The effective date for new programs subject to Statewide Academic Program review is implemented in accordance with the Statewide Academic Program Review calendar.
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  
January 17, 2017

TO:   Faculty Senate
FROM:  University Committee on Curriculum
SUBJECT:  New Academic Programs and Program Changes:  
New Courses and Course Changes

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

1. Change the requirements for the Bachelor of Science degree in Food Science in the Department of Food Science and Human Nutrition.

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

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

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

            FSC 410 Sensory Analysis and Consumer Research  3

      Add the following courses:

            FSC 310 Sensory Analysis and Consumer Research  3
            FSC 442 Hazard Analysis Critical Control Point Training and Certification  1

      (2) In item 3. a. change the total credits from ‘53’ to ‘54’.

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

            One of the following courses (3 credits):
            FSC 430 Food Processing: Fruits and Vegetables  3
            FSC 431 Food Processing: Cereals  3

      (4) Reletter item 3. c. to item 3. d.

      (5) Add the following item 3. c.:

            One of the following courses (3 credits):
            FSC 432 Food Processing: Dairy Foods  3
            FCS 433 Food Processing: Muscle Foods  3

      (6) In item 3. d. under the Food Technology concentration change the note following the list of courses to the following:

            Courses selected to meet this requirement may not be used to fulfill requirement 3. b. or 3. c. above.

Effective Fall 2017.
2. Delete the curriculum and degree requirements for the Minor in Nutritional Sciences in the Department of Food Science and Human Nutrition. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request at its October 6, 2016 meeting. 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 2016. No students are to be readmitted to the program effective Spring 2016. Effective Spring 2020, coding for the program will be discontinued and the program will no longer be available in the Department of Food Science and Nutrition. Students who have not met the requirements for the Minor in Nutritional Sciences through the Department of Food Science and Human Nutrition prior to Spring 2020 will have to change their minor.

COLLEGE OF ARTS AND LETTERS

1. Change the requirements for the Master of Arts degree in Arts and Cultural Management in the College of Arts and Letters. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

a. Under the heading Requirements for the Master of Arts Degree in Arts and Cultural Management replace the entire entry with the following:

The Master of Arts degree in Arts and Cultural Management is available only under Plan B (non-thesis). A total of 30 credits are required for the degree. At least 15 credits must be at the 800-level.

Students must complete 30 credits from the following courses:

1. Both of the following courses (6 credits):
   ACM 801 Introduction to Arts and Cultural Management 3
   AL 892 Seminar 3

2. One of the following courses (6 credits):
   ACM 871 Internship in Arts and Cultural Management 6
   AL 893 Museum Internship 6

3. Three of the following courses (9 credits):
   ACM 461 Strategies of Arts and Cultural Management 3
   ACM 462 Promotion and e-Commerce in Arts and Cultural Management 3
   ACM 463 Event Production and Planning for Arts and Culture 3
   ACM 868 Law and Policy for Arts and Cultural Management 3

4. One of the following concentrations (9 credits):
   Museum Studies
   1. The following course (3 credits):
      MUSM 485 Foundations of Museum Studies 3
   2. Two of the following courses (6 credits):
      CSUS 431 Interpretation and Visitor Information Systems 3
      CSUS 873 Culture, Communities and Tourism 3
      MUSM 494 Museum Exhibitions: Theory and Development 3
      MUSM 498 Learning in Museums 3
      MUSM 887 Museums and Technology 3
      MUSM 888 Curatorial Practices in Museums and Cultural Organizations 3
      MUSM 895 Special Topics in Museum Studies 3
   Management Studies
   1. Two of the following courses (6 credits):
      ACM 464 Education and Outreach for Arts and Cultural Management 3
      ACM 465 Leadership and Innovation for Arts and Cultural Management 3
      AL 891 Special Topics in Arts and Humanities 3
   2. One of the following courses (3 credits):
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

ACM 461 Strategies of Arts and Cultural Management 3
ACM 462 Promotion and e-Commerce in Arts and Cultural Management 3
ACM 463 Event Production and Planning for Arts and Culture 3
ACM 868 Law and Policy for Arts and Cultural Management 3

This requirement can only be met by choosing the course not used to fulfill requirement 3. above.

Operational Studies

1. Two of the following courses (6 credits):
   ACM 467 Development and Public Relations for Arts and Cultural Management 3
   ACM 468 Facilities and Operations for Arts and Cultural Management 3
   AL 891 Special Topics in Arts and Humanities 3

2. One of the following courses (3 credits):
   ACM 461 Strategies of Arts and Cultural Management 3
   ACM 462 Promotion and e-Commerce in Arts and Cultural Management 3
   ACM 463 Event Production and Planning for Arts and Culture 3
   ACM 868 Law and Policy for Arts and Cultural Management 3

This requirement can only be met by choosing the course not used to fulfill requirement 3. above.

Other management-focused, arts and humanities courses, including independent study, as applicable, may be substituted with the approval of the academic advisor.

5. Completion of a final oral examination or evaluation.

Effective Fall 2017.

2. Change the requirements for the Graduate Certificate in Museum Studies the College of Arts and Letters. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

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

a. Under the heading Requirements for the Graduate Certificate in Museum Studies make the following changes:

(1) In item 1. delete the following courses:
   AL 886 Fundamentals of Museum Studies 3
   AL 893 Museum Internship 3

Add the following courses:
   MUSM 886 Fundamentals of Museum Studies 3
   MUSM 893 Museum Internship 3

(2) In item 2. delete the following courses:
   AL 488 Museum Curatorial Practices 3
   AL 492 Special Topics in Museum Studies 3
   AL 494 Museum Exhibitions: Theory and Development 3
   AL 498 Learning in Museums 3
   AL 887 Museums and Technology 3
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

AL 888 Curatorial Practices in Museums and Cultural Organizations 3
AL 895 Special Topics in Museum Studies 3
AL 897 Practicum in Museum Studies 1 to 3

Add the following courses:

MUSM 488 Museum Curatorial Practices 3
MUSM 492 Special Topics in Museum Studies 3
MSUM 494 Museum Exhibitions: Theory and Development 3
MUSM 498 Learning in Museums 3
MUSM 887 Museums and Technology 3
MUSM 888 Curatorial Practices in Museums and Cultural Organizations 3
MUSM 895 Special Topics in Museum Studies 3
MUSM 897 Practicum in Museum Studies 1 to 3

Effective Fall 2017.

3. Change the requirements for the **Minor in Museum Studies** in the College of Arts and Letters.
   a. Under the heading **Requirements for the Minor in Museum Studies** make the following changes:

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

   AL 485 Foundations of Museum Studies 3
   AL 496 Museum Studies Internship 3

   Add the following courses:

   MUSM 485 Foundations of Museum Studies 3
   MUSM 496 Museum Studies Internship 3

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

   AL 488 Museum Curatorial Practices 3
   AL 492 Special Topics in Museum Studies 1 to 3
   AL 494 Museum Exhibitions: Theory and Development 3
   AL 497 Practicum in Museum Studies 1 to 3
   AL 498 Learning in Museums 3

   Add the following courses:

   MUSM 488 Museum Curatorial Practices 3
   MUSM 492 Special Topics in Museum Studies 1 to 3
   MUSM 494 Museum Exhibitions: Theory and Development 3
   MUSM 497 Practicum in Museum Studies 1 to 3
   MUSM 498 Learning in Museums 3

   (3) In the note following change ‘AL 271’ to ‘ACM 271’.

   Effective Fall 2017.
4. Delete the curriculum and degree requirements for the Master of Arts degree in Applied Spanish Linguistics in the Department of Romance and Classical Studies. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request at its October 10, 2016 meeting. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

No new students are to be admitted to the program effective Spring 2016. No students are to be readmitted to the program effective Spring 2016. Effective Summer 2016, coding for the program will be discontinued and the program will no longer be available in the Department of Romance and Classical Studies. Students who have not met the requirements for the Master of Arts Degree in Applied Spanish Linguistics through the Department of Romance and Classical Studies prior to Summer 2016 will have to change their major.

ELI BROAD COLLEGE OF BUSINESS

1. Delete the curriculum and degree requirements for the Master of Business Administration (Executive M.B.A.) degree in The Eli Broad College of Business. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request at its September 12, 2016 meeting. 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 2016. No students are to be readmitted to the program effective Fall 2016. Effective Spring 2017, coding for the program will be discontinued and the program will no longer be available in The Eli Broad College of Business. Students who have not met the requirements for the Master of Business Administration (Executive M.B.A.) through The Eli Broad College of Business prior to Spring 2017 will have to change their major.

COLLEGE OF EDUCATION

1. Change the requirements for the Graduate Certificate in Sport Coaching and Leadership in the Department of Kinesiology. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

a. Under the heading Graduate Certificate in Sport Coaching and Leadership replace the entire entry with the following:

Students must complete 9 credits form the following courses:

1. One of the following courses for the Psychosocial Competency (3 credits):
   - KIN 855 Psychosocial Bases of Coaching Athletes 3
   - KIN 857 Promoting Positive Youth Development through Sport 3
   - KIN 865 Stages of Athlete Development 3

2. One of the following courses for the Physical Competency (3 credits):
   - KIN 856 Physical Bases of Coaching Athletes 3
   - KIN 868 Skill Development in Athletes 3

3. One of the following courses for the Legal/Safety Competency (3 credits):
   - KIN 829 Safety and Injury Control 3
   - KIN 854 Legal and Administrative Issues 3

Effective Summer 2017.
COLLEGE OF ENGINEERING

1. Change the requirements in the Bachelor of Science degree in Chemical Engineering in the Department of Chemical Engineering and Materials Science.

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

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

      (1) In item 1., paragraph three, add the following statement:

      The alternative track requirement for Integrative Studies in Biological Sciences in Chemical Engineering is Biological Science 161.

      (2) In item 3. e. Technical Electives, replace the requirement with the following:

      Students must complete at least 6 credits in courses selected from a list of approved technical electives available from the Department of Chemical Engineering and Materials Science. Technical elective courses must include at least 3 credits of engineering topics, denoted with an ‘e’ next to the course number on the CHE technical elective list.

      NOTE: BMB 462 is taken to fulfill requirement 3. b. and will count as a technical elective credit in item 3. e., not as an engineering ‘e’ topics course.

      (3) In the Concentrations in Chemical Engineering make the following changes:

         (a) In the introductory text NOTE, add the following statement:

         For any concentration, up to 3 credits of Independent Study (CHE 490) related to the subject area may be applied with approval of the Department of Chemical Engineering and Materials Science.

         (b) Under the heading Biochemical Engineering replace the requirements with the following:

         To earn a Bachelor of Science degree in Chemical Engineering with a biochemical engineering concentration, students must complete requirements 1., 2., 3. a., and 3. d. above and the following:

         Both of the following courses (6 credits):
         CHE 481 Biochemical Engineering 3
         MMG 301 Introductory Microbiology 3

         One of the following tracks:
         Track 1 (12 or 13 credits):
         The following course (4 credits):
         BMB 401 Comprehensive Biochemistry 4
         Three of the following courses (8 or 9 credits):
         BMB 805 Protein Structure, Design, and Mechanism 3
         BMB 829 Methods of Macromolecular Analysis and Synthesis 2
         CHE 882 Advanced Biochemical Engineering 3
         CHE 883 Multidisciplinary Bioprocessing Laboratory 3
         MMG 409 Eukaryotic Cell Biology 3
         MMG 421 Prokaryotic Cell Physiology 3
         MMG 431 Microbial Genetics 3

         Track 2 (11 or 12 credits):
         Both of the following courses (6 credits):
         BMB 461 Advanced Biochemistry I 3
         BMB 462 Advanced Biochemistry II 3
         Two of the following courses (5 or 6 credits):
         BMB 805 Protein Structure, Design, and Mechanism 3
         BMB 829 Methods of Macromolecular Analysis and Synthesis 2
         CHE 882 Advanced Biochemical Engineering 3
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

(c) Under the heading Bioenergy rename the concentration to Bioenergy and Bioproducts and replace the requirements with the following:

NOTE: No new students are to be admitted to the Bioenergy concentration effective Fall 2017. No students are to be readmitted to the concentration effective Fall 2017. Effective Fall 2022, coding for the Bioenergy concentration will be discontinued and the concentration will no longer be available. Students who have not met the requirements for the concentration prior to Fall 2022 will have to change their concentration. Effective Fall 2017, students pursuing the Bioenergy and Bioproducts concentration will follow the requirements noted below.

To earn a Bachelor of Science degree in Chemical Engineering with a bioenergy and bioproducts concentration, students must complete requirements 1., 2., 3. a., 3. b., and 3. d. above and the following:

All of the following courses (9 credits):
- CHE 468 Biomass Conversion Engineering 3
- CHE 481 Biochemical Engineering 3
- CSS 467 Bioenergy Feedstock Production 3

One of the following courses (3 credits):
- BE 469 Sustainable Bioenergy Systems 3
- BE 869 Life Cycle Assessment for Bioenergy and Bioproduct Systems 3

One of the following courses (3 credits):
- AFRE 829 Economics of Environmental Resources 3
- CHE 882 Advanced Biochemical Engineering 3
- CHE 883 Multidisciplinary Bioprocessing Laboratory 3
- FOR 466 Natural Resource Policy 3
- MC 450 International Environmental Law and Policy 3

(d) Under the heading Biomedical Engineering replace the requirements with the following:

To earn a Bachelor of Science degree in Chemical Engineering with a biomedical engineering concentration, students must complete requirements 1., 2., 3. a., 3. b., and 3. d. above and the following:

All of the following courses (10 credits):
- CHE 481 Biochemical Engineering 3
- MMG 409 Eukaryotic Cell Biology 3
- PSL 431 Human Physiology I 4

One of the following courses (3 credits):
- CHE 883 Multidisciplinary Bioprocessing Laboratory 3
- ME 494 Biofluid Mechanics and Heat Transfer 3
- MSE 425 Biomaterials and Biocompatibility 3

One of the following courses not taken above (3 or 4 credits):
- BMB 471 Advanced Biochemistry Laboratory 3
- CHE 883 Multidisciplinary Bioprocessing Laboratory 3
- IBIO 341 Fundamental Genetics 4
- ME 494 Biofluid Mechanics and Heat Transfer 3
- MSE 425 Biomaterials and Biocompatibility 3

(e) Under the heading Environmental delete the following courses from the elective listing:

- CE 485 Landfill Design 3
- CSUS 200 Introduction to Sustainability 3
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

ZOL 446 Environmental Issues and Public Policy 3

Add the following course to the elective listing:

IBIO 446 Environmental Issues and Public Policy 3

Effective Fall 2017.

2. Delete the curriculum and degree requirements for the Bachelor of Science degree in Electrical and Computer Engineering in the Department of Electrical and Computer Engineering. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request at its meeting on October 6, 2016. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Summer 2015. No students are to be readmitted to the program effective Summer 2015. Effective Fall 2016, coding for the program will be discontinued and the program will no longer be available in the Department of Electrical and Computer Engineering. Students who have not met the requirements for the Bachelor of Science degree in Electrical and Computer Engineering through the Department of Electrical and Computer Engineering prior to Fall 2016 will have to change their major.

COLLEGE OF HUMAN MEDICINE

1. Change the requirements for the Minor in Global Public Health and Epidemiology in the Department of Epidemiology and Biostatistics.

   a. Under the heading Requirements for the Minor in Global Public Health and Epidemiology replace the entire entry with the following:

      1. All of the following courses (16 credits):
         EPI 200 A Multidisciplinary Approach to Problems in Global Public Health and Epidemiology 3
         EPI 280 Applied Analytic Methods in Health Studies I 3
         EPI 380 Applied Analytic Methods in Health Studies II 3
         EPI 390 Disease in Society: Introduction to Epidemiology and Public Health 4
         HM 101 Introduction to Public Health 3

   Effective Summer 2017.

LYMAN BRIGGS COLLEGE

1. Change the Graduation Requirements for Lyman Briggs College leading to the Bachelor of Science Degree in Lyman Briggs College.

   a. Under the heading Requirements for Bachelor of Science Degree in Lyman Briggs College make the following changes:

      (1) In item 1., change paragraph two to ‘Students who are enrolled in Lyman Briggs College…’.

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

      The University’s Tier II writing requirement for the Major and Coordinate Majors in Lyman Briggs College is met by completing Lyman Briggs College 492 and

3) In item 3. a. (4) delete items (d) and (e) and reletter respectively.

4) Replace item 3. a. (5) with the following:

**History, Philosophy and Sociology of Science**: A total of 11 or 12 credits from the courses in groups (a), (b), and (c) below:

(a) One of the following courses: Lyman Briggs 133; Writing, Rhetoric and American Cultures 101.

(b) One of the following courses: Lyman Briggs 321A, 322A, 323A, 324A, 325A, 326A, 327A.

(c) One of the following courses: Lyman Briggs 321B, 322B, 323B, 324B, 325B, 326B, 327B.

5) In item 3. b. under **Coordinate Majors (3)** College of Natural Science delete:

Diagnostic Molecular Science

Effective Fall 2017.

**COLLEGE OF MUSIC**

1. Change the requirements for the **Master of Music** degree in **Music Conducting** in the College of Music. The University Committee on Graduate Studies (UCGS) approved this request at its October 10, 2016 meeting.

a. Under the heading **Requirements for the Master of Music Degree in Music Conducting** make the following changes:

(1) In item 2. **Choral Conducting**:

(a) In item a. change the total credits from ‘16’ to ‘17’.

(b) In item a. add the following course:

MUS 891 Special Topics 1

(c) In item a. add the following note:

For MUS 891 Special Topics, students must enroll in the section on Score Study and Interpretation through String Bowing. Students must conduct a full program in a public choral concert, or conduct a series of pieces in two or more public choral concerts.

(d) Change item c. from ‘4 to 6’ credits to ‘3 to 5’ credits.

(e) Reletter item d. to item f.

(f) Add the following items d. and e.:

d. Demonstrate proficiency in French, German, Italian, English, and Latin through an assessment administered as part of the audition process. Lack of proficiency in any language must be addressed by enrolling in MUS 845 Secondary or Specialist Emphasis: Voice, which will focus on repertoire in the deficient language(s) and will include a jury for the voice faculty.
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

(2) In item 3. **Orchestral Conducting**:

(a) Reletter item e. to item f.

(b) Add the following item e.:

**e.** Demonstrate proficiency in French, German, Italian, English, and Latin through an assessment administered as part of the audition process. Lack of proficiency in any language must be addressed by enrolling in MUS 845 Secondary or Specialist Emphasis: Voice, which will focus on repertoire in the deficient language(s) and will include a jury for the voice faculty.

Effective Spring 2017.

2. Change the requirements for the **Doctor of Musical Arts** degree in **Music Conducting** in the College of Music. The University Committee on Graduate Studies (UCGS) approved this request at its October 10, 2016 meeting.

a. Under the heading **Requirements for the Doctoral of Musical Arts Degree in Music Conducting** add the following:

6. Students majoring in choral conducting must complete MUS 891 Special Topics and enroll in the section on Score Study and Interpretation through String Bowing.

7. Students majoring in choral conducting must demonstrate proficiency in vocal pedagogy by taking MUS 340 Methods and Literature for Voice. These credits will not count toward those required for the degree. This requirement will be waived if the student’s transcript shows successful completion of a similar course at another institution.

8. Students majoring in choral or orchestral conducting must demonstrate proficiency in French, German, Italian, English, and Latin through an assessment administered as part of the audition process. Lack of proficiency in any language must be addressed by enrolling in MUS 845 Secondary or Specialist Emphasis: Voice, which will focus on repertoire in the deficient language(s) and will include a jury for the voice faculty.

Effective Spring 2017.

**COLLEGE OF NATURAL SCIENCE**

1. Change the requirements for the **Bachelor of Science** degree in **Biological Science-Interdepartmental** in the College of Natural Science. The Teacher Education Council (TEC) approved this request at its November 7, 2016 meeting.

a. Under the heading **Requirements for the Bachelor of Science Degree in Biological Science-Interdepartmental** make the following changes in item 3.:

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOL 341</td>
<td>Fundamental Genetics</td>
<td>4</td>
</tr>
<tr>
<td>ZOL 355</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>ZOL 355L</td>
<td>Ecology Laboratory (W)</td>
<td>1</td>
</tr>
<tr>
<td>ZOL 445</td>
<td>Evolution (W)</td>
<td>3</td>
</tr>
</tbody>
</table>
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

Add the following courses:

IBIO 341 Fundamental Genetics 4
IBIO 355 Ecology 3
IBIO 355L Ecology Laboratory (W) 1
IBIO 445 Evolution (W) 3

(2) In item 3. c. delete the following course:
CEM 186H Honors Chemistry Laboratory II 2

Add the following item (4):

LB 171 Principles of Chemistry I 4
LB 171L Introductory Chemistry Laboratory I 1
LB 172 Principles of Chemistry II 3
LB 172L Principles of Chemistry II-Reactivity Laboratory 1

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

One course from group (1) and one course from group (2) (6 to 8 credits):
(1) MTH 124 Survey of Calculus I 3
MTH 132 Calculus I 3
MTH 152H Honors Calculus I 4
LB 118 Calculus I 4
(2) MTH 126 Survey of Calculus II 3
MTH 133 Calculus II 4
MTH 153H Honors Calculus II 3
LB 119 Calculus II 4
STT 201 Statistical Methods 4
STT 231 Statistics for Scientists 3
STT 351 Probability and Statistics for Engineering 3
STT 421 Statistics I 3

(4) Replace item 3. e. with the following:

One of the following groups of courses (8 to 10 credits):
(1) PHY 183 Physics for Scientists and Engineers I 4
PHY 184 Physics for Scientists and Engineers II 4
PHY 191 Physics Laboratory for Scientists, I 1
PHY 192 Physics Laboratory for Scientists, II 1
(2) PHY 193H Honors Physics I–Mechanics 4
PHY 294H Honors Physics II–Electromagnetism 4
PHY 191 Physics Laboratory for Scientists, I 1
PHY 192 Physics Laboratory for Scientists, II 1
(3) PHY 231 Introductory Physics I 3
PHY 232 Introductory Physics II 3
PHY 251 Introductory Physics Laboratory I 1
PHY 252 Introductory Physics Laboratory II 1
(4) LB 273 Physics I 4
LB 274 Physics II 4

(5) Delete item 3. f.

(6) Reletter item 3. g. to 3. f. and make the following change items 3. f. (1) and 3. f. (2):

Delete the following courses:
ZOL 408 Histology 4
ZOL 425 Cells and Development (W) 4
Add the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBIO 408</td>
<td>Histology</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 425</td>
<td>Cells and Development (W)</td>
<td>4</td>
</tr>
</tbody>
</table>

(7) Reletter item 3. h. to 3. g.

Effective Fall 2017.

2. Change the administrative responsibility for the **Master of Science** degree in **Computational Mathematics, Science and Engineering** in the Department of Computational Mathematics, Science and Engineering, **College of Natural Science** to the Department of Computational Mathematics, Science and Engineering, **College of Engineering**. The College of Engineering will now administer the graduate degree programs in the Department of Computational Mathematics, Science and Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

Effective Summer 2017.

3. Change the administrative responsibility for the **Doctor of Philosophy** degree in **Computational Mathematics, Science and Engineering** in the Department of Computational Mathematics, Science and Engineering, **College of Natural Science** to the Department of Computational Mathematics, Science and Engineering, **College of Engineering**. The College of Engineering will now administer the graduate degree programs in the Department of Computational Mathematics, Science and Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

Effective Summer 2017.

4. Change the administrative responsibility for the **Graduate Certificate** in **Computational Modeling** in the Department of Computational Mathematics, Science and Engineering, **College of Natural Science** to the Department of Computational Mathematics, Science and Engineering, **College of Engineering**. The College of Engineering will now administer the graduate degree programs in the Department of Computational Mathematics, Science and Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

Effective Summer 2017.

5. Change the administrative responsibility for the **Graduate Certificate** in **High-Performance Computing** in the Department of Computational Mathematics, Science and Engineering, **College of Natural Science** to the Department of Computational Mathematics, Science and Engineering, **College of Engineering**. The College of Engineering will now administer the graduate degree programs in the Department of Computational Mathematics, Science and Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

Effective Summer 2017.

6. Change the requirements for the **Bachelor of Science** degree in **Actuarial Science** in the Department of Mathematics.

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

   (1) In item 3. a. change ‘zoology’ to ‘integrative biology’.

   (2) In item 3. f. delete the following course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 255H</td>
<td>Honors Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

Effective Fall 2016.
7. Change the requirements for the **Bachelor of Arts** degree in **Computational Mathematics** in the Department of Mathematics.

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

   1. In item 3. a. (1) change ‘zoology’ to ‘integrative biology’.
   2. In item 3. c. (3) (b) change the credits of ‘MTH 317H’ from ‘3’ to ‘4’.
   3. In item 3. d. delete the following course:

      | Course            | Credits |
      |-------------------|---------|
      | MTH 472 Mathematical Logic | 3       |

   Effective Fall 2016.

8. Change the requirements for the **Bachelor of Science** degree in **Computational Mathematics** in the Department of Mathematics.

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

   1. In item 3. a. (1) change ‘zoology’ to ‘integrative biology’.
   2. In item 3. c. (3) (b) change the credits of ‘MTH 317H’ from ‘3’ to ‘4’.
   3. In item 3. d. delete the following course:

      | Course            | Credits |
      |-------------------|---------|
      | MTH 472 Mathematical Logic | 3       |

   Effective Fall 2016.

9. Change the requirements for the **Bachelor of Arts** degree in **Mathematics** in the Department of Mathematics. The Teacher Education Council (TEC) approved this request at its November 7, 2016 meeting.

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

   1. In item 3. a. (1) change ‘zoology’ to ‘integrative biology’.
   2. In item 3. c. (2) change the credits of ‘MTH 254H’ from ‘3’ to ‘4’.
   3. In item 3. c. (3) (b) change the credits of ‘MTH 317H’ from ‘3’ to ‘4’.
   4. In item 3. c. (5) delete ‘MTH 424 and MTH 443’.
   5. In item 3. c. (8) delete ‘MTH 255H’ in the note following.

   Effective Fall 2016.
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

10. Change the requirements for the Bachelor of Science degree in Mathematics in the Department of Mathematics. The Teacher Education Council (TEC) approved this request at its November 7, 2016 meeting.

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

      (1) In item 3. a. (1) change ‘zoology’ to ‘integrative biology’.
      (2) In item 3. c. (2) change the credits of ‘MTH 254H’ from ‘3’ to ‘4’.
      (3) In item 3. c. (3) (b) change the credits of ‘MTH 317H’ from ‘3’ to ‘4’.
      (4) In item 3. c. (5) delete ‘MTH 424 and MTH 443’.
      (5) In item 3. c. (8) delete ‘MTH 255H’ in the note following.

   Effective Fall 2016.

   COLLEGE OF NURSING

1. Change the requirements for the Master of Science in Nursing degree in Nursing. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

   a. Under the heading Admission make the following changes:

      (1) Replace sentence one in item 3. with the following:

      Current unrestricted RN license without probationary status in the applicant’s state or country.

   Effective Summer 2017.

2. Change the requirements for the Doctor of Nursing Practice degree in Nursing Practice. The University Committee on Graduate Studies (UCGS) approved this request at its November 7, 2016 meeting.

   a. Under the heading Admission make the following changes:

      (1) Replace item 5. with the following:

      Current unrestricted RN license without probationary status in the applicant’s state or country.

   Effective Summer 2017.
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF SOCIAL SCIENCE

1. Delete the curriculum and degree requirements for the **Undergraduate Specialization in Gender and Global Change** in the College of Social Science. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request at its October 6, 2016 meeting. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Fall 2015. No students are to be readmitted to the program effective Fall 2015. Effective Fall 2016, 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 Undergraduate Specialization in Gender and Global Change through the College of Social Science prior to Fall 2016 will have to change their specialization.

2. Establish a **Minor in Law, Justice and Public Policy** in the School of Criminal Justice. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its September 22, 2016 meeting.

   a. **Background Information:**

   The College of Social Science is changing its requirements for the bachelor’s degree by reducing the required credits from 30 to 15 to encourage its students to take additional majors or minors to enhance their major courses of study. It is anticipated that social science graduates will enroll in and complete academic programs in other colleges in greater numbers than previously because of the credit flexibility created by the new requirements.

   The new requirements continue the College’s tradition of combining disciplinary training with a liberal arts education, with a focus on thematic areas that will help students prepare for employment, continuing education, or global citizenship after graduation. To accomplish this, the college will require every student to complete an approved 15-credit interdisciplinary minor and 3 credits of experiential learning. Each minor must include 9 credits in Social Science and 6 credits outside of the College. Because the minors are structured specifically to meet the College of Social Science’s liberal arts requirement and learning objectives, each is open only to undergraduate majors in the College. In the future, if capacity exists in this minor and pending approval of contributing units, we will open to all university students.

   The Minor in Law, Justice and Public Policy aligns with the College of Social Science research focus on criminal justice, government, and public policy. The minor is administered by the School of Criminal Justice in collaboration with the Department of Political Science.

   The Minor in Law, Justice and Public Policy enhances the education and training of students who anticipate entering fields that require multidisciplinary approaches to advanced research, professional practice, or policymaking related to law. The minor is designed to complement current majors in the college who have interest in this field, but do not seek a bachelor's degree in criminal justice or pre-law. The minor brings courses from across the college together to provide students with an integrative learning experience that enhances their major degree program.

   b. **Academic Programs Catalog Text:**

   The Minor in Law, Justice and Public Policy, administered by the School of Criminal Justice, enhances the education and training of students who anticipate entering fields that require multidisciplinary approaches to advanced research, professional practice, or policymaking related to law.

   The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student’s degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor’s degree.

   Students who plan to complete the requirements of the minor should consult the undergraduate adviser in the School of Criminal Justice.
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

Requirements for the Minor in Law, Justice and Public Policy

Complete 15 credits from the following.

<table>
<thead>
<tr>
<th>CREDIT</th>
<th>COURSE</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The following course (3 credits):</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CJ 110 Introduction to Criminal Justice</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>One of the following courses (3 credits):</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CJ 220 Criminology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC 425 Law and Economics (W)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HDFS 448 Child and Family Policy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HST 318B United States Constitutional History from 1877</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PLS 321 Constitutional Law</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC 131 Social Problems</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Two of the following courses (6 credits):</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSUS 465 Environmental and Natural Resource Law</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 473B Law and Literature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GBL 323 Introduction to Business Law</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IBIO 446 Environmental Issues and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>JRN 430 News Media Law and Ethics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHL 354 Philosophy of Law</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>The following capstone course (3 credits):</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PLS 320 Judicial Politics</td>
<td></td>
</tr>
</tbody>
</table>

Effective Fall 2017.

3. Change the requirements for the Bachelor of Arts degree in Economics.

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

   1. In item 1., paragraph three, add the following course as available to fulfill the Tier II writing requirement:

   Economics 438.

   2. In item 3. c. add the following course:

   EC 438 Urban Economics (W) 3

Effective Summer 2017.

4. Change the requirements for the Bachelor of Science degree in Economics.

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

   1. In item 1., paragraph three, add the following course as available to fulfill the Tier II writing requirement:

   Economics 438.

   2. In item 2. delete the following course:

   MTH 255H Honors Differential Equations 3

   3. In item 3. c. add the following course:

   EC 438 Urban Economics (W) 3
(4) In the Business Cognate, replace ‘MSC 327’ with ‘MKT 327’.

Effective Summer 2017.

5. Delete the curriculum and degree requirements for the Bachelor of Arts and the Bachelor of Science degrees in Geography in the Department of Geography. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request at its October 6, 2016 meeting. The Provost made the determination to discontinue the programs after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Fall 2014. No students are to be readmitted to the program effective Fall 2014. Effective Fall 2016, coding for the program will be discontinued and the program will no longer be available in the Department of Geography. Students who have not met the requirements for the Bachelor of Arts or Bachelor of Science degree through the Department of Geography prior to Fall 2016 will have to change their major.

6. Delete the curriculum and degree requirements for the Master of Science degree in Geographic Information Science in the Department of Geography. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request at its October 10, 2016 meeting. 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 2015. No students are to be readmitted to the program effective Summer 2015. Effective Fall 2016, coding for the program will be discontinued and the program will no longer be available in the Department of Geography. Students who have not met the requirements for the Master of Science Degree in Geographic Information Science through the Department of Geography prior to Fall 2016 will have to change their major.

7. Delete the curriculum and degree requirements for the Specialization in African American History and Culture in the Department of History. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request at its October 6, 2016 meeting. 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 2014. No students are to be readmitted to the program effective Spring 2014. Effective Fall 2016, coding for the program will be discontinued and the program will no longer be available in the Department of History. Students who have not met the requirements for the Undergraduate Specialization in African American History and Culture through the Department of History prior to Fall 2016 will have to change their specialization (minor).

8. Establish a Minor in The City: Environment, Design and Society in the Department of History. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its September 22, 2016 meeting.

a. Background Information:

The College of Social Science is changing its requirements for the bachelor’s degree by reducing the required credits from 30 to 15 to encourage its students to take additional majors or minors to enhance their major courses of study. It is anticipated that social science graduates will enroll in and complete academic programs in other colleges in greater numbers than previously because of the credit flexibility created by the new requirements.

The new requirements continue the College’s tradition of combining disciplinary training with a liberal arts education, with a focus on thematic areas that will help students prepare for employment, continuing education, or global citizenship after graduation. To accomplish this, the college will require every student to complete an approved 15-credit interdisciplinary minor and 3 credits of experiential learning. Each minor must include 9 credits in Social Science and 6 credits
outside of the College. Because the minors are structured specifically to meet the College of Social Science’s liberal arts requirement and learning objectives, each is open only to undergraduate majors in the College. In the future, if capacity exists in this minor and pending approval of contributing units, we will open to all university students.

The Minor in The City: Environment, Design, and Society aligns with the College of Social Science research focus on urban policy, economics, design and sustainability. The minor is designed to assist students in understanding the social and environmental context of cities in the modern world in order to apply their learning in careers in various social science fields. The minor is administered by the Department of History. The School of Planning, Design, and Construction, which houses the Urban and Regional Planning major, is a partner unit.

The Minor in The City: Environment, Design, and Society complements existing programs, including the Urban Studies major, the Global and Urban Studies graduate program, and courses within majors across the College. The program is unique, however, it includes a combination of courses from across the College and University that focus on global urban issues, bringing those courses together to provide students interested in these issues with an integrative learning experience that enhances their major degree programs.

b. Academic Programs Catalog Text:

The Minor in The City: Environment, Design, and Society, administered by the Department of History, is designed to assist students in understanding the social and environmental context of cities in the modern world in order to apply their learning in careers in various social science fields.

The minor is available as an elective to students who are enrolled in bachelor’s degree programs in the College of Social Science. With the approval of the department and college that administer the student’s degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor’s degree.

Students who plan to complete the requirements of the minor should consult the undergraduate adviser in the Department of History.

Requirements for the Minor in The City: Environment, Design, and Society

Complete a minimum of 15 credits from the following.

<table>
<thead>
<tr>
<th>CREDITS</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The following course (3 credits):</td>
</tr>
<tr>
<td></td>
<td>UP 100 The City 3</td>
</tr>
<tr>
<td>2.</td>
<td>One of the following courses (3 credits):</td>
</tr>
<tr>
<td></td>
<td>ANP 426 Urban Anthropology 3</td>
</tr>
<tr>
<td></td>
<td>GEO 413 Urban Geography 3</td>
</tr>
<tr>
<td></td>
<td>GEO 418 The Ghetto 3</td>
</tr>
<tr>
<td></td>
<td>PLS 302 Urban Politics 3</td>
</tr>
<tr>
<td></td>
<td>SOC 375 Urban Sociology 3</td>
</tr>
<tr>
<td></td>
<td>UP 201 Introduction to Urban and Regional Planning 4</td>
</tr>
<tr>
<td></td>
<td>UP 488 The Sustainable and Climate Resilient City 3</td>
</tr>
<tr>
<td>3.</td>
<td>Two of the following courses (6 credits):</td>
</tr>
<tr>
<td></td>
<td>CSUS 200 Introduction to Sustainability 3</td>
</tr>
<tr>
<td></td>
<td>CSUS 447 Community Economic Development 3</td>
</tr>
<tr>
<td></td>
<td>DES 140 Design for Living 3</td>
</tr>
<tr>
<td></td>
<td>DES 458 Green Building and Housing 3</td>
</tr>
<tr>
<td></td>
<td>LA 200 Introduction to Landscape Architecture 3</td>
</tr>
<tr>
<td></td>
<td>MC 347 Urban and Regional Development 4</td>
</tr>
<tr>
<td></td>
<td>TE 351 Urban Education 3</td>
</tr>
<tr>
<td>4.</td>
<td>The following capstone course (3 credits):</td>
</tr>
<tr>
<td></td>
<td>HST 396 The City and its Discontents: Perspectives Past and Present 3</td>
</tr>
</tbody>
</table>

Effective Fall 2017.
9. Establish a Minor in **Youth and Society** in the Department of Human Development and Family Studies. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its September 22, 2016 meeting.

   a. **Background Information:**

      The College of Social Science is changing its requirements for the bachelor’s degree by reducing the required credits from 30 to 15 to encourage its students to take additional majors or minors to enhance their major courses of study. It is anticipated that social science graduates will enroll in and complete academic programs in other colleges in greater numbers than previously because of the credit flexibility created by the new requirements.

      The new requirements continue the College’s tradition of combining disciplinary training with a liberal arts education, with a focus on thematic areas that will help students prepare for employment, continuing education, or global citizenship after graduation. To accomplish this, the college will require every student to complete an approved 15-credit interdisciplinary minor and 3 credits of experiential learning. Each minor must include 9 credits in Social Science and 6 credits outside of the College. Because the minors are structured specifically to meet the College of Social Science’s liberal arts requirement and learning objectives, each is open only to undergraduate majors in the College. In the future, if capacity exists in this minor and pending approval of contributing units, we will open to all university students.

      The Minor in Youth and Society aligns with the College of Social Science research focus on youth and adolescence. The program is designed to assist students in understanding the development of youth in societies globally, with particular attention to the dynamic interaction of youth, their families, and the societies in which they live. The Department of Human Development and Family Studies, which has particular strength in this area, serves as the lead department. The minor was created in collaboration with the Department of Psychology and the School of Social Work.

      The Minor in Youth and Society is restricted to College of Social Science students and is not expected to compete with related programs within the College of Social Science or the University. Youth and adolescence is not currently offered as a separate degree program at Michigan State University. It is embedded in courses within the Departments of Human Development and Family Studies, Psychology, Social Work, and other departments and schools within the College or more broadly within the University.

   b. **Academic Programs Catalog Text:**

      The Minor in Youth and Society, administered by the Department of Human Development and Family Studies, is an enhanced interdisciplinary program of study designed to assist students in understanding the development of youth in societies globally, with particular attention to the dynamic interaction of youth, their families, and the societies in which they live.

      The minor is available as an elective to students who are enrolled in bachelor’s degree programs in the College of Social Science. With the approval of the department and college that administer the student’s degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor’s degree.

      Students who plan to complete the requirements of the minor should consult the undergraduate adviser in the Department of Human Development and Family Studies.

   **Requirements for the Minor in Youth and Society**

   Complete 15 credits from the following.

   | CREDITS | CRÉDIT | | | |
   |---------|--------| | | |
   | 1. The following course (3 credits): | | | |
   | HDFS  212 Children, Youth and Family | 3 |
   | 2. One of the following courses (3 credits): | | | |
   | CJ  220 Criminology | 3 |
   | HST 250 History and Technology of the Digital Age | 3 |
   | HST 413 Families in Historical Perspective | 3 |
   | PSY 444 Developmental Psychology: Adolescence through Youth (W) | 3 |
   | SOC 316 Youth and Society | 3 |
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

10. Establish a Bachelor of Arts degree in Human Capital and Society in the School of Human Resources and Labor Relations. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its September 8, 2016 meeting.

a. Background Information:

Through a broad interdisciplinary and social science perspective, students will gain a critical-thinking framework of human capital in society based on concepts, theories, empirical study and real-world practice. The study of human capital is based on multiple actors (e.g., government policy makers, social movement organizations, employers and unions) across multiple levels (at the individual, group, organization, industry and society levels), spanning local and global contexts. The major will develop analytical thinking related to issues arising with organizations, appreciation and understanding of global and cultural diversity within organizations, appreciation of the importance of internal and external governance systems, and the ability to apply information from various social science disciplines to resolve issues arising within a work-related organization.

At the core of this proposed curriculum revision are six new required courses offered by the School of Human Resources and Labor Relations (SHRLR) that will serve as the core foundation courses. In addition, SHRLR will offer eight elective courses that complement and expand upon the core knowledge subjects. Consistent with the current concentration in Human Capital and Society in the Interdisciplinary Studies in Social Science major, other required cognate course work, chosen based on its relationship to work and/or organizations, is drawn from anthropology, economics, geography, history, psychology, and sociology. Students would also have the option to pursue a business emphasis under an arrangement between the College of Social Science and the Eli Broad College of Business. Students have the flexibility, therefore, to concentrate their studies within selected disciplines or to concentrate on preferred subjects across several disciplines.

Housing this major in the School of Human Resources and Labor Relations (SHRLR) fits the school’s overall mission of preparing students for work in the fields of human resources and labor relations from this multidisciplinary perspective. Although there may be similarities between this proposed major and the Broad College of Business Undergraduate Human Resource Management (HRM) major, this new major would be distinct in its approach and it purposes. As described above, the major is grounded fully and broadly in the social science disciplines and law, with a wide lens focusing on multiple actors. In contrast, the HRM major in business is grounded fully in the various functions of business organizations, with a narrow lens focusing on the management of people. As part of its interdisciplinary approach, the proposed major requires 9 credit hours of elective cognate course work to enhance the interdisciplinary nature of the major, in combination with the College of Social Science’s course requirements. The HRM major in business, on the other hand, does not require any cognate course work.

In addition, the SHRLR major will serve a much wider and different population of students than the HRM business major. With approximately 180 students currently enrolled in the Interdisciplinary Studies in Social Science Human Capital and Society concentration, we anticipate that the revised curriculum will increase enrollments to 300-400 students. Importantly, College of Social Science students are not able to enroll in the business school’s HRM major course work. Consequently, the
proposed SHRLR major will serve the interests of a much larger student population that, otherwise, will not be able to pursue a meaningful career in their primary area of academic interest.

Lastly, taking into account the above differences in curricula and populations of students served, the proposed SHRLR major does not duplicate or compete directly with the HRM business major. Employers seeking students obtaining distinctive business degrees with a major in HRM will not view the SHRLR program as a substitute degree; and vice versa. Furthermore, by offering two complementary majors that companies will find attractive, recruiters will have an added reason to select MSU as a primary destination for recruitment.

The proposed major has been discussed fully with the Chair of the Management Department and Dean of the Eli Broad College of Business. There are no objections to the proposed major and they have signed a MOA to that effect, along with the Director of SHRLR and the Interim Dean of the College of Social Science.

b. Academic Programs Catalog Text:

The Bachelor of Arts degree in Human Capital and Society provides a general social science understanding of the complex nature of people and work. The program focuses on workforce education, training and development; laws governing employment and workplace rights; human decision-making and behavior in the labor market and workplace; and organizational strategies, policies and practices governing and influencing employee outcomes and performance.

Requirements for the Bachelor of Arts Degree in Human Capital and Society

1. The University requirements for bachelor’s degrees as described in the Undergraduate Education section of this catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Human Capital and Society.

   The completion of Statistics and Probability 200 or 201 referenced in item 3. below may also satisfy the University mathematics requirement or the NATURAL SCIENCE REQUIREMENT in the College, but not both.

   The University’s Tier II writing requirement for the Human Capital and Society major is met by completing Human Resources and Labor Relations 465. That course is referenced in item 3. below.

2. The requirements of the College of Social Science for the Bachelor of Arts degree.

3. The following courses for the major (45 or 46 credits):

   a. One of the following courses (3 or 4 credits):
      
      STT 200 Statistical Methods 3
      STT 201 Statistical Methods 4
   
   b. The following course (3 credits):
      
      EC 201 Introduction to Microeconomics 3
   
   c. All of the following courses (18 credits):
      
      HRLR 201 Human Capital and Society 3
      HRLR 313 Employment Relations 3
      HRLR 314 Legal Environment of Work 3
      HRLR 315 Research Methods and Analysis 3
      HRLR 410 Voice and Democracy at Work 3
      HRLR 465 Capstone in Human Capital and Society (W) 3
   
   d. Complete a minimum of 12 credits with at least 3 credits from each of the three areas below (General, Human Capital Systems, and International):

      General
      HRLR 211 Introduction to Organizational Leadership 3
      HRLR 212 Career Management 3
      HRLR 311 Applied Organizational Leadership 3

      Human Capital Systems
      HRLR 316 Economics of Human Capital 3
      HRLR 401 Income Inequality 3
      MGT 411 Organizational Staffing 3

      International
      HRLR 414 Legal Standards in a Global Workplace 3
      HRLR 420 Comparative Human Capital Systems 3
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

e. Complete at least 3 courses (9 credits) from the following courses:

**Anthropology**
- ANP 201 Introduction to Cultural Anthropology 3
- ANP 430 Culture, Resources and Power 3

**Economics**
- EC 301 Intermediate Microeconomics 3
- EC 340 Survey of International Economics 3
- EC 380 Labor Relations and Labor Market Policy 3
- EC 480 Analysis of Labor Markets (W) 3

**Geography**
- GEO 113 Introduction to Economic Geography 3
- GEO 204 World Regional Geography 3

**Human Development and Family Studies**
- HDFS 405 Work and Family 3

**History**
- HST 213 U.S. Business and Economic History 3
- HST 306 Modern United States 3

**Psychology**
- PSY 235 Social Psychology 3
- PSY 236 Personality 3
- PSY 255 Industrial and Organizational Psychology 3

**Sociology**
- SOC 215 Race and Ethnicity 3
- SOC 216 Sex and Gender 3
- SOC 322 Sociology of Work 3
- SOC 424 Organizations and Society 3

Effective Fall 2017.

11. Establish a Minor in Human Behavior and Social Services in the School of Social Work. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its September 22, 2016 meeting.

a. Background Information:

The College of Social Science is changing its requirements for the bachelor’s degree by reducing the required credits from 30 to 15 to encourage its students to take additional majors or minors to enhance their major courses of study. It is anticipated that social science graduates will enroll in and complete academic programs in other colleges in greater numbers than previously because of the credit flexibility created by the new requirements.

The new requirements continue the College’s tradition of combining disciplinary training with a liberal arts education, with a focus on thematic areas that will help students prepare for employment, continuing education, or global citizenship after graduation. To accomplish this, the college will require every student to complete an approved 15-credit interdisciplinary minor and 3 credits of experiential learning. Each minor must include 9 credits in Social Science and 6 credits outside of the College. Because the minors are structured specifically to meet the College of Social Science’s liberal arts requirement and learning objectives, each is open only to undergraduate majors in the College. In the future, if capacity exists in this minor and pending approval of contributing units, we will open to all university students.

The Minor in Human Behavior and Social Services aligns with the College of Social Science research focus on people and the environment. The minor is administered by the School of Social Work.

The Minor in Human Behavior and Social Services provides an interdisciplinary study of the human behavior and social services that prepare students to critically assess the different perspectives on aspects of human behavior which may create the need for assistance and how social service programs respond to those needs. The minor brings courses from across the college together to provide students with an integrative learning experience that enhances their major degree program.
b. **Academic Programs Catalog Text:**

The Minor in Human Behavior and Social Services, administered by the School of Social Work, provides an interdisciplinary study of the human behavior and social services that prepare students to critically assess the different perspectives on aspects of human behavior which may create the need for assistance and how social service programs respond to those needs.

The minor is available as an elective to students who are enrolled in bachelor's degree programs in the College of Social Science. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult the undergraduate adviser in the School of Social Work.

**Requirements for the Minor in Human Behavior and Social Services**

Complete a minimum of 15 credits from the following.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>SW 200</td>
<td>Introduction to Social Work</td>
</tr>
<tr>
<td>3</td>
<td>ANP 320</td>
<td>Social and Cultural Theory</td>
</tr>
<tr>
<td>3</td>
<td>ANP 370</td>
<td>Culture, Health and Illness</td>
</tr>
<tr>
<td>3</td>
<td>ANP 423</td>
<td>Psychological Anthropology</td>
</tr>
<tr>
<td>4</td>
<td>PSY 101</td>
<td>Introductory Psychology</td>
</tr>
<tr>
<td>3</td>
<td>SOC 241</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>3</td>
<td>SOC 475</td>
<td>Health and Society</td>
</tr>
<tr>
<td>3</td>
<td>HNF 150</td>
<td>Introduction to Human Nutrition</td>
</tr>
<tr>
<td>3</td>
<td>MMG 141</td>
<td>Introductory Human Genetics</td>
</tr>
<tr>
<td>4</td>
<td>PSL 250</td>
<td>Introductory Physiology</td>
</tr>
<tr>
<td>3</td>
<td>CEP 260</td>
<td>Dynamics of Personal Adjustment</td>
</tr>
<tr>
<td>3</td>
<td>CEP 261</td>
<td>Substance Abuse</td>
</tr>
<tr>
<td>3</td>
<td>CEP 470</td>
<td>Disability in a Diverse Society</td>
</tr>
<tr>
<td>3</td>
<td>PHL 340</td>
<td>Ethics</td>
</tr>
<tr>
<td>3</td>
<td>PHL 344</td>
<td>Ethical Issues in Health Care</td>
</tr>
<tr>
<td>3</td>
<td>PHL 350</td>
<td>Introduction to Social and Political Philosophy</td>
</tr>
<tr>
<td>3</td>
<td>TE 150</td>
<td>Reflections on Learning</td>
</tr>
<tr>
<td>3</td>
<td>TE 250</td>
<td>Human Diversity, Power, and Opportunity In Social Institutions</td>
</tr>
<tr>
<td>5</td>
<td>SW 471</td>
<td>Child Welfare</td>
</tr>
<tr>
<td></td>
<td>SW 494B</td>
<td>Social Work Field Education: Foundation II</td>
</tr>
</tbody>
</table>

Students interested in SW 494B must be a social work major.

Effective Fall 2017.
PART II - NEW COURSES

COLLEGE OF ARTS AND LETTERS

ACM 891  Special Topics in Arts and Cultural Management
Fall of every year. Spring of every year. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open to graduate students in the Arts and Cultural Management major or approval of college.
Special topics supplementing regular course offerings, proposed by faculty on a group study basis.
Effective Fall 2017

DEPARTMENT OF BIOMEDICAL ENGINEERING

BME 891  Selected Topics in Biomedical Engineering
Fall of every year. Spring of every year. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Approval of department.
Special topics in biomedical engineering of current importance.
Effective Spring 2017

DEPARTMENT OF COMMUNITY SUSTAINABILITY

CSUS 834  Survey Research and Design
Spring of every year. 3(3-0) RB: Graduate-level course in economics or sociology. R: Open to graduate students or approval of department.
Theory and practice of designing and conducting surveys in the study of community sustainability.
Effective Fall 2016

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY, AND SPECIAL EDUCATION

CEP 345  Language and Literacy Development and Disorders
Fall of every year. 3(3-0) R: Open to undergraduate students in the Special Education-Learning Disabilities Major.
Language and literacy development. Communication delays and disorders and their impact on reading and writing achievement. Interventions for language-based literacy problems.
Effective Fall 2017

DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

EPI 280  Applied Analytic Methods in Health Studies I
Spring of every year. 3(3-0) P: (EPI 200) and (STT 200 or STT 201 or STT 224 or STT 231 or STT 315 or STT 351 or STT 421) R: Open to undergraduate students in the Global Public Health and Epidemiology Minor or approval of department.
Introduction to conceptual and analytical methods used in Public Health and Epidemiology. Programming, statistical techniques, and interpretation of health data.
Effective Spring 2017

EPI 380  Applied Analytic Methods in Health Studies II
Fall of every year. 3(3-0) P: EPI 280 R: Open to undergraduate students in the Global Public Health and Epidemiology Minor or approval of department.
Topics in conceptual and analytical methods used in Public Health and Epidemiology. Continuation of EPI 280.
Effective Fall 2017
DEPARTMENT OF GEOGRAPHY, ENVIRONMENT, AND SPATIAL SCIENCES

GEO 459  Tourism in Regional Development
Spring of odd years. 3(3-0) RB: GEO 259

REINSTATEMENT  The role of tourism in regional development. Examples from Michigan, and the United States and other nations. Environmental considerations. The role of tourism in regional development. Examples from Michigan, the United States and other nations. Environmental considerations. Effective Fall 2017

DEPARTMENT OF HISTORY

HST 396  The City and its Discontents: Perspectives Past and Present
Spring of every year. 3(3-0) P: Completion of Tier I Writing Requirement R: Not open to freshmen. Historical transformations in modern urban social relations and their relationship to contemporary urban problems and governance. Effective Spring 2016

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

HDFS 412  Ecological Perspective of Adolescents
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: HDFS 212 R: Open to juniors or seniors or graduate students in the College of Social Science. Cross-disciplinary and cross-cultural perspectives on today’s youth. Health and nutrition, substance abuse, risk taking, violence and neglect, homelessness, juvenile crime and justice, media and technology and balancing resources. Effective Fall 2017

SCHOOL OF HUMAN RESOURCES AND LABOR RELATIONS

HRLR 201  Human Capital and Society
Fall of every year. Spring of every year. Summer of every year. 3(3-0) Human capital and society from cultural, organizational, and worker perspectives. Interdisciplinary and professional aspects of human resources and labor relations. Effective Summer 2016

HRLR 313  Employment Relations
Spring of every year. 3(3-0) P: HRLR 201 or concurrently Labor relations, collective bargaining involving unions, dispute resolution, and arbitration. Effective Fall 2016

HRLR 314  Legal Environment of Work
Fall of every year. 3(3-0) P: HRLR 201 or concurrently Legal rights of workers and responsibilities of employers affecting safety, nondiscrimination, wages, hours & benefits, collective action and unionization. Effective Fall 2016

HRLR 315  Research Methods and Analysis
Fall of every year. 3(3-0) P: STT 200 or STT 201 Social science research methodology and analysis techniques as applied to human capital issues. Effective Fall 2017

HRLR 316  Economics of Human Capital
Fall of every year. 3(3-0) P: EC 201 Economic and strategic aspects of human capital analysis and development in organizations. Effective Fall 2018
HRLR 401  Income Inequality  
Spring of every year. 3(3-0) P: HRLR 201  
Explanations for income inequality, including disparities based on gender, race and class.  
Solutions for income inequality.  
Effective Spring 2018

HRLR 410  Voice and Democracy at Work  
Spring of every year. 3(3-0) P: HRLR 201  
Collective action by workers. Worker voice and democracy within and outside of work organizations. Historical and current examples.  
Effective Spring 2018

HRLR 414  Legal Standards in a Global Workplace  
Spring of every year. 3(3-0) P: (HRLR 201 or concurrently) and (HRLR 314 or concurrently)  
Workers’ rights as human rights in developed and developing countries. Private, national, and international standards.  
Effective Spring 2018

HRLR 420  Comparative Human Capital Systems  
Fall of every year. 3(3-0) P: HRLR 313 and (HRLR 201 or concurrently)  
Institutional networks and practices in human capital systems in selected countries. Labor and employment laws, employment relations, and human resources practices.  
Effective Fall 2018

HRLR 465  Capstone in Human Capital and Society  
Fall of every year. Spring of every year. 3(3-0) P: (HRLR 201 and HRLR 315 and HRLR 313 and HRLR 314 and (HRLR 410 or concurrently)) and completion of Tier I writing requirement  
Comparative and international employment relations. Contemporary labor market trends and issues. High performance work systems and organizational effectiveness. Diverse stakeholders and worker outcomes.  
Effective Spring 2018

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

FLT 890  Independent Study  
Fall of every year. Spring of every year. Summer of every year. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Not open to graduate-professional students in the College of Arts and Letters or approval of department.  
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.  
Effective Spring 2017

LYMAN BRIGGS COLLEGE

LB 321A  Science and the Public - Arts and Humanities (W)  
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.  
Interdisciplinary study of the relationship between science and society, public engagement with science and technology, public expressions of scientific knowledge, and science in culture. Emphasis on scholarship in the arts and humanities.  
Effective Fall 2017

LB 321B  Science and the Public - Social Sciences (W)  
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.  
Interdisciplinary study of the relationship between science and society, public engagement with science and technology, public expressions of scientific knowledge, and science in culture. Emphasis on scholarship in the social sciences.  
Effective Fall 2017
PART II – NEW COURSES

LB 322A  Advances in Science and Technology - Arts and Humanities (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of technology and innovation. Emphasis on methodologies, scholarship, and theoretical approaches from the arts and humanities.
Effective Fall 2017

LB 322B  Advances in Science and Technology - Social Sciences (W)
On Demand. 4(4-0) P: Completion of Tier I writing requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of technology and innovation in relation to science and/or medicine. Emphasis on scholarship and methodologies from the social sciences.
Effective Fall 2017

LB 323A  Science in a Global Context - Arts and Humanities (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Explores scientific practice and relevance in a global context. Emphasis on scholarship from the arts and humanities.
Effective Fall 2017

LB 323B  Science in a Global Context - Social Sciences (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Explores scientific practice and relevance in a global context. Emphasis on scholarship from the social sciences.
Effective Fall 2017

LB 324A  Science and Sex, Gender, Sexuality - Arts and Humanities (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of sex, gender, and sexuality in relation to science and/or medicine. Emphasis on scholarship and methodologies from the arts and humanities.
Effective Fall 2017

LB 324B  Science and Sex, Gender, Sexuality - Social Sciences (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of sex, gender, and sexuality in relation to science and/or medicine. Emphasis on scholarship and methodologies from the social sciences.
Effective Fall 2017

LB 325A  Science and the Environment - Arts and Humanities (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of how and why humans have transformed their environments, as well as changes in people’s attitudes about nature and wilderness over time. Emphasis on scholarship and methodologies from the arts and humanities.
Effective Fall 2017

LB 325B  Science and the Environment - Social Sciences (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of the interrelationship between human systems and natural systems, including human drivers of environmental impact and solutions to environmental problems. Emphasis on scholarship and methodologies from the social sciences.
Effective Fall 2017

LB 326A  Medicine and Health - Arts and Humanities (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of health and medicine. Emphasis on scholarship and methodologies from the arts and humanities.
Effective Fall 2017
PART II – NEW COURSES

LB 326B  Medicine and Health - Social Sciences (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Interdisciplinary study of health and medicine. Emphasis on scholarship and methodologies from the social sciences.
Effective Fall 2017

LB 327A  Scientific Practice - Arts and Humanities (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Motivations and methodologies of the scientific endeavor, as well as the institutions that support it. Historical perspectives on the development of scientific practice, ethical implications of scientific work, and the impact of cultural practices, norms, and identities on scientific innovation. Emphasis on scholarship and methodologies from the arts and humanities.
Effective Fall 2017

LB 327B  Scientific Practice - Social Sciences (W)
On Demand. 4(4-0) P: Completion of Tier I Writing Requirement R: Open to students in the Lyman Briggs College or in the Science, Technology, Environment and Public Policy Minor.
Explores the motivations and methodologies of scientific endeavors and the relationships between science and other major human institutions such as religion, politics, government, and the economy. Emphasis on scholarship and methodologies from the social sciences.
Effective Fall 2017

MSU COLLEGE OF LAW

LAW 537R  Artificial Intelligence and Law
Spring of every year. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.
How Artificial Intelligence (AI) interacts with law. It considers how lawyers, computer scientists and others can get law and code to work together to regulate interactions among people and computers.
Effective Spring 2017

LAW 558Y  Scientific Research Regulation
Spring of odd years. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.
Seminar will focus on the legal, ethical and regulatory issues surrounding scientific research.
Request the use of the Pass-Fail Grade (P-F) system.
Effective Spring 2017

LAW 600J  Legal Analysis and Writing
Spring of every year. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.
Prepare students to be successful on the bar exam by covering core bar topics in depth, practice answering MBE questions and writing in MEE format.
Effective Spring 2017

LAW 635D  American Indian Children and the Law
Fall of even years. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.
Focus on American Indian children and the law including the implementation, interpretation and understanding of the Indian Child Welfare Act (ICWA).
Effective Spring 2017

LAW 635E  Tribal Law
Spring of odd years. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.
Survey of the laws that tribes enact to govern themselves.
Effective Spring 2017
LAW 810U  Regulatory Leadership in Food Law  
Spring of every year. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.  
Introduction to regulatory affairs through the regulation of food.  
Effective Spring 2017

LAW 810V  FSMA FSVP Rule  
Fall of every year. Summer of every year. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.  
Legal perspective of FDA's Foreign Supplier Verification Program of the Food Safety Modernization Act.  
Effective Summer 2017

LAW 810W  FSMA Preventive Controls Rule  
Fall of every year. Summer of every year. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.  
Legal perspective of FDA's Preventive Controls for Human Food Rule of the Food Safety Modernization Act.  
Effective Summer 2017

LAW 810X  FSMA Produce Safety Rule  
Fall of every year. Summer of every year. 0 to 6 credits. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.  
Legal perspective of FDA's Produce Safety Rule of the Food Safety Modernization Act.  
Effective Summer 2017

PROGRAM IN NEUROSCIENCE

NEU 230  Basic Concepts in Neuroscience  
Spring of every year. 3(3-0) P: Completion of Tier I Writing Requirement RB: ((PSY 101) or some background coursework (at the university or high school level) in psychology) and (BS 161 or BS 181H or LB 145)  
Introduction to fundamental neuroscience concepts including neuroanatomy, neuronal signaling, and molecular mechanisms of learning and memory.  
Effective Spring 2017

COLLEGE OF VETERINARY MEDICINE

VM 836  Food Safety Issues by Commodity  
Spring of every year. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the College of Veterinary Medicine or approval of department.  
Food safety issues specific to different commodity groups or segments of food industry including meat safety, dairy safety, beverage safety, pet food safety, ingredient safety, and food waste recovery.  
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 2017
PART III – COURSE CHANGES

DEPARTMENT OF ANTHROPOLOGY

ANP 363  Rise of Civilization
Spring of every year. 3(3-0) P: ANP 101 or ANP 203 or ANP 264 P: ANP 203 or ANP 264
Archaeological evidence for the appearance and development of the world’s earliest prehistoric civilizations. The nature of complex societies and the comparative evolution of states.
Effective Fall 2014 Effective Fall 2016

ANP 370  Culture, Health, and Illness
Fall of every year. Spring of every year. 3(3-0) P: (ANP 101 or ANP 201 or ANP 204) or completion of Tier I writing requirement P: (ANP 201 or ANP 204) or completion of Tier I writing requirement
Cross-cultural perspectives on the definition and treatment of illness.
Effective Fall 2013 Effective Fall 2016

ANP 411  North American Indian Ethnography
Fall of every year. 3(3-0) P: ANP 101 or ANP 201 P: ANP 201
Social and cultural patterns of North American Indian societies. History, economy, politics, social organization, religion, and social change.
Effective Fall 2013 Effective Fall 2016

ANP 414  Anthropology of South Asia
Fall of even years. 3(3-0) P: ANP 101 or ANP 201 P: ANP 201
Anthropology of India, Pakistan, Nepal, Bangladesh, and Sri Lanka. Religion, social organization, village life, urban structures, economic organization, history, and social change.
Effective Fall 2013 Effective Fall 2016

ANP 415  China: Culture and Society
Fall of odd years. 3(3-0) P: ANP 101 or ANP 201 P: ANP 201
Socioeconomic and cultural continuity and change from traditional civilization to the contemporary state and the communist period. Village and urban society and their relationships.
Effective Fall 2013 Effective Fall 2016

ANP 422  Religion and Culture
Fall of every year. Spring of every year. 3(3-0) P: (ANP 101 or ANP 201) or completion of Tier I writing requirement P: (ANP 201) or completion of Tier I writing requirement
The anthropology of religion and the symbolic analysis of ritual. Theoretical and ethnographic literature.
Effective Fall 2014 Effective Fall 2016

ANP 423  Psychological Anthropology
Spring of even years. 3(3-0) P: ANP 101 or ANP 201 P: ANP 201
Cross-cultural perspectives on culture and personality. Enculturation, life-cycle, person and self, emotion and cognition, mental illness.
Effective Fall 2013 Effective Fall 2016

ANP 425  Issues in Medical Anthropology
Fall of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: ANP 101 or ANP 201 or ANP 204 P: ANP 201 or ANP 204
Selected topics in the anthropological investigation of health issues with an emphasis on critical analysis of cultural, historical, and conceptual bases for trends in health research. Topics vary.
SA: ANP 435
Effective Fall 2014 Effective Fall 2016
ANP 429  Ethnographic Field Methods
Fall of every year. Spring of every year. 4(3-2) P: (ANP 101 or ANP 201) and completion of Tier I writing requirement P: (ANP 201) and completion of Tier I writing requirement R: Not open to freshmen or sophomores.
Field research in cultural anthropology. Research design, participant observation, relationship of techniques to methods, and ethics.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
**Effective Fall 2014 Effective Fall 2016**

ANP 431  Gender, Environment and Development
Fall of odd years. 3(3-0) P: ANP 101 or ANP 201 P: ANP 201 RB: Course work in international development and/or gender studies.
**Effective Fall 2013 Effective Fall 2016**

ANP 432  American Indian Women
Fall of even years. 3(3-0) P: ANP 101 or ANP 201 P: ANP 201 RB: Background in social sciences.
Role of women in a variety of North American Indian cultures, both traditional and contemporary, using autobiography, life history, historical biography, ethnography, and fiction. Interaction of Indian women and their cultures with Western European and American cultures.
**Effective Fall 2013 Effective Fall 2016**

ANP 451  European Archaeology
Spring of even years. 3(3-0) P: ANP 101 or ANP 203 or ANP 264 P: ANP 203 or ANP 264
Patterns of change in technology, subsistence, economy, settlement, social organization, and political complexity from the earliest human occupation through the Iron Age. Major issues in European archaeology.
**Effective Fall 2014 Effective Fall 2016**

ANP 452  North American Archaeology
Spring of every year. 3(3-0) P: ANP 101 or ANP 264 or ANP 203 P: ANP 264 or ANP 203
Characteristics and processes of North American archaeology on a regional level. Economic, social, political and technological change through time.
**Effective Fall 2014 Effective Fall 2016**

ANP 455  Archaeology of Ancient Egypt
Fall of even years. Summer of every year. 3(3-0) P: ANP 203 or ANP 264 or ANP 101 or approval of department P: ANP 203 or ANP 264 or approval of department
The archaeology of ancient Egypt from the Neolithic through the Greco-Roman period.
**Effective Fall 2013 Effective Fall 2016**

ANP 464  Field Methods in Archaeology
Summer of every year. 2 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: ANP 101 or ANP 203 or approval of department P: ANP 203 or approval of department
Field research. Survey, excavation, mapping, data recording, and field laboratory procedures.
**Effective Fall 2014 Effective Fall 2016**

ANP 491  Topics in Anthropology
Fall of every year. Spring of every year. Summer of every year. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: ANP 101 or ANP 201 or ANP 203 P: ANP 201 or ANP 203 RB: or one 300-level anthropology course.
Selected topics in sociocultural anthropology, archaeology, physical anthropology, anthropological linguistics, or medical anthropology.
**Effective Fall 2013 Effective Fall 2016**
COLLEGE OF ARTS AND LETTERS

AL 801
ACM 801
Introduction to Arts and Cultural Management
Fall of every year. Spring of every year. 3(3-0) R: Open to graduate students in the College of Arts and Letters or approval of college.
- Arts and cultural organization artistic administration and executive management.
- Operations and procedures of art and humanities-based agencies. Funding and financial structures involving audience development and marketing.
SA: AL 801
Effective Summer 2014 Effective Fall 2017

AL 868
ACM 868
Law and Policy for Arts and Cultural Management
Fall of every year. Spring of every year. 3(3-0) R: Open to graduate students in the College of Arts and Letters or approval of college.
- Legal issues pertaining to the creation and operation of cultural business entities.
- Exploration of relevant aspects of nonprofit and business law, finances and taxes, contracts, intellectual property, constitutional law, artists’ moral and economic rights, estate planning for individuals and organizations. Historical and contemporary examination of reparations of cultural property.
SA: AL 868
Effective Summer 2014 Effective Fall 2017

AL 871
ACM 871
Internship in Arts and Cultural Management
Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. R: Open to graduate students in the College of Arts and Letters or approval of college.
- Supervised internship with arts and cultural organizations associated with management and operational studies.
SA: AL 871
Effective Summer 2014 Effective Fall 2017

AL 886
MUSM 886
Fundamentals of Museum Studies
Fall of every year. 3(3-0) Interdepartmental with Anthropology and Community Sustainability and History. R: Open to lifelong graduate students in the College of Arts and Letters or in the Department of Anthropology or in the Department of History. Approval of department. Not open to students with credit in AL 485. Not open to students with credit in MUSM 485.
- Introduction to the history of museums and current practices, standards, issues and ethics related to education, administration, visitor studies and the development, care and use of museum collections.
- 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.
SA: AL 886
Effective Spring 2016 Effective Fall 2017

AL 887
MUSM 887
Museums and Technology
Summer of even years. 3(3-0) Interdepartmental with History of Art and Park, Recreation and Tourism Resources. Interdepartmental with Anthropology and History RB: AL 485 RB: MUSM 888
R: Open to graduate students or lifelong graduate students in the College of Arts and Letters.
- Theoretical and practical approaches to the way museums, zoos, gardens and other cultural sites use digital media, the web, interactive media and databases to engage the public, create virtual exhibits and web presences, and manage collections. Ways technologies are changing the definition of visitors and visitor experiences and the definitions of museums.
SA: AL 887
Effective Summer 2014 Effective Fall 2017
PART III – COURSE CHANGES

**AL 888**
MUSM 888 Curatorial Practices in Museums and Cultural Organizations
Spring of every year. 3(3-0) RB: AL 485 RB: MUSM 485 R: Open to graduate students or lifelong graduate students in the College of Arts and Letters. R: Open to graduate students in the College of Arts and Letters. Not open to students with credit in AL 488. Not open to students with credit in MUSM 488.
Research methods and practices for the development, care, and use of museum collections in research, exhibition, and interpretation.
SA: AL 888
Effective Summer 2014 Effective Fall 2017

**AL 893**
MUSM 893 Museum Internship
Fall of every year. Spring of every year. Summer of every year. 3(0-6) Interdepartmental with History of Art A student may earn a maximum of 6 credits in all enrollments for this course. Supervised applied experience in a museum, zoo, garden or other learning environment related to a student's field of study.
SA: AL 893
Effective Summer 2005 Effective Fall 2017

**AL 895**
MUSM 895 Special Topics in Museum Studies
Fall of every year. Spring of every year. Summer of every year. 3(3-0) Interdepartmental with Anthropology and History of Art. Interdepartmental with Anthropology A student may earn a maximum of 6 credits in all enrollments for this course. RB: AL 485 RB: MUSM 485 or MUSM 886 Current issues in museum studies.
SA: AL 895
Effective Summer 2005 Effective Fall 2017

**AL 897**
MUSM 897 Practicum in Museum Studies
On Demand. 1 to 3 credits. Interdepartmental with Anthropology and Community Sustainability and History. A student may earn a maximum of 6 credits in all enrollments for this course. C: AL 485 concurrently or AL 886 concurrently. C: MUSM 485 concurrently or MUSM 886 concurrently. Practical experience in museum studies. 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.
SA: AL 897
Effective Spring 2016 Effective Fall 2017

**BIOLOGICAL SCIENCE PROGRAM**

**BS 182H**
Honors Organismal and Population Biology
Fall of every year. 3(3-0) Interdepartmental with Integrative Biology and Lyman Briggs and Plant Biology. Not open to students with credit in BS 162 or LB 144. Not open to students with credit in LB 144.
Diversity and basic properties of organisms, with emphasis on genetic principles, ecological interactions, and the evolutionary process. Historical approach to knowledge discovery.
SA: BS 148H, BS 110
Effective Fall 2016 Effective Summer 2017

**BS 192H**
Honors Organismal and Population Biology Laboratory
Fall of every year. 2(1-3) Interdepartmental with Integrative Biology and Lyman Briggs and Plant Biology. P: BS 182H or concurrently Not open to students with credit in BS 172 or LB 144. Not open to students with credit in LB 144.
Nature and process of organismal biology, including experimental design and statistical methods, hypothesis testing, genetics, ecology, and evolution.
SA: BS 158H, BS 110
Effective Fall 2016 Effective Summer 2017
BIOMEDICAL LABORATORY DIAGNOSTICS PROGRAM

BLD 830  Concepts in Molecular Biology  
Fall of every year. Spring of every year. 2(2-0) Interdepartmental with Pathobiology and Diagnostic Investigation. RB: One course in biochemistry or concurrently.  
Techniques and theories of molecular biology, nucleic acid synthesis and isolation, enzymatic digestion and modification, electrophoresis, hybridization, amplification, library construction, and cloning.  
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. The work for the course must be completed and the final grade reported within 3 semesters after the end of the semester of enrollment.  
SA: MT 830  
Effective Summer 2009 Effective Fall 2016

BLD 842  Managing Biomedical Laboratory Operations  
Fall of every year. Spring of every year. 2(2-0) R: Open to graduate students or lifelong graduate students or approval of department.  
Integration of the roles of legislative, regulatory, technological and economic factors that influence the practice and management of biomedical laboratory operations.  
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. The work for the course must be completed and the final grade reported within 3 semesters after the end of the semester of enrollment.  
SA: MT 842  
Effective Fall 2009 Effective Fall 2016

BLD 844  Topics in Biomedical Laboratory Operations  
Spring of every year. 1(1-0) P: BLD 842 R: Open to graduate students or lifelong graduate students or approval of department.  
Current issues relevant to biomedical laboratory operations from an interdisciplinary perspective with an emphasis on efficient laboratory operations.  
Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 3 semesters after the end of the semester of enrollment.  
SA: MT 844  
Effective Summer 2010 Effective Fall 2016

DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE

CHE 210  Modeling and Analysis of Transport Phenomena  
Fall of every year. Spring of every year. 3(3-0) P: ((MTH 235 or concurrently) or (MTH 255H or concurrently) or (MTH 340 or concurrently) or (MTH 347H or concurrently)) or CHE 201 P: ((MTH 235 or concurrently) or (MTH 340 or concurrently) or (MTH 347H or concurrently) or CHE 201) and CHE 201  
Steady and unsteady state material and energy balances. Fluxes and rate processes.  
Application of computational methods to problem solutions.  
Effective Fall 2014 Effective Fall 2017

CHE 301  Chemical Engineering as a Profession  
Fall of every year. Spring of every year. 1(2-0) P: CHE 201 or concurrently P: (CHE 201 or concurrently) and completion of Tier I writing requirement RB: Junior standing in chemical engineering R: Open to juniors or seniors in the Chemical Engineering Major  
Professional aspects of chemical engineering. Communication skills, professionalism and ethics, teamwork skills, contemporary engineering issues, career planning, project management, and industrial processes.  
Effective Fall 2014 Effective Fall 2017
COLLEGE OF COMMUNICATION ARTS AND SCIENCES

CAS 110  Creative Thinking
Fall of every year. Spring of every year. 3(3-0)  R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information.  R: Open to undergraduate students in the College of Communication Arts and Sciences.
Theory and practice for utilizing creative and critical thinking skills to generate unique ideas to solve complex problems and generate unique media content.
SA: ADV 220
Effective Fall 2016 Effective Fall 2017

CAS 111  Design and Layout
Fall of every year. Spring of every year. 3(2-2)  R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information.  R: Open to undergraduate students in the College of Communication Arts and Sciences.
Fundamentals of design practices and creative thinking for media related projects. Understanding and application of elements and principles of design, form, content and meaning, composition, color theory, typography, and the grid. Includes Adobe applications: Photoshop, Illustrator and InDesign.
Effective Fall 2016 Effective Fall 2017

CAS 112  Story, Sound and Motion
Fall of every year. Spring of every year. 3(2-2)  R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information.  R: Open to undergraduate students in the College of Communication Arts and Sciences.
Explore the central role of storytelling, sound and editing in media communication.
SA: TC 243
Effective Fall 2016 Effective Fall 2017

CAS 116  Media Sketching and Graphics
Fall of every year. Spring of every year. 3(2-2)  R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information.  R: Open to undergraduate students in the College of Communication Arts and Sciences.
From sketching to final application in real and conceptual imagery using traditional and digital methods.
Effective Fall 2016 Effective Fall 2017

CAS 117  Games and Interactivity
Fall of every year. Spring of every year. 3(2-2)  R: Open to undergraduate students in the School of Journalism and open to undergraduate students in the Department of Advertising and Public Relations and open to undergraduate students in the Department of Media and Information.  R: Open to undergraduate students in the College of Communication Arts and Sciences.
Development of responsive media and iterative design from physical games to modern interactive software.
Effective Fall 2016 Effective Fall 2017

CAS 201  Audio and Video in Media Settings I
Fall of every year. Spring of every year. Summer of every year. 1(1-0)  R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information or in the Design Specialization.  R: Open to undergraduate students in the College of Communication Arts and Sciences.  C: CAS 202 concurrently.
Professional video/audio techniques, technologies, standards, aesthetics, and procedures.
SA: TC 340
Effective Fall 2016 Effective Fall 2017
CAS 202  Audio and Video in Media Settings II
Fall of every year. Spring of every year. Summer of every year. 1(0-2) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the Department of Media and Information or in the School of Journalism or in the Design Specialization. R: Open to undergraduate students in the College of Communication Arts and Sciences. C: CAS 201 concurrently.
Advanced professional video/audio techniques, technologies, standards, aesthetics and procedures.
**Effective Fall 2016 Effective Fall 2017**

CAS 203  Design in Media Settings
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information. R: Open to undergraduate students in the College of Communication Arts and Sciences.
Essential techniques for creating single and multiple page layouts for print communication products.
**Effective Fall 2016 Effective Fall 2017**

CAS 204  Web Design in Media Settings
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information. R: Open to undergraduate students in the College of Communication Arts and Sciences.
Professional web authoring techniques including technology standards, aesthetics and production in media settings.
**Effective Fall 2016 Effective Fall 2017**

CAS 205  Photography in Media Settings
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information. R: Open to undergraduate students in the College of Communication Arts and Sciences.
Essential techniques for capturing, processing and outputting digital images in media settings.
**Effective Fall 2016 Effective Fall 2017**

CAS 206  Graphics and Illustration in Media Settings
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information. R: Open to undergraduate students in the College of Communication Arts and Sciences.
Essential techniques for creating digital illustrations and graphics for media projects.
**Effective Fall 2016 Effective Fall 2017**

CAS 207  Animation in Media Settings
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information. R: Open to undergraduate students in the College of Communication Arts and Sciences.
Fundamentals of animation including principles, technology and design techniques for stand-alone and web-based applications in media settings.
**Effective Fall 2015 Effective Fall 2017**

CAS 208  Interactivity in Media Settings
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to undergraduate students in the Department of Advertising and Public Relations or in the School of Journalism or in the Department of Media and Information. R: Open to undergraduate students in the College of Communication Arts and Sciences.
User interface and programming techniques for interactive design.
**Effective Fall 2016 Effective Fall 2017**
DEPARTMENT OF COMPUTATIONAL MATHEMATICS, SCIENCE, AND ENGINEERING

CMSE 801  Introduction to Computational Modeling
Fall of every year. 3(3-0) RB: One semester of introductory calculus
Introduction to computational modeling using a wide variety of application examples. Algorithmic thinking and model building, data visualization, numerical methods, all implemented as programs. Command line interfaces. Scientific software development techniques including modular programming, testing, and version control.
SA: NSC 801
Effective Fall 2016 Effective Summer 2017

CMSE 802  Methods in Computational Modeling
Spring of every year. 3(3-0) RB: (CMSE 801) or equivalent experience
Standard computational modeling methods and tools. Programming and code-management techniques.
SA: NSC 802
Effective Fall 2016 Effective Summer 2017

CMSE 820  Mathematical Foundations of Data Science
Spring of every year. 3(3-0) RB: CMSE 802 or equivalent experience in programming and numerical methods. Differential equations at the level of (MTH 235 or MTH 255H or (MTH 340 and MTH 442) or (MTH 347H and MTH 442)). Linear algebra at the level of (MTH 309 or MTH 317H). Probability and statistics at the level of STT 231.
Fundamental mathematical principles of data science that underlie the algorithms, processes, and methods of data-centric thinking, and tools based on these principles.
Effective Fall 2016 Effective Summer 2017

CMSE 821  Numerical Methods for Differential Equations
Spring of every year. 3(3-0) RB: CMSE 802 or equivalent experience in programming and numerical methods. Differential equations at the level of (MTH 235 or MTH 255H or (MTH 340 and MTH 442) or (MTH 347H and MTH 442)). Linear algebra at the level of (MTH 309 or MTH 317H)
Effective Fall 2016 Effective Summer 2017

CMSE 822  Parallel Computing
Fall of every year. 3(3-0) Interdepartmental with Computer Science and Engineering. RB: Calculus at the level of MTH 133. Ability to program proficiently in C/C++, basic understanding of data structures and algorithms (both at the level of CSE 232). Basic linear algebra and differential equations.
Effective Fall 2016 Effective Summer 2017

CMSE 823  Numerical Linear Algebra
Fall of every year. 3(3-0) RB: (CMSE 802) or equivalent experience in programming and numerical methods. Linear algebra at the level of MTH 309 or MTH 317H.
Effective Fall 2016 Effective Summer 2017

CMSE 890  Selected Topics in Computational Mathematics, Science, and Engineering
Fall of every year. Spring of every year. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.
Topics selected to supplement and enrich existing courses.
Effective Fall 2016 Effective Summer 2017
CMSE 891  Independent Study in Computational Mathematics, Science, and Engineering
Fall of every year. Spring of every year. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Approval of department.
Topics selected to supplement and enrich existing courses.
Effective Fall 2016 Effective Summer 2017

CMSE 899  Master's Thesis Research
Fall of every year. Spring of every year. Summer of every year. 1 to 6 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open to master's students in the Department of Computational Mathematics, Science, and Engineering.

CMSE 999  Doctoral Dissertation Research
Fall of every year. Spring of every year. Summer of every year. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students in the Department of Computational Mathematics, Science, and Engineering.
Request the use of the Pass-No Grade (P-N) system.
Effective Fall 2016 Effective Summer 2017

DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

EPI 200  A Multi-disciplinary Approach to Problems in Global Public Health and Epidemiology
Fall of every year. 3(3-0) R: Open to undergraduate students in the Global Public Health and Epidemiology Specialization. R: Open to undergraduate students in the Global Public Health and Epidemiology Minor or approval of department.
Overview of global health and the role of epidemiology in studying health problems from a multi-disciplinary perspective.
Effective Spring 2013 Effective Fall 2016

DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION

FSC 410  Sensory Analysis and Consumer Research
Fall of every year. 3(2-2) P: (FSC 211 or HNF 150) and (STT 200 or STT 201 or STT 315 or STT 421 or STT 464) RB: HNF 300 or FSC 401 R: Open to undergraduate students in the College of Agriculture and Natural Resources or in the Department of Food Science and Human Nutrition. R: Open to undergraduate students in the Department of Food Science and Human Nutrition.
Discriminative, affective and descriptive methods used to evoke, measure, analyze, and interpret sensory reactions to food characteristics and consumer needs.
SA: HNF 410 SA: FSC 410
Effective Fall 2014 Effective Spring 2017

FSC 421  Food Laws and Regulations
Spring of every year. Summer of every year. 3(3-0) R: HNF 150 or HNF 260 or FSC 211 or ABM 100 P: HNF 150 or FSC 211 or ABM 100
Adoption, interpretation, and enforcement of laws and regulations governing food processing and foodservice systems. Impact of regulation on food production, availability, marketing, and safety.
Effective Fall 2014 Effective Fall 2016

FSC 430  Food Processing: Fruits and Vegetables
Fall of every year. 3(2-3) P: FSC 211 P: FSC 325 R: Not open to freshmen or sophomores.
Fruit and vegetable composition and quality indices. Harvest technology, post-harvest physiology, and preparatory systems. Principles and applications of thermal processing, freezing, and specialized techniques.
SA: FSC 330
Effective Fall 2014 Effective Fall 2017
FSC 431  Food Processing: Cereals
Spring of every year. 3(2-3) P: FSC 211 P: FSC 325 R: Not open to freshmen or sophomores.
SA: FSC 331
Effective Fall 2014 Effective Fall 2017

FSC 432  Food Processing: Dairy Foods
Fall of every year. Spring of every year. 3(2-3) P: FSC 211 or ANS 201 P: FSC 325 R: Not open to freshmen or sophomores.
Principles for production and processing of safe and wholesome dairy foods. Practical experience in safety and quality assurance systems and in the processing of fluid milk, cultured products, cheese, and frozen desserts.
SA: FSC 332
Effective Fall 2014 Effective Fall 2017

FSC 433  Food Processing: Muscle Foods
Fall of every year. Spring of every year. 3(2-3) Interdepartmental with Animal Science. P: FSC 211 or ANS 201 P: FSC 325 R: Not open to freshmen or sophomores.
Manufacturing practices and principles of fresh, frozen, and cured meats and fish. Processed products from muscle foods. Product formulation and quality control.
SA: FSC 333
Effective Fall 2014 Effective Fall 2017

FSC 442  Hazard Analysis Critical Control Point Training and Certification
Fall of every year. Spring of every year. 1(1-0) P: (MMG 301 or concurrently) or (FSC 440 or concurrently) P: (FSC 325) and (FSC 440 or concurrently) RB: Advanced course work in food science.
Design and implementation of Hazard Analysis Critical Control Point (HACCP) programs for the food industry. Offered second half of semester.
Effective Spring 2015 Effective Fall 2017

DEPARTMENT OF GEOGRAPHY, ENVIRONMENT, AND SPATIAL SCIENCES

GEO 401  Global Plant Geography
Fall of odd years. 3(3-0) P: GEO 201 or FOR 101 or FOR 204 or PLB 218 or ZOL 355 or approval of department P: GEO 201 or FOR 101 or FOR 204 or PLB 218 or IBIO 355 or approval of department R: Not open to freshmen.
Patterns of global plant distributions. Plant-atmosphere interactions, ecological processes, biogeographic patterns and predictive models of plant distributions.
Effective Spring 2016 Effective Fall 2017

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

HDFS 822  Assessment of the Young Child
Fall of even years. Spring of odd years. 3(3-0)
Assessment instruments and procedures for children from birth to age seven. Techniques for assessing physical, social, emotional, and cognitive development of young children.
SA: FCE 822
Effective Fall 2010 Effective Summer 2017

HDFS 833  Transgenerational Couple and Family Therapy
Spring of odd years. 3(3-0) RB: HDFS 830
Intergenerational couple and family therapy theories. Application to individuals, couples, and families.
DELETE COURSE
Effective Spring 2017

HDFS 834  Couple Therapy and Theory
Spring of odd years. 3(3-0) RB: HDFS 830
Major theories of couple therapy and their application to therapy.
DELETE COURSE
Effective Summer 2017
HDFS 835  Clinical and Prevention Practice in Couple Therapy and Theory  
Spring of even years. 3(3-0) RB: HDFS 830  
Prevention and early intervention programs in couple therapy and theory. Application and examination of strengths and limitations of couple therapy and theory programs.  
DELETE COURSE  
Effective Summer 2017

HDFS 864  Foundations of Youth Development  
Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to graduate students in the Youth Development major.  
Theories, concepts and terminology of youth development. Ethical, professional, and historical elements of youth development in social, economic, ethnic and political contexts.  
Effective Summer 2012 Effective Summer 2017

HDFS 875  Resilience in Families  
Spring of odd years. On Demand. 3(3-0) R: HDFS 874 or concurrently  
Models of family resilience across life span and within special populations, such as families in crisis, culturally diverse families, and military families.  
Effective Spring 2013 Effective Summer 2017

HDFS 876  Family Policy  
Spring of odd years. 3(3-0)  
Family perspective on public policy analysis. Linking research, policy and practice. Formulating policy that strengthens families across lifespan.  
DELETE COURSE  
Effective Summer 2017

HDFS 910  Contemporary Couple and Family Therapy Theories  
Fall of odd years. Spring of odd years. 3(3-0)  
Emerging theories and issues related to couple and family therapy. Review of evidence based family-based interventions.  
Effective Spring 2015 Effective Summer 2017

HDFS 982  Qualitative Research Methods  
Fall of even years. Fall of odd years. 3(3-0) RB: HDFS 801 and HDFS 880 R: Open to graduate students in the Department of Human Development and Family Studies.  
Theoretical and applied experience related to qualitative research design and methodology.  
SA: FCE 982  
Effective Fall 2010 Effective Summer 2017

HDFS 983  Advanced Research Methods in Couple and Family Therapy  
Fall of even years. Spring of odd years. 3(3-0) RB: (CEP 933 and CEP 934) or equivalent courses and 6 credits of HDFS 902. R: Open to graduate students.  
Methodological issues. Research design, measurement, and analysis appropriate for assessing effectiveness of couple and family therapy. Development of a couple and family therapy research proposal.  
SA: FCE 983  
Effective Fall 2011 Effective Summer 2017
SCHOOL OF HUMAN RESOURCES AND LABOR RELATIONS

HRLR 817  High Performance Work Systems
Spring of every year. 3(3-0) P: HRLR 813 R: Open to graduate students in the School of Human Resources and Labor Relations or approval of school.

- SA: LIR 827
- Effective Summer 2013 Effective Spring 2017

DEPARTMENT OF INTEGRATIVE BIOLOGY

IBIO 101  Exploring Biology
Fall of every year. Spring of every year. 1(1-0) R: Open to freshmen or sophomores in the Department of Integrative Biology or in the Environmental Biology/Zoology Major or in the Bachelor of Science in Zoology or in the Bachelor of Arts in Zoology. R: Open to freshmen or sophomores in the Department of Integrative Biology or in the Lyman Briggs College or in the Environmental Biology/Zoology Major or in the Bachelor of Science in Zoology or in the Bachelor of Arts in Zoology or in the Lyman Briggs Environmental Biology/Zoology Coordinate Major or in the Lyman Briggs Zoology Coordinate Major.

- Biology as a discipline. Investigation of diverse career options and of skills and background knowledge required to be a modern biologist. Integration of human and technical skills in scientific scholarship and inquiry.
- SA: ZOL 101
- Effective Fall 2016 Effective Spring 2017

CENTER FOR INTEGRATIVE STUDIES IN GENERAL SCIENCE

ISB 200  History of Life
Fall of every year. Summer of every year. 3(3-0) P: ((MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 116 or concurrently) or (LB 118 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test

- Life from its origin to the dawn of human history. Living things as both the products of evolutionary processes and as a major force driving evolution and altering the environment of planet earth.
- Effective Fall 2014 Effective Summer 2016

ISB 201  Insects, Globalization, and Sustainability
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: ((MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 116 or concurrently) or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test

- The relationship between insects, human society, and the environment with an emphasis on ecological and evolutionary processes. Critical evaluation of current regional and global environmental problems and how they are effecting the development of a sustainable society.
- Effective Fall 2014 Effective Fall 2016
ISB 202 Applications of Environmental and Organismal Biology
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: 
- (MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 116 or concurrently) or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or designated score on Mathematics Placement test
P: (MTH 101 or concurrently) or (MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or designated score on Mathematics Placement test
- Historical and recent development of ideas about behavior, ecological, and evolutionary processes. Critical evaluation of the use and misuse of human understanding of nature, emphasizing recent findings.
- Effective Fall 2014 Effective Fall 2016

ISB 204 Applications of Biomedical Sciences
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: 
- (MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 116 or concurrently) or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or designated score on Mathematics Placement test
P: (MTH 101 or concurrently) or (MTH 103 or concurrently) or (MTH 110 or concurrently) or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or designated score on Mathematics Placement test
- Historical and recent development of knowledge about cellular developmental or genetic processes. Critical evaluation of the use and misuse of scientific discoveries in these areas.
- Effective Fall 2014 Effective Fall 2016

ISP 203A Understanding Earth: Global Change
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: 
- (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently)) or designated score on Mathematics Placement test
P: (MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or designated score on Mathematics Placement test
- Science as a way of knowing about natural and anthropogenic global change. Implications for societies.
- Effective Fall 2014 Effective Fall 2016

ISP 203B Understanding Earth: Natural Hazards and the Environment
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: 
- (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently)) or designated score on Mathematics Placement test
P: (MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or designated score on Mathematics Placement test
- Science as a way of knowing about natural hazards, as well as natural and anthropogenic environmental change. Implications for societies.
- Effective Fall 2014 Effective Fall 2016
ISP 205  Visions of the Universe
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
P: (MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Effective Fall 2014 Effective Fall 2016

ISP 209  The Mystery of the Physical World
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or STT 201) or designated score on Mathematics Placement test
P: (MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Laws of physics through demonstrations and analyses of every day phenomena. Optics, mechanical systems and electromagnetic phenomena.
Effective Fall 2014 Effective Fall 2016

ISP 215  The Science of Sound
Fall of every year. Spring of every year. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or STT 201) or designated score on Mathematics Placement test
P: (MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
The science of speech, communication, musical instruments, room acoustics, and analogue and digital audio. Integrating the physical, physiological, and psychological principles involved.
Effective Fall 2014 Effective Fall 2016

ISP 217  Water and the Environment
Fall of every year. Spring of every year. 3(3-0) P: MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)
P: MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)
Application of the scientific method to identification and solution of environmental problems related to water.
Effective Fall 2014 Effective Fall 2016

ISP 220  Quarks, Spacetime, and the Big Bang
Spring of odd years. 3(3-0) P: (MTH 103 or MTH 110 or MTH 116 or (LB 118 or concurrently) or (MTH 112 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
P: (MTH 101 or MTH 103 or MTH 110 or (MTH 112 or concurrently) or (MTH 116 or concurrently) or (MTH 124 or concurrently) or (MTH 132 or concurrently) or (MTH 201 or concurrently) or (STT 200 or concurrently) or (STT 201 or concurrently)) or designated score on Mathematics Placement test
Elementary particle physics and the Big Bang for non-scientists. A survey of particles and forces in the early universe as it is recreated at high energy particle colliders in laboratories around the world.
Effective Fall 2014 Effective Spring 2017
DEPARTMENT OF KINESIOLOGY

KIN 829  Safety and Injury Control  
Summer of every year. 3(3-0) P: KIN 872 or concurrently R: Approval of department. R: Open to graduate students in the Education Major or in the Sport Coaching and Leadership Major or in the Sport Coaching and Leadership Graduate Certificate. 
Health and safety of participants. Prevention, care, and management of injuries. 
Effective Summer 2015 Effective Spring 2017

KIN 854  Legal and Administrative Issues for Administrators and Coaches  
Spring of every year. 3(3-0) R: Open to students in the Education Major or in the Sport Coaching and Leadership Graduate Certificate or in the Sport Coaching and Leadership Major. 
Responsibilities of administrators, directors of recreational programs and athletic coaches for providing and maintaining educationally sound athletic programs for amateur athletes. Concepts, policies and procedures that enhance the physical and psychological health of amateur athletes. Obligations for managing the risks of participation in physical activities. 
Effective Summer 2015 Effective Spring 2017

KIN 855  Psychosocial Bases of Coaching Athletes  
Fall of every year. 3(3-0) R: Open to students in the Education Major or in the Sport Coaching and Leadership Graduate Certificate or in the Sport Coaching and Leadership Major. 
Responsibilities of athletic administrators, directors of recreational programs and athletic coaches for the sociological, psychological, philosophical, developmental, and instructional principles for coaching amateur athletes. Development of a coaching philosophy and application of scientific findings to practical situations. 
Effective Summer 2015 Effective Spring 2017

KIN 856  Physical Bases of Coaching Athletes  
Summer of every year. 3(3-0) R: Open to students in the Education Major or in the Sport Coaching and Leadership Graduate Certificate or in the Sport Coaching and Leadership Major. 
Principles of anatomy, biomechanics, and physiology for coaching amateur athletes in various sports. Relationships between the biological bases of coaching and physical conditioning, and performance enhancement. 
Effective Summer 2015 Effective Spring 2017

KIN 857  Promoting Positive Youth Development Through Sport  
Fall of every year. 3(3-0) R: KIN 872 or approval of department R: Approval of department. R: Open to graduate students in the Education Major or in the Sport Coaching and Leadership Major or in the Sport Coaching and Leadership Graduate Certificate. 
Educational athletic programs for youth. Positive youth development through sports. Coaching and mentoring. 
Effective Summer 2015 Effective Spring 2017

KIN 865  Stages of Athlete Development  
Spring of every year. 3(3-0) P: KIN 872 R: Approval of department. R: Open to graduate students in the Education Major or in the Sport Coaching and Leadership Major or in the Sport Coaching and Leadership Graduate Certificate. C: KIN 868 concurrently. 
Effective Spring 2015 Effective Spring 2017

KIN 868  Skill Development in Athletes  
Spring of every year. 3(3-0) P: KIN 872 R: Approval of department. R: Open to graduate students in the Education Major or in the Sport Coaching and Leadership Major or in the Sport Coaching and Leadership Graduate Certificate. C: KIN 855 concurrently. 
Best practices in developing skills. Age appropriate approaches. Maximizing abilities of individuals and team success. Scouting methods and competitive sport approaches. 
Effective Spring 2015 Effective Spring 2017

KIN 870  Physical Activity and Well-Being  
Spring of even years. 3(3-0) R: Open to graduate students in the Department of Kinesiology. 
Relationship of physical activity to human well-being. Influence of growth, biological maturity, aging, body composition, nutrition, training, and rest on health and performance. SA: PES 870 
Effective Spring 2015 Effective Summer 2017
KIN 872 Coaching Science: Applied Research
Summer of every year. 3(3-0) R: Approval of department. R: Open to master's students in the Sport Coaching and Leadership Major.

KIN 880 Sport and Leadership Practicum
Fall of every year. Spring of every year. Summer of every year. 3(1-4) P: (KIN 872 and KIN 856) and (KIN 855 or concurrently) or (KIN 857 or concurrently)) R: Approval of department. R: Open to master's students in the Sport Coaching and Leadership Major.
Supervised practical experiences in specific sport or leadership programs. Effective Fall 2015 Effective Spring 2017

KIN 896 Integrative Capstone in Sport Coaching and Leadership
Summer of every year. 3(3-0) P: (KIN 829 or concurrently) and KIN 854 and KIN 855 and KIN 856 and KIN 857 and KIN 865 and KIN 868 and KIN 872 and KIN 880 R: Approval of department. R: Open to master's students in the Sport Coaching and Leadership Major.
Integrative capstone in coaching science, best practices, leadership, and management in sport. Request the use of the Pass-No Grade (P-N) system. Effective Summer 2016 Effective Spring 2017

MSU COLLEGE OF LAW

LAW 506A Bankruptcy
Fall of every year. Spring of every year. 2 to 4 credits. 0 to 6 credits. R: Open to students in the MSU College of Law. R: Open to Law students or law advanced students or law lifelong students or law non-degree students in the MSU College of Law. Not open to students with credit in LAW 506E or LAW 506F.
This course is designed to provide students with an understanding of bankruptcy law, the bankruptcy code, and the creditor/debtor relationship. Survey of bankruptcy law, the bankruptcy code, and the creditor/debtor relationship. SA: DCL 322 Effective Spring 2006 Effective Summer 2017

LAW 506E Consumer Bankruptcy
Fall of every year. Spring of every year. Summer of every year. 1 to 4 credits. 0 to 6 credits. R: Open to Law students or master's of law students or law lifelong students or law non-degree students. R: Open to Law students or law advanced students or law lifelong students or law non-degree students. Not open to students with credit in LAW 506A.

LAW 506F Chapter 11 Reorganization
Fall of every year. Spring of every year. Summer of every year. 0 to 6 credits. R: Open to Law students or master of law students or law lifelong students or law non-degree students. R: Open to Law students or law advanced students or law lifelong students or law non-degree students. Not open to students with credit in LAW 506A.
In-depth look at reorganization under Chapter 11 of the Bankruptcy Code. SA: LAW 506C Effective Summer 2016 Effective Spring 2017

LAW 509A Analytical Methods for Lawyers - Microeconomics
Fall of every year. Spring of every year. Summer of every year. 1 to 4 credits. R: Open to Law students or master of law students or law lifelong students or law non-degree students in the MSU College of Law. R: Open to Law students or law advanced students or law lifelong students or law non-degree students in the MSU College of Law. Not open to students with credit in LAW 637E.
Condensed principles of microeconomics to serve as a primer to law students. SA: DCL 607A Effective Spring 2012 Effective Summer 2017
LAW 514  Insurance Law
Spring of every year. 2 to 4 credits. 0 to 6 credits. R: Open to students in the MSU College of Law. R: Open to Law students or law advanced students or law lifelong students or law non-degree students in the MSU College of Law.

A general study of the scope and functions of insurance, the construction of insurance contracts, and governing regulations. Address the history and function of a variety of types of insurance, issues regarding contract formation, insurance regulation, reinsurance, the insurance claims process, and/or defense and settlement of insurance claims.
SA: DCL 379
Effective Spring 2006 Effective Summer 2017

LAW 532  Administrative Law
Fall of every year. Spring of every year. 2 to 4 credits. 0 to 6 credits. R: Open to students in the MSU College of Law. R: Open to Law students or law advanced students or law lifelong students or law non-degree students.

The study of the administrative process and the delegation to administrative agencies of legislative power.
SA: DCL 300
Effective Spring 2006 Effective Summer 2017

LAW 579G  Federal Jurisdiction
Fall of every year. Spring of every year. 2 to 4 credits. 0 to 6 credits. P: LAW 500A and LAW 500B
P: LAW 530A R: Open to Law students or law advanced students or law lifelong students or law non-degree students.

A study of the operation of the federal court system focusing on the Civil Rights Acts.
SA: DCL 349
Effective Spring 2006 Effective Spring 2017

LAW 637E  Quantitative Analysis for Lawyers
Fall of every year. Spring of every year. Summer of every year. 0 to 6 credits. R: Open to Law students or master’s of law students or law lifelong students or law non-degree students. R: Open to Law students or law advanced students or law lifelong students or law non-degree students. Not open to students with credit in LAW 509B.

Survey topics relevant to quantitative information.
Effective Spring 2012 Effective Summer 2017

LAW 810K  Administrative Law: Focus on Food Safety and Labeling
Fall of every year. Spring of every year. Summer of every year. 0 to 6 credits. R: Open to Law students or master’s of law students or law lifelong students or law non-degree students. R: Open to Law students or law advanced students or law lifelong students or law non-degree students. Not open to students with credit in LAW 532.

Administrative law influencing the development of law, rules, and policies governing the regulation of food and food products in the United States.
Effective Summer 2012 Effective Summer 2017

DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS

MMG 404  Human Genetics
Fall of every year. 3(3-0) P: ZOL 341 P: IBIO 341

SA: ZOL 344, ZOL 404
Effective Spring 2014 Effective Fall 2016
DEPARTMENT OF PHYSICS AND ASTRONOMY

PHY 959  Special Topics in High-Energy Physics
On Demand. 2(2-0) A student may earn a maximum of 6 credits in all enrollments for this course. A student may earn a maximum of 12 credits in all enrollments for this course. RB: PHY 951 R: Open to graduate students in the Department of Physics and Astronomy or approval of department. Topics in high-energy physics.
*Effective Fall 2014 Effective Spring 2017*

DEPARTMENT OF PSYCHOLOGY

IBIO 867  Nature and Practice of Cognitive Science
Spring of every year. 3(3-0) Interdepartmental with Computer Science and Engineering and Linguistics and Philosophy and Psychology. Interdepartmental with Computer Science and Engineering and Integrative Biology and Linguistics and Philosophy. RB: Undergraduate course work in behavioral biology, cognitive psychology, philosophy, linguistics, or artificial intelligence. Survey of how different disciplines explore the cognitive processes underlying intelligent behavior.
SA: ZOL 867
*Effective Fall 2016 Effective Summer 2017*

COLLEGE OF VETERINARY MEDICINE

VM 513  Ethical and Animal Welfare Issues in the Veterinary Profession
Fall of every year, Spring of every year. 2(1-2) R: Open to graduate-professional students in the College of Veterinary Medicine. Identifying and communicating ethical challenges and animal welfare issues in the veterinary profession.
*Effective Fall 2007 Effective Spring 2017*

VM 514  Comparative Lifestage Nutrition
Fall of every year, Spring of every year. 1(1-0) R: Open to graduate-professional students in the College of Veterinary Medicine. Nutritional assessment and management of the physiological stages of growth. Adult maintenance, gestation, lactation, performance, and geriatric concerns of common domestic species.
*Effective Spring 2008 Effective Fall 2017*

VM 817  Pre-Harvest Food Safety
Livestock Pre-Harvest Food Safety
Spring of every year. 3 credits. RB: Enrollment in graduate program in related field. R: Open to master's students in the Food Safety Major or approval of college. Principles for improvement of pre-harvest food safety. Emphasis on microbial, chemical, and toxic hazards. Strategies to reduce pre-harvest risks in many food production species. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
*Effective Fall 2014 Effective Spring 2017*