Strategic Communication | 4 |
| COM | 300 | Methods of Communication Inquiry | 4 |
| COM | 325 | Interpersonal Influence and Conflict | 3 |
| COM | 340 | Leadership and Group Communication | 3 |
| COM | 380 | Crisis Communication and Rapid Response | 3 |
| COM | 475 | Communication Campaign Design |  |
|  |  | and Analysis (W) | 4 |
| COM | 480 | Capstone in Communication Leadership |  |
|  |  | and Strategy | 4 |
| One course from each of the following areas (9 credits):  **Research Methods and Analytics** | | | |
| ADV | 442 | Digital Analytics | 3 |
| COM | 301 | Special Topics in Communication Science, |  |
|  |  | Analytics and Research Methods | 3 |
| MI | 220 | Methods for Understanding Users | 3 |
| MI | 350 | Evaluating Human-Centered Technology | 3 |
| MI | 355 | Media and Information Research | 3 |
| PLS | 202 | Introduction to Data Analytics and the |  |
|  |  | Social Sciences | 3 |
| PSY | 295 | Data Analysis in Psychological Research | 3 |
| PSY | 342 | Stereotypes, Prejudice, and Discrimination | 3 |
| SOC | 281 | Social Research Methods | 4 |
| SOC | 282 | Quantitative Analysis for Social Research | 4 |
| STT | 200 | Statistical Methods | 3 |
| **Computer-Mediated Communication and Social Media** | | | |
| ADV | 420 | New Media Driver’s License | 3 |
| ADV | 431 | Monitoring and Measuring Social Media |  |
|  |  | of Brands | 3 |
| COM | 302 | Special Topics in Health Communication | 3 |
| COM | 304 | Special Topics in Interpersonal |  |
|  |  | Communication | 3 |
| COM | 305 | Special Topics in Mediated Communication | 3 |
| JRN | 203 | Visual Storytelling | 3 |
| MI | 101 | Understanding Media and Information | 3 |
| MI | 201 | Introduction to Information Science | 3 |
| MI | 305 | Media and Information Policy | 3 |
| MI | 462 | Social Media and Social Computing | 3 |
| **Culture and Diversity** | | | |
| ANP | 200 | Navigating Another Culture | 2 |
| COM | 310 | Intercultural Communication | 3 |
| COM | 320 | Diversity and Communication | 3 |
| COM | 440 | Organizational Communication Structure (W) | 4 |
| JRN | 475 | International News and Government |  |
|  |  | Dynamics | 3 |
| MI | 480 | Information and Communication |  |
|  |  | Technologies and Development | 3 |
| PR | 310 | Diversity, Equity, and Inclusion in Public |  |
|  |  | Relations and Advertising | 3 |
| PSY | 342 | Stereotypes, Prejudice, and Discrimination | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| SOC | 161 | International Development and Change | 3 |
| SOC | 215 | Race and Ethnicity | 3 |

Effective Fall 2020.

1. Establish a **Bachelor of Arts** degree in **Games and Interactive Media** in the Department of Media and Information. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 20, 2020 meeting.

### Background Information:

The Department of Media and Information oversees the Minor in Game Design and Development, currently ranked #7 in the Princeton Top 50 Undergraduate Game Design programs (from a survey of 150 institutions). The games industry generated over $48 billion revenue in 2018, surpassing film at $41 billion. Careers within the industry include an ever-evolving array of project managers, programmers, 3D artists and animators, concept artists, sound engineers, level designers, character designers, storytelling/narrative writers, virtual reality designers and immersive content generators.

Our Game Design Minor students consistently produce high quality content and work for some of the largest and most respected game design companies in the world (EA, Rockstar, Blizzard, Insomnia, and more). Our students and faculty created Plunder Panic, a team-based multiplayer game that received multiple awards, including the coveted People’s Choice Award at IndieCade 2018.

Our research included interviewing/speaking with Game Design and Development Minor alumni; evaluating other Game Design/Development programs, especially those in the top Princeton rankings; talking with incoming and potential students, and their parents/guardians. All of these areas expressed a desire for a major rather than just a minor.

A major will allow for greater depth of knowledge, a uniform core with foundational knowledge in several areas related to games and interactivity, including: sketching, graphics, interactivity, the role of games in society and public policy around games.

The minor is a four-course progression, multidisciplinary in nature, whereas the major will provide a depth of content in one or more areas; game design, project management, graphics and animation, game development, storytelling and narrative, and the production process.

Our faculty possess advanced programming, storytelling, design, concept art, 3D modeling and animation skills that mirror and complement the industry standards.

The Bachelor of Arts Degree in Games and Interactive Media uniquely prepares graduates to design high-impact interactive products by focusing on: 1) using the design process to inform the creative act and fuel innovation using current and emerging technologies, 2) fluency with the tools, practice, and techniques used in the creation of current and emerging game design and interactive experiences, and 3) interpretation and critique of games in the context of audiences, users, historical precedents, narrative/storytelling, socio-cultural patterns of use, and ethical implications.

### Academic Programs Catalog Text:

Along with a strong liberal arts foundation, student pursuing the Bachelor of Arts Degree in Games and Interactive Media create and examine the design process, production, management, artistry, and effects of video games, board games, AR/VR, and emerging interactive media. Faculty will mentor students in the learning process to think critically about and design innovative games that serve to entertain, educate, and address societal concerns.

Students will be prepared for careers within industry that include an ever-evolving array of project managers, programmers, 3D artists and animators, concept artists, storytelling/narrative writers, and designers of characters, virtual/augmented reality, and immersive content.

### Admission

To be admitted to the Bachelor of Arts Degree in Games and Interactive Media, students must have:

* + 1. Completed 28 credits.
    2. Completed the following courses with a combined minimum grade-point average of 2.5:

|  |  |  |  |
| --- | --- | --- | --- |
| CAS | 116 | Media Sketching and Graphics | 3 |
| CAS | 117 | Games and Interactivity | 3 |
| MI | 101 | Understanding Media and Information | 3 |
| MTH | 103 | College Algebra | 3 |
| Or |  |  |  |
| MTH | 116 | College Algebra and Trigonometry | 5 |

* + 1. A cumulative grade-point average of 2.0.

### Requirements for the Bachelor of Arts Degree in Games and Interactive Media

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of the catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Games and Interactive Media.

The University's Tier II writing requirement for the Games and Interactive Media major is met by completing one of the following courses: Media and Information 402, 430, 447, 477, 482, 484, 486, or 498 . Those courses are referenced in item 3. below.

1. The requirements of the College of Communication Arts and Sciences for the Bachelor of Arts degree.
2. The following requirements for the major (36 credits):

CREDITS

* 1. All of the following courses (12 credits):

b.

|  |  |  |  |
| --- | --- | --- | --- |
| CAS | 116 | Media Sketching and Graphics | 3 |
| CAS | 117 | Games and Interactivity | 3 |
| MI | 101 | Understanding Media and Information | 3 |
| MI | 339 | Games and Society | 3 |
| Two of the following courses (6 credits): | | | |
| MI | 201 | Introduction to Information Science | 3 |
| MI | 220 | Methods for Understanding Users | 3 |
| MI | 301 | Bringing Media to Market | 3 |
| MI | 305 | Media and Information Policy | 3 |
| MI | 355 | Media and Information Research | 3 |

1. Six courses with four courses from the same focus area and at least one course from a different focus area (18 credits): **Game Design**

|  |  |  |  |
| --- | --- | --- | --- |
| MI | 230 | Game Design | 3 |
| MI | 330 | Game Level Design | 3 |
| MI | 332 | Game Interface Design | 3 |
| MI | 334 | eSports and Online Broadcasting | 3 |
| MI | 344 | Sound Design for Cinema, Television, |  |
|  |  | and Games | 3 |
| MI | 402 | Topics in Game Studies | 3 |
| MI | 430 | Game Writing (W) | 3 |
| MI | 445 | Game Design and Development I | 3 |
| MI | 455 | Game Design and Development II | 3 |
| MI | 482 | Building Virtual Worlds (W) | 3 |
| MI | 486 | Serious Game Design (W) | 3 |
| MI | 497 | Game Design Studio | 3 |
| MI | 498 | Collaborative Game Design (W) | 3 |
| **Game Graphics and Animation** | | | |
| MI | 227 | Concept Design for Games, Film, and TV | 3 |
| MI | 247 | Three-Dimensional Graphics and Design | 3 |
| MI | 327 | Advanced Concept Design for Games, |  |
|  |  | Film, and TV | 3 |
| MI | 337 | Compositing and Special Effects | 3 |
| MI | 347 | Advanced Three-Dimensional Computer |  |
|  |  | Animation | 3 |
| MI | 377 | Advanced 3D Modeling | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| MI | 447 | Graphics and Animation Portfolio (W) | 3 |
| MI | 477 | Character Design (W) | 3 |
| **Game Development** | | | |
| CSE | 231 | Introduction to Programming I | 4 |
| CSE | 232 | Introduction to Programming II | 4 |
| MI | 231 | Game and Interactive Media Development | 3 |
| MI | 349 | Web Design and Development | 3 |
| MI | 431 | Advanced Game Development | 3 |
| MI | 449 | Advanced Web Development and |  |
|  |  | Database Management | 3 |
| MI | 482 | Building Virtual Worlds (W) | 3 |
| MI | 484 | Building Innovative Interfaces (W) | 3 |
| MTH | 314 | Matrix Algebra with Computational |  |

Applications 3

### Media and Information (MI) Electives.

Additional credits in department courses can be taken as electives. Special topics (MI 491) and Internships (MI 493) are encouraged for experiential learning opportunities. Students interested in pursuing a minor should contact the Academic and Student Affairs Office in the College of Communication Arts and Sciences.

Effective Fall 2020.

1. Establish a **Bachelor of Arts** degree in **Information Science** in the Department of Media and Information. The University Committee on Undergraduate Education (UCUE recommended approval of this request at its February 20, 2020 meeting.

### Background Information:

The term “information professional” is being used to describe people who are working in settings that were emerging from the growing information, technology and knowledge economy. The need for research related to the increasing role that information plays in the lives of people, communities and institutions is also apparent.

Information science is interested in the relationship between information, technology, and people. This is characterized by a commitment to learning and understanding the role of information technologies in human endeavors. Expertise in all forms of information is required for progress in science, business, education, and culture. This expertise must include understanding of the uses and users of information, as well as information technologies and their applications.

The Media and Information department has long been teaching a variety of courses about the relationship between information and communications technologies and the people, communities, institutions, and governments that interact with them. Following the global iSchool movement (of which the Media and Information department is a member), we are assembling our courses into this “information science” major to train a new class of professionals who both understand the way modern technologies work, but also how those technologies influence and shape people, groups, communities, organizations, governments, and society.

This major takes a human-centered approach to understanding information technologies. It includes training in designing technologies from a human-centered perspective, organizing and managing groups of people through technologies, understanding how modern technologies are shaping society, and governing the role that these technologies play in our world.

There are few other majors with overlapping goals. The Experience Architecture major is focused solely on technology design, but does not provide comprehensive training to understand and influence how those designs shape businesses and society. The Computational Data Science major trains students to analyze large sets of data, but does not take human-centered approaches to understanding how those tools affect the people using them. The information science integrates understanding of technology (engineering) with the understanding of people (social science) around information and communication technologies to produce interdisciplinary professionals.

### Academic Programs Catalog Text:

Information science is interested in the relationship between information, technology, and people. Information Science students will be equipped for jobs emerging from the growing information, technology and knowledge economy. Students will design technologies from a human-centered perspective, organize and manage groups of people using information technologies, understand how modern technologies are shaping society, and govern the role that these technologies play in our world.

### Requirements for the Bachelor of Arts Degree in Information Science

* + 1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of the catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Information Science.

The University's Tier II writing requirement for the Information Science major is met by completing one of the following courses: Media and Information 401, 450, or 488. Those courses are referenced in item 3. below.

* + 1. The requirements of the College of Communication Arts and Sciences for the Bachelor of Arts degree.
    2. The following requirements for the major:

CREDITS

* + - 1. All of the following core courses (9 credits):

b.

|  |  |  |  |
| --- | --- | --- | --- |
| MI | 101 | Understanding Media and Information | 3 |
| MI | 201 | Introduction to information Science | 3 |
| MI | 304 | Information and Society | 3 |
| Two of the following methods courses (6 credits): | | | |
| MI | 220 | Methods of Understanding Users | 3 |
| MI | 320 | Reasoning with Data | 3 |
| MI | 355 | Media and Information Research | 3 |
| MI | 425 | Advanced Data Analysis | 3 |

1. Six courses from the following focus areas with at least

four courses in the same focus area and at least one course from a different focus area (18 credits):

### Human-Centered Technologies

|  |  |  |  |
| --- | --- | --- | --- |
| MI | 250 | Introduction to Applied Programming | 3 |
| MI | 349 | Web Design and Development | 3 |
| MI | 350 | Evaluating Human-Centered Technology | 3 |
| MI | 420 | Interactive Prototyping | 3 |
| MI | 449 | Advanced Web Development and |  |
|  |  | Database Management | 3 |
| MI | 450 | Creating Human-Centered Technology (W) | 3 |
| **Media and Information** | | | |
| ITM | 444 | Information Technology Project |  |
|  |  | Management | 3 |
| MI | 349 | Web Design and Development | 3 |
| MI | 360 | Media and Information Management | 3 |
| MI | 361 | IT Network Management and Security | 3 |
| MI | 401 | Topics in Information Science (W) | 3 |
| MI | 449 | Advanced Web Development and |  |
|  |  | Database Management | 3 |
| MI | 452 | Media Entrepreneurship and Business |  |
|  |  | Strategies | 3 |
| MI | 462 | Social Media and Social Computing | 3 |
| MI | 472 | Digital Business and Commerce | 3 |
| **Information and Society** | | | |
| MI | 239 | Digital Footprints: Privacy and Online |  |
|  |  | Behavior | 3 |
| MI | 302 | Networks, Markets, and Society | 3 |
| MI | 305 | Media and Information Policy | 3 |
| MI | 401 | Topics in Information Science (W) | 3 |
| MI | 462 | Social Media and Social Computing | 3 |
| MI | 480 | Information and Communication |  |
|  |  | Technologies and Development | 3 |

MI 488 Information and Communication Technology

Development Project (W) 3

### Media and Information (MI) Electives.

Additional credits in department courses can be taken as electives outside the above requirements. No more than 60 credits can be taken within the college. Students are encouraged to pursue an optional transcriptable concentration or a department-affiliated minor to complement their major. Minors may be chosen from fiction filmmaking, documentary production, game design and development, information technology, or information and communication technology and development. Special topics and internships are also encouraged through enrollment in MI 491 and MI 493. Students interested in pursuing a concentration or minor should contact the Academic and Students Affairs Office in the College of Communication Arts and Sciences.

Effective Fall 2020.

## COLLEGE OF EDUCATION

1. Change the requirements for the **Graduate Certificate** program in **Applied Behavior Analysis 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 April 13, 2020 meeting.
   1. Under the heading **Graduate Certificate in Applied Behavior Analysis in Special Education**

make the following changes:

* + 1. Change the total credits from ‘24’ to ‘21’.
    2. Delete the following course:

CEP 846 Autism Spectrum Disorders: Advanced Topics 3

Effective Fall 2020.

## COLLEGE OF ENGINEERING

1. Change the requirements in the **Master of Science** degree in **Chemical Engineering** in the Department of Chemical Engineering and Materials Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Science Degree in Chemical Engineering**

make the following changes:

* + 1. Under the heading **Requirements for Both Plan A and Plan B**, in item 1. change the total credits from ‘15’ to ’12 and delete the following course:

CHE 802 Research Methods 3

* + 1. Add the following item 3.:

Complete 2 credits of CHE 892 Seminar.

Effective Summer 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Chemical Engineering** in the Department of Chemical Engineering and Materials Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** add the following paragraph:

Students may be required to complete additional collateral course work to fulfill deficiencies in their academic background. A grade of 3.0 or higher is required in each course. In some cases, students may be granted provisional status in the program until collateral course work has been satisfactorily completed. Collateral course work does not count towards fulfillment of degree requirements.

* 1. Under the heading **Requirements for the Doctor of Philosophy Degree in Chemical Engineering** replace the entire entry with the following:

The Doctor of Philosophy degree in Chemical Engineering is comprised of course work, research, selection of an advisor, a qualifying examination, formation of a guidance committee and doctoral degree program, comprehensive examination, and successful completion of a dissertation and final oral examination in defense of the dissertation.

Students must complete the requirements specified by their guidance committee and must include the requirements specified below:

1. All of the following courses (13 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| CHE | 801 | Advanced Chemical Engineering Calculations | 3 |
| CHE | 802 | Research Methods | 1 |
| CHE | 821 | Advanced Chemical Engineering Thermodynamics | 3 |
| CHE | 822 | Advanced Transport Phenomena | 3 |
| CHE | 831 | Advanced Chemical Reaction Engineering | 3 |

1. Complete 5 credits of CHE 992 Seminar.
2. Students entering the program with a master’s degree must complete 12 additional credits in consultation with the guidance committee. Students may receive a waiver for some of the required courses. Students who have a bachelor’s degree are required to complete a minimum of 16 additional credits chosen in consultation with the guidance committee.
3. Pass a qualifying examination consisting of a written component and an oral component.
4. Pass a comprehensive examination in the form of a research proposal defense containing a written proposal and an oral defense.
5. Complete a minimum of 24 credits and no more than 36 credits of CHE 999 Doctoral Dissertation Research and successfully defend the dissertation.
6. Present the results of the research in a public seminar during the final oral examination.

Effective Fall 2020.

1. Change the requirements in the **Master of Science** degree in **Computer Science** in the Department of Computer Science and Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Science Degree in Computer Science** make the following changes:
      1. Under the heading **Requirements for Both Plan A and Plan B** replace the entire entry with the following:

The student must complete a minimum of 18 credits in courses listed below with at least one course from each breadth area:

### System Design and Analysis

|  |  |  |  |
| --- | --- | --- | --- |
| CSE | 812 | Distributed Systems | 3 |
| CSE | 820 | Advanced Computer Architecture | 3 |
| CSE | 822 | Parallel Computing | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| CSE | 824 | Advanced Computer Networks and Communications | 3 |
| CSE | 825 | Computer and Network Security | 3 |
| CSE | 870 | Advanced Software Engineering | 3 |
| **Theory and Algorithms** | | | |
| CSE | 830 | Design and Theory of Algorithms | 3 |
| CSE | 835 | Algorithmic Graph Theory | 3 |
| CSE | 836 | Probabilistic Models and Algorithms in |  |
|  |  | Computational Biology | 3 |
| CSE | 860 | Foundations of Computing | 3 |
| **Data Analysis and Applications** | | | |
| CSE | 802 | Pattern Recognition and Analysis | 3 |
| CSE | 803 | Computer Vision | 3 |
| CSE | 841 | Artificial Intelligence | 3 |
| CSE | 842 | Natural Language Processing | 3 |
| CSE | 843 | Language and Interaction | 3 |
| CSE | 845 | Multidisciplinary Research Methods for the |  |
|  |  | Study of Evolution | 3 |
| CSE | 847 | Machine Learning | 3 |
| CSE | 848 | Evolutionary Computing | 3 |
| CSE | 872 | Advanced Computer Graphics | 3 |
| CSE | 881 | Data Mining | 3 |

* + 1. Under the heading **Additional Requirements for Plan A** replace the entire entry with the following:

The student must complete:

* + - 1. A minimum of 21 credits in 800-900 level course courses chosen in consultation with the student’s advisor, excluding Computer Science and Engineering 801, 890, 898, and 899.
      2. At least 6, but not more than 8, credits of CSE 899 Master’s Thesis Research.
    1. Under the heading **Additional Requirements for Plan B** replace the entire entry with the following:
       1. Complete a minimum of 24 credits in 800-900 level courses chosen in consultation with the student’s advisor, excluding Computer Science 801, 890, 898, and 899.

Effective Summer 2020.

1. Change the requirements in the **Doctor of Philosophy** degree in **Computer Science** in the Department of Computer Science and Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in Computer Science**

replace the entire entry with the following:

1. Students must complete a minimum of 30 credits beyond the research requirements in CSE 999. Students must maintain a cumulative grade-point average of at least 3.00 in all courses counted towards the 30 credits. The student’s guidance committee reserves the right to require additional course work beyond the minimum.
2. Students may receive credit for 24 credits of course work taken during a prior completed Master of Science degree or equivalent. In the case where the master’s degree was obtained from the Department of Computer Science and Engineering at Michigan State University, the Ph.D. students is only required to complete 24 to 36 credits of CSE 999 Doctoral Dissertation Research.
3. As part of the total credit requirements, students must complete a minimum of 18 credits in courses listed below with at least one course from each breadth area. If a student has completed a Master of Science degree and receives a waiver, then the corresponding breadth area requirement will also be waived.

### System Design and Analysis

|  |  |  |  |
| --- | --- | --- | --- |
| CSE | 812 | Distributed Systems | 3 |
| CSE | 820 | Advanced Computer Architecture | 3 |
| CSE | 822 | Parallel Computing | 3 |
| CSE | 824 | Advanced Computer Networks and Communications | 3 |
| CSE | 825 | Computer and Network Security | 3 |
| CSE | 870 | Advanced Software Engineering | 3 |
| **Theory and Algorithms** | | | |
| CSE | 830 | Design and Theory of Algorithms | 3 |
| CSE | 835 | Algorithmic Graph Theory | 3 |
| CSE | 836 | Probabilistic Models and Algorithms in |  |
|  |  | Computational Biology | 3 |
| CSE | 860 | Foundations of Computing | 3 |
| **Data Analysis and Applications** | | | |
| CSE | 802 | Pattern Recognition and Analysis | 3 |
| CSE | 803 | Computer Vision | 3 |
| CSE | 841 | Artificial Intelligence | 3 |
| CSE | 842 | Natural Language Processing | 3 |
| CSE | 843 | Language and Interaction | 3 |
| CSE | 845 | Multidisciplinary Research Methods for the |  |
|  |  | Study of Evolution | 3 |
| CSE | 847 | Machine Learning | 3 |
| CSE | 848 | Evolutionary Computing | 3 |
| CSE | 872 | Advanced Computer Graphics | 3 |
| CSE | 881 | Data Mining | 3 |

1. Complete a minimum of 24 credits in 800-900 level courses chosen in consultation with the student’s advisor, excluding Computer Science 801, 890, 898, and 899.
2. Pass a qualifying examination consisting of a written and an oral part, generally within two years of beginning the Ph.D. program.
3. Pass the comprehensive examination that includes a program statement presenting the student’s learning and professional background and goals, and provides a rationale for the students declared focus areas.
4. Complete 24 credits of CSE 999 Doctoral Dissertation Research and successfully defend the dissertation. Present the results of the research in a public seminar during the final oral examination.

Effective Summer 2020.

1. Change the requirements in the **Doctor of Philosophy** degree in **Materials Science and Engineering** in the Department of Chemical Engineering and Materials Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** add the following paragraph:

Students entering the program with a bachelor’s degree in a field other than Materials Science and Engineering may be required to complete additional collateral courses to fulfill deficiencies in their academic background. Collateral course work will not count towards degree requirements.

* 1. Under the heading **Requirements for the Doctor of Philosophy Degree in Materials Science and Engineering** replace the entire entry with the following:

Students must meet the requirements specified by their guidance committee and must meet the requirements specified below. Students entering the program with a bachelor’s degree are required to complete a minimum of 13 additional credits selected in conjunction with the advisor and committee. Students entering the program with a master’s degree are required to complete a minimum of 12 additional credits, but may receive a waiver for some of the required courses with approval of the advisor and committee.

* + 1. All of the following courses (13 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| CHE | 802 | Research Methods | 1 |
| MSE | 851 | Thermodynamics of Solids | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| MSE | 855 | Advanced Rate Theory and Diffusion | 3 |
| MSE | 860 | Advanced Theory of Solids | 3 |
| MSE | 870 | Electron Microscopy in Materials Science | 3 |
|  | Or |  |  |
| MSE | 881 | Advanced Spectroscopy and Diffraction Analysis of Materials | 3 |

* + 1. Complete 5 credits of CHE 992 Seminar.
    2. Complete one mathematics or statistics course at the 400-level or above. 3
    3. Pass a qualifying examination consisting of a written component and an oral component.
    4. Pass a comprehensive examination in the form of a research proposal defense containing a written proposal and an oral defense.
    5. Complete a minimum of 24 credits of MSE 999 Doctoral Dissertation Research, with no more than 36 credits.
    6. Successfully defend the dissertation and present the results of the research in a public seminar during the final oral examination.

Effective Summer 2020.

## COLLEGE OF HUMAN MEDICINE

1. Change the requirements for the **Professional Program in Human Medicine** leading to the **Doctor of Medicine** (M.D.) degree. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **PROGRAM IN HUMAN MEDICINE** make the following changes:
      1. Under the heading **Admission to the Program in Human Medicine** replace the ‘Minimum requirements which must be fulfilled prior to enrollment in the program in human medicine’ with the following:
         1. Be a U.S. or Canadian citizen or permanent resident of the United States.
         2. Have a valid U.S. or Canadian Driver's License and reliable vehicle upon matriculation.
         3. Have completed at least a four-year high school education or equivalent.
         4. Have completed all premedical requirements, including a bachelor's degree earned in the U.S. or Canada.
         5. Have taken the Medical College Admission Test (MCAT).
         6. Have taken the CASPer Test.

Michigan State University-College of Human Medicine has embraced a flexible approach in providing four options (or pathways) to meeting the premedical course requirements. A description of the four premedical course requirement options can be found here: *https://mdadmissions.msu.edu/applicants/prereq.html*.

* + 1. Under the heading **Requirements for the Doctor of Medicine Degree** add the following:
       1. All of the following courses (132 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| FM | 641 | Family Medicine Clerkship in the Late Clinical  Experience | 6 |
| HM | 552 | Medical School I | 16 |
| HM | 553 | Medical School II | 16 |
| HM | 554 | Medical School III | 16 |
| HM | 555 | Medical School IV | 16 |
| HM | 556 | Medical School V | 16 |
| HM | 651 | Advanced Skills and Knowledge in Medical School I | 2 |
| HM | 652 | Advanced Skills and Knowledge in Medical School II | 2 |
| HM | 653 | Advanced Skills and Knowledge in Medical School III | 2 |
| HM | 654 | Advanced Skills and Knowledge in Medical School IV | 2 |
| HM | 655 | Advanced Skills and Knowledge in Medical School V | 2 |

2.

|  |  |  |  |
| --- | --- | --- | --- |
| MED | 641 | Internal Medicine Clerkship in the Late Clinical |  |
|  |  | Experience | 6 |
| OGR | 641 | Obstetrics and Gynecology Clerkship in the Late |  |
|  |  | Clinical Experience | 6 |
| PHD | 641 | Pediatric Clerkship in the Late Clinical Experience | 6 |
| PSC | 641 | Psychiatry and Behavioral Science Clerkship |  |
|  |  | in the Late Clinical Experience | 6 |
| SUR | 641 | Surgery in the Late Clinical Experience I | 6 |
| SUR | 642 | Surgery in the Late Clinical Experience II | 6 |
| One of the following Critical Care Selective courses (6 credits): | | | |
| MED | 643 | Medicine Critical Care | 6 |
| PHD | 643 | Pediatric Critical Care | 6 |
| SUR | 643 | Surgical Critical Care | 6 |
| One of the following Primary Care Selective courses (6 credits): | | | |
| FM | 610 | Outpatient Family Medicine Clerkship | 6 |
| FM | 611 | Geriatric Clerkship | 6 |
| FM | 616 | Rural Family Practice Elective | 6 |
| FM | 617 | Sports Medicine Clerkship | 6 |
| FM | 618 | Palliative and End of Life Care Clerkship | 6 |
| MED | 619 | Advanced Internal Medicine-Ambulatory | 6 |
| MED | 624 | Geriatric Clerkship | 6 |
| MED | 636 | Advanced Internal Medicine: Medicine/Pediatrics | 6 |
| PHD | 602 | Ambulatory Pediatric Clerkship | 6 |

3.

4. Completion of 20 weeks of Elective Clerkships (30 credits):

ANTR 685 Directed Study in Clinical Prosection 3 or 6

EM 630 Emergency Medicine Clerkship 6

EM 631 Clinical Experience in Emergency Medicine 3 or 6 EM 632 Senior Clinical Elective in Emergency Medicine 6

EM 633 Emergency Medicine Sub-Specialty Clinical Elective 3 or 6 FM 610 Outpatient Family Medicine Clerkship 3 or 6

FM 611 Geriatric Clerkship 3 or 6

FM 612 Inpatient Family Medicine Clerkship 3 or 6

FM 613 Clinical Research in Family Practice 6

FM 616 Rural Family Practice Elective 6

FM 617 Sports Medicine Clerkship 3 or 6 FM 618 Palliative and End of Life Care Clerkship 3 or 6 FM 620 Family Practice Subinternship 6

HM 608 Sub-Specialty Clerkships 6

HM 609 Laboratory Medicine Clerkship 3 or 6

HM 610 Pathology Clerkship 3 or 6

HM 611 Hospice Clerkship 3 or 6

HM 612 Pain Medicine 3 or 6

HM 613 Complementary Medicine Clerkship 3 or 6

HM 614 Student-Designed Elective Clerkship 3 or 6

HM 615 Global Health Experience in India 3 or 6

HM 616 Radiation Oncology Clerkship 3 or 6 HM 622 Medical Partners in Public Health Community

Resources and Wellness Programs 3 or 6 HM 623 Medical Partners in Public Health Capstone

Project Elective 3 or 6

HM 629 Leadership in Medicine for the Underserved

Community Elective 3 or 6 HM 631 Leadership in Medicine for Underserved Urban

or Global Elective 3 or 6

HM 632 Rural Community Health 3 or 6

HM 633 Advanced Rural Community Health 3 or 6 HM 639 Northern Wilderness, Emergency and

Sports Medicine 6

HM 691 Research Clerkship 3 or 6

MED 609 Hematology Clerkship 3 or 6

MED 610 Oncology Clerkship 3 or 6

MED 611 Cardiology Clerkship 3 or 6

MED 612 Nephrology Clerkship 3 or 6

MED 613 Dermatology Clerkship 3 or 6

|  |  |  |  |
| --- | --- | --- | --- |
| MED | 614 | Pulmonary Clerkship | 3 or 6 |
| MED | 615 | Gastroenterology Clerkship | 3 or 6 |
| MED | 616 | Allergy Clerkship | 3 or 6 |
| MED | 618 | Infectious Disease Clerkship | 3 or 6 |
| MED | 619 | Advanced Internal Medicine - Ambulatory | 3 or 6 |
| MED | 621 | Advanced Internal Medicine - Inpatient | 3 or 6 |
| MED | 622 | Endocrinology and Metabolism Clerkship | 3 or 6 |
| MED | 624 | Geriatric Clerkship | 3 or 6 |
| MED | 626 | Physical Medicine and Rehabilitation Clerkship | 3 or 6 |
| MED | 627 | Rheumatology Clerkship | 3 or 6 |
| MED | 628 | Advanced Internal Medicine: Senior Medicine |  |
|  |  | Sub-Internship | 6 |
| MED | 632 | Occupational Medicine Clerkship | 3 or 6 |
| MED | 634 | Advanced Internal Medicine: Intensive Care |  |
|  |  | Medicine/Critical Care | 3 or 6 |
| MED | 635 | Advanced Internal Medicine: Women's Health | 3 or 6 |
| MED | 636 | Advanced Internal Medicine: Medicine/Pediatrics | 3 or 6 |
| NOP | 617 | Neurology Clerkship | 6 |
| NOP | 620 | Ophthalmology Clerkship | 6 |
| OGR | 609 | Advanced Gynecology Clerkship | 3 or 6 |
| OGR | 610 | Perinatology Clerkship | 3 or 6 |
| OGR | 611 | Reproductive Endocrinology and Infertility Clerkship | 3 or 6 |
| OGR | 612 | Gynecologic Oncology Clerkship | 3 or 6 |
| OGR | 614 | Advanced Obstetrics Clerkship | 3 or 6 |
| OGR | 615 | Obstetrics and Gynecology Sub-Internship | 6 |
| PHD | 601 | Human Development and Pediatric Sub-specialties | 3 or 6 |
| PHD | 602 | Ambulatory Pediatrics Clerkship | 3 or 6 |
| PHD | 603 | Pediatric Infectious Diseases Clerkship | 3 or 6 |
| PHD | 604 | Neonatology | 6 |
| PHD | 605 | Pediatric Cardiology Clerkship | 3 or 6 |
| PHD | 606 | Pediatric Endocrinology and Metabolism Clerkship | 3 or 6 |
| PHD | 607 | Pediatric Hematology and Oncology Clerkship | 3 or 6 |
| PHD | 608 | Pediatric Pulmonary Disease Clerkship | 3 or 6 |
| PHD | 609 | Pediatric Genetics Clerkship | 3 or 6 |
| PHD | 610 | Pediatric Allergy-Immunology Clerkship | 3 or 6 |
| PHD | 611 | Pediatric Critical Care Medicine Clerkship | 3 or 6 |
| PHD | 612 | Pediatric Gastroenterology Clerkship | 3 or 6 |
| PHD | 613 | Pediatric Emergency Medicine Clerkship | 3 or 6 |
| PHD | 614 | Pediatric Nephrology Clerkship | 3 or 6 |
| PHD | 615 | Pediatric Neurology Clerkship | 3 or 6 |
| PHD | 616 | Pediatric Physical Medicine and Rehabilitation |  |
|  |  | Clerkship | 3 or 6 |
| PHD | 617 | Pediatric Adolescent Medicine Clerkship | 3 or 6 |
| PHD | 618 | Pediatrics Sub-Internship | 3 or 6 |
| PHD | 619 | Pediatric Hospital Medicine Clerkship | 3 or 6 |
| PHD | 620 | Child Abuse Pediatrics Clerkship | 3 or 6 |
| PHD | 621 | Pediatric Rheumatology Clerkship | 3 or 6 |
| PSC | 609 | Adult Psychiatry Clerkship | 3 or 6 |
| PSC | 610 | Child Psychiatry Clerkship | 3 or 6 |
| PSC | 611 | Addiction Psychiatry Clerkship | 3 or 6 |
| PSC | 612 | Geriatric Psychiatry Clerkship | 3 or 6 |
| RAD | 609 | Radiology Clerkship | 3 or 6 |
| RAD | 612 | Interventional Radiology | 3 or 6 |
| SUR | 609 | Otolaryngology Clerkship | 3 or 6 |
| SUR | 610 | Plastic Surgery Clerkship | 3 or 6 |
| SUR | 611 | Urology Clerkship | 3 or 6 |
| SUR | 612 | General Surgery Sub-Internship | 6 |
| SUR | 613 | Orthopedic Surgery Clerkship | 3 or 6 |
| SUR | 614 | Neurosurgery Clerkship | 3 or 6 |
| SUR | 615 | Ophthalmology Clerkship | 3 or 6 |
| SUR | 616 | Cardiothoracic Surgery Clerkship | 3 or 6 |
| SUR | 617 | Critical Care Clerkship | 3 or 6 |
| SUR | 618 | Anesthesia Clerkship | 3 or 6 |
| SUR | 619 | Sub-specialty Surgery Clerkship | 3 or 6 |

|  |  |  |  |
| --- | --- | --- | --- |
| SUR | 622 | Pediatrics Orthopedic Surgery Clerkship | 3 or 6 |
| SUR | 623 | Sports Medicine Orthopedic Surgery Clerkship | 3 or 6 |
| SUR | 624 | Vascular Surgery Clerkship | 3 or 6 |
| SUR | 625 | Hand Surgery Clerkship | 3 or 6 |
| SUR | 626 | Pediatric Surgery Clerkship | 3 or 6 |
| SUR | 627 | Burns Clerkship | 3 or 6 |
| SUR | 628 | Trauma Surgery Clerkship | 3 or 6 |
| SUR | 629 | Colorectal Surgery Clerkship | 3 or 6 |
| SUR | 630 | Surgical Wound Care Clerkship | 3 or 6 |
| SUR | 631 | Surgical Oncology Clerkship | 3 or 6 |
| SUR | 632 | Surgical Nutrition Clerkship | 3 or 6 |

Effective Fall 2020.

## COLLEGE OF MUSIC

1. Establish a **Graduate Certificate** in **Music Cognition** in the College of Music. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its February 10, 2020 meeting.

*The Graduate Certificate in Music Cognition is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Music Cognition".*

### Background Information:

The certificate program was developed by Associate Professor Leigh Van Handel in consultation with her colleagues in the Music Theory Area of the College of Music and with Associate Professor Devin McAuley from the Department of Psychology and the Cognitive Science program. It has been approved the College of Music Graduate Committee and the full faculty.

The certificate builds upon the established research collaboration between Dr. VanHandel and Dr. McAuley, and the two excellent degree programs that already exist in Music Theory and Cognitive Science. The certificate will have a broad appeal, including M.Mus., D.M.A., and Ph.D. students in the College of Music across all disciplines, and M.A. and Ph.D. students from Psychology, Neuroscience, Cognitive Science, Linguistics, Communicative Sciences and Disorders, Communications, Kinesiology, and Media Arts and Technology. Their work in music cognition is already drawing students who are interested in music cognition, and will provide a curriculum that offers a solid foundation in the discipline.

The following U.S. universities have graduate degrees in music cognition: Northwestern, McMaster, Ohio State, University of California at Santa Barbara. Eastman School of Music (University of Rochester) offers an M.A. and a Ph.D. in music theory with a concentration (similar to the certificate proposed) in music cognition. The following universities have music cognition labs: University of Washington, Indiana University, Carnegie Mellon, Princeton, University of North Carolina at Greensboro, University of South Florida, and University of Delaware.

MSU currently has course work and the Timing, Attention and Perception lab (TAP lab) in place to support the students who want to pursue this certificate.

### Academic Programs Catalog Text:

The Graduate Certificate in Music Cognition provides the foundation of how music theory and music cognition relate to each other and to related disciplines. Students will understand the fundamental principles and perception of music cognition and be able to read, interpret, and construct experimental studies in music cognition. The graduate certificate is available to students currently enrolled in master’s or doctoral degree programs at Michigan State University.

### Admission

To be considered for admission to the Graduate Certificate in Music Cognition, an applicant must:

* + 1. Complete an application consisting of a personal statement, transcripts of previous college or university course work, three letters of recommendation, a scholarly writing sample, and an optional portfolio of work.
    2. Interview, if invited, with the affiliated faculty to determine admission.
    3. Pass the College of Music Graduate Orientation Examination in Music Theory or complete MUS 200 Music Theory Review with a grade of 2.0 or higher.

### Requirements for the Graduate Certificate in Music Cognition

The student must complete 11 to 14 credits from the following:

1. Both of the following courses (5 credits):

CREDITS

MUS 973 Readings in Music Theory 2

PSY 802 Basic Cognitive Processes 3

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

|  |  |  |  |
| --- | --- | --- | --- |
| MUS | 868 | Topics in Music Analysis | 3 |
| MUS | 872 | Tonal Forms | 2 |
| MUS | 879 | Tonal Literature and Analysis | 3 |
| One of the following courses (3 credits) | | | |
| PSY | 801 | Sensation and Perception | 3 |
| PSY | 803 | Higher Order Cognitive Processes | 3 |
| PSY | 867 | Nature and Practice of Cognitive Science | 3 |
| PSY | 992 | Seminar in Psychology | 3 |

3.

1. Active participation in relevant music theory area events, including colloquia and guest lectures, and active participation in the Timing, Attention and Perception Lab (TAP lab) including relevant events

in the Psychology/Cognitive Science program.

1. **Research Requirement** (1 to 3 credits):

A capstone research essay approximately 15-20 pages in length and a public presentation in the model of a conference presentation. The topic could emerge from the research project undertaken within MUS 973 or could come from research conducted in conjunction with the TAP lab. Alternatively, the topic could draw connections between what the student has learned in other courses undertaken as part of the student’s primary degree program. The topic will be approved by a member of the faculty of the theory area within the College of Music or from the Department of Psychology, who will advise the project and certify its completion. Students will register for 1 to 3 credits of MUS 898 Master’s Research or PSY 891 Special Topics in Psychology with the faculty advisor. An alternative independent research course may be substituted if deemed appropriate by the faculty advisor.

Effective Fall 2020.

## COLLEGE OF NATURAL SCIENCE

1. Change the name of the **Master of Science** degree in **Genetics** to **Genetics and Genome Sciences** in the College of Natural Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

Students admitted to the major prior to Fall 2020 will be awarded a Master of Science Degree in Genetics.

Students admitted to the major Fall 2020 and forward will be awarded a Master of Science Degree in Genetics and Genome Sciences.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Genetics and Genome Sciences** in the College of Natural Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Applicants will be considered for admission by the Genetics and Genome Sciences Executive Committee. The criteria for admission include an undergraduate major in the biological sciences, acceptable grade-point average, a statement of objectives and three letters of recommendation. The Genetics and Genome Sciences Executive Committee will also consider requests for students to transfer from the Doctor of Philosophy in Genetics and Genome Sciences to this program.

In addition to meeting the requirements of the university and the College of Natural Science, students must meet the requirements specified below.

* 1. Under the heading **Genetics and Genome Sciences** replace the entire entry with the following:

The Master of Science degree in Genetics and Genome Sciences is available under Plan A (with thesis). Students must earn at least 30 credits, of which a minimum of 20 credits must consist of course work and must include the following:

* + 1. Both of the following courses (4 to 6 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| BMB | 801 | Molecular Biology | 3 |
| GEN | 810 | Theory and Practice of Teaching Genetics | 1 to 3 |
| One of the following courses (3 credits): | | | |
| MMG | 833 | Microbial Genetics | 3 |
| MMG | 835 | Eukaryotic Molecular Genetics | 3 |

2.

1. Complete 4 to 10 credits of Genetics 899, Master’s Thesis Research.
2. Submission of a written thesis.
3. Presentation of a final research seminar.
4. Pass a final oral examination.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Genetics and Genome Sciences** in the College of Natural Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Admission to the Doctor of Philosophy degree program with a major in genetics and genome sciences is through the BioMolecular Science Gateway – First Year (BMS). The BMS does not establish minimum cut-off values from any indices, however, 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 3.5 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.

The GRE is not required to apply to the BMS. Students admitted through the BMS typically perform three research rotations during their first two semesters before they choose their Ph.D. laboratory, and join the Ph.D. program of their choice during the spring semester of their first year in the BMS.

* 1. Under the heading **Requirements for the Doctor of Philosophy Degree in Genetics and Genome Sciences** replace the entire entry with the following:

The program of study is planned by the student in consultation with the major professor and a guidance committee. Specific courses in genetics, as well as courses in other areas considered relevant to the student's interests and chosen research area, are included in the program.

The student must:

* + 1. Complete one of the following courses:

MMG 833 Microbial Genetics 3

MMG 835 Eukaryotic Molecular Genetics 3

* + 1. Complete both of the following courses:

GEN 810 Theory and Practice of Teaching Genetics 1 to 3

GEN 840 Genetics Writing Skills 1 to 6

* + 1. Complete a minimum of 12 credits of additional graduate course work approved by the student’s guidance committee in genetics, molecular biology, and/or biochemistry, including at least one 3-credit course in genomics, quantitative or computational biology.
    2. Complete a minimum of four 1-credit seminar courses approved by the student’s guidance committee and the Genetics and Genome Sciences director.
    3. Complete a minimum of 24 credits of GEN 999 Doctoral Dissertation Research.
    4. Pass a comprehensive examination that includes a written research proposal, public seminar and oral examination with the student’s guidance committee.
    5. Write and defend a research dissertation, which shows original treatment of an important research problem.

Effective Fall 2020.

1. Change the requirements for the **Bachelor of Science** degree in **Biochemistry and Molecular Biology** in the Department of Biochemistry and Molecular Biology.
   1. Under the heading **Requirements for the Bachelor of Science Degree in Biochemistry and Molecular Biology** make the following changes:
2. In item 3. a. change the total credits from ’64 to 70’ to ’61 to 69’.
3. Change item 3. a. (7) to the following: One of the following courses (3 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| CEM | 383 | Introductory Physical Chemistry I | 3 |
| CEM | 484 | Molecular Thermodynamics | 3 |

1. Change item 3. a. (9) to the following:

Ten additional credits in approved courses at the 300-400 level.

1. In item 3. b. delete the following course:

BMB 472 Advanced Molecular Biology Laboratory 3

Add the following course:

BMB 470 Advanced Molecular Biology Laboratory 3

Effective Summer 2020.

1. Change the requirements for the **Bachelor of Science** degree in **Biochemistry and Molecular Biology/Biotechnology** in the Department of Biochemistry and Molecular Biology.
   1. Under the heading **Requirements for the Bachelor of Science Degree in Biochemistry and Molecular Biology/Biotechnology** make the following changes:

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

BMB 472 Advanced Molecular Biology Laboratory 3

Add the following course:

BMB 470 Advanced Molecular Biology Laboratory 3

Effective Summer 2020.

1. Change the requirements for the **Master of Science** degree in **Biochemistry and Molecular Biology** in the Department of Biochemistry and Molecular Biology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Science Degree in Biochemistry and Molecular Biology** add the following:
      1. Complete all of the following courses (11 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| BMB | 801 | Molecular Biology | 3 |
| BMB | 805 | Protein Structure, Design, and Mechanism | 3 |
| BMB | 829 | Methods of Macromolecular Analysis |  |
|  |  | and Synthesis | 2 |
| BMB | 978 | Seminar in Biochemistry | 3 |

Biochemistry and Molecular Biology 978 is completed in three separate 1 credit enrollments.

* + 1. Complete two additional 800-level courses as approved by the student’s guidance committee.
    2. Complete a minimum of 4 credits with no more than 15 credits of BMB 899 Master’s Thesis Research.
    3. Successfully pass an oral examination covering both a defense of the thesis and course work.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Biochemistry and Molecular Biology** in the Department of Biochemistry and Molecular Biology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in Biochemistry and Molecular Biology** add the following:
      1. Complete all of the following courses (14 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| BMB | 801 | Molecular Biology | 3 |
| BMB | 805 | Protein Structure, Design, and Mechanism | 3 |
| BMB | 829 | Methods of Macromolecular Analysis |  |
|  |  | and Synthesis | 2 |
| BMB | 960 | Selected Topics in Biochemistry I | 1 |
| BMB | 961 | Selected Topics in Biochemistry II | 1 |
| BMB | 978 | Seminar in Biochemistry | 4 |

Biochemistry and Molecular Biology 978 is completed in four

separate 1 credit enrollments. Equivalent course work involving student presentations may be substituted for BMB 960 and BMB 961 with approval by the Graduate Program Director.

* + 1. Complete two additional 800-level courses as approved by the student’s guidance committee.
    2. Complete at least one semester as a Teaching Assistant in the second year together with enrollment in BMB 961 Selected Topics in Biochemistry II, Section 002 Instructional Methods in Biochemistry and Molecular Biology.
    3. Successfully complete the comprehensive examination taken no later than one month after the start of year three.
    4. Complete 24 credits of BMB 999 Doctoral Dissertation Research.
    5. Successfully defend the publicly presented dissertation.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Biomedical Laboratory Operations** in the Biomedical Laboratory Diagnostics Program. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Regular admission to the Master of Science degree in Biomedical Laboratory Operations requires completion of a bachelor’s degree in a relevant field, with a grade-point average that is indicative of success in the program, including the following course work:

* + 1. Completion of 16 credits of biological science including one semester of microbiology.
    2. Completion of 16 credits of chemistry including organic chemistry and/or biochemistry.
    3. Completion of 3 credits of statistics.
    4. A minimum of two years’ experience in a clinical laboratory setting beyond the clinical internship.

Applicants must:

1. Submit official transcripts.
2. Submit three letters of recommendation on official letterhead paper from professional references such as supervisors, professors, or project leaders, people who have overseen your work and can speak to your ability to think critically, work independently, and succeed in graduate work. The letter must include the recommender's credentials and contact information.
3. Submit a letter of intent or purpose statement that addresses why you want to enter graduate education, including career goals and educational goals. Highlight exceptional achievements or explain low performance or withdrawal from undergraduate courses.
4. Submit a brief resume.
5. Submit General Record Examination (GRE) scores. The GRE exam score can be waived in lieu of a professional credential.
6. Submit scores from the Test of English as a Foreign Language (TOEFL) if English is not the first language.

Scholastic record, experience, personal qualifications and career goals will be taken into consideration to determine the applicant’s acceptability.

For additional information on admission, contact the Graduate Program Director, 322 North Kedzie Hall, 354 Farm Lane, Michigan State University, East Lansing, Michigan 48824.

Effective Fall 2020.

1. Change the requirements for the **Master of Arts** degree in **Biomedical Laboratory Science** in the Biomedical Laboratory Diagnostics Program. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Regular admission to the Master of Arts degree in Biomedical Laboratory Science requires completion of a bachelor’s degree in a relevant field, with a grade-point average that is indicative of success in the program, including the following course work:

* + 1. Completion of 16 credits of biological science including one semester of microbiology.
    2. Completion of 16 credits of chemistry including organic chemistry and/or biochemistry.
    3. Completion of 3 credits of statistics.

Applicants must:

1. Submit official transcripts.
2. Submit three letters of recommendation on official letterhead paper from professional references such as supervisors, professors, or project leaders, people who have overseen your work and can speak to your ability to think critically, work independently, and succeed in graduate work. The letter must include the recommender's credentials and contact information.
3. Submit a letter of intent or purpose statement that addresses why you want to enter graduate education, including career goals and educational goals. Highlight exceptional achievements or explain low performance or withdrawal from undergraduate courses.
4. Submit a brief resume.
5. Submit General Record Examination (GRE) scores. The GRE exam score can be waived in lieu of a professional credential.
6. Submit scores from the Test of English as a Foreign Language (TOEFL) if English is not the first language.

Scholastic record, experience, personal qualifications and career goals will be taken into consideration to determine the applicant’s acceptability.

Applicants who fail to meet the criteria for regular admission, may apply for provisional admission if they have demonstrated a high probability of success and will be provided other options to obtain a post-baccalaureate clinical laboratory education.

For additional information on admission, contact the Graduate Program Director, 322 North Kedzie Hall, 354 Farm Lane, Michigan State University, East Lansing, Michigan 48824.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Clinical Laboratory Sciences** in the Biomedical Laboratory Diagnostics Program. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Regular admission to the Master of Science degree in Clinical Laboratory Sciences requires completion of a bachelor’s degree in a relevant field, with a grade-point average that is indicative of success in the program, including the following course work:

* + 1. Completion of 16 credits of biological science including one semester of microbiology.
    2. Completion of 16 credits of chemistry including organic chemistry and/or biochemistry.
    3. Completion of 3 credits of statistics.

Applicants must:

1. Submit official transcripts.
2. Submit three letters of recommendation on official letterhead paper from professional references such as supervisors, professors, or project leaders, people who have overseen

your work and can speak to your ability to think critically, work independently, and succeed in graduate work. The letter must include the recommender's credentials and contact information.

1. Submit a letter of intent or purpose statement that addresses why you want to enter graduate education, including career goals and educational goals. Highlight exceptional achievements or explain low performance or withdrawal from undergraduate courses.
2. Submit a brief resume.
3. Submit General Record Examination (GRE) scores. The GRE exam score can be waived in lieu of a professional credential.
4. Submit scores from the Test of English as a Foreign Language (TOEFL) if English is not the first language.

Certification as a medical technologist/clinical laboratory scientist is preferred, but not required for admission. Scholastic record, experience, personal qualifications and career goals will be taken into consideration to determine the applicant’s acceptability.

For additional information on admission, contact the Graduate Program Director, 322 North Kedzie Hall, 354 Farm Lane, Michigan State University, East Lansing, Michigan 48824.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Chemistry** in the Department of Chemistry. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Science Degree in Chemistry** delete the following paragraph:

All entering graduate students must take an orientation examination in each of the four major areas of chemistry and must ultimately achieve at the doctoral qualifying level in one area (for students on Plan A, that area must be the one in which the research is to be performed), and at the minimum proficiency level established by the department in the other three areas.

Effective Fall 2020.

1. Change the requirements for the **Minor** in **Computational Mathematics, Science, and Engineering** in the Department of Computational Mathematics, Science, and Engineering.
   1. Under the heading **Requirements for the Minor in Computational Mathematics, Science, and Engineering** make the following changes:
2. In item 2. delete the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| CEM | 481 | Seminar in Computational Chemistry | 3 |
| STT | 301 | Computational Methods for Data Science | 3 |

Add the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| CMSE | 410 | Bioinformatics and Computational Biology | 3 |
| CMSE | 411 | Computational Medicine | 3 |
| CSE | 404 | Introduction to Machine Learning | 3 |
| CSE | 415 | Introduction to Parallel Computing | 3 |
| CSE | 482 | Big Data Analysis | 3 |
| MTH | 314 | Matrix Algebra with Computational Applications | 3 |

1. Change the note following item 2. to the following:

Additional courses may be used with approval of the program advisor including additional CMSE 300-400 level courses. Courses outside of CMSE with a strong focus on the applications of computational methods or on discipline-related computational techniques will be considered.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Integrative Biology** in the Department of Integrative Biology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Science Degree in Integrative Biology** add the following:

#### *Requirements for Both Plan A and Plan B*

* + 1. Complete 3 credits of course work at the 800-level or above in biology chosen in consultation with the student’s guidance committee.

#### *Additional Requirements for Plan A*

1. Completion of 4 credits of IBIO 899 Master’s Thesis Research.
2. Although there is no departmental language requirement, a Guidance Committee may prescribe a language requirement for a particular graduate student.
3. Completion of a final oral examination.
4. Successful defense of the master’s research.

#### *Additional Requirements for Plan B*

1. Completion of 3 credits of IBIO 890 Special Problems which usually consists of a research project carried out either in a laboratory or the library.
2. Completion of a final oral examination formulated and administered by the student’s Guidance Committee. It is the student’s responsibility to contact the members of the committee concerning the content of the oral examination.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Integrative Biology** in the Department of Integrative Biology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Add the following statement:

**Requirements for the Doctor of Philosophy Degree in Integrative Biology**

The student's program of study must be developed in cooperation with and approved by the student's guidance committee and must include the requirements specified below:

* + 1. Complete at least 6 credits in two 800-level courses in biology.
    2. A minimum of 4 semesters of at least one-half time of supervised teaching, research, or other university service. The specific requirements are to be determined by the student’s guidance committee. Students should expect to complete all Ph.D. requirements in no more than 5 years.
    3. Complete 24 credits of IBIO 999 Doctoral Dissertation Research.
    4. Successful completion of the comprehensive examination, taken no later than the end of the first semester of the second calendar year after completing the Master’s degree or the end of the first semester of the third calendar year from the time of the student’s first enrollment at MSU, if he/she did not enter with a master’s and is working directly toward the doctoral degree.
    5. Successfully defend the doctoral dissertation.

Effective Fall 2020.

1. Change the requirements in the **Master of Science** 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 April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master of Science Degree in Microbiology and Molecular Genetics** add the following:

Students may select from the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| BMB | 801 | Molecular Biology | 3 |
| BMB | 802 | Metabolic Regulation and Signal Transduction | 3 |
| BMB | 803 | Protein Structure and Function | 2 |
| BMB | 805 | Protein Structure, Design, and Mechanism | 3 |
| MMG | 801 | Integrative Microbial Biology | 4 |
| MMG | 803 | Topics in Integrative Microbial Biology | 2 |
| MMG | 813 | Molecular Virology | 3 |
| MMG | 825 | Cell Structure and Function | 3 |
| MMG | 833 | Microbial Genetics | 3 |
| MMG | 835 | Eukaryotic Molecular Genetics | 3 |
| MMG | 851 | Immunology | 3 |
| MMG | 861 | Advanced Microbial Pathogenesis | 3 |
| MMG | 991 | Topics in Microbiology | 1 to 3 |

Other courses may be used if approved by the Director of Graduate Studies.

Effective Fall 2020.

## 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 April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Osteopathic Medicine Degree** replace the entire entry with the following:

The standard duration of the D.O. degree program is four years. A student may be granted up to six years to complete all degree requirements, as defined in the MSUCOM Policy for Retention, Promotion, and Graduation. Specific program requirements leading to conferral of the D.O. degree include:

* + 1. Completion of each required course in the preclerkship and clerkship phase with a passing grade or successful remediation.
    2. Passing score on the National Board of Osteopathic Medical Examiners (NBOME) COMLEX-USA Level 1, COMLEX-USA Level 2 Cognitive Evaluation (CE), and COMLEX- USA Level 2 Performance Evaluation (PE) licensure examinations, with no more than three (3) attempts permitted on each examination.
    3. Compliance with annual training requirements of the Responsible Conduct of Research (RCR) program.
    4. Achievement of the academic requirements and professional conduct expectations of the

D.O. program as outlined in the policies and procedures of MSUCOM and MSU.

* 1. Under the heading **PreClerkship Curriculum** replace the entire entry with the following: The preclerkship curriculum consists of 98 required credit hours across seven semesters,

representing years one and two of the four-year program. The courses are offered in a predefined

sequence. Successful completion of each course in a semester is required to advance to the following semester.

The following courses are required:

|  |  |  |  |
| --- | --- | --- | --- |
| ANTR | 510 | Clinical Human Gross Anatomy and Palpatory Skills | 8 |
| BMB | 516 | Metabolic Biochemistry: Nutrients and Products | 1 |
| BMB | 528 | Molecular Biology and Medical Genetics | 2 |
| FCM | 640 | Principles of Family Medicine I | 1 |
| FCM | 650 | Principles of Family Medicine II | 1 |
| MMG | 531 | Medical Immunology | 2 |
| MMG | 532 | Medical Microbiology | 2 |
| OMM | 511 | Osteopathic Manipulative Medicine I | 1 |
| OMM | 512 | Osteopathic Manipulative Medicine II | 1 |
| OMM | 513 | Osteopathic Manipulative Medicine III | 1 |
| OMM | 514 | Osteopathic Manipulative Medicine IV | 1 |
| OMM | 515 | Osteopathic Manipulative Medicine V | 1 |
| OST | 551 | Osteopathic Patient Care I | 2 |
| OST | 552 | Osteopathic Patient Care II | 2 |
| OST | 553 | Osteopathic Patient Care III | 3 |
| OST | 554 | Osteopathic Patient Care IV | 3 |
| OST | 555 | Osteopathic Patient Care V | 3 |
| OST | 556 | Pediatrics I | 1 |
| OST | 557 | Pediatrics II | 1 |
| OST | 558 | Pediatrics III | 1 |
| OST | 571 | Neuromusculoskeletal System | 10 |
| OST | 572 | Genitourinary System | 3 |
| OST | 573 | Endocrine System | 3 |
| OST | 574 | Female Reproductive System | 3 |
| OST | 575 | Gastrointestinal System | 6 |
| OST | 576 | Integumentary System | 2 |
| OST | 577 | Psychopathology | 2 |
| OST | 578 | Hematopoietic System | 2 |
| OST | 579 | Cardiovascular System | 9 |
| OST | 580 | Respiratory System | 6 |
| OST | 582 | Transitions I – Board Preparation | 6 |
| OST | 583 | Geriatrics | 1 |
| OST | 598 | Evidence-Based Health Science | 1 |
| PHM | 564 | Basic Principles of Medical Pharmacology | 2 |
| PSL | 539 | Principles of Cell Biology and Pathophysiology | 4 |

* 1. Under the heading **Clerkship Curriculum** replace the entire entry with the following:

The clerkship curriculum consists of 133 required credit hours in years three and four of the four- year program. Students may advance to clinical rotations after successful completion of the COMLEX-USA Level 1 examination. During the clerkship curriculum, students will complete 77 credits, among six semesters, of required clinical clerkship core rotation courses and an additional 56 credits, among six semesters, to be selected from available required clinical clerkship elective rotation courses. Core rotation courses are scheduled by the COM Clerkship Office and Base Hospital training site and may occur in different sequences. Most core rotation courses are completed during year three. Two required longitudinal courses span each of the third and fourth year.

*Required Clinical Clerkship* ***Core*** *Rotation Courses*:

|  |  |  |  |
| --- | --- | --- | --- |
| FCM | 620 | Core Family Medicine Clerkship | 6 |
| FCM | 622 | Core Family Medicine Sub-Internship | 6 |
| Or |  |  |  |
| IM | 658 | Core Internal Medicine Outpatient Clerkship | 6 |
| IM | 650 | Core Internal Medicine In-Patient Clerkship | 6 |
| IM | 657 | Core Emergency Medicine Clerkship | 6 |
| IM | 658 | Core Internal Medicine Out-Patient | 6 |
| Or |  |  |  |
| FCM | 622 | Core Family Medicine Sub-Internship | 6 |
| IM | 660 | Core Internal Medicine Sub-Internship | 6 |
| NOP | 656 | Core Neurology Clerkship | 6 |
| OMM | 602 | Osteopathic Principles and Practice Clerkship | 2 |
| OSS | 651 | Core Obstetrics and Gynecology Clerkship | 6 |
| OST | 602 | Primary Care Ambulatory | 5 |

|  |  |  |  |
| --- | --- | --- | --- |
| OST | 603 | Core Clinical Concepts | 9 |
| OST | 604 | Essential Clinical Skills for Senior Medical Students | 1 |
| OST | 653 | Core Surgery Clerkship | 6 |
| PED | 600 | Core Pediatrics Clerkship | 6 |
| PSC | 608 | Psychiatry and Behavioral Science Clerkship | 6 |

Required clinical elective clerkship rotation courses: the student must complete 56 credits (or 40 weeks) of additional clinical elective clerkship rotation courses; 18 credits (12 weeks) must be chosen from the medicine category and 12 credits (8 weeks) must be chosen from the surgery category. The additional 10 weeks can be chosen from either the medicine or surgery category.

A complete list of required clinical clerkship elective rotation courses includes:

|  |  |  |  |
| --- | --- | --- | --- |
| ANTR | 685 | Directed Study in Clinical Prosection | 1 to 6 |
| FCM | 621 | Family Medicine Specialty Rotation | 1 to 24 |
| HM | 610 | Pathology Clerkship | 3 to 6 |
| IM | 621 | Clinical Tropical Medicine Clerkship | 1 to 20 |
| IM | 651 | Cardiology Clerkship | 1 to 20 |
| IM | 652 | Gastroenterology Clerkship | 1 to 20 |
| IM | 653 | Oncology and Hematology Clerkship | 1 to 20 |
| IM | 654 | Pulmonary Disease Clerkship | 1 to 20 |
| IM | 655 | Nephrology Clerkship | 1 to 20 |
| IM | 659 | Medical Critical Care Clerkship | 1 to 20 |
| IM | 661 | Internal Medicine Specialty Clerkship | 1 to 20 |
| IM | 662 | Urgent Care Clerkship | 1 to 20 |
| IM | 663 | Emergency Medicine/Wilderness/Austere Medicine Clerkship | 1 to 20 |
| IM | 664 | Pediatric Emergency Medicine Clerkship | 1 to 20 |
| IM | 665 | Emergency Medicine Advanced Clerkship | 1 to 20 |
| IM | 666 | Emergency Medicine Toxicology | 3 to 18 |
| IM | 667 | Emergency Medicine Hyperbaric Medicine and Wound Management | 3 to 18 |
| IM | 668 | Emergency Medicine EMS and Disaster Management | 3 to 18 |
| IM | 669 | Emergency Medicine Ultrasound | 3 to 18 |
| NOP | 657 | Neurology Specialty Clerkship | 1 to 24 |
| OMM | 601 | Osteopathic Manipulative Medicine Clerkship | 1 to 20 |
| OST | 615 | Biomedical Research Clerkship | 3 to 18 |
| OST | 685 | International Clerkship Rotations | 1 to 20 |
| OST | 686 | Global Health: Mexico – Clinical Immersion | 1 to 20 |
| OST | 687 | Global Health: Peru – Clinical Immersion | 1 to 20 |
| OST | 688 | Global Health: Cuba – Clinical Immersion | 1 to 20 |
| OST | 689 | Global Health: Haiti – Clinical Immersion | 1 to 20 |
| OST | 690 | Global Health: Dominican Republic – Clinical Immersion | 1 to 20 |
| PED | 601 | Pediatric Specialty Clerkship | 3 to 24 |
| PMR | 601 | Physical Medicine and Rehabilitation Clerkship | 1 to 18 |
| PSC | 609 | Adult Psychiatry Clerkship | 3 to 6 |
| PSC | 610 | Child Psychiatry Clerkship | 3 to 6 |
| PSC | 611 | Addiction Psychiatry Clerkship | 3 to 6 |
| PSC | 612 | Geriatric Psychiatry Clerkship | 3 to 6 |
| RAD | 609 | Radiology Clerkship | 3 to 12 |
| RAD | 610 | Core Radiology Clerkship | 1 to 20 |
| The following rotation courses are credited toward the surgery requirement: | | | |
| NOP | 620 | Ophthalmology Clerkship | 1 to 24 |
| OSS | 640 | Cardio Thoracic/Vascular Surgery Clerkship | 1 to 20 |
| OSS | 641 | Facial and Plastic Reconstruction Surgery Clerkship | 1 to 20 |
| OSS | 642 | Neurosurgery Clerkship | 1 to 20 |
| OSS | 643 | Podiatry Clerkship | 1 to 20 |
| OSS | 644 | Sports Medicine Clerkship | 1 to 20 |
| OSS | 645 | Urology Clerkship | 1 to 20 |
| OSS | 646 | Maternal Fetal Medicine Clerkship | 1 to 20 |
| OSS | 647 | Reproductive Endocrine Clerkship | 1 to 20 |
| OSS | 648 | Anesthesiology Advanced Clerkship | 3 to 30 |
| OSS | 652 | Obstetrics and Gynecology Specialty Clerkship | 1 to 20 |
| OSS | 654 | Core Anesthesiology Clerkship | 1 to 20 |
| OSS | 655 | Pain Management Clerkship | 1 to 20 |

|  |  |  |  |
| --- | --- | --- | --- |
| OSS | 656 | Orthopedic Clerkship | 1 to 20 |
| OSS | 658 | Otorhinolaryngology Clerkship | 1 to 20 |
| OSS | 663 | General Surgery | 1 to 20 |

The number of rotation/course weeks determines the assigned credits.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Integrative Pharmacology** in the Department of Pharmacology and Toxicology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Applicants will be accepted into the program after review of application materials by an admissions committee from the department. A faculty member in the Department of Pharmacology and Toxicology will serve as the student’s academic advisor.

Applicants must have completed a bachelor’s degree from an accredited college or university, with at least 3 credits in chemistry and 3 credits in a biological science. Preference will be given to applicants with undergraduate degrees in biology, chemistry or related sciences and who are currently employed in an academic, government or industrial laboratory. A letter of intent outlining the student’s interests and professional goals and two letters of recommendation are required for consideration for admission.

* 1. Under the heading **Requirements for the Master of Science Degree in Integrative Pharmacology** make the following changes:

1. Replace item 1. with the following:

All of the following courses (11 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| PHM | 819 | Principles of Drug-Tissue Interactions | 2 |
| PHM | 822 | Academic and Research Integrity | 1 |
| PHM | 830 | Experimental Design and Data Analysis | 3 |
| PHM | 832 | Applied Integrative Pharmacology Laboratory | 3 |
| PHM | 850 | Communications for Scientists | 2 |

1. Add the following item 2.:

One of the following courses (2 to 6 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| PHM | 895 | Applied Project in Integrative Pharmacology | 3 to 6 |
| or |  |  |  |
| PHM | 982 | Master of Science Capstone Literature Review | 2 |

1. Renumber the former items 2. and 3. to items 3. and 4. respectively.
2. In item 3. add the statement ‘with a minimum of 4 credits at the 800-level’ and add the following course:

PHM 492 Pharmacotherapy of Human Viral Infections 2

1. Delete the former requirement 4. a. and b.

Effective Fall 2020.

1. Change the requirements for the **Master of Science** degree in **Pharmacology and Toxicology** in the Department of Pharmacology and Toxicology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

*The concentrations in the Master of Science degree in Pharmacology and Toxicology will be noted on the student’s academic record when the requirements for the degree have been completed.*

* 1. Under the heading **Admission** replace the first paragraph with the following:

Applicants will be accepted into the program after review of application materials by an admissions committee from the department. A member in the Department of Pharmacology and Toxicology will serve as the student’s academic advisor and will assist the student in planning a program of study related to the student’s interests and professional goals.

* 1. Under the heading **Requirements for the Master of Science Degree in Pharmacology and Toxicology** make the following changes:

1. Change requirement 2. to ‘Complete up to 21 credits, a minimum of 7 credits of 800-level PHM courses and a maximum of 9 credits of 400-level courses, of science electives chosen from the following’.
2. In item 2., add the following course:

PHM 492 Pharmacotherapy of Human Viral Infections 2

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Pharmacology and Toxicology** in the Department of Pharmacology and Toxicology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

Admission to the doctoral program is conducted by the BioMolecular Science Gateway. An applicant to the program must hold a bachelor’s degree from an accredited four-year institution. Applicants who hold a master’s degree may also apply.

* 1. Under the heading **Requirements for the Doctor of Philosophy Degree in Pharmacology and Toxicology** add the following statement:

Students must complete the following required courses for the degree: 1.

|  |  |  |  |
| --- | --- | --- | --- |
| All of the following courses (10 credits): | | | |
| PHM | 801 | Fundamental Principles of Pharmacology |  |
|  |  | and Toxicology | 3 |
| PHM | 802 | Cellular, Molecular and Integrated Systems |  |
|  |  | Pharmacology | 3 |
| PHM | 803 | Chemical Disposition in Mammals | 1 |
| PHM | 816 | Integrative Toxicology: Mechanisms, Pathology |  |
|  |  | and Regulation | 3 |
| One of the following courses (3 or 4 credits): | | | |
| PHM | 827 | Physiology and Pharmacology of Excitable Cells | 4 |
| PSL | 828 | Cellular and Integrative Physiology I | 3 |
| PSL | 829 | Cellular and Integrative Physiology II | 3 |
| One of the following courses (3 credits): | | | |
| BMB | 801 | Molecular Biology | 3 |
| BMB | 802 | Metabolic Regulation and Signal Transduction | 3 |
| The following course (24 to 36 credits): | | | |

2.

3.

4.

PHM 999 Doctoral Dissertation Research 24 to 36

1. Successfully defend the doctoral dissertation.

c. Under the heading **Academic Standards** replace the entry with the following: A candidate must maintain at least a 3.0 grade in all required PHM courses.

Effective Fall 2020.

1. Change the requirements for the **Graduate Certificate** in **Safety Pharmacology** in the Department of Pharmacology and Toxicology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

*The Graduate Certificate in Safety Pharmacology is a Type 2 graduate certificate and will appear on the transcript as “Graduate Certificate Program in Safety Pharmacology”.*

* 1. Under the heading **Requirements for the Graduate Certificate in Safety Pharmacology** make the following change:
     1. In item 1., add the following note:

Students must attain grades of at least 3.0 in these core courses and an overall grade- point average of 3.00.

* + 1. Add the following item 3.: Create an electronic portfolio.

Effective Fall 2020.

## COLLEGE OF SOCIAL SCIENCE

1. Establish in the College of Social Science, in collaboration with Michigan State University College of Law, a 3 + 3 Option for selected College of Social Science students to earn a bachelor’s degree. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 20, 2020 meeting.

### Background Information:

The College of Social Science, in collaboration with Michigan State University – College of Law, has agreed to offer an opportunity for selected students to earn a bachelor’s degree after satisfactory completion of a minimum of 92 credits at Michigan State University and a minimum of 28 credits through subsequent enrollment at Michigan State University – College of Law.

The program provides an opportunity for MSU students to pursue a Bachelor of Arts or Bachelor of Science degree and a Juris Doctor within a shorter timeframe than traditional programs. In keeping with MSU’s land-grant mission, this program is especially suitable for non-traditional students.

### Academic Programs Catalog Text:

The College of Social Science, in collaboration with Michigan State University - College of Law, offers an opportunity for selected College of Social Science students to earn a baccalaureate degree after satisfactory completion of a minimum of 92 credits at Michigan State University and a minimum of 28 credits through subsequent enrollment at Michigan State University - College of Law. Students interested in this option should consult with their academic advisors during the first year in the college.

Admission to the Michigan State University - College of Law component of this program is limited to a small number of students who complete the specified university and college requirements and who earn a grade-point average and a score on The Law School Admission Test (LSAT) that is acceptable for admission to Michigan State University - College of Law.

All students in this program will complete a minimum of 92 credits at Michigan State University, at least 45 of which shall be College of Social Science credits. The requirements for the program are as follows:

* + 1. Completion of the University requirements for the bachelor’s degree.
    2. Completion of all College of Social Science requirements for the bachelor’s degree, including an interdisciplinary minor requirement; Science, Technology, Engineering and Mathematics (STEM) and/or Arts and Humanities (A&H) distribution requirement; and experiential learning requirements.
    3. Complete of a specific major in the College of Social Science.
    4. Completion of a minimum of 28 credits equivalent to the first-year curriculum at Michigan State University - College of Law.

Upon satisfactory completion of the specified Michigan State University - College of Law credits, students in this program will be awarded the Bachelor of Arts or Bachelor of Science degree.

Effective Fall 2020.

1. Change the requirements in the **Doctor of Philosophy** in **Chicano/Latino Studies** in the College of Social Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** make the following changes:
2. Change the second sentence to the following:

To be considered for admission to the program with regular status, applicants must have a master’s degree in an appropriate field or its equivalent, of at least 30 credits of approved course work beyond the bachelor’s degree.

1. Add the following paragraph two:

Application forms for graduate school must be completed online for both domestic and international students. The Graduate School website contains all the information necessary to complete the application process. Applicants must submit the following materials:

* 1. The online application form to the Graduate School.
  2. GRE General Test scores no more than five (5) years old, as well as two sets of official transcripts from all colleges and universities attended, to the Chicano/Latino Studies Graduate Program Director.
  3. A statement of purpose, three letters of recommendation, and a writing sample to the Chicano/Latino Studies Graduate Program Director. The letters of recommendation must be submitted by the recommender directly to the Chicano/Latino Studies office.
  4. Original transcripts from all colleges or universities attended sent directly from the institution to the Chicano/Latino Studies office.
  5. A writing sample of the applicant’s best example of written analytic and interpretative work that validates the applicant’s aptitudes and abilities in research and academic writing, and their preparation for scholarly work.
  6. A statement of purpose of 1000 words or less providing the applicant’s explanation of why s/he wishes to pursue a doctoral degree in Chicano/Latino Studies, outlining an area of interest in Chicano/Latino Studies, and discusses career goals.
  7. Under the heading **Requirements for the Doctor of Philosophy Degree in Chicano/Latino Studies** make the following changes:

1. In item 1. a., add ‘minimum of 15 credits’.
2. Replace item 1. c. with the following:

Complete 12 credits of electives from the following: American studies, anthropology, education, English, history of art, history, music, philosophy, political science, psychology, resource development, social work, sociology, and Spanish. The course work must be selected from an approved course list in consultation with the student's guidance committee.

Effective Fall 2020.

1. Change the requirements for the **Graduate Certificate** in **Chicano/Latino Studies** in the College of Social Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

*The Graduate Certificate in Chicano/Latino Studies is a Type 2 graduate certificate and will appear on the transcript as “Graduate Certificate Program in Chicano/Latino Studies”.*

* 1. Under the heading **Admission** add the following:

1. Obtain approval from the student’s primary major advisor and the Chicano/Latino Studies Graduate Program Director by submitting a short application form.

Effective Fall 2020.

1. Delete the curriculum and degree requirements for the **Graduate Specialization** in **Environmental Science and Policy** in the College of Social Science. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Fall 2003. No students are to be readmitted to the program effective Fall 2003. Effective Fall 2020, coding for the program will be discontinued and the program will no longer be available in the College of Social Science. Students who have not met the requirements for the Graduate Specialization in Environmental Science and Policy through the College of Social Science prior to Fall 2020 will have to change their specialization.

1. Establish a **Graduate Certificate** in **Cyber Criminology and Cyber Security** in the School of Criminal Justice. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its March 9, 2020 meeting.

*The Graduate Certificate in Cyber Criminology and Cyber Security is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Cyber Criminology and Cyber Security".*

### Background Information:

The proposed Graduate Certificate in Cyber Criminology and Cyber Security aligns with the missions of the University, College of Social Science and the School of Criminal Justice. The certificate was developed in collaboration with the MSU interdisciplinary Cyber-Security group that includes faculty and doctoral students and is the first criminal justice program in AAU to offer a cybercrime/cyber-security focus.

**Importance to Field and Demand for Degree**: Cybercrime is a form of transnational crime and the top national security threat. According to the United Nations, cybercrime affects more than 431 million adult victims globally. Specific types of crime include: computer hacking, digital piracy, electronic fraud and theft, sexual victimization. Identity-related offenses are both the most common and fastest growing forms of consumer fraud on the Internet, especially through the misuse of credit card information. While teaching citizens’ proper online behavior and digital privacy can curb some cybercrime, the immediate need for professionals trained to address the threats posed by cybercrime through enhanced cyber security is quite evident. Cyber security job postings grew 114% between 2011 to 2015, according to Burning Glass Technologies. A 2012 Bureau of Labor

Statistics report also projected the field to grow by 22% over the next ten years, with as many as 120,000 new jobs created in this sector. Most entry-level positions require a bachelor’s degree at a minimum, and colleges are only meeting 24 percent of the entry-level demand. See detailed market analysis provided by Wiley.

**Importance to the School of Criminal Justice, College of Social Science, and MSU**: Cybercrime is a major area of focus for the school and 5 of the Big 10 institutions (e.g., Illinois, Maryland, Indiana, Ohio, and Minnesota) have institutes or hold summits on cybercrime. The school is one of two (University of Maryland) top 10 Ph.D. granting programs in criminology/criminal justice within the United States that offers courses for graduate students to specialize in cybercrime research through innovative course content and the ability to structure cognate courses across the campus. No criminal justice programs at AAU institutions offer a cybersecurity specialization.

Within the Computer Science and Engineering degree programs, a few offer a specialization in e- crime, but it is largely focused on digital forensic training (e.g. University of Albany, USF). The school can differentiate itself through a focused certificate on cybercrime/cybersecurity with five courses total at the graduate (master’s) degree.

**School of Criminal Justice Strengths**: The school has faculty that has been awarded 11 grants/contracts totaling ~ $1.7 million from NIJ, NSF, DOI to study cybercrime and 5 grants/contracts over $2.7 million from NIJ and DHS to study domestic terrorism. The school offers several courses on cybercrime and terrorism at the undergraduate and graduate levels. At present, we offer two cybercrime courses for undergraduates which supports our security specialization.

These courses also have enrollments from students outside the school – mainly from computer science and engineering.

A second resource is the development of a digital forensic laboratory that will compliment both teaching and research needs. This lab, located in Nisbet 327 is available for research and instruction. Currently nearly 50 students (graduate and undergraduate) assist in research efforts in cybercrime, cyber-security, and terrorism.

A third resource is the Annual MSU Interdisciplinary Conference on Cybercrime and Cyber Security (first held in 2014). This conference promotes collaborative scholarly endeavors between the social and technical sciences, and directly engages practitioner communities in security, law enforcement, and the intelligence community. The success of the conference has also led to support for the formation of an interdisciplinary cybercrime research consortium (ICRC). The ICRC has support from faculty at multiple universities in the social and computer sciences, including University of Maryland, Arizona State University, University of Arizona, Temple University, Georgia Southern University, and Cambridge University (UK). It held its first European meeting in Spain in summer 2017. There is a critical need for such a Consortium, as the criminological research community investigating cybercrime is tremendously stove-piped, with one or two faculty at institutions across the world who work in this space.

A fourth resource is the interdisciplinary Cyber-Security group that includes faculty and doctoral students in the Communication Arts and Sciences, Computer Science and Engineering, and Criminal Justice who meet every two weeks to identify synergies in research and teaching.

MSU is known for its strong professional degree programs, and the School of Criminal Justice has positively contributed to this reputation as its graduate degree programs (online masters and on- campus doctoral) have been consistently ranked in the top 10 nationally by US. News and World Reports. Core to MSU’s mission is the commitment to engage in “cross- and interdisciplinary enterprises that connect the sciences, humanities, and professions in practical, sustainable, and innovative ways to address society’s rapidly changing needs.” The College of Social Science has articulated a vision: “Our science transforms the human experience and inspires leaders,” a vision fulfilled in its commitment to address societal issues through its research, education, and outreach efforts. The development of a Certificate in Cybercriminology and Cyber Forensics demonstrates this commitment.

### Academic Programs Catalog Text:

The Graduate Certificate in Cyber Criminology and Cyber Security is designed to provide graduates the knowledge of cybercrime/cyberterrorism, the understanding of basic principles of cybersecurity, and digital forensics skills to prepare individuals for successful careers in the fields of digital forensics, law enforcement investigations, cyber security, or intelligence analysis, whether in government or the private sector. Students leave the program with ability to understand and

identify the range of cybercrimes that occur, as well as the facilitating role of technology in myriad real world offenses, and will be able to identify the basic system and network structures that support the Internet and online communications, and understand and communicate basic cybersecurity strategies in practice in various organizations. Students will be able to utilize forensic techniques to appropriately seize and analyze digital forensic evidence from devices to yield digital evidence.

### Requirements for the Graduate Certificate in Cyber Criminology and Cyber Security

CREDITS

Students must complete 15 credits from all of the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| CJ | 872 | Open Source Information Analysis | 3 |
| CJ | 874 | Cybercrime, Deviance and Virtual Society | 3 |
| CJ | 875 | Digital Forensic Investigations | 3 |
| CJ | 876 | Data Systems/Infrastructure | 3 |
| CJ | 877 | Cyber Terror and Cyber Warfare | 3 |

Effective Fall 2020.

1. Delete the curriculum and degree requirements for the **Master of Science** degree in

**Judicial Administration** in the School of Criminal Justice. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Summer 2018. No students are to be readmitted to the program effective Summer 2018. Effective Fall 2020, coding for the program will be discontinued and the program will no longer be available in the School of Criminal Justice. Students who have not met the requirements for the Master of Science Degree in Judicial Administration through the School of Criminal Justice prior to Fall2020 will have to change their major.

1. Change the requirements for the **Master of Arts** degree in **History** in the Department of History. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission**, delete paragraphs two, three, and four and replace with the following:

To be considered for admission to the Master of Arts degree program in history, an applicant must:

* + 1. Have an official transcript forwarded from the applicant’s undergraduate institution(s) that verifies conferral of a baccalaureate degree.
    2. Have the results of the Graduate Record Examination (GRE) General Test forwarded to the department.
    3. Submit a writing sample to the department that the applicant considers to be a fair representation of the applicant’s ability to conduct scholarly research and produce academic writing.
    4. Submit a statement (500-1000 words) that clearly indicates the primary field of intended study and addresses the applicant’s goals in pursuing a Master of Arts degree in History.
    5. Have at least two individuals, preferably scholars with whom the applicant has had course work or other professional contact, submit letters of recommendation to the department.

An international applicant is required to have fulfilled the university's English language proficiency requirement as described in the Graduate Education section of this catalog in one of the following three ways:

1. Have a total score of 580 (paper version) or 237 (computer version) or 100 (Internet version) or above on the **Test of English as a Foreign Language** with no subscore below 55 (paper version) or 21 (computer version).
2. Have an average score of 85 or higher on the **Michigan English Language Assessment Battery** with no subscore below 83.
3. Have an average score of 85 or higher on the **Michigan State University English Language Center Test** with no subscore below 83.
   1. Under the heading **Requirements for Both Plan A and Plan B**, replace item 3. with the following:

Competency in a foreign language. Credits in courses in foreign language may not be counted toward the requirements for the Master of Arts or Doctor of Philosophy in History degree programs.

* 1. Delete the section **Academic Standards**.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **History** in the Department of History. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission**, delete paragraphs one, two, three, and four and replace with the following:

Students are admitted to the program for fall semester only. The department must receive all application materials by December 1. Decisions on admission are announced by late February. In making admissions decisions, the department considers the competencies of the faculty and the needs of students and the profession.

To be considered for admission to the Doctor of Philosophy degree program in history, an applicant must:

* + 1. Have an official transcript forwarded from the applicant’s undergraduate institution(s) that verifies conferral of a baccalaureate degree. If the applicant completed graduate course work or a graduate degree, official transcript(s) reflecting that work must also be submitted.
    2. Have the results of the Graduate Record Examination (GRE) General Test forwarded to the department.
    3. Submit a writing sample to the department that the applicant considers to be a fair representation of the applicant’s ability to conduct scholarly research and produce academic writing.
    4. Submit a statement (500-1000 words) that clearly indicates the primary field of intended study, the faculty members with whom the applicant would like to work, and the reasons for choosing the field and faculty.
    5. Submit a personal statement (500-1000 words) that addresses the applicant’s background as well as his or her goals in pursuing a Doctor of Philosophy degree in History.
    6. Have at least three individuals, preferably scholars with whom the applicant has had course work or other professional contact, submit letters of recommendation to the department.

An international applicant is required to have fulfilled the university's English language proficiency requirement as described in the Graduate Education section of this catalog in one of the following three ways:

1. Have a total score of 580 (paper version) or 237 (computer version) or 100 (Internet version) or above on the **Test of English as a Foreign Language** with no subscore below 55 (paper version) or 21 (computer version).
2. Have an average score of 85 or higher on the **Michigan English Language Assessment Battery** with no subscore below 83.
3. Have an average score of 85 or higher on the **Michigan State University English Language Center Test** with no subscore below 83.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in History**, replace the entire entry with the following:

The student must:

* + 1. Complete HST 803 Seminar in Methodology of Historical Research (3 credits) in the first semester of their first year.
    2. Complete at least 12 credits in additional 800-900 level courses in a major field of history as specified by the student’s guidance committee. The major field should be the field in which the student plans to focus research for the dissertation. The available major fields of history are referenced above.
    3. Complete at least 6 credits in each of the student’s two minor fields or in one minor field of history and in one minor field in a related discipline.
    4. Student must demonstrate knowledge of two foreign languages before they may take the comprehensive examinations. This requirement for students formally admitted to the Ph.D. program can be fulfilled by one of these three options:
       1. Competency in two foreign languages.
       2. With approval of the student’s guidance committee, the student may substitute certification in humanities computing for the second foreign language.
       3. With the approval of the student’s guidance committee, the second foreign language may be waived.
    5. Pass the written and oral comprehensive examinations:
       1. Written examinations must be completed within a six-month period by the end of a student’s third year.
       2. An oral examination must be completed no later than two weeks after the student successfully passes the written examination.
       3. A defense of the dissertation prospectus needs to take place either at the time of the oral examination or in a separate defense within six weeks of the oral examination.
    6. Complete 24 credits of HST 999 Doctoral Dissertation Research.
    7. Pass a final oral examination in defense of the dissertation.
  1. Delete the section **Academic Standards**.

Effective Fall 2020.

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1. Change the requirements for the **Doctor of Philosophy** degree in **Human Development and Family Studies** in the Department of Human Development and Family Studies. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

*The concentrations in the Doctor of Philosophy degree in Human Development and Family Studies are noted on the student’s academic record when the requirements for the degree have been completed.*

* 1. Under the heading **Requirements for the Doctor of Philosophy Degree in Human Development and Family Studies** replace the entire entry with the following:

Students in the doctoral program in human development and family studies are required to complete the following:

* + 1. The following course:

HDFS 901 Contemporary Scholarship in Human Development

and Family Studies 3

* + 1. Completion of 21 credits in methodology and statistics course work as approved by the student’s academic advisor.
    2. Completion of 24 credits in HDFS 999 Doctoral Dissertation Research.
    3. Completion of one of the concentrations noted below.
    4. Successfully pass the comprehensive examination.
    5. Successfully defend the doctoral dissertation.

One of the following concentrations:

#### *Child Development*

Complete all of the following (15 credits):

HDFS 826 Social-Emotional Development Birth to Eight Years:

Biology, Relationships, and Culture 3

HDFS 827 Language and Literacy Development from Infancy to

Formal Schooling 3

An additional 9 credits of course work chosen in consultation with the

student’s guidance committee.

#### *Couple and Family Therapy*

Complete all of the following (18 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| HDFS | 888 | Diverse Families and Communities: Interventions |  |
|  |  | and Strategies | 3 |
| HDFS | 903 | Evidence-Based Couple and Family Therapy |  |
|  |  | Intervention Programs | 3 |
| HDFS | 910 | Contemporary Couple and Family Therapy Theories | 3 |
| HDFS | 911 | Outcome Research: What Works in Couple and Family |  |
|  |  | Therapy Theories | 3 |
| HDFS | 994 | Advanced Evidence-Based Couple Therapy | 3 |
| HDFS | 995 | Couple and Family Therapy Supervision | 3 |

*Clinical Requirements* (3 to12 credits):

HDFS 993 Internship 3 to 12

Doctoral students are required to complete a total of 1,000 hours of direct client contact before graduating (pre-doctoral and doctoral hours combined).

The Couple and Family Therapy Program at Michigan State University has been accredited by the Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy. Students entering the doctoral concentration in Couple and Family Therapy will be required to meet equivalent of the master’s Standard Curriculum of the Commission on Accreditation of Marriage and Family Therapy Education (COAMFTE).

#### *Lifespan Human Development and Family Diversity*

Complete all of the following (12 to 15 credits):

HDFS 847 Theories of the Family 3

A course in diversity chosen in consultation with the student’s guidance

committee 3

An additional 6 to 9 credits of course work chosen in consultation with the student’s guidance committee.

Effective Fall 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Human Resources and Labor Relations** in the School of Human Resources and Labor Relations. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in Human Resources and Labor Relations** replace the entire entry with the following:

Students will complete 60 credits of course work and seminars within the School of Human Resources and Labor Relations and within other departments in the university.

Students must:

* + 1. Complete the following courses (12 credits):

HRLR 991A Theoretical Perspectives in Human Resource

Management 3

HRLR 991B Theoretical Perspectives in Labor and Employment

Relations 3

HRLR 992A Research Perspectives in Human Resource

Management 3

HRLR 992B Research Perspectives in Labor and Employment

Relations 3

* + 1. Complete 9 credits in three doctoral level research methods courses within other departments approved by the student’s doctoral committee.
    2. Complete 15 credits in five doctoral level courses in other departments approved by the student’s doctoral committee.
    3. Pass comprehensive examinations based on their course work.
    4. Demonstrate research competence by writing an empirical research paper.
    5. Complete 24 credits of HRLR 999 Doctoral Dissertation Research.
    6. Successfully defend the dissertation.

Effective Summer 2020.

1. Change the requirements for the **Master in Urban and Regional Planning** degree in **Urban and Regional Planning** in the School of Planning, Design and Construction. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Master in Urban and Regional Planning Degree in Urban and Regional Planning** make the following changes:
2. Under the heading **Requirements for Both Plan A and Plan B** make the following changes:
   1. In the introductory paragraph, delete ‘at least 24 of which must be in courses numbered in the 800 and 900 series’.
   2. In item 2., delete ‘At least one 3-credit Urban Planning Special Topics course must be taken’.
   3. Under the heading ***Additional Requirements for Plan A*** replace the entry with the following:

Students will complete the following two courses in a two-step process by enrolling in 2 credits of UP 889 Master’s Research with their major faculty advisor who will chair their research before they can enroll in 4 credits of UP 899 Master’s Thesis Research or additional elective course work usually in their second year. A maximum of 6 credits combined can be taken in UP 889 and UP 899.

Effective Fall 2020.

1. Establish a Linked **Bachelor of Science Degree in Urban and Regional Planning** and **Master of Urban and Regional Planning Degree** in **Urban and Regional Planning** in the School of Planning, Design, and Construction. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its February 20, 2020 meeting. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its February 10, 2020 meeting.

Per University policy:

A candidate for a Linked Bachelor's-Master's Degree from Michigan State University may request the application of up to 9 credits toward the master's program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or another postsecondary accredited institution of comparable academic quality. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Some colleges with programs that require more than 30 credits for the master's degree may apply more than 9 credits toward the master's degree but not more than 30% of the total number of credits required for the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

* 1. Add the following statement in the School of Planning, Design, and Construction:

#### *LINKED BACHELOR’S-MASTER’S DEGREE IN URBAN AND REGIONAL PLANNING*

***Bachelor of Science Degree in Urban and Regional Planning***

***Master of Urban and Regional Planning Degree in Urban and Regional Planning***

The department welcomes applications from Michigan State University undergraduate Urban and Regional Planning majors with at least 56 credits. Admission applications must be made prior to the final semester as an Urban and Regional Planning junior. Admission to the program requires a minimum undergraduate grade-point average of 3.50, a statement of goals for the master’s degree, three letters of recommendation, and all academic transcripts. Admission to the Linked Bachelor’s- Master’s Program allows the application of up to 13 credits toward the master’s program for

qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 13, is applied toward the credit requirement of the master’s degree. No 400-level courses with a grade lower than 3.0 will count toward the master’s degree. Credits applied to the Linked Bachelor’s- Master’s Program are not eligible to be applied to any other graduate degree program.

Effective Fall 2020.

1. Change the requirements for the **Master of Arts** degree in **Program Evaluation** in the Department of Psychology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

To be admitted to the Master of Arts Degree in Program Evaluation, applicants must have:

* + 1. a bachelor’s degree from a recognized educational institution.
    2. an academic record equivalent to at least 3.00 (B) in undergraduate course work in their junior and senior year. This requirement is waived for students who have completed a graduate degree.
    3. submitted three letters of recommendation and a personal statement about their academic and professional goals and experience.
    4. submitted Test of English as a Foreign Language (TOEFL) scores if they are an international student.

It is recommended that applicants have earned at least 12 undergraduate credits in a social science such as anthropology, sociology, or psychology.

Admission to the program is selective and meeting the minimum standards does not guarantee admission. The applicant’s overall record is considered, including the student’s personal statement, recommendations, academic transcripts, and other documentation as required.

Effective Summer 2020.

1. Change the requirements for the **Graduate Certificate** in **Program Evaluation** in the Department of Psychology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Admission** replace the entire entry with the following:

To be admitted to the Graduate Certificate in Program Evaluation, applicants must have:

* + 1. a bachelor’s degree from a recognized educational institution.
    2. an academic record equivalent to at least 3.00 (B) in undergraduate course work in their junior and senior year. This requirement is waived for students currently pursuing a master’s or doctoral degree program at MSU.
    3. submitted three letters of recommendation and a personal statement about their academic and professional goals and experience.
    4. submitted Test of English as a Foreign Language (TOEFL) scores if they are an international student.

It is recommended that applicants have earned at least 12 undergraduate credits in a social science such as anthropology, sociology, or psychology.

Admission to the program is selective and meeting the minimum standards does not guarantee admission. The applicant’s overall record is considered, including the student’s personal statement, recommendations, academic transcripts, and other documentation as required.

Students currently pursuing a graduate degree at MSU should submit a letter from their program adviser or chairperson indicating that the student is in good standing and they agree the certificate is an appropriate adjunct training opportunity.

Effective Summer 2020.

1. Change the requirements for the **Master of Arts** degree in **Psychology** in the Department of Psychology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

*The concentrations in the Master of Arts degree in Psychology are noted on the student’s academic record when the requirements for the degree have been completed.*

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

Factors given major consideration for admission to the graduate program at the first–year level include (1) an approved bachelor's degree from a recognized college or university, (2) a junior– senior undergraduate grade–point average of 3.20 or better in academic studies, (3) undergraduate courses in experimental psychology and statistics, (4) satisfactory scores on the Graduate Record Examination General Test, (5) favorable evaluations of the applicant by three referees, preferably instructors in the applicants undergraduate major; and (6) approval by a departmental committee. That an applicant has achieved the above is not sufficient for admission. The number of applicants with superior qualifications exceeds the number of students that can be accommodated.

The department is especially interested in quality students and generally accepts them regardless of their undergraduate majors provided that they have adequate background for graduate study in psychology. Students meeting only the requirements for admission to provisional status are not generally accepted.

Completed applications must be received by December 1 for consideration for the subsequent fall semester.

* 1. Under the heading **Requirements for the Master of Arts Degree in Psychology** replace the entire entry with the following:

To meet individual needs, every student has a guidance committee with the student's advisor as chairperson. The committee develops a program of studies in consultation with the student. The program is available under both Plan A (with thesis) and Plan B (without thesis). The student must complete a total of 30 credits as follows:

### Requirements for Both Plan A and Plan B

* + 1. Complete the following course (3 credits):

PSY 815 Quantitative Research Design and Analysis

in Psychology 3

* + 1. Complete course work appropriate for the student’s subdiscipline as determined and approved by the student’s guidance committee.
    2. Complete additional elective credits approved by the student’s guidance committee.

#### *Additional Requirements for Plan A*

1. Complete 4 credits of PSY 899 Master’s Thesis Research.
2. Preparation of an approved thesis proposal.
3. Successful oral defense of the thesis.

#### *Additional Requirements for Plan B*

1. Complete 4 credits of PSY 890 Special Problems in Psychology.
2. Pass a final evaluation with a guidance committee of at least three faculty and the chairperson of the Department of Psychology. At least two of the three must be faculty members in the Department of Psychology.

There is no general language requirement. Where acquaintance with a foreign language is necessary for advancing the special interest of a particular student, the guidance committee may impose foreign language requirements.

Psychology graduate students may participate in advanced graduate training through a concentration in Quantitative Methodology and Evaluation Science (QMES). Students selecting

this concentration must complete two prerequisite courses, three advanced training courses, and one student-developed project under the supervision of two members of the Quantitative Methodology and Evaluation Science faculty.

Effective Summer 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Psychology** in the Department of Psychology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Add the heading **Requirements for the Doctor of Philosophy Degree in Psychology** and the following entry:

To meet individual needs, every student has a guidance committee with the student's advisor as chairperson. The committee develops a program of studies in consultation with the student.

Students who are accepted into the doctoral program will fulfill the following program requirements for the degree:

* + 1. Complete the following course (3 credits):

PSY 815 Quantitative Research Design and Analysis

in Psychology 3

* + 1. Complete additional course work required by the student’s guidance committee.
    2. Successful completion of the comprehensive examination.
    3. Successful completion and defense of a dissertation.
    4. Completion of 24 credits PSY 999 Doctoral Dissertation Research.

There is no general language requirement. Where acquaintance with a foreign language is necessary for advancing the special interest of a particular student, the guidance committee may impose foreign language requirements.

Psychology graduate students may participate in advanced graduate training through a concentration in Quantitative Methodology and Evaluation Science (QMES). Students selecting this concentration must complete two prerequisite courses, three advanced training courses, and one student-developed project under the supervision of two members of the Quantitative Methodology and Evaluation Science faculty.

Effective Summer 2020.

1. Change the requirements for the **Doctor of Philosophy** degree in **Sociology**. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.
   1. Under the heading **Requirements for the Doctor of Philosophy Degree in Sociology** replace the entire entry with the following:

Students must complete 60 credits from the following:

* + 1. All of the following courses (15 credits):

|  |  |  |  |
| --- | --- | --- | --- |
| SOC | 815 | Classical Sociological Theory | 3 |
| SOC | 816 | Contemporary Sociological Theory | 3 |
| SOC | 881 | Analysis of Social Data I | 3 |
| SOC | 882 | Analysis of Social Data II | 3 |
| SOC | 885 | Methods of Sociological Inquiry | 3 |
| Two of the following courses (6 credits): | | | |
| SOC | 883 | Multi-Equation Quantitative Models | 3 |
| SOC | 884 | Applied Longitudinal Data Analysis | 3 |
| SOC | 985 | Qualitative Field Research | 3 |
| SOC | 986 | Survey Research Principles | 3 |
| SOC | 989 | Topics in Sociological Methodology | 3 |

2.

1. Complete 15 credits from 5 additional courses approved by the student’s guidance committee.
2. Complete 24 credits of SOC 999 Doctoral Dissertation Research.
3. Successful completion of the departmental Graduate Teaching Assistant workshop.
4. Successful completion of the departmental Professional Development Workshop series.
5. Successful completion and presentation of a qualifying paper.
6. Successful completion of the comprehensive examination.
7. Successful defense of the dissertation proposal.
8. Successful defense of the dissertation.

Effective Fall 2020.

# PART II - NEW COURSES

## DEPARTMENT OF COMMUNICATION

COM 280 Principles, Practices and Ethics of Strategic Communication

Fall of every year. Spring of every year. Summer of every year. 4(4-0) R: Open to undergraduate students in the College of Communication Arts and Sciences.

Develop the skills necessary to apply strategic communication principles in support of organizational objectives. Leadership, credibility, responsiveness, ethics and legal considerations. Create targeted, innovative, research-based strategic plans to accomplish long-range goals.

Effective Fall 2020

COM 380 Crisis Communication and Rapid Response

Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: COM 280 R: Open to undergraduate students in the College of Communication Arts and Sciences.

Elements of crisis communication and management. Pre-crisis planning, environmental scanning, strategies for crisis management and rapid response, and rebuilding public trust post-crisis. Emphasis on practical application of crisis communication theory, using case studies and practitioner engagement.

Effective Fall 2020

COM 480 Capstone in Communication Leadership and Strategy

Fall of every year. Spring of every year. Summer of every year. 4(4-0) P: (COM 100 and COM 280 and COM 380 and COM 475 and COM 225 and COM 340) and completion of Tier I writing requirement R: Open to undergraduate students in the College of Communication Arts and Sciences.

Apply and demonstrate strategic communication leadership principles and theories in a semester-long comprehensive project. Course activities apply theoretical principles, concepts and skills gained in their course work.

Effective Fall 2020

## SCHOOL OF CRIMINAL JUSTICE

CJ 874 Cybercrime, Deviance and Virtual Society Fall of every year. 3(3-0)

Emergence of cybercrime and technology-engendered deviance, and the ways that subcultures transcend virtual spaces to affect behavior on and off-line.

Effective Fall 2020

CJ 875 Digital Forensic Investigations Fall of every year. 3(3-0)

Digital forensic analyses, including computer technology, data storage, proper search/seizure/imaging techniques, analysis of imaged devices, and proper presentation of evidence.

Effective Fall 2020

CJ 876 Data Systems/Infrastructure Fall of every year. 3(3-0)

Networked resources that support the Internet and the basics of the Open Systems Interconnection (OSI) Model.

Effective Fall 2020

CJ 877 Cyber Terror and Cyber Warfare Spring of every year. 3(3-0)

Use of technology and the Internet to further terror and extremism across the globe. Effective Fall 2020

## DEPARTMENT OF ENGLISH

ENG 800 Studies in Race, Gender, and the Human

Fall of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

The Interdisciplinary Study of Difference in the U.S. and the Humanities. Theoretical and historical considerations of the category of the human. Attention to the development of race, ethnicity, gender and their critical intersections in relation to the U.S. and the discipline of the Humanities.

Effective Fall 2020

## SCHOOL OF HOSPITALITY BUSINESS

HB 203 Hospitality Communication

Fall of every year. Spring of every year. 3(3-0) P: WRA 101 R: Open to students in the Hospitality Business Major. Not open to students with credit in COM 100 or COM 225 or MKT 250.

Effective hospitality business communication. Selecting appropriate formats for the audience. Developing and delivering effective presentations. Analyzing, writing and revising hospitality business documents. Spotting, correcting and avoiding common writing pitfalls.

Effective Summer 2020

HB 207 Hospitality Management and Leadership

Fall of every year. Spring of every year. 3(3-0) R: Open to students in the Hospitality Business Major. Not open to students with credit in HB 267.

Overview of management and leadership theories and applications specific to the hospitality industry. Discussion of leadership principles, management principles, change management, decision-making, communications, motivational theories, and negotiation skills.

Effective Summer 2020

## COLLEGE OF HUMAN MEDICINE

HM 617 Introduction to Simulation Education Elective

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

Learn and apply educational theory to the use of simulation in medical education. Participate in a blended course to learn skills necessary to conduct training including procedural or clinical skills and/or team training.

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

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

Effective Spring 2020

HM 618 Telemedicine Experiences in Rural Clinical Settings

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

Clinical, biopsycosocial, documentation, and ethical aspects of telehealth to address health conditions and patient needs.

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

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

Effective Spring 2020

HM 619 Clinical Knowledge, Ethics, Epidemiology in Pandemics

Spring of every year. Summer of every year. 3(3-0) P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

Survey of clinical knowledge and principles of necessary science, epidemiology, economics, ethics, and public health policy required in primary and tertiary health care settings during pandemics.

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

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

Effective Spring 2020

HM 620 Clinical Bioethics

Spring of every year. Summer of every year. 3(3-0) P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

Complex bioethical issues including pandemics, physician aid-in-dying, futility/non- beneficial care, and treatment refusal by competent patients.

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

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

Effective Spring 2020

HM 624 Medical Humanities

Spring of every year. Summer of every year. 3(3-0) P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

Reflection on professional medical practice by employing the skills and perspectives of the humanities, specifically literary studies, visual and performing arts.

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

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

Effective Spring 2020

HM 643 Critical Care Experience

Spring of every year. 3(3-0) P: MED 641 or PHD 641 or SUR 641 R: Open to graduate-professional students in the College of Human Medicine.

Virtual learning experience in evaluating and managing acutely ill patients Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

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

Effective Spring 2020

## SCHOOL OF JOURNALISM

JRN 487 Creative Journey Education Abroad

Summer of every year. Abroad, Abroad, Abroad 6(6-0) R: Approval of school.

Visual communication for the transfer of ideas, knowledge and data. Visual tools including videos, infographics, color, typography, and photography.

Effective Summer 2020

## DEPARTMENT OF KINESIOLOGY

KIN 174 Human Medical Terminology

Spring of every year. Summer of every year. 2(2-0) RB: KIN 173 R: Open to undergraduate students in the Department of Kinesiology.

Foundational medical terminology with a focus on cardiovascular, pulmonary, musculoskeletal and neurological systems. Common prefixes, suffixes and root words organized by body system, structures and functions, diagnostic procedures and treatments.

Effective Spring 2021

## PROGRAM IN NEUROSCIENCE

NEU 499 Neuroscience Senior Research Thesis

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

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

Effective Spring 2020

## DEPARTMENT OF OSTEOPATHIC MEDICAL SPECIALTIES

IM 690 Internal Medicine Clerkship Essentials

Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open to students in the College of Osteopathic Medicine.

Case-based review of essential topics in internal medicine 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 2020

## SCHOOL OF PLANNING, DESIGN AND CONSTRUCTION

PDC 100 Introduction to the Built Environment

Fall of every year. Spring of every year. 1(2-0)

Overview of the fields of construction management, interior design, landscape architecture and urban and regional planning. Offered first ten weeks of semester.

Effective Fall 2020

# PART III – COURSE CHANGES

## DEPARTMENT OF ANTHROPOLOGY

ANP 325 Anthropology of the Environment and Development

Fall of every year. Spring of every year. Summer of every year. 3(3-0)

Anthropological approaches to contemporary environmental and development issues and their inter-relation.

~~Effectiv~~e Fa~~l~~l 2014 Effective Spring 2020

ANP 422 Religion and Culture

Fall of every year. ~~Sprin~~g ~~o~~f every year. 3(3-0) P: (ANP 201) or completion of Tier I writing requirement

The anthropology of religion and the symbolic analysis of ritual. Theoretical and ethnographic literature.

~~Effectiv~~e Fa~~l~~l 2016 Effective Spring 2020

## BIOMEDICAL LABORATORY DIAGNOSTICS PROGRAM

BLD 434 Clinical Immunology

Fall of every year. Spring of every year. Summer of every year. 3(3-0) ~~P~~: ~~BL~~D 204 P: PSL 250 or PSL 310 or PSL 432 ~~RB~~: MMG ~~20~~1 ~~o~~r ~~MM~~G 301 RB: (MMG 201 or MMG 301) and BLD 204 Not

open to students with credit in MMG 451.

Concepts of innate and adaptive immunity. Immunodeficiency and autoimmunity. Principles and applications of immunoassays in medical laboratories.

SA: MT 432, MT 434

~~Effectiv~~e Fa~~l~~l 2018 Effective Fall 2020

## SCHOOL OF CRIMINAL JUSTICE

CJ 804 Crime Scene Investigation

Fa~~l~~l ~~o~~f ~~eve~~n years. Fall of odd years. 1(1-0) R: Open to graduate students in the Forensic Science Major.

Introduction to crime scene investigation. Documentation, evidence collection, presumptive chemical and biological tests, and collection and preservation of impression evidence.

~~Effectiv~~e Fa~~l~~l 2015 Effective Summer 2020

CJ 805 Survey in Forensic Science

Fa~~l~~l ~~o~~f every year. Fall of even years. 3(3-0) ~~R~~: ~~Ope~~n only to ~~student~~s ~~i~~n the Fo~~rensi~~c Science major. R: Open to students in the Forensic Science Major.

Scientific analysis of physical evidence. Four major aspects of physical evidence using real criminal and civil cases: generation of physical evidence by criminal activity; collection and preservation of physical evidence; analysis of physical evidence by forensic science laboratory; presentation of scientific expert testimony in court.

~~Effectiv~~e ~~Summe~~r 2006 Effective Summer 2020

CJ 817 Law and Forensic Science

Fa~~l~~l ~~o~~f ~~eve~~n years. Fall of odd years. 2(2-0) R: Open to students in the Forensic Science Major.

Legal aspects of forensic science. Adjudicative process, admissibility of scientific evidence, laboratory reports, hearsay, relevant case materials, and expert testimony. 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.

~~Effectiv~~e Fa~~l~~l 2019 Effective Summer 2020

CJ 820 Forensic Chemistry and Microscopic Evidence

~~Sprin~~g ~~o~~f every year. Spring of odd years. 3(1-5) RB: CJ 819 ~~R~~: ~~Ope~~n only ~~t~~o grad~~uat~~e stu~~dent~~s in ~~th~~e ~~Forensi~~c S~~cienc~~e major. R: Open to graduate students in the Forensic Science Major.

Continuation of CJ 819. Analysis of trace evidence including hairs and fibers, paints and coatings, explosives and fire residues, glass and soil.

~~Effectiv~~e ~~Summe~~r 2006 Effective Summer 2020

CJ 829 National and Global Trends in Court Planning

Spring of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of school.

Emerging judicial trends. Stakeholder expectations. Impact on judicial branch planning. Regional, national, and global trends that frame strategic issues, planning, actions, and leadership.

DELETE COURSE

Effective Fall 2020

CJ 860 Historical Foundations/Contemporary Frameworks of Judicial Administration

Fall of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.

Foundations in the legal and historical evolution of courts. Contemporary methods, practices, and theories of court administration, including purposes and responsibilities of courts, rule of law, caseflow management, and court governance and leadership models. DELETE COURSE

Effective Fall 2020

CJ 861 Budget Planning and Resource Allocation for Court Performance

Summer of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.

Financial resources for courts and court systems. Resource acquisition and allocation strategies, output and outcome measurement for expenditure assessment, efficient and effective resource management, techniques for budget presentation in the public-sector context, alternative budget planning and justification formats, audit formats, revenue enhancement sources and strategies.

DELETE COURSE

Effective Fall 2020

CJ 862 Workforce Planning and Management in the Courts

Summer of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.

Workforce planning and management in the judicial branch. Selections and forms of employment, including elected and appointed judges and other judicial officers, at-will employees, civil servants, contractual labor and services. Succession planning, methods of employee development, coaching, mentoring, and continuing education.

DELETE COURSE

Effective Fall 2020

CJ 863 Courthouse Planning: Space, Technology, Security, and Disaster Recovery

Summer of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.

Planning for building or remodeling of courthouse and courtroom facilities. Requirements for federal and state courts. Safe public space, efficient workflow, technology infrastructure for electronic courts, security, and disaster planning and recovery.

DELETE COURSE

Effective Fall 2020

CJ 864 Elements of Essential Court Operations

Spring of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.

Court management infrastructure systems. Contemporary developments in problem- solving courts. Methods for measuring court inputs, outputs, and outcomes.

Constitutional mandates, judicial branch independence and interdependence, transparency, and accountability.

DELETE COURSE

Effective Fall 2020

CJ 887 Quantitative Methods in Criminal Justice Research

Fa~~l~~l ~~o~~f every year. Spring of every year. 3(3-0) P: CJ 811 ~~R~~: O~~pe~~n ~~t~~o gradu~~at~~e ~~student~~s in the Crimin~~a~~l Justice ~~Majo~~r ~~o~~r ~~i~~n the Judici~~a~~l Administration Major. R: Open to graduate students in the Criminal Justice Major or in the Criminal Justice Major.

Descriptive and inferential statistics and computer use in criminal justice research. ~~Effectiv~~e Fa~~l~~l 2019 Effective Fall 2020

## DEPARTMENT OF ECONOMICS

EC 335 Taxes, Government Spending and Public Policy

Fall of every year. Spring of every year. Summer of every year. 3(3-0) Interdep~~artmenta~~l with Environm~~enta~~l ~~Economic~~s ~~an~~d Policy. Interdepartmental with Environmental Economics and Management P: EC 201 or EC 251H Not open to students with credit in EC 435 or EC 436.

Economics of the public sector. Public goods, externalities, design and incidence of the tax system. Equity and efficiency effects of government programs.

~~Effectiv~~e Fa~~l~~l 2014 Effective Summer 2020

## SCHOOL OF HOSPITALITY BUSINESS

HB 105 Service Management Principles

Fall of every year. Spring of every year. 2(2-0) ~~RB: HB 100 R~~: ~~No~~t ~~ope~~n ~~t~~o seniors. R: Open to students in the Hospitality Business Major.

Concept of service organizations. Key issues in delivering and managing services. Service intangibility. Needs, expectations, habituation and customer satisfaction. Prepurchase and postpurchase behaviors.

~~Effectiv~~e Fa~~l~~l 2017 Effective Summer 2020

HB 201 Hospitality Busi~~nes~~s Professio~~na~~l Development Hospitality Professional Development

Fall of every year. Spring of every year. 1(1-0) ~~RB~~: ~~H~~B ~~10~~0 or concurrently ~~R: Open to~~ undergraduate ~~student~~s ~~i~~n the School ~~o~~f Hospitality Business. R: Open to undergraduate students in the Hospitality Business Major.

Self-assessment of personal and professional interests, skills, and values. Development of professional identity. Career exploration, planning, and development. Building professional relationships through networking and mentorships. Workplace competencies including diversity and multicultural awareness, interpersonal communication, team membership, and leadership.

~~Effectiv~~e ~~Summe~~r 2018 Effective Summer 2021

HB 210 Introduction ~~t~~o ~~th~~e Casi~~n~~o Industry Casino Operations and Management

Fa~~l~~l ~~o~~f ~~od~~d years. Spring of every year. 3(3-0)

Social issues of gaming, casino games of chance, management controls and marketing plans.

~~Effectiv~~e Spring 2013 Effective Summer 2021

HB 237 Management of Lodgi~~n~~g Systems Hospitality Lodging Systems

Fall of every year. Spring of every year. 3(3-0) ~~RB~~: ~~H~~B ~~10~~0 or concurrently R: Not open to seniors.

Interrelated systems in lodging operations for front desk/guest services, reservations, housekeeping, engineering, sales/conference services, accounting, security as well as food and beverage. Segmentation of lodging products and associated management challenges.

~~Effectiv~~e ~~Summe~~r 2014 Effective Summer 2021

HB 265 ~~Foo~~d ~~Management~~: Safety ~~an~~d Nutrition

Hospitality Foodservice Systems

Fall of every year. Spring of every year. 3(3-0) ~~RB~~: ~~H~~B ~~10~~0 or concurrently R: Not open to seniors.

Standar~~d~~s ~~o~~f microbiology, sanitatio~~n~~, nutrition, ~~an~~d other quality ~~issue~~s in food ~~management~~. Chemic~~al~~, ~~health~~, ~~an~~d wo~~rkplac~~e standar~~ds~~. Manageme~~n~~t ~~o~~f ~~produc~~t quality ~~an~~d costs. Food and Beverage systems that enhance food safety and quality management. Standards of microbiology, sanitation, and other quality control issues in foodservice operations. Chemical, health, and workplace safety standards. Introduction of fundamental principles of cost control concepts and techniques at different control points. Food allergen management practices and food safety technology highlighted. Emerging trends that affect different segments of food and beverage operations.

~~Effectiv~~e ~~Summe~~r 2014 Effective Summer 2021

~~H~~B 473

HB 273 Hospitality Business Analytics

Fall of every year. Spring of every year. 3(3-0) P: CSE 101 or CSE 102 RB: Basic Microsoft Excel Skills ~~R~~: ~~Ope~~n ~~t~~o ~~junior~~s ~~o~~r senio~~r~~s ~~i~~n ~~th~~e ~~Schoo~~l of Hospitality Business. R: Open to students in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management 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

~~Effectiv~~e Fa~~l~~l 2016 Effective Summer 2021

~~H~~B 382

HB 282 Hospitality Busi~~nes~~s Re~~a~~l Est~~at~~e ~~Investmen~~t Management Hospitality Real Estate

Fall of every year. Spring of every year. 3(3-0) ~~R~~: ~~Ope~~n ~~t~~o sophom~~ore~~s ~~o~~r ju~~nior~~s ~~o~~r seniors ~~i~~n the ~~Schoo~~l ~~o~~f Hospitality Busine~~s~~s ~~o~~r approv~~a~~l ~~o~~f school. R: Open to students in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management 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

~~Effectiv~~e Fa~~l~~l 2016 Effective Summer 2021

HB 302 Hospitality Managerial Accounting

Fall of every year. Spring of every year. 3(3-0) P: ACC 201 ~~R~~: ~~Ope~~n ~~t~~o sop~~homore~~s or juni~~or~~s or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to sophomores or juniors or seniors in the Hospitality Business Major. Not open to students with credit in ACC 202 or ACC 230.

Principles of managerial accounting applied to hospitality enterprises. Topics include financial statements, forecasting methods, internal control, and ethics.

~~Effectiv~~e Fa~~l~~l 2015 Effective Summer 2020

HB 307 Hospitality Human Resources

Fall of every year. Spring of every year. 3(3-0) P: HB 201 RB: Completion of Level I internship. R: ~~Ope~~n ~~t~~o jun~~ior~~s ~~o~~r ~~senior~~s in ~~th~~e Scho~~o~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major. Not open to students with credit in MGT 315.

Human resource management and interpersonal skills in the hospitality industry. Managing in a culturally diverse workplace. Benefits, compensation, employee and labor relations, equal opportunity, ethics, interviewing, job analysis and description, labor laws, performance management and appraisal, personnel planning, recruitment, retention, risk management, strategic planning, talent management, testing and selection, training and development.

~~Effectiv~~e ~~Summe~~r 2018 Effective Summer 2020

HB 311 Hospitality Finance

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~H~~B ~~30~~2 ~~o~~r A~~C~~C 202 ~~o~~r ~~AC~~C 230 P: ACC 201 or ACC 230 ~~R~~: ~~Ope~~n ~~t~~o ~~junior~~s or seni~~or~~s ~~i~~n the School ~~o~~f Hospitality Business. R: Open to sophomores or juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor. Not open to students with credit in FI 311 or FI 320.

Optimal management of a hospitality firm's assets and financing requirements. Analysis of financial statements, financial markets, risk, valuation, short-term and long-term financing and investment.

~~Effectiv~~e Fa~~l~~l 2015 Effective Summer 2020

HB 320 Casino Operations and Management

Fall of even years. 3(3-0) P: HB 210 R: Open to students in the School of Hospitality Business.

Practices and problems associated with casino management. Staffing, security, protection of table games, and control.

DELETE COURSE

Effective Summer 2020

HB 321 Club Operations and Management

Fall of every year. ~~Sprin~~g ~~o~~f every year. 3(3-0) ~~P: HB 105 R~~: O~~pe~~n ~~t~~o sopho~~more~~s ~~o~~r juniors or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major.

Club operations and management. City, country, yacht, and athletic clubs. SA: HB 211

~~Effectiv~~e Fa~~l~~l 2016 Effective Summer 2020

HB 337 Hospitality Information Systems

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~(H~~B ~~237~~) and ~~(CS~~E 101 or ~~CS~~E 102) P: CSE 101 or CSE 102 ~~R~~: O~~pe~~n ~~t~~o jun~~ior~~s ~~o~~r ~~senior~~s in ~~th~~e Scho~~o~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major.

Technology for gathering, analyzing, storing and communicating information within the hospitality industry.

~~Effectiv~~e Spring 2020 Effective Summer 2020

HB 345 Quantity Fo~~o~~d Producti~~o~~n Systems

Hospitality Food Production Systems

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~H~~B ~~26~~5 and ~~H~~B 267 P: HB 265 R: ~~Ope~~n ~~t~~o juniors ~~o~~r ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to sophomores or juniors or seniors in the Hospitality Business Major.

Organization of food and beverage operations. Product knowledge, especially purchasing, storing, preparing and production in food service operations. Menu development and recipe management.

~~Effectiv~~e ~~Summe~~r 2019 Effective Summer 2021

HB 345L Quantity Fo~~o~~d Producti~~o~~n Syst~~em~~s Laboratory Hospitality Food Production Systems Lab

Fall of every year. Spring of every year. 1(0-2) P: HB 345 or concurrently ~~R~~: ~~Ope~~n ~~t~~o juniors or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. 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.

~~Effectiv~~e ~~Summe~~r 2019 Effective Summer 2021

HB 347 T~~h~~e Foodservi~~c~~e Distributi~~o~~n Channel

Hospitality Supply Chain Process

Fa~~l~~l ~~o~~f every year. Spring of every year. 3(3-0) ~~P: HB 265 and HB 267 R: Open to juniors or seniors~~ ~~in th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major.

Business and management of the foodservice distribution channel. Relationships among foodservice manufacturers, brokers, and distributors. Value-added services. Request for proposal (RFP) process. Current issues and future trends.

~~Effectiv~~e ~~Summe~~r 2014 Effective Summer 2021

HB 349 ~~Facilitie~~s Maintena~~nc~~e and Systems

Hospitality Facilities Management

Fall of every year. ~~Sprin~~g ~~o~~f every year. 3(3-0) ~~P: HB 237 R~~: O~~pe~~n ~~t~~o sopho~~more~~s ~~o~~r juniors or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.

Managing the physical plant of a hospitality business. Key systems, safety, preventive maintenance, energy conservation.

~~Effectiv~~e Fa~~l~~l 2016 Effective Summer 2021

HB 358 Hospitality Busi~~nes~~s Ownership Hospitality Entrepreneurship

Spring of every year. 3(3-0) ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality Business Major or in the Entrepreneurship and Innovation Minor.

Hospitality business ownership qualities and characteristics. Thinking like an owner and resultant actions. Ownership responsibilities across all functional areas of the hospitality entrepreneur business.

~~Effectiv~~e Spring 2013 Effective Summer 2021

HB 376 Hospitality Sales Process

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~(H~~B ~~37~~5 ~~o~~r concurrently) ~~o~~r ~~(MK~~T ~~30~~0 or ~~concurrently) or (MKT 327 or concurrently) R: Open to juniors or seniors in the School of Hospitality~~ Business. R: Open to juniors or seniors in the Hospitality Business Major. Not open to students with credit in MKT 313.

Management of the sales process in the hospitality industry. ~~Effectiv~~e ~~Summe~~r 2014 Effective Summer 2020

HB 380 Meeting ~~an~~d Event Planning ~~an~~d Management Event Planning and Management

Fall of every year. 3(3-0) ~~P~~: (~~H~~B ~~37~~5 ~~o~~r concurrently) ~~o~~r ~~(MK~~T ~~30~~0 ~~o~~r concurrently) ~~o~~r ~~(MK~~T ~~32~~7 or ~~concurrently) R: Ope~~n ~~t~~o juniors ~~o~~r ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major.

Planning, developi~~ng~~, budgeti~~ng~~, promoti~~ng~~, deliverin~~g~~, ~~an~~d evaluating meet~~ing~~s or special even~~t~~s ~~i~~n ~~th~~e hospitali~~t~~y industry. 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.

~~Effectiv~~e Fa~~l~~l 2017 Effective Summer 2021

HB 405 Advanc~~e~~d Managem~~en~~t of F~~oo~~d and Bevera~~g~~e Systems Hospitality Foodservice Cost Control

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~H~~B 345 P: (HB 265) and ((HB 302 or concurrently) or (ACC 202 or concurrently) or (ACC 230 or concurrently)) ~~R~~: ~~Ope~~n ~~t~~o juni~~or~~s or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. 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.

~~Effectiv~~e ~~Summe~~r 2019 Effective Summer 2021

HB 411 Hospitality Beverages

Fall of every year. Spring of every year. 3(3-0) RB: Must be 21 years of age ~~R~~: O~~pe~~n ~~t~~o ~~junior~~s or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality ~~Business~~. ~~Approva~~l ~~o~~f sch~~ool~~; ~~applicatio~~n required. 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.

~~Effectiv~~e ~~Summe~~r 2019 Effective Summer 2020

HB 437 Hospitality Revenue Management

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~H~~B ~~37~~5 ~~o~~r M~~K~~T ~~30~~0 ~~o~~r ~~MK~~T 327 P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 375 or MKT 300 or MKT 327) ~~R~~: ~~Ope~~n to ~~junior~~s ~~o~~r ~~senior~~s in ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management 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.

~~Effectiv~~e Fa~~l~~l 2017 Effective Summer 2020

HB 447 Hospitality Business Law

Fall of every year. Spring of every year. 3(3-0) ~~R~~: ~~Ope~~n ~~t~~o jun~~ior~~s ~~o~~r seniors ~~i~~n ~~th~~e School of Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major. Not open to students with credit in GBL 323 or GBL 385.

Legal aspects of hospitality industry, including structure of the U.S. legal system, contracts, torts, discrimination, property and product liability. Administrative law and government regulation of the industry.

SA: GBL 447

~~Effectiv~~e ~~Summe~~r 2019 Effective Summer 2020

HB 482 Advanced Hospitality Finance

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~H~~B ~~31~~1 ~~o~~r FI ~~31~~1 ~~o~~r FI 320 P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320) ~~R~~: ~~Ope~~n ~~t~~o ~~junior~~s or ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.

Cash flow determination and management. Strategies for financing hospitality ventures and expansion. Determining financial viability of proposed and existing operations.

~~Effectiv~~e ~~Summe~~r 2014 Effective Summer 2020

HB 485 Hospitality Foodservice Operations

Fall of every year. Spring of every year. 3(1-4) ~~P~~: ~~(H~~B ~~345~~) and ~~((H~~B 302 ~~o~~r concurrently) ~~o~~r (ACC ~~20~~2 ~~o~~r concurrently) ~~o~~r ~~(AC~~C ~~23~~0 ~~o~~r concurrently)) P: HB 345 and HB 345L ~~R~~: ~~Ope~~n ~~t~~o ~~senior~~s in ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major.

Beverage management and dining room service. Guest relations and current management topics. Emphasis on foodservice team projects.

~~Effectiv~~e ~~Summe~~r 2019 Effective Summer 2020

HB 486 Advanced Hospitality Marketing

Fall of every year. ~~Sprin~~g ~~o~~f every year. 3(3-0) P: HB 375 or MKT 300 or MKT 327 ~~R~~: ~~Ope~~n to ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to juniors or seniors in the Hospitality Business Major.

Application of advanced marketing principles in the hospitality industry. Identifying, influencing and servicing demand for hospitality products, services, and experiences. SA: HB 475, HB 476

~~Effectiv~~e ~~Summe~~r 2014 Effective Summer 2020

HB 489 Hospitality Business Strategy (W)

Fall of every year. Spring of every year. 3(3-0) ~~P~~: ~~(H~~B ~~307~~) and ~~completio~~n ~~o~~f Ti~~e~~r I writing requirement P: (HB 307 or MGT 315) and completion of Tier I writing requirement ~~RB~~: Completion ~~o~~f ~~Leve~~l I ~~an~~d ~~Leve~~l ~~I~~I internships. RB: Completion of Level I and Level 2 internships. ~~R~~: ~~Ope~~n to ~~senior~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to seniors in the Hospitality Business Major.

Management problems and issues in the hospitality industry. Focus on decision-making models. Case study analysis, discussion and report writing.

~~Effectiv~~e ~~Summe~~r 2018 Effective Summer 2020

HB 490 Independ~~en~~t Study

Hospitality Independent Study

On Demand. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. ~~R~~: ~~Ope~~n ~~t~~o ~~junior~~s ~~o~~r seni~~or~~s ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Business. ~~Approva~~l ~~o~~f school. R: Open to students in the Hospitality Business Major. Approval of school.

Supervised research in hospitality management and operations. ~~Effectiv~~e Fa~~l~~l 2017 Effective Summer 2021

HB 491 ~~Curren~~t T~~opic~~s ~~i~~n Hospitality Business

Hospitality Current Topics and Trends

On Demand. 1 ~~t~~o 6 credits. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. ~~R~~: ~~Ope~~n ~~t~~o juniors ~~o~~r ~~senior~~s in t~~h~~e ~~Schoo~~l ~~o~~f Hospitality Business. R: Open to students in the Hospitality Business Major.

Emerging topics or issues confronting the hospitality service industry. ~~Effectiv~~e Fa~~l~~l 2016 Effective Summer 2021

HB 492 Hospitality Business Real Estate Professional Skills Workshop

Fall of every year. Spring of every year. 1 ~~t~~o 6 credits. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320) ~~R~~: ~~Ope~~n ~~t~~o stud~~ent~~s ~~i~~n ~~th~~e Hospitality Business ~~Rea~~l ~~Estat~~e Inve~~stmen~~t Management ~~Mino~~r or appr~~ova~~l ~~o~~f school. R: Open to juniors or seniors in the Hospitality Business Real Estate Investment Management Minor.

Specific knowledge and analytical skills necessary to be successful in an analyst role with a consulting, real estate development, or investment advisory organization. Workshop topics include but are not limited to hospitality real estate investment, market valuation, Excel modeling, business writing, financing hospitality enterprises, asset management, and hotel industry data analytics.

~~Effectiv~~e Fa~~l~~l 2017 Effective Summer 2021

## COLLEGE OF HUMAN MEDICINE

HM 651 Advanced Skills and Knowledge in Medical School I

Fall of every year. 2(2-0) 3(3-0) A student may earn a maximum of 20 credits in all enrollments for this course. P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

Interdisciplinary small group course for advanced medical students combining advanced clinical skills with deep exploration of scientific and humanities literature underlying these skills. Interdisciplinary small group course for advanced medical students combining advanced clinical skills, ongoing development of research skills, and principles of biomedical science and humanities.

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.

~~Effectiv~~e Fa~~l~~l 2017 Effective Fall 2020

HM 652 Advanced Skills and Knowledge in Medical School II

Spring of every year. 2(2-0) 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 651 R: Open to graduate-professional students in the College of Human Medicine.

Interdisciplinary small group course for advanced medical students combining advanced clinical skills with deep exploration of scientific and humanities literature underlying these skills. Interdisciplinary small group course for advanced medical students combining advanced clinical skills, ongoing development of research skills, and principles of biomedical science and humanities.

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.

~~Effectiv~~e Spring 2018 Effective Fall 2020

HM 653 Advanced Skills and Knowledge in Medical School III

Fall of every year. Spring of every year. Summer of every year. 2(2-0) 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 652 R: Open to graduate- professional students in the College of Human Medicine.

Interdisciplinary small group course for advanced medical students combining advanced clinical skills with deep exploration of scientific and humanities literature underlying these skills. Interdisciplinary course combining discipline-based modules with comprehensive assessments of clinical skills and knowledge to complement concurrent USMLE Step 2 preparation for advanced medical students.

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.

~~Effectiv~~e ~~Summe~~r 2018 Effective Fall 2020

HM 654 Advanced Skills and Knowledge in Medical School IV

Fall of every year. 2(2-0) 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 653 R: Open to graduate-professional students in the College of Human Medicine.

Advanc~~e~~d medi~~ca~~l stud~~ent~~s combining advan~~ce~~d clinic~~a~~l sk~~ill~~s wi~~t~~h deep explorati~~o~~n of ~~scientifi~~c a~~n~~d humaniti~~e~~s literat~~ur~~e underlying ~~thes~~e skills. Interdisciplinary course for advanced medical students combining advanced clinical skills, ongoing development of research skills, and principles of biomedical science and humanities.

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.

~~Effectiv~~e Fa~~l~~l 2018 Effective Fall 2020

HM 655 Advanced Skills and Knowledge in Medical School V

Fall of every year. Spring of every year. 2(2-0) 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 654 or concurrently R: Open to graduate-professional students in the College of Human Medicine.

Interdisciplinary small group course for advanced medical students combining advanced clinical skills with deep exploration of scientific and humanities literature underlying these skills. Preparation and assessment of residency readiness. Interdisciplinary comprehensive synthesis of clinical skills and knowledge for advanced medical students. 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.

~~Effectiv~~e Fa~~l~~l 2019 Effective Fall 2020

## SCHOOL OF JOURNALISM

JRN 418 Advanced Sports Reporting

Fall of every year. Spring of every year. 3(2-2) ~~P~~: ~~JR~~N 416 P: JRN 300 and JRN 317

Upper-level explorati~~o~~n ~~o~~f iss~~ue~~s ~~i~~n sp~~ort~~s journal~~is~~m and dire~~cte~~d professi~~ona~~l work experiences at outlets such as WKAR's Current Sports (radio/TV/web) and FOX Sports. Upper-level exploration of issues in sports journalism and directed professional work experiences at outlets.

~~Effectiv~~e Fa~~l~~l 2018 Effective Fall 2020

## DEPARTMENT OF LINGUISTICS AND GERMANIC, SLAVIC, ASIAN AND AFRICAN LANGUAGES

LLT 861 Advanced Topics in Second Language Acquisition

Fall of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. ~~P~~: ~~LL~~T ~~86~~0 ~~o~~r L~~L~~T 872 RB: LLT 860 or LLT 872 R: Open to graduate students in the Second Language Studies Major or approval of department.

Advanced course in second language acquisition. Topics vary based on current topics in the field and faculty interests.

~~Effectiv~~e Spring 2007 Effective Fall 2020

LLT 864 Second Language Psycholinguistics

Spring of every year. 3(3-0) P: ~~LL~~T 860 RB: (LLT 861 and LLT 862) and Background in SLA research. ~~R~~: Approv~~a~~l ~~o~~f department. R: Open to graduate students in the Second Language Studies Major or approval of department.

Second and foreign language learning from a psycholinguistic perspective. Discussion of major research findings and theories of second and foreign language perception, comprehension, and production.

~~Effectiv~~e Fa~~l~~l 2007 Effective Fall 2020

LLT 873 Quantitative Research in Second Language Studies

Fall of every year. Spring of every year. 3(3-0) ~~P: LLT 872~~ RB: LLT 872 R: Open to graduate students in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major or approval of department.

Statistical principles and techniques with particular application to investigating second language learning and teaching.

~~Effectiv~~e Fa~~l~~l 2006 Effective Fall 2020

LLT 874 Qualitative Research in Second Language Studies

Fall of every year. Spring of every year. 3(3-0) ~~P: LLT 872~~ RB: LLT 872 ~~R~~: ~~Ope~~n ~~t~~o doctoral ~~student~~s ~~i~~n the Second Langu~~ag~~e Stud~~ie~~s ma~~jo~~r ~~o~~r ~~i~~n ~~th~~e Teachi~~n~~g English ~~t~~o Speak~~er~~s ~~o~~f Other ~~Language~~s ~~majo~~r ~~o~~r ~~approva~~l of department. R: Open to graduate students in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major or approval of department.

Theories, principles, and techniques underlying qualitative research. Applications to investigating second language learning and teaching.

~~Effectiv~~e Fa~~l~~l 2006 Effective Fall 2020

## COLLEGE OF OSTEOPATHIC MEDICINE

OST 580 Respiratory System

Spring of every year. 6(4-4) 7(5-4) R: Open to graduate-professional students in the College of Osteopathic Medicine.

Systems biology approach to the entire respiratory system. Request the use of the Pass-No Grade (P-N) system.

~~Effectiv~~e Spring 2019 Effective Spring 2021

## DEPARTMENT OF PLANT, SOIL AND MICROBIAL SCIENCES

CSS 202L World of Turf Lab

Fall of every year. Spring of every year. Summer of every year. 1(0-2) P: CSS 202 or concurrently Not open to students with credit in CSS 232.

Turfgrass identification. Site analysis and recommendations. On campus facility and venue visits. Mowing equipment and practices. Turf establishment. Soil cultivation and amendments. Fertilizer and pest management. Field trips required.

~~Effectiv~~e ~~Summe~~r 2016 Effective Spring 2020

CSS 313 D~~at~~a Interpreta~~tio~~n and Writing ~~i~~n ~~th~~e Agrono~~mi~~c Sciences Data Interpretation and Writing in the Agronomic Sciences (W)

Spring of every year. 2(2-0) P: ~~(CS~~S ~~11~~0 and ~~CS~~S ~~210~~) and ~~(CS~~S ~~10~~1 ~~o~~r C~~S~~S 232) P: ((CSS 110 and CSS 210) and completion of Tier I writing requirement) and (CSS 101 or CSS 232) R: Not open to freshmen.

Data analysis, interpretation, integration, and technical writing in agronomic sciences. ~~Effectiv~~e Fa~~l~~l 2018 Effective Summer 2021

CSS 499 Undergraduate Research

Fall of every year. Spring of every year. Summer of every year. 3(0-9) A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department; application required.

Faculty supervised research in a selected area of crop and soil sciences or environmental soil science.

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.

~~Effectiv~~e Spring 2014 Effective Fall 2020

**DEPARTMENT OF SUPPLY CHAIN MANAGEMENT**

SCM 303 Introduction to Supply Chain Management

Fall of every year. Spring of every year. Summer of every year. 3(3-0) ~~R: Open to juniors or seniors~~ ~~in th~~e ~~El~~i Broad Colle~~g~~e ~~o~~f Busi~~nes~~s a~~n~~d T~~h~~e ~~El~~i Broad Grad~~uat~~e School ~~o~~f Management ~~an~~d not open ~~t~~o undergradu~~at~~e students ~~i~~n ~~th~~e ~~Schoo~~l ~~o~~f Hospitality Bu~~sines~~s a~~n~~d open ~~t~~o studen~~t~~s ~~i~~n the Agribusin~~es~~s Management ~~majo~~r ~~o~~r ~~i~~n the Appli~~e~~d Enginee~~rin~~g Scienc~~e~~s ~~majo~~r ~~o~~r ~~i~~n the Constructi~~o~~n Management ~~majo~~r or ~~i~~n ~~th~~e Fo~~o~~d Industry Management maj~~o~~r ~~o~~r ~~i~~n ~~th~~e Packaging major. R: Open to undergraduate students in the Accounting major or in the Finance Major or in the Human Resource Management Major or in the Management Major or in the Marketing Major or in the Business - Admitted major or in the Supply Chain Management Major or in the Applied Engineering Sciences Major.

Objectives, processes, and functions of supply chain management activities including procurement, manufacturing, and logistics. The role of supply chain processes in creating competitive advantage with respect to quality, flexibility, lead-time, and cost.

SA: MGT 303, MSC 303

~~Effectiv~~e Spring 2013 Effective Spring 2020