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

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:**
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:**
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.

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

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

1. Change the requirements for the Bachelor of Science degree in Agribusiness Management in the Department of Agricultural, Food, and Resource Economics.

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

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

      The University’s Tier II Writing Requirement for the Agribusiness Management major is met by completing one of the following courses: Agribusiness Management 437, Environmental Economics and Policy 405, or Food Industry Management 439. Those courses are reference in item 3. below.

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

      Agribusiness Management 437 or Food Industry Management 439 and Environmental Economics and Policy 405 may be used to fulfill requirement 3. b. if it is not used to fulfill requirement 3. c. Agribusiness Management 130 may be used to fulfill requirement 3. b. if it is not used to fulfill requirement 3. e.

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

      ABM 437 Agribusiness Strategic Management (W) 3

      Add the following course:

      ABM 435 Financial Management in the Agri-Food System 3

      (4) In item 3. b. change the requirement from ‘Three of the following’ to ‘Four of the following’ and delete the following course:

      ABM 435 Financial Management in the Agri-Food System 3

      Add the following courses:

      ABM 437 Agribusiness Strategic Management (W) 3
      ABM 490 Independent Study 3
      ABM 493 Professional Internship in Agribusiness Management 3
      FIM 439 Food Business Analysis and Strategic Planning (W) 3

      A study abroad experience may also fulfill part of this requirement with approval by the academic advisor.

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

      ABM 435 Financial Management in the Agri-Food System 3

      Add the following courses:

      ABM 437 Agribusiness Strategic Management (W) 3
      FIM 439 Food Business Analysis and Strategic Planning (W) 3
(6) Delete item 3. g.

(7) Change item 3. h. to item 3. g.:

Complete 6 credits from the same science discipline as approved by the academic advisor.

Effective Summer 2016.

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

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

(1) In item 3. b. change the requirement from 'Three of the following' to 'Four of the following' and add the following courses:

- EEP 490 Independent and Supervised Study 3
- EEP 493 Professional Internship in Environmental Economics and Policy 3

A study abroad experience may also fulfill part of this requirement with approval by the academic advisor.

(2) Delete item 3. g.

(3) Change item 3. h. to 3. g.:

Complete 6 credits from the same science discipline as approved by the academic advisor.

Effective Summer 2016.

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

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

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

The University’s Tier II Writing Requirement for the Food Industry Management major is met by completing Agribusiness Management 437 or Food Industry Management 439. Those courses are reference in item 3. below.

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

- FIM 439 Food Business Analysis and Strategic Planning (W) 3

(3) Add the following new item 3. b. and reletter items b., c., d., e., and f. respectively:

One of the following courses (3 credits):

- ABM 437 Agribusiness Strategic Management (W) 3
- FIM 439 Food Business Analysis and Strategic Planning (W) 3

(4) In item 3. c. change the requirement from ‘Three of the following’ to ‘Four of the following’ and add the following courses:

- FIM 490 Independent Study in Food Industry Management 3
- FIM 493 Professional Internship in Food Industry Management 3

A study abroad experience may also fulfill part of this requirement with approval by the academic advisor.
(5) Delete item 3. g.

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

Complete 6 credits from the same science discipline as approved by the academic advisor.

Effective Summer 2016.

4. Delete the curriculum and degree requirements for the **Graduate Specialization in Agribusiness** in the Department of Agricultural, Food, and Resource Economics. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies (UCGS).

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 Summer 2016, coding for the program will be discontinued and the program will no longer be available in the Department of Agricultural, Food, and Resource Economics. Students who have not met the requirements for the Graduate Specialization in Agribusiness through the College of Agriculture and Natural Resources prior to Summer 2016 will have to change their major.

5. Change the requirements for the **Bachelor of Science degree in Biosystems Engineering** in the Department of Biosystems and Agricultural Engineering.

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

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

(1) In item 3., make the following changes:

(a) In item a. change the total credits from ‘46’ to ‘47’ and add the following course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE 274</td>
<td>Graphics for Civil and Environmental Engineers</td>
<td>1</td>
</tr>
</tbody>
</table>

(b) In item c. 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>
</tbody>
</table>

Add the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBIO 341</td>
<td>Fundamental Genetics</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 355</td>
<td>Ecology</td>
<td>3</td>
</tr>
</tbody>
</table>

(c) In item d. delete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR 404</td>
<td>Forest Ecology</td>
<td>3</td>
</tr>
<tr>
<td>PLB 402</td>
<td>Biology of Fungi</td>
<td>3</td>
</tr>
</tbody>
</table>

Add the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS 451</td>
<td>Biotechnology Applications for Plant Breeding and Genetics</td>
<td>3</td>
</tr>
<tr>
<td>FOR 406</td>
<td>Applied Forest Ecology: Silviculture</td>
<td>3</td>
</tr>
<tr>
<td>PLB 402</td>
<td>Biology of Fungi</td>
<td>4</td>
</tr>
</tbody>
</table>

(d) In item e. delete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 445</td>
<td>Biosensors for Medical Diagnostics</td>
<td>3</td>
</tr>
<tr>
<td>ECE 445</td>
<td>Biomedical Instrumentation</td>
<td>3</td>
</tr>
</tbody>
</table>
Add the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 444</td>
<td>Biosensors for Medical Diagnostics</td>
<td>3</td>
</tr>
<tr>
<td>BE 449</td>
<td>Human Health Risk Analysis for Engineering Controls</td>
<td>3</td>
</tr>
</tbody>
</table>

b. Under the heading Concentration in Biosystems Engineering make the following changes:

(1) In the Bioenergy Engineering concentration make the following changes:

(a) Change the name of the Bioenergy Engineering concentration to Bioenergy and Bioproduct Engineering.

(b) Delete item 2.

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

i. Change the requirement to ‘Two of the following’ and change the credits to ‘6 to 8’.

ii. Add the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 457</td>
<td>Bioenergy Feedstock Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CSS 451</td>
<td>Biotechnology Applications for Plant Breeding and Genetics</td>
<td>3</td>
</tr>
<tr>
<td>FOR 406</td>
<td>Applied Forest Ecology: Silviculture</td>
<td>3</td>
</tr>
</tbody>
</table>

iii. Change the credits of PLB 402 from ‘3’ to ‘4’.

iv. Delete the note.

(2) In the Biomedical Engineering concentration make the following changes:

(a) Replace item 1. with the following:

Both of the following courses (6 credits):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE 444</td>
<td>Biosensors for Medical Diagnostics</td>
<td>3</td>
</tr>
<tr>
<td>BE 449</td>
<td>Human Health Risk Analysis for Engineering Controls</td>
<td>3</td>
</tr>
</tbody>
</table>

(b) Delete item 2.

(c) Renumber items 3. and 4. to 2. and 3. Respectively.

(d) Change the note to ‘Courses used to fulfill requirement 2. in this concentration may not be used to fulfill this requirement.

Effective Fall 2016.

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

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

(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>HNF 461</td>
<td>Advanced Human Nutrition: Carbohydrates, Lipids, and Proteins</td>
<td>3</td>
</tr>
<tr>
<td>HNF 462</td>
<td>Advanced Human Nutrition: Vitamins and Minerals</td>
<td>3</td>
</tr>
</tbody>
</table>

Add the following course:
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

HNF 350 Advanced Human Nutrition and Metabolism 4

(2) In item 3. a. change the total credits from ‘44’ to ‘42’.

Effective Summer 2016.

7. 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:

HNF 260 Principles of Human Nutrition 3

Add the following course:

HNF 150 Introduction to Human Nutrition 3

Effective Summer 2016.

8. Change the requirements for the Bachelor of Science degree in Nutritional Sciences in the Department of Food Science and Human Nutrition.

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

a. Under the heading Requirements for the Bachelor of Science Degree in Nutritional Sciences replace the entire entry with the following:

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 Science degree in Nutritional Sciences.

The University’s Tier II writing requirement for the Nutritional Sciences major is met by completing Human Nutrition and Foods 450. This course is referenced in item 3. below.

Students who are enrolled in the Nutritional Sciences major leading to the Bachelor of Science degree in the Department of Food Science and Human Nutrition may complete an alternative track to Integrative Studies in Biological and Physical Sciences that consists of the following courses: Chemistry 141, 161; Biological Science 161 and 171. The completion of Chemistry 161 and Biological Science 171 satisfies the laboratory requirement.

2. The requirements of the College of Agriculture and Natural Resources for the Bachelor of Science degree.

The credits earned in certain courses referenced in item 3. below may be counted toward college requirements as appropriate.

The completion of Mathematics 124 or 132 or Lyman Briggs 118 satisfies the college mathematics requirement.

3. The following requirements for the major:
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

a. The following courses (40 to 42 credits):
(1) All of the following courses (24 credits):
   COM 100 Human Communication 3
   CSS 124 Introduction to Sustainable Agricultural and Food Systems 2
   FSC 211 Principles of Food Science 3
   FSC 455 Food and Nutrition Laboratory 3
   HNF 150 Introduction to Human Nutrition 3
   HNF 250 Contemporary Issues in Human Nutrition 2
   HNF 350 Advanced Human Nutrition and Metabolism 4
   HNF 450 Nutrition in the Prevention and Treatment of Disease 4
(2) One of the following, either (a) or (b) (5 credits):
   (a) BS 161 Cell and Molecular Biology 3
   (b) LB 145 Biology II: Cellular and Molecular Biology 5
(3) One course from each of the following groups (a) and (b) (5 or 6 credits):
   (a) CEM 141 General Chemistry 4
       CEM 151 General and Descriptive Chemistry 4
       CEM 181H Honors Chemistry I 4
       LB 171 Principles of Chemistry I 4
   (b) CEM 161 Chemistry Laboratory I 1
       CEM 185H Honors Chemistry Laboratory I 2
       LB 171L Introductory Chemistry Laboratory I 1
(4) One of the following courses (3 or 4 credits):
   MTH 124 Survey of Calculus I 3
   MTH 132 Calculus I 3
   LB 118 Calculus I 4
(5) Completion of a minimum of 3 credits in Experiential Learning. Students must consult with their academic advisor for specific details on this requirement. Completion of this requirement may be fulfilled by enrollment in ANR 475, HNF 490, or HNF 490H or any approved study abroad, service, or research experience.

b. One of the following concentrations:
   **Biomedical and Molecular Nutrition** (40 to 50 credits):
(1) One of the following, either (a) or (b) (4 or 6 credits):
   (a) BMB 401 Comprehensive Biochemistry 4
   (b) BMB 461 Advanced Biochemistry I 3
       BMB 462 Advanced Biochemistry II 3
(2) One of the following, either (a) or (b) (8 credits):
   (a) LB 273 Physics I 4
       LB 274 Physics II 4
   (b) 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
(3) All of the following courses (11 credits):
   CEM 251 Organic Chemistry I 3
   CEM 252 Organic Chemistry II 3
   CEM 255 Organic Chemistry Laboratory 2
   HNF 310 Nutrition in Medicine for Pre-Health Professionals 3
(4) One of the following courses (3 or 4 credits):
   STT 201 Statistical Methods 4
   STT 231 Statistics for Scientists 3
(5) One course from each of the following groups (4 or 5 credits):
   (a) CEM 142 General and Inorganic Chemistry 3
       CEM 152 Principles of Chemistry 3
       CEM 182H Honors Chemistry II 4
       LB 172 Principles of Chemistry II 4
   (b) CEM 162 Chemistry Laboratory II 1
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

LB 172L Principles of Chemistry II – Reactivity Laboratory 1

(6) One of the following, either (a) or (b) (4 or 8 credits):
(a) PSL 310 Physiology for Pre-Health Professionals 4
(b) PSL 431 Human Physiology I 4
PSL 432 Human Physiology II 4

(7) Two of the following courses (6 to 8 credits):
ANTR 350 Human Gross Anatomy for Pre-Health Professionals 3
CEM 262 Quantitative Analysis 3
IBIO 341 Fundamental Genetics 4
IBIO 408 Histology 4
MMG 301 Introductory Microbiology 3
MMG 409 Eukaryotic Cell Biology 3
PHM 350 Introductory Human Pharmacology 3
PSY 320 Health Psychology 3

Global Nutrition and Health (42 to 47 credits):

(1) All of the following courses (20 credits):
CSUS 215 International Development and Sustainability 3
HNF 377 Applied Community Nutrition 4
HNF 406 Global Foods and Culture 3
HNF 453 Nutrition and Human Development 3
PSL 310 Physiology for Pre-Health Professionals 4
SOC 362 Developing Societies 3

(2) One of the following, (a) or (b), (4 or 6 credits):
(a) CEM 143 Survey of Organic Chemistry 4
(b) CEM 251 Organic Chemistry I 3
CEM 252 Organic Chemistry II 3

(3) One of the following courses (2 to 4 credits):
AL 200 Cultural Difference and Study Abroad 3
ANP 200 Navigating Another Culture 2
ANP 370 Culture, Health, and Illness 3
COM 391 Topics in Verbal, Intercultural, or Gender Communication 4
GSAH 230 Values, Experience, and Difference in Global Contexts 3

(4) One of the following courses (4 credits):
BMB 200 Introduction to Biochemistry 4
BMB 401 Comprehensive Biochemistry 4

(5) One of the following courses (3 credits):
CSUS 429 Program Evaluation for Community Sustainability 3
CSUS 433 Grant Writing and Fund Development (W) 3

(6) One of the following courses (3 or 4 credits):
STT 201 Statistical Methods 4
STT 224 Introduction to Probability and Statistics for Ecologists 3
STT 231 Statistics for Scientists 3
STT 464 Statistics for Biologists 3

(7) Two of the following courses (6 credits):
ANP 270 Women and Health: Anthropological and International Perspectives 3
CSS 431 International Agricultural Systems 3
CSUS 463 Food Fight: Politics of Food 3
EEP 260 World Food Population and Poverty 3
FOR 466 Natural Resource Policy 3
GEO 435 Geography of Health and Disease 3
PHL 453 Ethical Issues in Global Public Health 3
SOC 161 International Development and Change 3

Public Health Nutrition (41 to 44 credits):

(1) All of the following courses (24 credits):
HM 101 Introduction to Public Health 3
HNF 377 Applied Community Nutrition 4
HNF 385 Public Issues in Health and Nutrition 3
### PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HNF 485</td>
<td>Advanced Research Methods in Nutrition and Health</td>
<td>4</td>
</tr>
<tr>
<td>PSL 310</td>
<td>Physiology for Pre-Health Professionals</td>
<td>4</td>
</tr>
<tr>
<td>STT 421</td>
<td>Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>STT 422</td>
<td>Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>(2)</td>
<td>One of the following, either (a) or (b), (4 or 6 credits):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(a) CEM 143 Survey of Organic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(b) CEM 251 Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CEM 252 Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>(3)</td>
<td>One of the following courses (4 credits):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BMB 200 Introduction to Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BMB 401 Comprehensive Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>(4)</td>
<td>One of the following courses (3 credits):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CSUS 429 Program Evaluation for Community</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSUS 433 Grant Writing and Fund Development (W)</td>
<td>3</td>
</tr>
<tr>
<td>(5)</td>
<td>Two of the following courses (6 or 7 credits):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ANP 270 Women and Health: Anthropological and International Perspectives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ANP 370 Culture, Health, and Illness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ANP 443 Human Adaptability</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EPI 240 Epidemiological Investigations in Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EPI 390 Disease in Society: Introduction to Epidemiology and Public Health</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GEO 435 Geography of Health and Disease</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HNF 453 Nutrition and Human Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PhIL 453 Ethical Issues in Global Public Health</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PLS 313 American Public Policy</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC 451 Dynamics of Population</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC 461 Basic Demographic Techniques and Applications</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC 475 Health and Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Effective Fall 2016

### COLLEGE OF ARTS AND LETTERS

1. Change the requirements for the **Minor in Dance** in the Department of Theatre.

   a. Under the heading **Requirements for the Minor in Dance** replace the entire entry with the following:

   Complete a minimum of 16 credits from the following:

   1. A minimum of 12 credits from the following courses, including reenrollments:
      - DAN 251 Introduction to Dance 2
      - DAN 351 Dance Technique I 2
      - DAN 352 Dance Technique II 2
      - DAN 451 Dance Technique III 2
      - DAN 452 Dance Technique IV 2
   2. Both of the following courses (4 credits):
      - DAN 300 Dance Practicum 1
      - DAN 354 Dance Choreography 3

   Additional movement-focused courses, especially in theatre, including independent study as applicable, may be substituted as approved by the academic advisor.

Effective Fall 2016.
COLLEGE OF COMMUNICATION ARTS AND SCIENCES

1. Establish a Minor in Animation and Comics Storytelling in Media in the School of Journalism. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its January 14, 2016 meeting.

   a. Background Information:

   Major news organizations all over the world regularly use 2D and 3D animations when presenting news stories in different media platforms, such as digital and televised news. There is a long history of media use of comics and cartoons--long before photography--in various media, such as print newspapers and magazines, that is now also used in websites and mobile apps for news and information. A direct relationship exists with comics and animation for storytelling. The School of Journalism has been offering courses in this area that are very popular with students and enrollment is growing. The School would like to marshal the courses into a formal program. This program of study is unique at MSU and elsewhere in that it focuses on production and critical thinking of media visual storytelling integrating animation, comics, characters and news and information. This minor also enhances our innovative College Media Sandbox initiative. Although other universities are beginning to offer more courses in animation and also comics, no other university offers this integrated program of study (production and critical thinking) for storytelling. MSU would be ahead of the curve.

   Through a sequence of courses the students are able to build a strong foundation in the skills necessary to research, create and produce traditional, digital, interactive and immersive 2D/3D animation, comics, graphic novels and cartoons for journalistic storytelling. The end result is a focus on the production of instructional, narrative, historical, news issues and events, and experimental and entertainment works, combined with a look at the cultural, global and historical impacts of media. This fits squarely with the college’s new technology signature area and the innovative digital media creative Media Sandbox initiative in which students produce news and information through storytelling in different forms for various audiences. Projects enhance the student experience and their work is productive community engagement. Students are expected to become highly marketable upon graduation.

   b. Academic Programs Catalog Text:

   The Minor in Animation and Comics Storytelling in Media, administered by the School of Journalism, provides a strong foundation in history, theory and production of storytelling using animation and comics. Students acquire production skills to visually represent issues, events, narrative, instruction, history and entertainment and use critical thinking as they study storytelling content, context, ethics and the cultural, global and historical impacts of these forms for various media platforms and audiences. Upon completion of the minor, students will have gained necessary skills to research, create and produce digital, interactive and immersive 2D/3D animation, comics, graphic novels, and cartoons.

   The minor is available as an elective to students who are enrolled in bachelor’s degree programs at Michigan State University. 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 Journalism to apply. Applications will be reviewed prior to semester enrollment.

   Requirements for the Minor in Animation and Comics Storytelling in Media

   Complete 15 credits from the following.

   1. Both of the following courses (6 credits):

      JRN 212  2D Animation Storytelling  3
      JRN 213  Animation, Comics, Culture and Graphic Novels In Media  3

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

      ENG 325  Readings in Graphic Narrative  3
PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

JRN 338 Visualizing Data with Information Graphics 3
JRN 413 3D Animation Storytelling 3

3. Two of the following courses (6 credits):
   - JRN 312 Stop Motion Animation Storytelling 3
   - JRN 313 Political Cartoons 3
   - JRN 338 Visualizing Data with Information Graphics 3
   - JRN 413 3D Animation Storytelling 3
   - JRN 445 Images and Messages 3
Journalism 338 and 413 may not be used to fulfill both requirement 2. and 3.

Effective Fall 2016.

2. Change the requirements for the Bachelor of Arts degree in Media and Information.

The concentrations in the Bachelor of Arts degree in Media and Information will be noted on the student’s academic record when the requirements for the degree have been completed.

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

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

   The University’s Tier II writing requirement for the Media and Information major is met by completing one of the following courses: Media and Information 401, 411, 435B, 442, 443, 447, 450, 488, or 498. Those courses are referenced in item 3. below.

   (2) Replace item 3. with the following:

   a. All of the following core courses (9 credits):
      - MI 101 Understanding Media and Information 3
      - MI 201 Media and Information Technologies and Industries 3
      - MI 301 Bringing Media to Market 3
   b. Two of the following foundation courses (6 credits):
      - CAS 110 Creative Thinking 3
      - CAS 111 Design and Layout 3
      - CAS 112 Story, Sound, and Motion 3
      - CAS 116 Media, Sketching, and Graphics 3
      - CAS 117 Games and Interactivity 3
      - MI 239 Digital Footprints: Privacy and Online Behavior 3
   c. Five courses from the following focus areas. Three of the five courses must be from the same focus area (15 credits):
      - **Film and Media Production**
        - CAS 396 Integrated Media Arts Special Topics 3
        - MI 241 Filmmaking I 3
        - MI 311 Introduction to Documentary Production 3
        - MI 341 Filmmaking II 3
        - MI 342 Multi Camera Production for Television 3
        - MI 343 Audio Production 3
        - MI 344 Sound Design for Cinema, Television, and Games 3
        - MI 351 Producing for Cinema and Television 3
        - MI 440 Advanced Video Editing 3
        - MI 441 Advanced Lighting and Camera Techniques 3
        - MI 435A Creating the Fiction Film I 3
      - **Game and Interactive Media Design**
        - CAS 396 Integrated Media Arts Special Topics 3
        - MI 231 Game and Interactive Media Development 3
        - MI 346 Game Design 3
        - MI 349 Web Design and Development 3
        - MI 445 Game Design and Development I 3
### PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI 449</td>
<td>Advanced Web Development and Database Management</td>
<td>3</td>
</tr>
<tr>
<td>MI 455</td>
<td>Game Design and Development II</td>
<td>3</td>
</tr>
<tr>
<td>MI 482</td>
<td>Building Virtual Worlds</td>
<td>3</td>
</tr>
<tr>
<td>MI 484</td>
<td>Building Innovative Interfaces</td>
<td>3</td>
</tr>
<tr>
<td>MI 497</td>
<td>Game Design Studio</td>
<td>3</td>
</tr>
</tbody>
</table>

**Graphics and Animation**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 396</td>
<td>Integrated Media Arts Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>MI 247</td>
<td>Three-Dimensional Graphics and Design</td>
<td>3</td>
</tr>
<tr>
<td>MI 337</td>
<td>Compositing and Special Effects</td>
<td>3</td>
</tr>
<tr>
<td>MI 347</td>
<td>Advanced Three-Dimensional Computer Animation</td>
<td>3</td>
</tr>
<tr>
<td>MI 377</td>
<td>Advanced 3D Modeling</td>
<td>3</td>
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</tbody>
</table>

**Creating Human-Centered Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MI 220</td>
<td>Methods for Understanding Users</td>
<td>3</td>
</tr>
<tr>
<td>MI 250</td>
<td>Introduction to Applied Programming</td>
<td>3</td>
</tr>
<tr>
<td>MI 320</td>
<td>Reasoning with Data</td>
<td>3</td>
</tr>
<tr>
<td>MI 350</td>
<td>Evaluating Human-Centered Technology</td>
<td>3</td>
</tr>
<tr>
<td>MI 420</td>
<td>Interactive Prototyping</td>
<td>3</td>
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</table>

**Media and Information Management**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MI 360</td>
<td>Media and Information Management</td>
<td>3</td>
</tr>
<tr>
<td>MI 361</td>
<td>IT Network Management and Security</td>
<td>3</td>
</tr>
<tr>
<td>MI 452</td>
<td>Media Entrepreneurship and Business Strategies</td>
<td>3</td>
</tr>
<tr>
<td>MI 462</td>
<td>Social Media and Social Computing</td>
<td>3</td>
</tr>
<tr>
<td>MI 472</td>
<td>Digital Business and Commerce</td>
<td>3</td>
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</tbody>
</table>

**Society, Policy and Research**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MI 302</td>
<td>Networks, Markets, and Society</td>
<td>3</td>
</tr>
<tr>
<td>MI 305</td>
<td>Media and Information Policy</td>
<td>3</td>
</tr>
<tr>
<td>MI 355</td>
<td>Media and Information Research</td>
<td>3</td>
</tr>
<tr>
<td>MI 480</td>
<td>Information and Communication Technologies and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 496</td>
<td>Advanced Media Project Design and Production (W)</td>
<td>3</td>
</tr>
<tr>
<td>ITM 444</td>
<td>Information Technology Project Management</td>
<td>3</td>
</tr>
<tr>
<td>MI 401</td>
<td>Topics in Media, Information, and Society (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 411</td>
<td>Collaborative Documentary Design and Production (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 435B</td>
<td>Creating the Fiction Film II (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 442</td>
<td>Design of Cinema and Television Projects (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 443</td>
<td>Audio Industry Design and Management (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 447</td>
<td>Three-Dimensional Graphics and Animation Portfolio (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 450</td>
<td>Creating Human-Centered Technology (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 488</td>
<td>Information and Communication Technology Development Project (W)</td>
<td>3</td>
</tr>
<tr>
<td>MI 498</td>
<td>Collaborative Game Design (W)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Media and Information (MI) Electives.**

Additional credits in department courses can be taken as electives outside the above requirements. No more than 60 credits can be taken within the college. Students are encouraged to pursue an optional transcriptable concentration or a department-affiliated minor to complement their major. Minors may be chosen from fiction filmmaking, documentary production, game design and development, information technology, or information and communication technology and development. Special topics and internships are also encouraged through enrollment in MI 491 and MI 493. Students interested in pursuing a concentration or minor should contact the Academic and Students Affairs Office in the College of Communication Arts and Sciences.
Concentrations in Media and Information
The department offers concentrations for students who wish to focus on a specific application area in the discipline. The concentrations are available to, but not required of, any student enrolled in the Bachelor of Arts degree program in Media and Information. Courses completed to satisfy requirement 3. above may also be used to satisfy the requirements of a concentration. The concentration will be noted on the student’s transcript.

Film and Media Production
To earn a Bachelor of Arts degree in Media and Information with a film and media production concentration, students must complete degree requirements 1., 2., and 3. above and the following:

1. Five of the following courses from the Film and Media Production focus area:
   - CAS 396 Integrated Media Arts Special Topics 3
   - MI 241 Filmmaking I 3
   - MI 311 Introduction to Documentary Production 3
   - MI 341 Filmmaking II 3
   - MI 342 Multi Camera Production for Television 3
   - MI 343 Audio Production 3
   - MI 344 Sound Design for Cinema, Television, and Games 3
   - MI 351 Producing for Cinema and Television 3
   - MI 440 Advanced Video Editing 3
   - MI 441 Advanced Lighting and Camera Techniques 3
   - MI 435A Creating the Fiction Film I 3

2. Two courses from the Graphics and Animation, or Game and Interactive Media Design, or Media and Information Management focus areas.

3. One of the following capstone courses:
   - MI 411 Collaborative Documentary Design and Production (W) 3
   - MI 435B Creating the Fiction Film II (W) 3
   - MI 442 Design of Cinema and Television Projects (W) 3
   - MI 443 Audio Industry Design and Management (W) 3

Game and Interactive Media Design
To earn a Bachelor of Arts degree in Media and Information with a game and interactive media design concentration, students must complete degree requirements 1., 2., and 3. above and the following:

1. Five of the following courses from the Game and Interactive Media Design focus area:
   - CAS 396 Integrated Media Arts Special Topics 3
   - MI 231 Game and Interactive Media Development 3
   - MI 346 Game Design 3
   - MI 349 Web Design and Development 3
   - MI 445 Game Design and Development I 3
   - MI 449 Advanced Web Development and Database Management 3
   - MI 455 Game Design and Development II 3
   - MI 482 Building Virtual Worlds 3
   - MI 484 Building Innovative Interfaces 3
   - MI 497 Game Design Studio 3

2. Two courses from the Graphics and Animation, or Film and Media Production, or Media and Information Management focus areas.

3. One of the following capstone courses:
   - MI 447 Three-Dimensional Graphics and Animation Portfolio (W) 3
   - MI 498 Collaborative Game Design (W) 3

Information, Management and Design for Society
To earn a Bachelor of Arts degree in Media and Information with an information, management and design for society concentration, students must complete degree requirements 1., 2., and 3. above and the following:

1. All of the following courses:
   - MI 220 Methods for Understanding Users 3
   - MI 302 Networks, Markets, and Society 3
   - MI 360 Media and Information Management 3

2. Four of the following courses from the Creating Human-Centered Technology, or Media and Information Management, or Society, Policy, and Research focus areas. Three of the four courses must come from the same focus area.

3. One of the following capstone courses:
### COLLEGE OF EDUCATION

**1.** Change the requirements for the Doctor of Philosophy degree in Educational Psychology and Educational Technology in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its February 1, 2016 meeting.

a. Under the heading Requirements for the Doctor of Philosophy Degree in Educational Psychology and Educational Technology replace the entire entry with the following:

The student must meet the requirements specified below:

<table>
<thead>
<tr>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Proseminar Sequence.</strong> Both of the following courses:</td>
</tr>
<tr>
<td></td>
<td>CEP 900 Proseminar in Educational Psychology and Educational Technology I</td>
</tr>
<tr>
<td></td>
<td>CEP 901 Proseminar in Educational Psychology and Educational Technology II</td>
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<tr>
<td>2.</td>
<td><strong>Educational Inquiry and Research.</strong> All of the following courses:</td>
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<tr>
<td></td>
<td>CEP 930 Educational Inquiry</td>
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<td></td>
<td>CEP 932 Quantitative Methods in Educational Research I</td>
</tr>
<tr>
<td></td>
<td>CEP 933 Quantitative Methods in Educational Research II</td>
</tr>
<tr>
<td></td>
<td>CEP 955 Research Design and Methods for Educational Psychology and</td>
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<td></td>
<td>Educational Technology</td>
</tr>
<tr>
<td></td>
<td>CEP 995 Practicum in Research Design and Data Analysis</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Core Courses</strong> (12 credits):</td>
</tr>
<tr>
<td>a.</td>
<td>One of the following courses (3 credits):</td>
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<tr>
<td></td>
<td>CEP 911 Intellectual History of Educational Psychology</td>
</tr>
<tr>
<td></td>
<td>CEP 916 Intellectual History of Educational Technology</td>
</tr>
<tr>
<td>b.</td>
<td>Three of the following courses (9 credits):</td>
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<tr>
<td></td>
<td>CEP 902 The Psychology of Learning School Subjects</td>
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<tr>
<td></td>
<td>CEP 903 Cognitive Development Across the Lifespan</td>
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<tr>
<td></td>
<td>CEP 904 Social-Emotional Development across the Lifespan</td>
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<td></td>
<td>CEP 909 Cognition and Technology</td>
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<td></td>
<td>CEP 910 Motivation and Learning</td>
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<td>CEP 917 Design of Media for Learning</td>
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<td>CEP 953 Teachers and Technology</td>
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<td></td>
<td>CEP 956 Mind, Media, and Learning</td>
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<td>4.</td>
<td><strong>Area of Concentration.</strong> At least three additional courses in the student's area of concentration. Students are encouraged to include some course work from outside the Department of Counseling, Educational Psychology and Special Education. Emphasis area and concentration courses must provide a coherent program of study approved, in advance, by the student’s guidance committee.</td>
</tr>
<tr>
<td>5.</td>
<td>Pass a departmental preliminary examination, focused on scholarly written and the critique of research at the end of the first year of doctoral study.</td>
</tr>
<tr>
<td>6.</td>
<td>Satisfactory completion of a research apprenticeship.</td>
</tr>
</tbody>
</table>
7. Successful completion and defense of the dissertation.
8. Complete 24 credits of CEP 999 Doctoral Dissertation Research. Students may not earn more than 30 credits in CEP 999 Doctoral Dissertation Research.

Effective Summer 2016.

2. Change the requirements for the Doctor of Philosophy degree in Measurement and Quantitative Methods in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its February 1, 2016 meeting.

a. Under the heading Requirements for the Doctor of Philosophy Degree in Measurement and Quantitative Methods make the following change:

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

CEP 900 Proseminar in Learning, Technology, and Culture 3

Add the following course:

CEP 900 Proseminar in Educational Psychology and Educational Technology I 3

Effective Fall 2016.

3. Change the requirements for the Doctor of Philosophy degree in Special Education in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its February 1, 2016 meeting.

a. Under the heading Requirements for the Doctor of Philosophy Degree in Special Education make the following change:

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

CEP 939 Special Topics in Advanced Qualitative Methodology 3

Add the following courses:

CEP 939A Special Topics in Advanced Qualitative Methodology 3
CEP 939B Advanced Qualitative Methods: Critical Ethnography 3
CEP 939C Advanced Qualitative Methods: Discourse Analysis 3
CEP 939D Advanced Qualitative Methods: Case Studies 3
CEP 939E Advanced Qualitative Methods: Humanities Oriented Research 3
CEP 939F Advanced Qualitative Methods: Phenomenology 3
CEP 939G Advanced Qualitative Methods: Humanizing Research-Decolonizing Qualitative Inquiry 3

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

CEP 900 Proseminar in Learning, Technology, and Culture 3

Add the following course:

CEP 900 Proseminar in Educational Psychology and Educational Technology I 3

Effective Fall 2016.
4. Change the requirements for the Doctor of Philosophy degree in Curriculum, Instruction, and Teacher Education in the Department of Teacher Education. The University Committee on Graduate Studies (UCGS) approved this request at its February 1, 2016 meeting.

a. Under the heading Requirements for the Doctor of Philosophy Degree in Curriculum, Instruction, and Teacher Education make the following change:

(1) Replace item 2. d. with the following:

One course in advanced methodology, approved in advance by the guidance committee. (3 or 4 credits)

Effective Fall 2016.

COLLEGE OF SOCIAL SCIENCE

1. Establish a Disciplinary Teaching Minor available for elementary teacher certification in Early Childhood-General and Special Education in the Department of Human Development and Family Studies. The Teacher Education Council (TEC) approved this request at its February 1, 2016 meeting.

a. Background Information:

The Michigan Department of Education (MDE) changed its rules governing some of its teaching endorsements. Because of this change, MSU must also establish a teaching minor for elementary certification in the current endorsement area of Early Childhood-General and Special Education so that students can be recommended for full certification in the field.

Many students pursuing elementary teacher certification also wish to be certified to teach at the PreK-Kindergarten level. To do so, the MDE requires teacher candidates to complete an approved program of study leading to the Early Childhood-General and Special Education (ZS) endorsement. MSU currently offers the MDE-approved 26-credit program leading to the endorsement, however MDE will no longer permit the endorsement to be added to an initial teaching certificate. MDE regulations now require that only teaching majors and minors can be added to an initial teaching certificate. With approval of this request, the endorsement will also be recognized as a teaching minor that can be added to an initial elementary teaching certificate.

b. Academic Programs Catalog Text:

| CEP 240 | Diverse Learners in Multicultural Perspective | 3 |
| HDFS 211 | Child Growth and Development | 3 |
| HDFS 320 | Interaction with Children in Groups | 3 |
| HDFS 320L | Interaction with Children-Laboratory | 1 |
| HDFS 321 | Curriculum for Children (W) | 3 |
| HDFS 321L | Curriculum for Children-Laboratory | 1 |
| HDFS 322 | Infant Development and Program Planning | 3 |
| HDFS 421 | Assessment of the Young Child | 3 |
| HDFS 424 | Student Teaching in an Early Childhood Program | 6 |

Total 26

Effective Fall 2016.
2. Establish a **Minor** in **Leadership of Organizations** in the School of Human Resources and Labor Relations. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its January 14, 2016 meeting.

a. **Background Information:**

   The proposed Minor in Leadership of Organizations aligns with the College of Social Science research focus on people and the environment. The program goal is to provide an interdisciplinary study of the leadership of organizations that prepares students to critically assess the effectiveness of leaders in a wide range of organizations such as business, government, and non-profit. Students will be prepared to be more effective leaders in their work careers and as citizens.

b. **Academic Programs Catalog Text:**

   The Minor in Leadership of Organizations provides interdisciplinary study of the leadership of organizations, preparing students to critically assess the effectiveness of leaders in a wide range of organizations including business, government, and non-profit. The minor also prepares students to be more effective leaders in their careers and as citizens.

   The minor is available as an elective to students who are enrolled in bachelor’s degree programs at Michigan State University. 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 an adviser in the School of Human Resources and Labor Relations.

**Requirements for the Minor in Leadership of Organizations**

Complete a minimum of 15 credits from the following.

1. The following core course (3 credits):
   
   HRLR 211 Introduction to Organizational Leadership 3

2. One of the following courses (3 credits):
   
   ANP 321 Anthropology of Social Movements 3
   ANP 475 Organizational Anthropology 3
   HST 213 U.S. Business and Economic History 3
   PLS 313 American Public Policy 3
   PSY 235 Social Psychology 3
   PSY 255 Industrial and Organizational Psychology 3
   SOC 481 Social Movements and Collective Identities 3

3. Two of the following courses (6 to 8 credits):
   
   COM 240 Introduction to Organizational Communication 4
   CSUS 429 Program Evaluation for Community Sustainability 3
   PHL 345 Business Ethics 4
   TE 250 Human Diversity, Power, and Opportunity in Social Institutions 3
   WRA 491 Special Topics 1 to 4
   
   Students who choose WRA 491 must obtain prior approval from the academic advisor to ensure content is specific to Leadership of Organizations.

4. The following course (3 credits):
   
   HRLR 311 Applied Organizational Leadership 3

Effective Fall 2016.
3. Change the requirements for the Bachelor of Arts degree in Economics. The University Committee on Undergraduate Education (UCUE) approved this request at its January 28, 2016 meeting.

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

      (1) In item 3. a. add the following statement following the list of courses:

      A minimum grade of 2.0 must be achieved in both Economics 201 and 202. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

      (2) In item 3. a. add the following statement following the list of notes:

      Students who elect to use Economics 251H as a substitute for Economics 201 and/or Economics 252H as a substitute for Economics 202 must achieve a minimum grade of 2.0 in the course substitute. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

      (3) Add the following item 3. f.:

      One of the following courses (3 credits):
      
      CSE 101 Computing Concepts and Competencies 3
      CSE 131 Technical Computing and Problem Solving 3

   Effective Fall 2016.

4. Change the requirements for the Bachelor of Science degree in Economics. The University Committee on Undergraduate Education (UCUE) approved this request at its January 28, 2016 meeting.

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

      (1) In item 3. a. add the following statement following the list of courses:

      A minimum grade of 2.0 must be achieved in both Economics 201 and 202. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

      (2) In item 3. a. add the following statement following the list of notes:

      Students who elect to use Economics 251H as a substitute for Economics 201 and/or Economics 252H as a substitute for Economics 202 must achieve a minimum grade of 2.0 in the course substitute. A maximum of one course repeat (3 credits) may be used to satisfy the 2.0 grade requirement.

   Effective Fall 2016.

5. Request to change the requirements for the Bachelor of Arts degree in Social Work.

   a. Under the heading Requirements for the Bachelor of Arts Degree in Social Work make the following change:

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

      ZOL 341 Fundamental Genetics 4

      Add the following course:

      MMG 141 Introductory Human Genetics 3

   Effective Fall 2016.
PART II - NEW COURSES

DEPARTMENT OF BIOSYSTEMS AND AGRICULTURAL ENGINEERING

BE 449  Human Health Risk Analysis for Engineering Controls  
Fall of every year. 3(2-2) P: (BE 385 and BE 360 and BE 332) or (CE 371 and CE 372 and ENE 487) R: Open to juniors or seniors in the College of Engineering.  
Characterize human health risk from microbial stressors. Develop and evaluate engineering controls for risk management.  
Effective Fall 2016

DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE

MSE 801  Foundations of Materials Science and Engineering  
Summer of every year. 3(3-0) RB: Undergraduate degree in science or engineering related to Materials Science.  
Structure-Property-Processing-Performance interrelationship of metals, ceramics and polymers. Phase diagrams, thermomechanical treatments, physical and mechanical properties, processing, diffusion, microstructure studies, environmental effects.  
Request the use of the Pass-No Grade (P-N) system.  
Effective Summer 2016

DEPARTMENT OF COMMUNITY SUSTAINABILITY

CSUS 423  Educational Theory and Application of Experiential Learning in ANR  
Summer of odd years. 3(3-0) RB: CSUS 322 or CSUS 422 R: Not open to freshmen or sophomores.  
Foundations of experiential learning. Experiential learning within the context of families, schools, organizations and communities as a function of an educational system. Application of experiential learning within formal and nonformal educational settings.  
Field trips required.  
Effective Summer 2017

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY, AND SPECIAL EDUCATION

CEP 901  Proseminar in Educational Psychology and Educational Technology II  
Spring of every year. 3(3-0) P: CEP 900 R: Open to doctoral students in the Educational Psychology and Educational Technology Major.  
Further work on historical theoretical, empirical, methodological, and philosophical issues. Scholarship and research skills.  
Effective Spring 2016

CEP 916  Intellectual History of Educational Technology  
Spring of every year. 3(3-0) R: Open to doctoral students in the College of Education.  
History of technology and learning in formal and informal settings. Historical, theoretical, empirical, methodological, and philosophical issues in the study of technology in education. Teachers’ use of educational technology.  
Effective Spring 2016

DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION

HNF 250  Contemporary Issues in Human Nutrition  
Fall of every year. 2(1-2) P: (HNF 150) and completion of Tier I writing requirement R: Open to students in the Nutritional Sciences Major.  
Effective Summer 2016
PART II – NEW COURSES

HNF 310  Nutrition in Medicine for Pre-Health Professionals
Spring of every year. Summer of every year. 3(3-0) P: (HNF 150) and ((PSL 250 or concurrently) or (PSL 310 or concurrently) or (PSL 431 or concurrently)) R: Not open to freshmen.
Relationship of nutrition and dietary practices to human health and treatment of clinical conditions. Health care team approach to nutrition issues.
Effective Summer 2016

HNF 350  Advanced Human Nutrition and Metabolism
Spring of every year. 4(5-0) P: (HNF 250 or HNF 320) and (PSL 250 or PSL 310 or PSL 431) and (BMB 200 or BMB 401 or BMB 461) R: Open to juniors or seniors in the Dietetics Major or in the Nutritional Sciences Major.
Nutrient function, metabolism, and interaction in humans at the molecular, cellular, tissue, organ and system level. Mechanistic relationships of nutritional status to health and disease.
SA: HNF 461, HNF 462
Effective Spring 2017

HNF 385  Public Issues in Nutrition and Health
Spring of every year. Summer of every year. 3(3-0) P: (HNF 150) and ((STT 200 or concurrently) or (STT 201 or concurrently) or (STT 224 or concurrently) or (STT 231 or concurrently) or (STT 421 or concurrently) or (STT 464 or concurrently) or approval of department) R: Not open to freshmen.
Nutrition from a public health perspective. Overview of public health research, evidence-based recommendations and epidemiology. Diet and nutrition assessment. Ethical issues surrounding public health nutrition recommendations.
Effective Summer 2016

HNF 450  Nutrition in the Prevention and Treatment of Disease
Spring of every year. 4(4-0) P: (HNF 250 and HNF 350) and completion of Tier I writing requirement.
Nutrition and its relationship to health and disease using a basic research approach.
SA: HNF 464
Effective Spring 2017

HNF 485  Advanced Research Methods in Nutrition and Health
Fall of every year. 3(2-2) P: HNF 250 and HNF 385 and STT 422 R: Open to students in the Nutritional Sciences Major.
Survey design, data collection and analysis of nutrition and health data. Use of statistical analysis software (SPSS/SAS). Interpretation and presentation of research results.
Effective Summer 2016

DEPARTMENT OF HISTORY

HST 209  Traditional East Asia
Fall of every year. 4(4-0)
REINSTATEMENT Major trends in the history, government, religion, philosophy, society and cultures of China, Japan and Korea.
Effective Fall 2016

HST 363  East Africa in the Twentieth Century
Fall of even years. 3(3-0) R: Not open to freshmen
REINSTATEMENT Background up to 1500. European invasions, colonialism, nationalism, and independence.
Effective Fall 2016

SCHOOL OF JOURNALISM

JRN 212  2D Animation Storytelling
Fall of every year. Spring of every year. 3(3-0)
Theory and production practice of creating 2D animation in cultural storytelling and education.
Effective Fall 2016
JRN 213  Animation, Comics, Culture and Graphic Novels in Media
Summer of every year. 3(3-0)
Study of the development and relevance of comics and graphic novels from around the world to cultural and historical issues and events. Creation of digital and interactive comics to market work for transmedia publication. Special emphasis is put on creating short comics around news issues and events, educational and instructional comics, interactive, animated and experimental comic styles.
Effective Fall 2016

JRN 312  Stop Motion Animation Storytelling
Summer of every year. 3(3-0)
Creation of digital stop motion animation sequences to tell a narrative story or recreate a historical or current world event. History of stop motion animation, character rigging and kinetics, storyboarding, plot and sequence development.
Effective Fall 2016

JRN 313  Political Cartoons
Summer of every year. 3(3-0)
Survey and critique of political cartoons from around the world from ancient Egypt through today. Impact the cartoons can have on society as well as the techniques to research, create, and market political cartoons.
Effective Fall 2016

JRN 413  3D Animation Storytelling
Summer of every year. 3(3-0)
Character development in regard to culture and story. Advanced relationship of physics between character and the environment through micro facial expressions, body language of walk and gesture.
Effective Fall 2016

DEPARTMENT OF MEDIA AND INFORMATION

MI 220  Methods for Understanding Users
Fall of every year. 3(3-0)
Basics of user research methods, such as interviews, surveys, content analysis, and focus groups. Methods to generate design ideas, solve design problems, and communicate the results.
Effective Fall 2016

MI 241  Filmmaking I
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: CAS 112 R: Open to students in the Department of Media and Information. Not open to students with credit in CAS 201 or CAS 202.
Process of creating a film product. Basic camera operation, sound capture, the editing process and producing a final product.
Effective Fall 2016

MI 250  Introduction to Applied Programming
Fall of every year. 3(2-2)
Creation of software that responds to user input. Introduces variables, control structures, problem decomposition, finding and using existing libraries/APIs, producing user visible output, testing, creating documentation, and using version control.
Effective Fall 2016

MI 302  Networks, Markets and Society
Fall of every year. 3(3-0) P: MI 201 or concurrently
Theories and methods for understanding dynamic systems in which information and communication technology (ICT) and society evolve interdependently over time. Explores how ICTs shape human experience, and how politics, commercial interests and culture shape how ICTs are designed.
Effective Fall 2016
PART II – NEW COURSES

MI 305  Media and Information Policy
Fall of every year. 3(3-0) P: MI 201 or concurrently
National, international and local policies and private agreements governing traditional, new and emerging media, including radio, television, film, games, social media, mobile communications and the Internet.
SA: TC 200, TC 210
Effective Fall 2016

MI 320  Reasoning with Data
Spring of every year. 3(2-2) P: MI 220 and MI 250
Explore and summarize structured data using simple statistics such as means, standard deviations, contingency tables, and hypothesis tests, and use this data to evaluate arguments and draw conclusions about technology performance and human behavior.
Effective Fall 2016

MI 350  Evaluating Human-Centered Technology
Spring of every year. 3(2-2) P: MI 220 and MI 250
How to form context specific inquiry based on user needs and goals, how to assess fundamental usability problems, how to conduct lab-based summative evaluation methods, and how to summarize their evaluation results into reports and design suggestions.
Effective Fall 2016

MI 360  Media and Information Management
Fall of every year. 3(3-0) P: MI 201 or concurrently RB: Completion of Tier I Writing Requirement
Basic principles of managing and financing media and information companies, media projects, and information applications.
Effective Fall 2016

MI 420  Interactive Prototyping
Fall of every year. 3(2-2) P: MI 220 and MI 250
Creation of iterative and diverse prototypes of computer-based technologies that satisfy user needs. Low-fidelity prototypes that can be used for design feedback and medium-fidelity working prototypes that can be used to assess interactivity and social goals.
Effective Fall 2016

DEPARTMENT OF PHYSIOLOGY

PSL 311L  Physiology Laboratory for Pre-Health Professionals
Fall of every year. Spring of every year. 2(0-4) P: (CEM 142 or CEM 152 or CEM 182H or LB 172) and ((PSL 310 or concurrently) or (PSL 432 or concurrently)) R: Not open to freshmen.
Laboratory exercises in human and animal physiology, including neural, sensory, muscle, cardiovascular, and urinary function, with an emphasis on the integration of physiological systems. Laboratory exercises relevant for pre-health students and the development of data analysis and problem solving skills.
Effective Fall 2016

DEPARTMENT OF THEATRE

DAN 251  Introduction to Dance
Fall of every year. Summer of every year. 2(0-4) A student may earn a maximum of 4 credits in all enrollments for this course.
Introduction to the technique, vocabulary and appreciation of dance in its varied forms within a global context.
Effective Summer 2016
PART III – COURSE CHANGES

DEPARTMENT OF AGRICULTURAL, FOOD, AND RESOURCE ECONOMICS

ABM 337  Labor and Personnel Management in the Agri-Food System
Fall of every year. 3(3-0) P: ABM 100 or ABM 130 or HRT 404 RB: EC 201 R: Open to juniors or seniors.  Not open to students with credit in FIM 415, Human resource management practices and techniques for farms, and agri-food firms: planning, recruiting, training, motivating, and evaluating. Labor regulations, compensation incentive plans, and employee benefits.  SA: FSM 325
Effective Fall 2014 Effective Fall 2016

AFRE 874  Field Data Collection and Analysis in Developing Countries
Empirical Methods for Field Research in Developing Countries
Spring of every year. 3(3-0) RB: AFRE 861 RB: AFRE 861 and AFRE 835 Designing and conducting socioeconomic surveys to inform agricultural production, marketing, and environment/natural resource issues in developed and developing countries. Research proposal preparation, questionnaire design, sampling, data collection, and data processing and analysis using computers. Research design, sampling, questionnaire design, data collection and analysis of multi-topic household surveys for international development issues.
SA: AEC 874, AEC 891C
Effective Summer 2015 Effective Spring 2017

DEPARTMENT OF ANIMAL SCIENCE

ANS 413  Non-Ruminant Nutrition
Fall of every year. Spring of every year. 3(3-0) 4(3-2) P: ANS 313 P: (ANS 110 and ANS 313) and (STT 200 or STT 201 or STT 464) RB: BMB 200 or BMB 401 R: Not open to freshmen or sophomores. Digestive processes and nutrient metabolism in non-ruminant animals. Metabolic basis for nutrient requirements.
Effective Summer 2015 Effective Summer 2016

DEPARTMENT OF COMMUNITY SUSTAINABILITY

CSUS 429  Program Planning and Evaluation
Program Evaluation for Community Sustainability
Fall of every year. 3(3-0) P: (MTH 116 or (MTH 103 and MTH 114)) and (STT 200 or STT 201 or STT 224 or PSY 295 or COM 300 or approval of department) P: (MTH 116) or (MTH 103 and MTH 114) or MTH 124. and Completion of Tier I Writing Requirement Concepts, theories, and procedures in program development and evaluation. Practical methods and skills to plan and implement evaluations of community, agriculture, and natural resource programs. Concepts, theories, and procedures in program evaluation. Practical methods and skills to plan and implement evaluations of community, agriculture, and natural resource programs.
SA: ACR 415
Effective Fall 2014 Effective Spring 2016

CSUS 814  Sustainable Tourism and Protected Area Management: Theories and Applications
Fall of every year. Spring of every year. 3(3-0) Historical antecedents and current concepts of leisure, travel, and tourism. Tourism theory and applications.
SA: PRR 874, ACR 814
Effective Fall 2014 Effective Fall 2016
CSUS 828  The Art and Craft of Public Policy Analysis  
Spring of every year. 3(3-0) RB: Prior course work in political science, public administration or economics, and research methods, or relevant work experience.  
Public policy analysis, especially natural resource policy. Theoretical models of policy analysis. Practice translating science to policy. Values, systems and political environments in which policy decisions are made. Field trip required.  
SA: ACR 828  
DELETE COURSE  
Effective Fall 2016  

CSUS 830  Planning for Sustainable Development  
Summer of every year. 3(3-0)  
SA: ACR 830  
DELETE COURSE  
Effective Fall 2016  

CSUS 833  Program Evaluation in Agriculture and Natural Resources  
Spring of every year, Summer of every year. 3(3-0)  
Concepts, theories, procedures and applications of program evaluation. Planning and implementing evaluations of food, agriculture and natural resources programs. Logic models, evaluation plans and instruments, data analysis and written reports.  
SA: ACR 833  
Effective Fall 2014 Effective Summer 2016  

CSUS 838  Participatory Modes of Inquiry  
Fall of every year, Spring of every year. 3(3-0) RB: CSUS 800, CSUS 802, a graduate philosophy of science course, or a graduate-level research methods course.  
Participatory and action research literature across the disciplines. Epistemological and theoretical foundations, fields of application, points of emphasis for practice. Skill building in reflexivity, surfacing assumptions, dialogue, and active listening.  
SA: ACR 838  
Effective Fall 2014 Effective Fall 2016  

CSUS 845  Coastal and Maritime Resources Management  
Fall of odd years. 3(3-0)  
Integrated planning and management of coastal and maritime resources. Legal, social and political contexts of Coastal tourism. Cultural landscapes. Natural, historic and cultural resources. Commercial and recreational uses. Field trips required.  
SA: ACR 845, PRR 895  
DELETE COURSE  
Effective Fall 2016  

CSUS 846  Law of Environmental Regulation  
Fall of every year. 3(3-0)  
How the legal system regulates environmental matters. Case studies. Administrative Procedures Act, National Environmental Policy Act, Clean Air Act, Nuclear power, federal lands, parks, monuments, and the production, use and disposal of hazardous substances.  
SA: ACR 846, RD 836  
DELETE COURSE  
Effective Fall 2016  

CSUS 854  Agriculture and Social Movements  
Spring of even years. 3(3-0)  
SA: ACR 854  
DELETE COURSE  
Effective Fall 2016
CSUS 857  Culture and Rurality  
Spring of odd years. 3(3-0)  
Culture, meaning, values, ideology, and identity in rurality, agriculture, and development.  
Cultural production and reproduction in rural communities and agriculture including power and inequality. Socio-cultural life of markets and commodities, alternative agri-food networks, and sustainable development.  
SA: ACR 857  
DELETE COURSE  
Effective Fall 2016

CSUS 862  Community Program Development - Theory and Practice  
Fall of even years. 3(3-0)  
Community program development theory and practice for formal and non-formal program developers. Participant experiences used to connect theory and practice.  
SA: ACR 862  
DELETE COURSE  
Effective Fall 2016

CSUS 865  Facilitative Leadership  
Fall of every year. 1(1-0)  
Facilitative leadership in groups, organizations and communities. Techniques, processes, and skills for leading groups to generate and prioritize ideas, set goals, and create action plans. Practical experience emphasized.  
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.  
SA: ACR 865, PRR 842  
DELETE COURSE  
Effective Fall 2014 Effective Summer 2016

CSUS 872  Parks and Protected Areas Policy and Management  
Spring of odd years. 3(3-0) Interdepartmental with Forestry.  
Historical and institutional approach to national park and wilderness policies. Variations in policy implementation across United States natural resource management agencies.  
International protected areas policies and issues. Relationship between policy and resource management.  
SA: ACR 872, PRR 842  
DELETE COURSE  
Effective Summer 2016

CSUS 876  Marketing Tourism, Leisure, and Natural Resources  
Spring of odd years. 3(3-0) RB: One undergrad or grad marketing class.  
Classic and contemporary marketing theories and methods in planning and design marketing.  
SA: ACR 876  
DELETE COURSE  
Effective Fall 2016

CSUS 878  Tourism, Conservation and Development  
Fall of even years. 3(3-0)  
Theory and practice of using tourism as a means of conserving natural and cultural resources and promoting economic growth at the local and regional level. Case studies.  
SA: ACR 878  
DELETE COURSE  
Effective Fall 2016
DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY, AND SPECIAL EDUCATION

CEP 900  Proseminar in Learning, Technology and Culture  Proseminar in Educational Psychology and Educational Technology I  Fall of every year. 3(3-0) R: Open to doctoral students in the Department of Counseling, Educational Psychology, and Special Education.  Historical, theoretical, empirical, methodological, and philosophical issues. Research literature on learning, teaching subject matter, and social-cultural contexts.  Effective Fall 2006 Effective Fall 2016

DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

EPI 920  Advanced Methods in Epidemiology and Applied Statistics  Spring of every even year. Spring of every year. 3(3-0) R: Open to graduate students in the Department of Epidemiology and Biostatistics or approval of department  Effective Summer 2012 Effective Fall 2015

DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION

HNF 150  Introduction to Human Nutrition  Fall of every year. Spring of every year. Summer of every year. 3(3-0) R: Open to juniors or seniors in the Department of Food Science and Human Nutrition.  Nutrition needs in life stages from a human ecological perspective. Domestic and international factors affecting the availability of a safe, nutritious food supply. Relationships of food choices to health and disease. Nutrient function and metabolism. Food and nutrients in health and disease. Socioeconomic and environmental influences on food and health. Incorporation of healthy food choices into daily living.  Effective Fall 2014 Effective Summer 2016

HNF 260  Principles of Human Nutrition  Fall of every year. Spring of every year. 3(3-0) P: BS 161 or BS 181H or LB 145 or BMB 200 or PSL 250 R: Open to juniors or seniors in the Dietetics Major or in the Food Science Major.  Identification, function and food sources of nutrients required by humans. Normal metabolism. Effects of deficiencies or excesses of specific nutrients and food components on metabolism and health.  Effective Fall 2016

HNF 300  Experimental Approaches to Foods  Fall of every year. Spring of every year. 4(2-4) P: Completion of Tier I Writing Requirement P: ((CEM 143 or concurrently) or (CEM 251 or concurrently)) and completion of Tier I writing requirement RB: CEM 143 R: Open to juniors or seniors in the Department of Food Science and Human Nutrition.  Effects of preparation methods and ingredient substitutions on chemical and physical properties of food constituents. Effects of changes in chemical and physical properties on functional and sensory attributes of foods.  Effective Fall 2014 Effective Summer 2016

PART III – COURSE CHANGES

HNF 461  Advanced Human Nutrition: Carbohydrates, Lipids and Proteins
Fall of every year. 3(3-0) P: (BMB 200 or BMB 401 or BMB 461) and (PSL 250 or PSL 310 or PSL 432)
Energetics and metabolism of carbohydrates, lipids, and proteins as related to dietary requirements and disease processes in humans. Recommended dietary allowances. Food sources of nutrients.
SA: HNF 460
DELETE COURSE
Effective Fall 2016

HNF 462  Advanced Human Nutrition: Vitamins and Minerals
Fall of every year. 3(3-0) P: HNF 461 or concurrently
SA: HNF 460
DELETE COURSE
Effective Fall 2016

HNF 463  Nutritional Sciences Laboratory
Fall of every year. 3(1-4) P: (CEM 255 and (HNF 461 or concurrently) and (HNF 462 or concurrently)) and completion of Tier I writing requirement
Principles and methods used in nutrient analyses and nutritional assessment.
DELETE COURSE
Effective Fall 2015

HNF 464  Nutrition in the Prevention and Treatment of Disease
Spring of every year. 4(4-0) P: (HNF 461 and HNF 462) and (BMB 401 or BMB 461) and Completion of Tier I Writing Requirement
Nutrition and relationship to health and disease using a basic research approach.
DELETE COURSE
Effective Summer 2016

HNF 471  Medical Nutrition Therapy I
Fall of every year. 4(3-2) P: (((HNF 461 or concurrently) and (HNF 462 or concurrently)) and completion of Tier I writing requirement) and (PSL 250 or PSL 310 or PSL 431) and (PSL 432 or ANTR 350) P: (HNF 350) and ANTR 350 and (PSL 250 or PSL 310) and Completion of Tier I Writing Requirement
R: Open to juniors or seniors in the Dietetics Major
SA: HNF 470
Effective Fall 2014 Effective Summer 2016
HNF 472  Medical Nutrition Therapy II  
Spring of every year. 4(3-2) P: HNF 471  R: Open to juniors or seniors.  R: Open to juniors or seniors in the Dietetics Major.  
SA: HNF 470  
Effective Fall 2014 Effective Summer 2016

HNF 480  Human Nutrition Research Methods  
Spring of every year. 3(1-6) P: (HNF 461 and HNF 462 and HNF 463) and completion of Tier I writing requirement  
Issues and techniques involved in nutrition research with humans and animals.  
Independent research and public presentation of projects.  
DELETE COURSE  
Effective Fall 2015

DEPARTMENT OF FORESTRY

FOR 833  Human Dimensions of Forest Carbon Management  
Fall of every year. Spring of every year. 3(3-0)  
Social dimensions associated with the development and implementation of forest-based climate change mitigation projects, including: valuation of trees and forests by local communities vs. international community; community decision making; public participation; community engagement.  
Effective Fall 2013 Effective Spring 2015

FOR 835  Forest Carbon Policy, Economics and Finance  
Fall of every year. Spring of every year. 3(3-0)  
Policy, economic and financial dimensions of the development and implementation of forest-based climate change mitigation projects, including: the role of forests in international agreements and policy, finance and investment approaches to forest carbon sequestration; emissions trading; biofuels; and valuation of ecosystem services.  
Effective Fall 2013 Effective Fall 2014

SCHOOL OF HOSPITALITY BUSINESS

HB 382  Hospitality Business Real Estate Investment Management  
Fall of every year. 3(3-0)  R: Open to juniors or seniors in the School of Hospitality Business.  R: Open to sophomores or juniors or seniors in the School of Hospitality Business or approval of school.  
Process of planning and developing a commercial real estate project: conceptualization and planning, feasibility, commitment, design layout and construction, and management and operation.  
Effective Summer 2014 Effective Fall 2016
HB 437  Hospitality Revenue Management  
Spring of every year. 3(3-0) P: HB 375 R: Open to juniors or seniors in the School of Hospitality Business.  
Exposure to key management and marketing issues relating to the effective implementation of revenue management. The relationships between the revenue management function and other functions or departments in the hospitality organization. The role and job responsibilities of a revenue manager. The identification of distribution channels that hospitality organizations may use to distribute their inventory.  
**Effective Fall 2015 Effective Fall 2016**

**PROGRAM IN MATHEMATICS EDUCATION**

MTHE 926  Proseminar in Mathematics Education I  
Fall of odd years. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education, Interdepartmental with Counseling, Educational Psychology and Special Education and Teacher Education  
Research on the learning and teaching of mathematics. Focus on curriculum, discourse, equity and teacher education.  
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.  
SA: SME 926  
**Effective Summer 2013 Effective Fall 2016**

MTHE 927  Proseminar in Mathematics Education II  
Fall of even years. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education, Interdepartmental with Counseling, Educational Psychology and Special Education and Teacher Education  
Research on the learning and teaching of mathematics. Focus on teaching, student learning, assessment and policy.  
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.  
SA: SME 927  
**Effective Summer 2013 Effective Fall 2016**

MTHE 954  Design and Methods in Mathematics Education Research  
Fall of every year. 3(3-0) Interdepartmental with Counseling, Educational Psychology and Special Education and Mathematics and Teacher Education, Interdepartmental with Counseling, Educational Psychology and Special Education and Teacher Education RB: (MTHE 927) and at least one approved research methods course.  
History, current trends, and issues pertaining to research design and methods in mathematics education research. Mathematics education research in the areas of policy, teaching, teacher learning, and student learning with particular attention to how research design influence research findings.  
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.  
SA: SME 954  
**Effective Summer 2013 Effective Fall 2016**
DEPARTMENT OF MEDIA AND INFORMATION

MI 101  Understanding Media in the Information Age
Understanding Media and Information
Fall of every year. Spring of every year. Summer of every year. 3(3-0)
Critique and analysis of media including television, radio, film, handheldds, video games, social media and the Internet. Media history, policy, industry structure, and ethics. Technology, industry and social trends affecting the media in the information society. Critique and analysis of media including television, radio, film, handheldds, video games, social media and the Internet. Media history, effects and ethics. Technology, business and social developments affecting the media in the information society.
SA: TC 100, TC 110, TC 101
Effective Fall 2015 Effective Fall 2016

MI 201  Introduction to Media and Information Technologies and Industries
Media and Information Technologies and Industries
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: MI 101 or CSE 231 P: (MI 101 or concurrently) or (CSE 231 or concurrently)
Operational principles and applications of media and information technologies. Overview of the media and information industries. Operational principles and applications of media and information technologies and services. Technological, business, and policy developments transforming media and information industries. Local, national and global players in the media and information sector.
SA: TC 201
Effective Fall 2015 Effective Fall 2016

MI 231  Introduction to Interactive Media Development
Game and Interactive Media Development
Fall of every year. Spring of every year. 3(2-2) P: CAS 204 and CAS 208 P: (CAS 117) or (CAS 204 and CAS 208) P: Open to students in the Department of Media and Information or in the Game Design and Development Specialization R: Open to students in the Department of Media and Information or in the Design Specialization or in the Game Design and Development Specialization. R: Open to students in the Department of Media and Information or in the Design Specialization or in the Game Design and Development Minor. Brainstorming, planning, implementing, and troubleshooting applications and interfaces for interactive media. Basic principles of programming for interactivity. Brainstorming, planning, implementing, and troubleshooting applications and interfaces for games and interactive media. Basic principles of programming for interactivity.
SA: TC 241, TC 331 SA: TC 241, TC 331, MI 331
Effective Fall 2015 Effective Fall 2016

MI 239  Digital Footprints: Privacy and Online Behavior
Fall of every year. Spring of every year. 3(3-0) P: Completion of Tier I Writing Requirement R: Open to undergraduate students. Exploration of digitization and capture of personal information. Issues of privacy, anonymity, and ownership. Technologies involved in capturing personal information.
Effective Fall 2015 Effective Fall 2016

MI 247  Three-Dimensional Modeling and Design
Three-Dimensional Graphics and Design
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: ((CAS 111 or CAS 112) and (CAS 205 or CAS 206 or CAS 207)) or (STA 110 and STA 113) or (CAS 205 or CAS 206 or CAS 207) P: (CAS 116) or (STA 110 and STA 113) or (CAS 205 or CAS 206 or CAS 207) P: Open to students in the Department of Media and Information or in the Game Design and Development Specialization. R: Open to students in the Department of Media and Information or in the Game Design and Development Minor. Principles of 3D of computer graphics applied in cinema, games, illustration, design and sculpture. Use of 3D software to create and manipulate synthetic objects, materials, lights, and cameras.
SA: TC 247
Effective Fall 2015 Effective Fall 2016
PART III – COURSE CHANGES

MI 300  Media Policy and Economics  
Fall of every year. 3(3-0) P: MI 101  
Economics and public policy related to traditional, new and emerging media, including  
radio, television, cinema, telephony, mobile communications, interactive media, and the  
Internet.  
SA: TC 200, TC 210, TC 300  
DELETE COURSE  
Effective Fall 2016

MI 301  Bringing Media to Market  
Spring of every year. Summer of every year. 3(3-0) P: MI 101 P: (MI 201 or concurrently) or CAS 114 or BUS 190  
Process of bringing media to market across multiple delivery platforms including  
broadcast, cable, satellite, internet and mobile devices. Industry structure of creative and  
distribution methods, pricing and repurposing of content. Practical and theoretical models  
of the behavior of media consumers. Process of bringing media to market across multiple  
delivery platforms including broadcast, cable, satellite, Internet and mobile devices.  
Organization of creative industries, distribution methods, pricing and business models.  
Creation and repurposing of content. Practical and theoretical models of the behavior  
of media and information consumers.  
SA: TC 356, TC 381, TC 301  
Effective Fall 2015 Effective Fall 2016

MI 311  Introduction to Documentary Production  
Spring of every year. 3(2-2) Interdepartmental with Film Studies and Journalism and Writing,  
Rhetoric and American Cultures. P: MI 211 R: Open to students in the Documentary Studies  
Specialization. R: Open to students in the Documentary Production Minor.  
Introduction to documentary production using accessible and affordable digital technology.  
SA: TC 233  
Effective Fall 2015 Effective Fall 2016

MI 337  Compositing and Special Effects  
Fall of every year. Spring of every year. 3(1-4) 3(2-2) P: ((CAS 201 and CAS 202) and (CAS 205 or  
CAS 206 or CAS 207)) or THR 219 P: ((CAS 112) and (CAS 111 or CAS 116)) or THR 219 or  
(CAS 201 and CAS 202) or (CAS 205 or CAS 206 or CAS 207) RB: MI 241 R: Open to students in the  
Department of Media and Information or in the Department of Theatre or in the Documentary  
Studies Specialization or in the Fiction Film Production Specialization.  
R: Open to students in the Department of Media and Information or in the Department of Theatre.  
Not open to students with credit in THR 337.  
Conceptual and technical use of animation and compositing software for television,  
cinema, interactive media, and live performance.  
SA: TC 437, TC 337  
Effective Fall 2015 Effective Fall 2016

MI 341  Film Style Production for Cinema and Television Filmmaking II  
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: CAS 112 and CAS 201  
and CAS 202 P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the  
Department of Media and Information or in the Documentary Studies Specialization or in the  
Fiction Film Production Specialization. R: Open to students in the Department of Media and  
Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.  
Advanced film style planning techniques, and aesthetic principles for cinema and  
television production. Film style planning, techniques, and aesthetic principles for cinema  
and television production.  
SA: TC 341  
Effective Fall 2015 Effective Fall 2016
MI 342  Multi Camera Production for Television
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: CAS 112 and CAS 201 and CAS 202 P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.
Conceptualizing, designing, planning, producing, directing and evaluating multi-camera video programs.
SA: TC 342
Effective Fall 2015 Effective Fall 2016

MI 343  Basic Audio Production
Audio Production
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: CAS 112 and CAS 201 and CAS 202 P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.
Basic audio production techniques. In-depth audio and radio industry analysis. Media writing.
SA: TC 343
Effective Fall 2015 Effective Fall 2016

MI 344  Sound Design for Cinema, Television, and Games
Spring of every year. Summer of every year. 3(2-2) P: CAS 112 P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) RB: CAS 201 and CAS 202 RB: MI 343 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.
Principles, technology, and techniques of sound design for media projects, including film, games, television, animation, and web.
Effective Fall 2015 Effective Fall 2016

MI 346  Introduction to Game Design
Game Design
Fall of every year. 3(2-2) P: (MI 331 or concurrently) or (CSE 331 or concurrently) P: MI 231 or CSE 331 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Game Design and Development Specialization. R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Game Design and Development Minor or in the Information and Communication Technology for Development Minor.
Analyze, critique, and design of non-digital and digital games. Overview of game industry.
SA: TC 346
Effective Fall 2015 Effective Fall 2016

MI 349  Web Design and Development
Fall of every year. Summer of every year. 3(2-2) P: (CAS 204 and CAS 205) or MI 331 or CSE 231 P: (MI 220 or MI 231 or CSE 231) or (CAS 204 and CAS 205) RB: MI 231 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Design Specialization or in the Information and Communication Technology for Development Specialization. R: Open to students in the Department of Computer Science and Engineering or in the Design Specialization or in the Information and Communication Technology for Development Minor.
Design and development of web sites, services, and applications that employ primarily web browser technologies. Preproduction, design and development of web sites, services, and applications that employ primarily web browser technologies.
SA: TC 349
Effective Fall 2015 Effective Fall 2016
MI 351  Producing For Cinema and Television  
Spring of every year. 3(3-0)  P: CAS 112 and (CAS 201 and CAS 202)  
P: (MI 241) or (CAS 112 and CAS 201 and CAS 202)  
R: Open to students in the Department of Media and Information or in the 
Documentary Studies Specialization or in the Fiction Film Production Specialization.  
R: Open to students in the Department of Media and Information or in the 
Documentary Production Minor or in the Fiction Filmmaking Minor.  
Conceptualizing, designing, planning, and developing projects for cinema and television.  
SA: TC 351  
Effective Fall 2015  Effective Fall 2016

MI 355  Media and Information Research  
Spring of every year. 3(3-0)  RB: Completion of University Math Requirement  
P: Open to juniors or seniors in the Department of Advertising and Public Relations or in the Department of Media and Information.  
Applied media and information research methods, practices, techniques and ethics.  
Data analytics, visualization and online research methods.  
SA: ADV 340, ADV 355, TC 376, TC 355  
Effective Fall 2015  Effective Fall 2016

MI 361  Information and Communication Technology Management  
IT Network Management and Security  
Fall of every year. Spring of every year. 3(3-0)  P: MI 201 or CSE 231  
RB: MI 360  
Technologies and organizations that support data communications infrastructure. Case 
studies of businesses that develop the infrastructure.  
Structure, design, and management of data networks with a focus on business settings.  
Examination of information technology security issues specifically in the context of data networks and new, digital media and ITs.  
SA: TC 361  
Effective Fall 2015  Effective Fall 2016

MI 362  Web Administration  
Spring of every year. 3(2-2)  P: MI 331 or MI 349 or CSE 232  
RB: (MI 349 or concurrently) or (MI 361 or concurrently)  
P: Open to students in the Department of Media and Information or in the 
Department of Computer Science and Engineering or in the Information and Communication 
Technology for Development Specialization or in the Information Technology Minor.  
Administration of Web servers and the services necessary to support modern information 
applications.  
SA: TC 362  
DELETE COURSE  
Effective Fall 2016

MI 401  Topics in Media Impacts on Society  
Topics in Media, Information and Society (W)  
Fall of every year. Spring of every year. Summer of every year. 3(3-0)  
A student may earn a maximum of 9 credits in all enrollments for this course.  
P: MI 101 and completion of Tier I Writing Requirement  
P: (MI 101) and completion of Tier I writing requirement  
P: Open to undergraduate students or graduate students in the Department of Media and Information.  
Cultural, technological, and design evolution of media.  
Current and historical genres, content, audiences, and industries for media.  
Conventional and emerging theories of media processes and effects.  
Critical examination of empirical research concerning social 
impacts of media. Cultural, technological, and design evolution of media and information.  
Conventional and emerging theories of media processes and effects.  
Critical examination of empirical research concerning social impacts of media, information technologies, and the Internet.  
SA: TC 239, TC 339, TC 375, TC 401  
Effective Fall 2015  Effective Fall 2016
MI 411  Collaborative Documentary Design and Production (W)
Spring of every year. 3(2-2) Interdepartmental with Film Studies and Journalism and Writing, Rhetoric and American Cultures. P: Completion of Tier I Writing Requirement R: Open to students in the Documentary Studies Specialization. R: Open to students in the Documentary Production Minor.

Design and development of documentaries in a team setting using video and audio, still photography, web design, and print media. Participation in a production cycle including idea generation, research, design, production, and distribution.
SA: TC 411
Effective Fall 2015 Effective Fall 2016

MI 352
MI 440  Advanced Video Editing
Spring of every year. 3(2-2) P: MI 341 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.

Advanced principles, technology and techniques of video editing.
SA: MI 352
Effective Fall 2015 Effective Fall 2016

MI 348
MI 441  Advanced Lighting and Camera Techniques
Fall of every year. Spring of every year. 3(1-4) P: MI 341 R: Open to students in the Department of Media and Information or in the Documentary Studies Specialization or in the Fiction Film Production Specialization. R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.

Advanced techniques for manipulation of light and image characteristics in film and television settings.
SA: TC 348 SA: TC 348, MI 348
Effective Fall 2015 Effective Fall 2016

MI 442  Design of Cinema and Television Projects (W)
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: MI 341 and Completion of Tier I Writing Requirement P: (MI 341) and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information. R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor.

Design and development of television and cinema projects in a team setting. Participation in a production cycle including planning, budgeting, design, proposal writing, production, testing, and evaluation. Issues of professionalism, ethics, and communication. Develop TV, video and film projects in a group setting. Practice a full production cycle including idea development, budgeting, pitching, teaser, trailer, production, postproduction, distribution and evaluation. Production case studies, advertising, ethics and worldwide media and job trends.
SA: TC 442
Effective Fall 2015 Effective Fall 2016

MI 443  Audio Industry Design and Management (W)
Fall of every year. Spring of every year. Summer of every year. 3(2-2) P: MI 343 and Completion of Tier I Writing Requirement P: (MI 343) and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information.

Advanced audio production specializing in multi-channel techniques. Industry focus on all aspects of the audio field.
SA: TC 443
Effective Fall 2015 Effective Fall 2016
MI 445  Game Design and Development I  
Fall of every year. 3(2-2) P: (MI 331 or CSE 331 or CSE 335 or STA 360) and Completion of Tier I Writing Requirement  
R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information.  
R: Open to students in the Game Design and Development Minor and open to graduate students in the Department of Media and Information.  
Design, architecture, and creation concepts related to the development of interactive digital games. 
SA: TC 445  
Effective Fall 2015 Effective Fall 2016

MI 447  Three-Dimensional Modeling and Animation Workshop (W)  
Three-Dimensional Graphics and Animation Portfolio (W)  
Fall of every year. 3(1-4) 3(2-2) P: (MI 347 or MI 377) and Completion of Tier I Writing Requirement  
RB: MI 337  
Open to seniors or graduate students in the Department of Media and Information or in the Game Design and Development Specialization or approval of department.  
R: Open to seniors or graduate students in the Department of Media and Information.  
Design of advanced three-dimensional models and animation. Development of a portfolio of advanced three-dimensional models, animation, and technical art. This course is aimed at students seeking to become computer graphics professionals and want to learn to develop a portfolio and focus their skills on a specific profession or industry.  
SA: TC 447  
Effective Fall 2015 Effective Fall 2016

MI 359  
MI 449  Server-Side Web Development  
Advanced Web Development and Database Management  
Spring of every year. 3(2-2) P: MI 331 or CSE 331  
P: MI 349  
R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Information and Communication Technology for Development Specialization.  
R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering.  
Development of advanced Web sites, services, and applications that employ both browser and server-side technologies. Learn and apply server-side web technologies and database integration with client-side web technologies, to design, develop, and deploy modern web sites, services, and applications.  
SA: TC 449, TC 359 SA: TC 449, TC 359, MI 359  
Effective Fall 2015 Effective Fall 2016

MI 450  Human Computer Interaction and User Experience Design (W)  
Creating Human-Centered Technology (W)  
Fall of every year. Spring of every year. 3(2-2) P: (MI 331 or MI 346 or MI 349) and Completion of Tier I Writing Requirement  
P: (MI 320 and MI 350 and MI 420 or approval of department) and Completion of Tier I Writing Requirement  
R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Department of Computer Science and Engineering.  
Development, formalization, and communication of information designs. Gathering and structuring information and requirements to meet technological, personal, and business communication goals. Systematic usability evaluation of information designs. Entire human-centered design process, including assessing needs, forming ideas, designing a solution, building prototypes, evaluating the effectiveness of those solutions, and iterating to improve the solutions. Creation of a portfolio piece to illustrate capabilities.  
SA: TC 450  
Effective Fall 2015 Effective Fall 2016
MI 452  Media Strategy (W)
Media Entrepreneurship and Business Strategies
Fall of every year. 3(3-0) P: (MI 300 and MI 301) and completion of Tier I writing requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information.
Strategic options, with their attendant risks and opportunities, available to media firms in an industry that is being transformed by new information and communication technologies. Entrepreneurship and business strategy options, with their attendant risks and opportunities, available to media firms in an industry that is being dynamically transformed by new information and communication technologies.
SA: TC 452
Effective Fall 2015 Effective Fall 2016

MI 455  Game Design and Development II
Spring of every year. 3(2-2) P: MI 445 and completion of Tier I Writing Requirement R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information. R: Open to students in the Game Design and Development Minor and open to graduate students in the Department of Media and Information.
Advanced design, architecture, and creation concepts related to the development of real-time interaction 3D design for gaming, simulation, and immersive virtual environments.
SA: TC 455
Effective Fall 2015 Effective Fall 2016

MI 458  Project Management (W)
Spring of every year. 3(3-0) P: (MI 301) and completion of Tier I writing requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Applied Engineering Sciences Major. Not open to students with credit in MI 499.
Managing complicated and multidisciplinary projects. Organizing projects into manageable elements: scope, time, cost, quality, human resources, communication, risk, procurement, and integration. Communicate with stakeholders. Analyze organizations. Develop a budget. Identify roles and responsibilities during the critical planning, deployment, and evaluation stages.
SA: TC 458
DELETE COURSE
Effective Fall 2017

MI 462  Social Computing (W)
Social Media and Social Computing
Fall of every year. 3(2-2) P: (MI 349 or MI 361) and completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Information and Communication Technology for Development Specialization. R: Open to juniors or seniors or graduate students.
Social and technological perspectives on how people collaborate using information and communication technology. Experience with using multiple collaboration platforms and analysis of differences between enabling technologies. Social and technological perspectives on how people collaborate using social media and other information and communication technologies. Experience with using multiple collaboration platforms and analysis of differences between enabling technologies.
SA: TC 462B, TC 462
Effective Fall 2015 Effective Fall 2016
MI 472  **Electronic Commerce (WA)**  
Digital Business and Commerce  
Spring of every year. 3(2-2) P: (MI 349 or MI 361) and completion of Tier I writing requirement P: (MI 349 or MI 361) or approval of department and completion of Tier I writing requirement RB: MI 359 or concurrently R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Information and Communication Technology for Development Specialization. R: Open to juniors or seniors or graduate students.  
SA: TC 462C, TC 472  
Effective Fall 2015 Effective Fall 2016

MI 480  **Information and Communication Technologies for Development**  
Information and Communication Technologies and Development  
Fall of every year. 3(3-0) Interdepartmental with Engineering. P: Completion of Tier I Writing Requirement  
This course will prepare students with the knowledge and skills necessary to understand the role of information and communications technologies (ICT) in developing countries. This includes theories and case studies that link ICT and social, political, economic, and environmental change. Role of information and communications technologies (ICT) in low income countries and in disadvantaged areas in middle and high income countries. Theories and case studies that link ICT and social, political, economic and environmental change.  
SA: TC 480  
Effective Fall 2015 Effective Fall 2016

MI 482  **Building Virtual Worlds (W)**  
Building Virtual Worlds  
Fall of every year. Spring of every year. 3(2-2) P: (MI 331 and MI 346) and completion of Tier I writing requirement P: (MI 231 and MI 346) or MI 445 RB: MI 247 R: Open to students in the Department of Media and Information or in the Game Design and Development Minor.  
Theoretical and practical approaches to the planning, design, and development of virtual worlds for games and simulations.  
Effective Fall 2015 Effective Fall 2016

MI 484  **Building Innovative Interfaces (W)**  
Building Innovative Interfaces  
Fall of every year. Spring of every year. 3(2-2) P: (MI 331) and completion of Tier I writing requirement P: MI 231 or MI 250 or CSE 320 or CSE 331 or CSE 335 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Game Design and Development Minor.  
Designing, implementing and evaluating new interaction devices using mobile and sensor technologies.  
Effective Fall 2015 Effective Fall 2016

MI 488  Information and Communication Technology Development Project (W)  
Spring of every year. Summer of every year. 3 to 6 credits. Interdepartmental with Engineering. A student may earn a maximum of 6 credits in all enrollments for this course. P: Completion of Tier I Writing Requirement RB: MI 480  
Students will learn about the challenges and opportunities of implementing an information and communication technology in a developing country or underprivileged region of the United States. Students will gain hands-on experience conducting field work on location. Challenges and opportunities of implementing an information and communication technology in a developing country or underprivileged region of the United States. Hands-on experience conducting field work on location.  
SA: TC 488  
Effective Fall 2015 Effective Fall 2016
MI 498  Collaborative Game Design (W)
Spring of every year. 3(2-2) P: (MI 445 and MI 455 and MI 497) and completion of Tier I writing requirement
R: Open to students in the Game Design and Development Specialization and open to graduate students in
the Department of Media and Information.  R: Open to students in the Department of Media and
Information or in the Game Design and Development Minor.
Design and development of comprehensive digital games in a team setting working with a
client. Participation in a design cycle including specification, design, prototyping,
implementation, testing, and documentation. Issues of professionalism, ethics, and
communication.
SA: TC 498
Effective Fall 2015 Effective Fall 2016

MI 499  Media and Information Capstone (W)
On Demand. 3(2-2) P: (MI 331 or MI 341 or MI 300) and Completion of Tier I Writing Requirement
R: Open to juniors or seniors in the Department of Media and Information. Not open to students
with credit in MI 458.
Design and development of comprehensive media and information projects in a team
setting working with a client. Participation in a design cycle including specification, design,
prototyping, implementation, testing, and documentation. Issues of professionalism,
ethics, and communication.
SA: TC 499
DELETE COURSE
Effective Fall 2016

COLLEGE OF NURSING

NUR 802  Theoretical Foundations and Role Development for the Advanced Practice Nurse
Fall of every year. Spring of every year. 3(3-0) R: Open to graduate students in the College of
Nursing. Not open to students with credit in NUR 801 or NUR 803.
Integration of theories from nursing and related disciplines to provide a foundation for the
graduate student to transition into the advanced practice role.
Effective Fall 2011 Effective Fall 2015

NUR 806  Research for Advanced Practice Nurses
Fall of every year. Spring of every year. 3(3-0) R: Open to graduate students in the College of
Nursing.
Prepares advanced practice nurses to be proficient in the ethical and clinical application of
research including problem identification and critically evaluate the evidence to provide
high quality care and improve practice.
Effective Fall 2015 Effective Spring 2016

NUR 901  Knowledge Development in Nursing
Fall of every year. Spring of every year. 3(3-0) R: Open only to doctoral students in the College of
Nursing or approval of college.  R: Open to doctoral students in the College of Nursing or approval
of college.
Development and growth of substantive knowledge within nursing. Middle range theories.
Strategies for concept development and theory testing in nursing research for
understanding health status and health outcomes for individuals, families and community-
based primary care.
Effective Summer 2001 Effective Fall 2015

NUR 961  Leadership I: Organizational Leadership
Fall of every year. Summer of every year. 3(3-0) R: Open to doctoral students in the College of
Nursing.
Analysis and evaluation of organization and leadership theories and their relationship to
complex health care systems. Strategies for effective leadership include systems thinking,
organizational culture, communication, resource utilization, ethics, and change models
required to lead cost-effective quality and safety improvements within health care
organizations and in an interdisciplinary environment.
Effective Summer 2014 Effective Spring 2016
NUR 962  Analytical Methods for Evidence-Based Practice
Fall of every year.  Summer of every year.  3(3-0) P: NUR 960 or concurrently R: Open to doctoral students in the College of Nursing.
Integrate and critically evaluate knowledge from diverse sources to develop the best evidence-based practice guidelines for improving health outcomes. Explore rigorous methodologies to design, implement, and evaluate evidence-based interventions. Effective Summer 2014 Effective Spring 2016

NUR 965  DNP Practicum II
Spring of every year. Summer of every year. 3 credits. P: NUR 964 R: Open to doctoral students in the College of Nursing.
Builds on NUR 964. Provides opportunities to engage in increasingly complex organizational projects. Participates in implementation of evidence-based initiatives to improve health outcomes and system effectiveness. Provides opportunities to engage in increasingly complex organizational projects. Participates in implementation of evidence-based initiatives to improve health outcomes and system effectiveness.
Request the use of the Pass-No Grade (P-N) system. Effective Spring 2014 Effective Fall 2015

DEPARTMENT OF RADIOLOGY

ANTR 485  Directed Study in Human Prosection
Fall of every year. Spring of every year. Summer of every year. 2 to 4 credits. 2(0-6) A student may earn a maximum of 15 credits in all enrollments for this course. A student may earn a maximum of 14 credits in all enrollments for this course. P: ANTR 350 or ZOL 328 or KIN 217 or ZOL 320 P: ANTR 350 or IBIO 328 or KIN 217 or IBIO 320 R: Open to juniors or seniors. Approval of department.
Prosection of selected regions and isolated structures of preserved human cadavers. Effective Spring 2015 Effective Fall 2016

DEPARTMENT OF ROMANCE AND CLASSICAL STUDIES

SPN 810  Literature of the Reconquest
Studies in Medieval Spanish Literature
Fall of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: B.A. in Spanish or equivalent.
Works, genres, and writers of the Reconquest. Topics vary. Works, genres, and writers of the Spanish Middle Ages (12th-15th c.)
Effective Fall 2012 Effective Fall 2016

DEPARTMENT OF THEATRE

DAN 354  Dance Choreography
Spring of every year. 3(0-6) A student may earn a maximum of 6 credits in all enrollments for this course. P: (DAN 253 and DAN 351) and (DAN 352 or DAN 451 or DAN 452) P: (DAN 251 and DAN 351) and (DAN 352 or DAN 451 or DAN 452) R: Not open to freshmen.
Intensive study in the craft of dance composition and the art of choreography. SA: THR 354
Effective Spring 2012 Effective Fall 2016