The effective date for new programs subject to Statewide Academic Program review is implemented in accordance with the Statewide Academic Program Review calendar.
This report is prepared and distributed for the following purposes:

1. To report new academic programs, changes in academic programs, discontinuations of academic programs, new courses, permanent changes in courses, and deletions of courses.
2. To notify the initiating colleges, schools, and departments of approval by the University Committee on Curriculum of their requests for new academic programs, changes in academic programs, discontinuations of academic programs, new courses, permanent changes in courses, and deletions of courses. Any items not approved by the Faculty Senate will be reported to the appropriate college and department or school.
3. To provide information to members of the faculty in each department about academic programs and courses in all colleges, departments, and schools of the University.

Reports of the University Committee on Curriculum to the Faculty Senate are organized as follows:

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES:

Organized by colleges in alphabetical order. For a given college, academic units are organized in alphabetical order. For a given academic unit, degrees, majors, and specializations are organized in alphabetical order.

PART II - NEW COURSES:¹

Organized by academic units in alphabetical order; All-University courses appear last. For a given academic unit, courses are organized according to the names associated with course subject codes, in alphabetical order. Courses with the same subject code are in numerical order.

PART III - COURSE CHANGES:¹

Organized by academic units in alphabetical order; All-University courses appear last. For a given academic unit, courses are organized according to the names associated with course subject codes, in alphabetical order. Courses with the same subject code are in numerical order.

Not all of the above categories, and not all of the colleges and academic units, will necessarily appear in any given Senate Report.

¹One or more of the abbreviations that follow may be included in a course entry:

P: = Prerequisite monitored in SIS
C: = Corequisite
R: = Restriction
RB: = Recommended background
SA: = Semester Alias
PART I – NEW PROGRAMS AND PROGRAM CHANGES

MICHIGAN STATE UNIVERSITY
December 20, 2022

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. Establish a Linked Bachelor of Science Degree in Agriculture, Food and Natural Resources Education and Master of Arts Degree in Agriculture, Food and Natural Resources Education in the Department of Community Sustainability. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its September 1, 2022 meeting. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its September 19, 2022 meeting.

Per University policy:
A candidate for a Linked Bachelor's-Master's Degree from Michigan State University may request the application of up to 9 credits toward the master’s program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, are applied toward the credit requirement of the master's degree. Credits applied to the Linked Bachelor's-Master's Program are not eligible to be applied to any other graduate degree program.

a. Add the following statement in the Department of Community Sustainability:

LINKED BACHELOR’S-MASTER’S DEGREE IN AGRICULTURE, FOOD AND NATURAL RESOURCES EDUCATION
Bachelor of Science Degree in Agriculture, Food and Natural Resources Education
Master of Arts Degree in Agriculture, Food and Natural Resources Education

The department welcomes applications from Michigan State University Agriculture, Food and Natural Resources Education undergraduate students in their junior and senior year. Admission applications must be made at least one and a half semesters prior to graduation to allow admission before the final semester as an Agriculture, Food and Natural Resources Education undergraduate. Admission to the program requires a minimum undergraduate grade-point average of 3.5 and an approved program of study for the Master of Arts degree in Agriculture, Food and Natural Resources Education at the time of admission. Admission to the Linked Bachelor’s-Master’s program allows the application of up to 9 credits toward the master’s program for qualifying 400-level and above course work taken at the undergraduate level at Michigan State University or an external accredited institution. The number of approved credits, not to exceed 9, including at least one CSUS course at the 800-level, are applied toward the credit requirement of the master’s degree. Credits applied to the Linked Bachelor’s-Master’s program are not eligible to be applied to any other graduate degree program.

Effective Fall 2023.
COLLEGE OF ARTS AND LETTERS

1. Change the requirements for the Minor in Digital Humanities in the College of Arts and Letters.
   a. Under the heading Minor in Digital Humanities replace the entire entry with the following:

   The student must complete a minimum of 15 credits from the following:

<table>
<thead>
<tr>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The following core courses (6 credits):</td>
</tr>
<tr>
<td>DH 285 Introduction to Digital Humanities 3</td>
</tr>
<tr>
<td>DH 340 Digital Humanities Seminar 3</td>
</tr>
<tr>
<td>2. Complete a minimum of 6 credits in digital humanities courses approved in advance by the Digital Humanities undergraduate advisor. Courses with the DH course code count as electives toward the minor without additional advisor approval.</td>
</tr>
<tr>
<td>DH 450 Digital Humanities Capstone 3</td>
</tr>
<tr>
<td>DH 493 Digital Humanities Internship 3</td>
</tr>
<tr>
<td>3. A capstone course or other experience (3 credits):</td>
</tr>
<tr>
<td>Another study abroad program, internship or portfolio seminar with a significant digital component, or documented work on a digital humanities project or in a digital humanities unit may be used to fulfill this requirement if approved in advance by the Digital Humanities undergraduate advisor.</td>
</tr>
</tbody>
</table>

   Effective Fall 2023.

COLLEGE OF COMMUNICATION ARTS AND SCIENCES

1. Change the requirements for the Bachelor of Arts degree in Communication in the Department of Communication.
   a. Under the heading Requirements for the Bachelor of Arts Degree in Communication replace item 3. a. (4) with the following:

   (4) Complete one of the following options:
   (a) A cognate in the behavioral/social sciences that is comprised of six courses outside the Department of Communication chosen from at least three of the following departments: Anthropology, Communicative Sciences and Disorders, Economics, Human Development and Family Studies, Political Science, Psychology, and Sociology. The courses must be chosen in consultation with the student’s academic advisor. (18 to 24 credits)
   (b) A concentration from the following that focuses on a specific application area in the discipline. Courses used to satisfy requirements for the major may also be used to satisfy the requirements of a concentration. The concentration will be noted on the student’s transcript. (minimum of 18 credits)

   Communication Science, Analytics and Research Methods
   1. Both of the following courses (7 credits):
   COM 301 Special Topics in Communication Sciences, Analytics and Research Methods 3
   or
   COM 401 Advanced Topics in Communication (W) 4
   COM 494 Practicum in Communication Research and Instruction 3

   If COM 301 is selected, it may not be used in requirement 2. below. Students who do not select COM 401 will need to take a different COM capstone course as an elective to meet the (W) requirement.
2. Four courses from the following (12 to 16 credits):
   - COM 301 Special Topics in Communication Sciences, Analytics and Research Methods 3
   - MI 220 Methods for Understanding Users 3
   - MI 355 Media and Information Research 3
   - PSY 101 Introductory Psychology 4
   - PSY 295 Data Analysis in Psychological Research 3
   - SOC 281 Social Research Methods 4
   - SOC 282 Quantitative Analysis for Social Research 4
   - STT 201 Statistical Methods 4
   - WRA 202 Introduction to Professional and Public Writing 3
   - WRA 330 Writing Research in Communities and Cultures 3
   - WS 203 Introduction to Methods for Women's and Gender Studies Research 3

   If COM 301 is taken for requirement 1. above, students may take COM 301 up to two times in different topics for group 2.

**Health Communication**

1. All of the following courses (10 credits):
   - COM 325 Interpersonal Influence and Conflict 3
   - COM 330 Health Communication 3
   - COM 475 Communication Campaign Design and Analysis (W) 4

2. Three courses from the following (9 to 11 credits):
   - ANP 201 Introduction to Cultural Anthropology 3
   - ANP 204 Introduction to Medical Anthropology 3
   - ANP 370 Culture, Health, and Illness 3
   - COM 302 Special Topics in Health Communication 3
   - EPI 390 Disease in Society: Introduction to Epidemiology and Public Health 4
   - GEO 435 Geography of Health and Disease 3
   - HM 101 Introduction to Public Health 3
   - HNF 150 Introduction to Human Nutrition 3
   - HNF 406 Global Foods and Culture 3
   - HST 425 American and European Health Care since 1800 4
   - PHL 344 Ethical Issues in Health Care 4
   - PSY 101 Introductory Psychology 4
   - PSY 320 Health Psychology 3
   - SOC 475 Health and Society 3

   COM 302 may be taken up to 3 times under different topics.

**Intercultural Communication**

1. All of the following courses (10 credits):
   - COM 310 Intercultural Communication 3
   - COM 320 Diversity and Communication 3
   - COM 325 Interpersonal Influence and Conflict 3
   - COM 475 Communication Campaign Design and Analysis (W) 4

2. Three courses from the following (8 to 11 credits):
   - ANP 200 Navigating Another Culture 3
   - COM 303 Special Topics in Intercultural Communication 3
   - COM 310 Intercultural Communication 3
   - COM 320 Diversity and Communication 3
   - CSUS 200 Introduction to Sustainability 3
   - CSUS 250 Global Issues in Agriculture and Natural Resources 3
   - ENG 478B Literature and Visual Culture 3
   - MC 230 Cultures and Politics in Comparative Perspective 4
PART I – NEW PROGRAMS AND PROGRAM CHANGES

MI 480 Information and Communication Technologies and Development 3
PSY 101 Introductory Psychology 4
PSY 342 Stereotypes, Prejudice, and Discrimination 3
SOC 161 International Development and Change 3
SOC 215 Race and Ethnicity 3
SOC 310 Global Migration 3
SOC 362 Developing Societies 3
TE 352 Immigrant Language and Culture 3

COM 303 may be taken up to 3 times under different topics.

Up to 6 credits of a foreign language or educational study abroad program may also serve as an elective in this concentration with advisor approval.

Students who select COM 310 or COM 320 in item 1. may not use those courses to fulfill the requirement in item 2.

Interpersonal Communication

1. All of the following courses (7 credits):
   COM 325 Interpersonal Influence and Conflict 3
   COM 425 Communication in Close Relationships (W) 4

2. Three courses from the following (9 or 10 credits):
   ATD 430 Dress, Culture and Human Behavior 3
   COM 304 Special Topics in Interpersonal Communication 3
   HDFS 145 The Individual, Couples and Families 3
   HDFS 225 Lifespan Human Development in the Family 3
   HDFS 414 Parenting 3
   HDFS 442 Ethnic Families in America 3
   HDFS 444 Interpersonal Relationships in the Family 3
   HDFS 445 Human Sexuality 3
   HST 313 Women in the United States to 1869 3
   HST 314 Women in the United States since 1869 3
   PSY 101 Introductory Psychology 4
   PSY 235 Social Psychology 3
   PSY 236 Personality 3
   PSY 339 Psychology of Women 3
   PSY 342 Stereotypes, Prejudice, and Discrimination 3
   WS 201 Introduction to Women’s and Gender Studies 3
   WS 304 Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ) and Sexuality Studies 3
   WS 403 Women and Change in Developing Countries 3

COM 304 may be taken up to 3 times under different topics.

Mediated Communication

1. Both of the following courses (7 credits):
   COM 375 Audience Response to Media Entertainment 3
   COM 475 Communication Campaign Design and Analysis (W) 4

2. Four of the following courses (12 to 14 credits):
   ADV 375 Consumer Behavior 3
   ADV 431 Monitoring and Measuring Social Media of Brands 3
   CAS 110 Creative Thinking 3
   CAS 112 Story, Sound and Motion 3
   CAS 116 Media Sketching and Graphics 3
   CAS 117 Games and Interactivity 3
   COM 305 Special Topics in Mediated Communication 3
   DH 285 Introduction to Digital Humanities 3
   ENG 142 Introduction to Popular Literary Genres 4
   FILM 230 Introduction to Film 4
   FILM 380 Classical Film and Media Theory 3
   FILM 381 Contemporary Film and Media Theory 3
   JRN 108 The World of Media 3
<table>
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<th>Credits</th>
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<tbody>
<tr>
<td>JRN 213</td>
<td>Animation, Comics, Culture and Graphic Novels in Media</td>
<td>3</td>
</tr>
<tr>
<td>JRN 218</td>
<td>Sports in Contemporary Media</td>
<td>3</td>
</tr>
<tr>
<td>MI 101</td>
<td>Understanding Media and Information</td>
<td>3</td>
</tr>
<tr>
<td>MI 201</td>
<td>Introduction to Information Science</td>
<td>3</td>
</tr>
<tr>
<td>MI 220</td>
<td>Methods for Understanding Users</td>
<td>3</td>
</tr>
<tr>
<td>MI 239</td>
<td>Digital Footprints: Privacy and Online Behavior</td>
<td>3</td>
</tr>
<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>
<tr>
<td>PLS 170</td>
<td>Introduction to Political Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PLS 333</td>
<td>Public Opinion and Political Behavior</td>
<td>3</td>
</tr>
<tr>
<td>PLS 334</td>
<td>Campaigns and Elections</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introductory Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 200</td>
<td>Cognitive Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 235</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 270</td>
<td>Community Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 463</td>
<td>Introduction to Cognitive Science</td>
<td>3</td>
</tr>
<tr>
<td>REL 175</td>
<td>Religion in Film</td>
<td>3</td>
</tr>
<tr>
<td>WRA 202</td>
<td>Introduction to Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>WRA 225</td>
<td>Introduction to Multimedia Writing</td>
<td>3</td>
</tr>
<tr>
<td>WRA 425</td>
<td>Advanced Multimedia Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Organizational Communication**

1. All of the following courses (10 credits):
   - COM 340 Leadership and Group Communication 3
   - COM 440 Organizational Communication Structure (W) 4
   - COM 493 Internship 3

2. Three of the following courses (9 or 10 credits):
   - ACC 230 Survey of Accounting Concepts 3
   - ANP 321 Anthropology of Social Movements 3
   - COM 306 Special Topics in Organizational Communication 3
   - GBL 323 Introduction to Business Law 3
   - HST 213 U.S. Business and Economic History 3
   - MGT 325 Management Skills and Processes 3
   - MKT 327 Introduction to Marketing 3
   - PR 325 Intermediate Social Media and Public Relations Techniques 3
   - PSY 101 Introductory Psychology 4
   - PSY 255 Industrial and Organizational Psychology 3
   - SOC 481 Social Movements and Collective Identities 3

**Social Influence**

1. Both of the following courses (7 credits):
   - COM 325 Interpersonal Influence and Conflict 3
   - COM 475 Communication Campaign Design and Analysis (W) 4

2. Four of the following courses (12 to 15 credits):
   - ANP 321 Anthropology of Social Movements 3
   - COM 307 Special Topics in Social Influence 3
   - HST 316 United States Intellectual History since 1860 3
   - IBIO 446 Environmental Issues and Public Policy 3
   - PHL 330 Formal Deductive Reasoning 4
   - PSY 101 Introductory Psychology 4
   - PSY 270 Community Psychology 3
   - SOC 241 Social Psychology 3
   - SOC 368 Science, Technology and Society 3
   - SOC 481 Social Movements and Collective Identities 3
   - SOC 499 Social Issues and Change in Contemporary Society (W) 3
Students should meet with their academic advisors concerning the minimum and maximum numbers of elective credits available to them at various stages in their programs.

Students are strongly encouraged to complete an internship or experiential learning experience approved by the Department of Communication whether for university credit based on academic eligibility standards or on a voluntary, non-credit basis. The department will make every effort to assist communication majors in finding appropriate internship placements.

Effective Spring 2023.

**COLLEGE OF EDUCATION**

1. Establish a Master of Arts degree in Learning Experience Design in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its September 19, 2022 meeting.

a. **Background Information:**

This program’s inception developed from interest from our current Master of Arts in Educational Technology (MAET) students and our alumni. Historically, our program has served primarily K-12 teachers and administrators. Over the past few years, in an attempt to diversify our student population, we have welcomed more students outside of the traditional, K-12 educational field. Professionals from higher education, the private sector, business, and communications departments have come into our MAET program to learn more about theory and design as they employ technologies in their professional work. Many have noted that they wish we offered something more concrete in instructional design, as it would be highly beneficial to their work. Over the last three years, we have also noticed that our MAET alumni are obtaining an increasing number of positions in instructional design within higher education institutions and the private sector. In discussing these professional roles with alumni in instructional design positions, we identified gaps and opportunities for supporting the field of instructional and learning experience design through a new master’s degree program. Currently, we offer a Graduate Certificate in Online Teaching and Learning which covers some concepts within the field of instructional design: digital assessment, online teaching and learning, and technology by design. While this graduate certificate is relevant to individuals who want to pursue a career in instructional design, the focus is more on teaching and learning and the K-12 context, whereas, individuals in learning experience design have a focus on design and learning.

By creating the Master of Arts in Learning Experience Design (MALXD), we will be able to engage and serve a more diverse student population (outside of K-12) in critical areas of focus for the instructional and learning design field. There is an audience of interested learners and currently we do not fully meet their needs with our existing programs. We have the experience, skills, and resources to offer this program. While there are no accrediting agencies or federal regulations guiding instructional or learning experience design, the Quality Matters Higher Education Rubric (https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEd ucationRubric.pdf) and Online Learning Consortium’s quality scorecard (https://onlinelearningconsortium.org/consult/olc-quality-scorecard-administrationonline- programs/) provide standards for online learning and program review.

Multiple institutions currently offer a similar master’s degree. Purdue University offers a Master of Science in Instructional Design and Technology, Northeastern University offers a Master of Professional Studies in Learning Experience Design and Technology, West Virginia University offers a Master of Arts in Instructional Design and Technology.

The origins of instructional design as a discipline date back to the 1960s. Learning experience design is a relatively new field, some dating its development to as recent as 2007. In the grand scheme of academia, both of these fields can be considered relatively new. With the emergence of COVID-19 and the rapid shift to online environments, educational, business, and health organizations found themselves navigating an entirely new environment to educate their employees, with little to no support. This served as a catalyst for organizations to create positions for instructional and learning experience designers. A quick search on a career search site, such as
Indeed, reveals 13,400+ instructional design positions and 202,800+ learning experience design positions. The field is expanding at an incredibly rapid rate and there are not many master’s-level programs for those wishing to enter the field or those who are in the field and trying to advance their knowledge. We have the opportunity to provide a critical lens of equity, accessibility, and social justice in human-centered learning and design, which is an area in which we excel. We have the opportunity to lead the field.

Upon completion of the program, MALXD graduates will position themselves as leaders in the field by being able to: (1) create accessible and inclusive learning experiences and environments, rooted in the learning sciences, educational psychology, and theories of teaching and learning; (2) evaluate leading design principles and frameworks, modify, and apply them through a critical lens focused on equity and social justice; (3) assess learning platforms and technologies for accessibility, user experience, and social and ethical implications; (4) use rich pedagogical knowledge and knowledge of research practices to generate creative designs and learning solutions; (5) develop strategies to support a team’s productivity, capacity, and culture as a project manager; and (6) engage in a cycle of continuous improvement and project management, including researching, planning, implementing, tracking, evaluating the success of initiatives, and finessing the product.

b. Academic Programs Catalog Text:

The Master of Arts in Learning Experience Design prepares graduates in human-centered, instructional, and learning experience design who are well-versed in designing learning experiences based on their knowledge of educational psychology, theories of teaching and learning, rich pedagogical knowledge, accessible and inclusive learning design, social and ethical implications of technologies, project management, versatility in platforms and technologies, and creative design and solutions. Graduates will be positioned to create accessible and inclusive learning experiences and environments, evaluate leading design principles and frameworks, assess learning platforms and technologies for accessibility, generate creative designs and learning solutions, develop strategies to support a team’s productivity, and engage in continuous improvement and project management.

This program is not accredited by the Kentucky Education Professional Standards Board and is not recognized for initial, additional, or renewal of certification or salary enhancement (rank change) for K-12 educators in Kentucky.

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

Admission

For admission to the master's degree program in learning experience design on regular status, the student must:

1. submit both departmental and university application forms with responses to both personal and academic statement questions.
2. submit a CV/resume.
3. submit official transcripts from all higher education institutions attended.
4. submit letters of recommendation from professional references.

Applications for admission to the program are reviewed by the learning experience design faculty who evaluate applicants for indications of a high probability of success. Such indications include a high level of academic performance, experience or interest in the field, and consistency of professional goals with the objectives of the program. Factors also considered are:

1. have an undergraduate degree from an accredited institution.
2. have a minimum cumulative grade-point average of 3.00 or higher in your undergraduate degree.
3. have a minimum TOEFL score of 80 if you are a first-language speaker of a language other than English.
4. applying from a state where degrees from Michigan State University are recognized.
Students who do not meet the requirements for admission to the program on regular status may be admitted on a provisional basis to remove deficiencies. Collateral course work will not count towards the requirements for the degree.

**Requirements for the Master of Arts Degree in Learning Experience Design**

The Master of Arts degree in Learning Experience Design is available only online and under Plan B (without thesis). A total of 30 credits are required for the degree.

The students must complete the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEP 800</td>
<td>Psychology of Learning in School and Other Settings</td>
<td>3</td>
</tr>
<tr>
<td>CEP 807</td>
<td>Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td>CEP 813</td>
<td>Electronic Assessment for Teaching and Learning</td>
<td>3</td>
</tr>
<tr>
<td>CEP 820</td>
<td>Teaching and Learning Online</td>
<td>3</td>
</tr>
<tr>
<td>CEP 822</td>
<td>Approaches to Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>CEP 856</td>
<td>Learning Design Leadership</td>
<td>3</td>
</tr>
<tr>
<td>CEP 857</td>
<td>Current Topics and Trends in Learning Design</td>
<td>3</td>
</tr>
<tr>
<td>CEP 858</td>
<td>Upskilling in Learning Design</td>
<td>3</td>
</tr>
<tr>
<td>EAD 861</td>
<td>Adult Learning</td>
<td>3</td>
</tr>
<tr>
<td>UX 835</td>
<td>Accessibility and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Effective Fall 2023.

2. Establish a [Graduate Certificate in Learning Design](#) in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its September 19, 2022 meeting.

   a. **Background Information:**

   The instructional and learning design fields are rapidly expanding due to COVID-19 and transitions to remote work and virtual learning environments. As we developed the outline for the proposed Master of Arts in Learning Experience Design (MALXD) program, we did extensive research and held focus groups with student, alumni, and field experts in the instructional and learning design field. As we take into account a variety of entry points for learners who are looking to enter the field from another career, advance within the field, and those who have no educational background in the field, we wanted to build a robust graduate certificate experience to focus-in on core knowledge that all of our potential learners would need. The Graduate Certificate in Learning Design will meet our objectives to support learners from multiple pathways to understanding founding principles, to advancing their knowledge of the instructional and learning experience design field. Few institutions currently offer a similar graduate certificate. Some comparable programs include the University of Michigan: Graduate Certificate in Learning Experience Design; the Harvard Extension School: Graduate Certificate in Learning Design and Technology; and Northwestern: Graduate Certificate in Learning Design.

   While there are no accrediting agencies or federal regulations guiding instructional or learning experience design, the Quality Matters Higher Education Rubric ([https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf](https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf)) and Online Learning Consortium’s quality scorecard ([https://onlinelearningconsortium.org/consult/olc-quality-scorecard-administrationonline-programs/](https://onlinelearningconsortium.org/consult/olc-quality-scorecard-administrationonline-programs/)) provide standards for online learning and program review.

   Faculty and adjuncts who are active in the field of instructional design in the Educational Psychology and Educational Technology doctoral program and MAET program serve as some of the instructors for our courses and the work and research that we do as the MAET program revolves around effective, engaging, and inclusive instructional design. The richness of study, research, and application of learning sciences, educational technology, online learning, and design allows us to design at the intersection of theory and forward-thinking practice. To build a robust program that leverages the strengths of individuals and programs outside of our own, we plan to incorporate an existing course outside of our program into the program plan, in collaboration with the Strategic
Communications’ Master of Science in User Experience program. This will be mutually beneficial to all programs and, most importantly, the learners.

Upon completion of the program, Graduate Certificate in Learning Design graduates will be able to: (1) develop and implement effective, engaging, and inclusive online curriculum and instruction; (2) use educational technology to meet the needs of learners from diverse backgrounds; (3) analyze the social and ethical issues and concerns when creating learning experiences and assessments; (4) thoughtfully create and implement digital assessments for learning, as learning, and of learning; (5) design ways of creating and providing feedback to students in digital contexts through a critical lens; (6) develop formative assessments based on theoretical and design principles in online learning spaces; (7) design learning experiences and technological interactions for people with disabilities with an understanding of ability, cultural, social, and political factors that define disability; and (8) understand inclusive design principles that will help them to design, develop, and evaluate inclusive technologies for people with various human abilities.

b. Academic Programs Catalog Text:

The Graduate Certificate in Learning Design prepares graduates who are well-versed in online curriculum development, motivation in online learning, ethics and social implications of educational technology, online collaborative communities, accessibility, universal design, deficit model of disability, social model of disability, human-centered design methods, how to design learning experiences and technological interactions from the perspective of people with disabilities, assistive technology, destigmatizing disease, illness, and impairment, foundational theories of assessment, foundational assumptions of assessment design, assessment-driven curriculum design for learning, designing formative assessments in digital contexts, online content management systems and learning management systems, the role of feedback, its design and provision in digital contexts, and analysis of assessment data to inform pedagogy and support learning.

This program is not accredited by the Kentucky Education Professional Standards Board and is not recognized for initial, additional, or renewal of certification or salary enhancement (rank change) for K-12 educators in Kentucky.

Admission

For admission to the graduate certificate in learning design leadership, the student must:

1. submit both departmental and university application forms.
2. submit official transcripts from all higher education institutions attended.
3. complete the Intent to Enroll form after obtaining approval from their academic advisor if currently enrolled in a graduate degree program at Michigan State University.

Applications for admission to the program are reviewed by faculty who evaluate applicants for indications of a high probability of success. Such indications include academic performance, experience or interest in the field, and consistency of professional goals with the objectives of the program. Factors also considered are:

1. have an undergraduate degree from an accredited institution.
2. have a minimum TOEFL score of 80 if you are a first-language speaker of a language other than English.
3. applying from a state where degrees from Michigan State University are recognized.

Requirements for the Graduate Certificate in Learning Design

The Graduate Certificate is available only online and the student must complete a total of 9 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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</tr>
<tr>
<td>CEP 820</td>
<td>Teaching and Learning Online</td>
<td>3</td>
</tr>
<tr>
<td>UX 835</td>
<td>Accessibility and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Effective Fall 2023.
3. **Establish a Graduate Certificate in Learning Design Leadership** in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its September 19, 2022 meeting.

   **a. Background Information:**

   The instructional and learning design fields are rapidly expanding due to COVID-19 and transitions to remote work and virtual learning environments. As we developed the outline for the proposed Master of Arts in Learning Experience Design (MALXD) program, we knew that our potential learners would be coming to us from various stages of their instructional design careers. To meet the needs of novice and experienced designers, we created multiple entry points through three distinct graduate certificate programs that are scaffolded to comprise the MALXD program. The Graduate Certificate in Learning Design Leadership has been developed to support our learners in advancing in their professional spaces as well as leading the charge in design strategy. We want to develop learning experience designers who are leaders in the field and this graduate certificate program brings a strong focus to that commitment and goal. Few institutions currently offer a similar graduate certificate. Some comparable programs include University of Colorado Denver: Graduate Certificate in Leadership for Learning Design and Technology; and University of Illinois Urbana-Champaign: Graduate Certificate in Learning Design and Leadership.

   While there are no accrediting agencies or federal regulations guiding instructional or learning experience design, the Quality Matters Higher Education Rubric ([https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf](https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf)) and Online Learning Consortium's quality scorecard ([https://onlinelearningconsortium.org/consult/olc-quality-scorecard-administrationonline-programs/](https://onlinelearningconsortium.org/consult/olc-quality-scorecard-administrationonline-programs/)) provide standards for online learning and program review.

   Through student, alumni, and field expert focus groups, we have learned the importance of creating an experience that will appeal to designers at various stages of their careers. Many existing programs are solely focused on developing new designers or advancing senior designers. Our program and our perspective is that we can develop both of these audiences to excel in instructional and learning experience design leadership. As the field of instructional and learning experience design is expanding at an incredibly rapid rate, we believe that the College of Education and the (current) MAET program and (proposed) MALXD program are in the position to provide the knowledge to advance the field of instructional and learning design, and we will empower our learners to lead the change with us.

   Upon completion of the program, Graduate Certificate in Learning Design Leadership graduates will be able to: (1) describe a variety of leadership, organizational management, coaching, and mentorship models that can be applied in practice as a learning design leader; (2) evaluate the potential use of various leadership, organizational management, coaching, and mentorship in your professional context; (3) apply and lead project management and workflow practices for collaborative team projects; (4) employ effective communication practices to lead and support teams with diverse perspectives, through proactive and responsive leadership practices; (5) evaluate design frameworks for your client and organizational needs through a critical lens; (6) create plans from ideation, to implementation, to evaluation for a design project; (7) identify industry standards and needs in order to guide professional work; (8) identify industry standards and needs in order to anticipate emerging and future trends; (9) apply theories and frameworks of instructional and learning experience design to your professional context(s); (10) analyze technologies for usability, accessibility, engagement, and ethical and social challenges and implications; (11) use a diverse range of meaningful and appropriate pedagogical strategies in your designs; (12) create powerful learning solutions for and with learners, instructors, and clients; (13) identify opportunities for individual growth and leadership development for instructional design through a self-evaluation process; (14) create and implement an actionable plan to support professional development goals; (15) evaluate resources for credibility and applicability to growth goals; (16) design a workflow and evaluation system to self-monitor progress in obtaining goals; and (17) develop an individual project to showcase gained knowledge in instructional and learning design.

   **b. Academic Programs Catalog Text:**

   The Graduate Certificate in Learning Design Leadership prepares graduates who are well-versed in self-evaluation and goal setting; theories of creativity, visual design, multimodal communication, and professional development; platform-specific exploration and development; leadership models; coaching and mentorship; project management and workflow; organizational management models;
communication and conflict; ethical leadership; evaluating design frameworks/finding the best fit for your organization; initiative development, implementation, and evaluation of learning design projects; instructional design theories, principles, and methodologies; industry standards of instructional and learning design; industry needs; pedagogical strategies; promising platforms and technologies for learning design; and societal and ethical issues and implications of educational technologies.

This program is not accredited by the Kentucky Education Professional Standards Board and is not recognized for initial, additional, or renewal of certification or salary enhancement (rank change) for K-12 educators in Kentucky.

Admission

For admission to the graduate certificate in learning design leadership, the student must:

1. submit both departmental and university application forms.
2. submit official transcripts from all higher education institutions attended.
3. complete the Intent to Enroll form after obtaining approval from their academic advisor if currently enrolled in a graduate degree program at Michigan State University.

Applications for admission to the program are reviewed by faculty who evaluate applicants for indications of a high probability of success. Such indications include academic performance, experience or interest in the field, and consistency of professional goals with the objectives of the program. Factors also considered are:

1. have an undergraduate degree from an accredited institution.
2. have a minimum TOEFL score of 80 if you are a first-language speaker of a language other than English.
3. applying from a state where degrees from Michigan State University are recognized.

Requirements for the Graduate Certificate in Learning Design Leadership

The Graduate Certificate is available only online and the student must complete a total of 9 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEP 856</td>
<td>Learning Design Leadership</td>
<td>3</td>
</tr>
<tr>
<td>CEP 857</td>
<td>Current Topics and Trends in Learning Design</td>
<td>3</td>
</tr>
<tr>
<td>CEP 858</td>
<td>Upskilling in Learning Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Effective Fall 2023.

4. Establish a Graduate Certificate in Learning Sciences in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its September 19, 2022 meeting.

a. Background Information:

The instructional and learning design fields are rapidly expanding due to COVID-19 and transitions to remote work and virtual learning environments. As we developed the outline for the proposed Master of Arts in Learning Experience Design (MALXD) program, we know that leaders in these fields need a strong foundation in learning sciences. Thus, the Graduate Certificate in Learning Sciences is being proposed as a core component of the learner experience in the MALXD program. In working with students, alumni, and field experts in instructional and learning design, we know that having "steps" within the master’s degree experience is important to receiving professional funding from corporations and employers. Awarding graduate certificates as these "steps" in the MALXD experience is highly marketable and motivating for potential learners who are outside of our traditional K-12 audience for graduate degrees. Few institutions currently offer a similar graduate certificate. Some comparable programs include Indiana University Bloomington, Certificate in Learning Sciences, Media, and Technology (Online); and UC Berkeley, Learning Sciences Certificate in Instructional Design, Learning Technologies, and Education Research.
While there are no accrediting agencies or federal regulations guiding instructional or learning experience design, the Quality Matters Higher Education Rubric (https://www.qualitymatters.org/sites/default/files/PDFs/StandardsfromtheQMHigherEducationRubric.pdf) and Online Learning Consortium's quality scorecard (https://onlinelearningconsortium.org/consult/olc-quality-scorecard-administrationonline-programs/) provide standards for online learning and program review.

Many instructional and learning experience designers do not have a formal education in the learning sciences. Through student, alumni, and field expert focus groups, we have found learning sciences to be a high interest area for growth and career development. As the field of instructional and learning experience design is expanding at an incredibly rapid rate, we believe that the College of Education and the (current) MAET program and (future) MALXD program are in the position to provide this crucial knowledge at the core of instructional design decisions. We already have the courses that offer this advancement of knowledge in learning sciences, so we are merely grouping them and broadening the definition of learning to expand to business, health, and additional professionals as learners.

Upon completion of the program, Graduate Certificate in Learning Sciences graduates will be able to: (1) understand the complex nature of learning, its cultural embeddedness, and the fact that it involves the active construction of knowledge; (2) describe the multiple influences on learning, including learners' prior knowledge, identities, contexts, and personal epistemologies; (3) distinguish among approaches to conception, design, analysis, and use of research via case examples; (4) develop understanding of who adult learners are, why they participate in educational programs, and barriers to participation and learning based on research, data, empathy, and understanding; (5) compare major approaches to understanding diversity and differences in how adults learn; (6) apply major cognitive, emotional, and socio-cultural processes involved in adult learning; (7) design with an understanding of adult learning to enhance planning and instruction in adult contexts based on research/data; and (8) use strong research fundamentals and practices to ensure strong alignment between design and user needs.

b. Academic Programs Catalog Text:

The Graduate Certificate in Learning Sciences prepares graduates who are well-versed in learning theories, teaching for understanding, research design and analysis in educational settings, contexts for adult learning, adult identity, development, change, and learning, learning theories and process in adulthood, and the application of learning theories in educational contexts based on research and well-informed practices.

This program is not accredited by the Kentucky Education Professional Standards Board and is not recognized for initial, additional, or renewal of certification or salary enhancement (rank change) for K-12 educators in Kentucky.

Admission

For admission to the graduate certificate in learning sciences, the student must:

1. submit both departmental and university application forms.
2. submit official transcripts from all higher education institutions attended.
3. complete the Intent to Enroll form after obtaining approval from their academic advisor if currently enrolled in a graduate degree program at Michigan State University.

Applications for admission to the program are reviewed by faculty who evaluate applicants for indications of a high probability of success. Such indications include academic performance, experience or interest in the field, and consistency of professional goals with the objectives of the program. Factors also considered are:

1. have an undergraduate degree from an accredited institution.
2. have a minimum TOEFL score of 80 if you are a first-language speaker of a language other than English.
3. applying from a state where degrees from Michigan State University are recognized.
Requirements for the Graduate Certificate in Learning Sciences

The Graduate Certificate is available only online and the student must complete a total of 9 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEP 800</td>
<td>Psychology of Learning in School and Other Settings</td>
<td>3</td>
</tr>
<tr>
<td>CEP 822</td>
<td>Approaches to Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>EAD 861</td>
<td>Adult Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

Effective Fall 2023.

COLLEGE OF ENGINEERING

1. Change the requirements for the **Master of Science** degree in **Electrical and Computer Engineering** in the Department of Electrical and Computer Engineering. The University Committee on Graduate Studies (UCGS) approved this request at its November 21, 2022 meeting.

   a. Under the heading **Requirements for the Master of Science Degree in Electrical and Computer Engineering** make the following change:

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

      | Course    | Title                                           | Credits |
      |-----------|-------------------------------------------------|---------|
      | ECE 813   | Advanced VLSI Design                            | 3       |
      | ECE 820   | Advanced Computer Architecture                  | 3       |

      Add the following courses:

      | Course    | Title                                           | Credits |
      |-----------|-------------------------------------------------|---------|
      | ECE 830   | Embedded Cyber-Physical Systems                 | 3       |
      | ECE 842   | Performance Modeling of Communication Networks  | 3       |

      (2) Replace item 2. with the following:

      Completion of supporting course work outside the department and college at the 400-level and above chosen in consultation with the student's academic advisor. Plan A students must have at least 20 credits, including thesis credits, at the 800-level or above and Plan B students must have 18 credits at the 800-level or above.

      (3) Add the following:

      **Additional Requirements for Plan A**
      1. Completion of at least 4 credits of ECE 899 Master's Thesis Research, and no more than 8 credits.

      **Additional Requirements for Plan B**
      1. Completion of a final examination or evaluation.

Effective Fall 2023.
COLLEGE OF NATURAL SCIENCE

1. Change the requirements for the Bachelor of Science degree in Environmental Biology/Microbiology in the Department of Microbiology and Molecular Genetics.

   a. Under the heading Requirements for the Bachelor of Science Degree in Environmental Biology/Microbiology in item 3. make the following changes:

      (1) In item a., change the total credits from ‘59 to 68’ to ‘58 to 68’.

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

         ENE 280 Principles of Environmental Engineering and Science 3

      (3) In item a. (5) change the credits of LB 172 from ‘4’ to ‘3’.

      (4) Add the following item to a. (6):

         (c) LB 271 Organic Chemistry 3
         CEM 252 Organic Chemistry II 3
         CEM 255 Organic Chemistry Laboratory 2

      (5) In item a. (7), add the following course:

         MTH 124 Survey of Calculus I 3

      (6) In item a. (8), add the following courses:

         MTH 126 Survey of Calculus II 3
         MTH 153H Honors Calculus II 4
         LB 119 Calculus II 4

      (7) In item a. (8), change the credits of MTH 133 from ‘3’ to ‘4’.

      (8) Add the following to item a. (9):

         (f) PHY 221 Studio Physics for Life Scientists, I 4
         PHY 222 Studio Physics for Life Scientists, II 4

      (9) In item b. (2), MMG 494 should be listed as ‘MMG 494L’.

      (10) In item c., delete item (6) and renumber the remaining accordingly.

      (11) In item c. (8), delete the following course:

         PLB 400 Introduction to Bioinformatics 3

      Add the following course:

         CMSE 410 Bioinformatics and Computational Biology 3

Effective Summer 2023.
2. Change the requirements in the Bachelor of Science degree in Genomics and Molecular Genetics in the Department of Microbiology and Molecular Genetics.
   a. Under the heading Requirements for the Bachelor of Science Degree in Microbiology and Molecular Genetics make the following changes:
      (1) In item 3. a. (5) add the following:
          (c) LB 271 Organic Chemistry    3
          CEM 252 Organic Chemistry II    3
          CEM 255 Organic Chemistry Laboratory   2
      (2) In item 3. a. (7) add the following:
          (f) PHY 221 Studio Physics for Life Scientists I   4
          PHY 222 Studio Physics for Life Scientists II   4
      (3) In item 3. b. (2) change 'MMG 494' to 'MMG 494L'.

   Effective Summer 2023.

3. Change the requirements in the Bachelor of Science degree in Microbiology in the Department of Microbiology and Molecular Genetics.
   a. Under the heading Requirements for the Bachelor of Science Degree in Microbiology make the following changes:
      (1) In item 3. a. (5) add the following:
          (c) LB 271 Organic Chemistry    3
          CEM 252 Organic Chemistry II    3
          CEM 255 Organic Chemistry Laboratory   3
      (2) In item 3. a. (6) add the following:
          (f) PHY 221 Studio Physics for Life Scientists I   4
          PHY 222 Studio Physics for Life Scientists II   4
      (3) In item 3. b. (2) change 'MMG 494' to 'MMG 494L'.
      (4) In item 3. c. add the following course:
          GLG 435 Geomicrobiology      4

   Effective Summer 2023.

4. Change the requirements for the Master of Science degree in Physics in the Department of Physics and Astronomy. The University Committee on Graduate Studies (UCGS) approved this request at its November 21, 2022 meeting.

   The concentration in the Master of Science degree in Physics is noted on the student’s academic record when the requirements for the degree have been completed.

   a. Under the heading Admission delete item 2.:
      A satisfactory grade point average, normally at least 3.00, in the courses referenced in item 1. above.

   b. Under the heading Requirements for the Master of Science Degree in Physics replace the entire entry with the following:
The student must complete a total of 30 credits for the degree under either Plan A (with thesis) or Plan B (without thesis) including:

1. A minimum of 16 credits of approved course work at the 800-900 level.
2. A minimum of 14 credits of 400-level Physics and Astronomy courses approved by the Director of Graduate Studies. These courses may not have been used previously towards another degree. Courses outside of the department may be used with approval by the Director of Graduate Studies.

**Concentration in Beam Physics.** Students pursuing a concentration in beam physics must satisfy the regular requirements for the master's degree. Credits for the concentration may be earned through courses including PHY 861, PHY 961, PHY 962, PHY 963, and PHY 964.

**Additional Requirements for Plan A**
1. Complete 5 to 10 credits of course work from PHY 800 Research Methods and PHY 899 Master's Thesis Research combined. At least 4 credits must be in PHY 899.
2. Successfully complete the oral examination in defense of the thesis.

**Additional Requirements for Plan B**
1. Complete at least 5 credits of research course work normally met by completing PHY 800 Research Methods.
2. Completion of a final evaluation.

Effective Fall 2023.

**COLLEGE OF SOCIAL SCIENCE**

1. Change the requirements for the Bachelor of Arts degree in Human Geography in the Department of Geography, Environment, and Spatial Sciences.

   a. Under the heading **Requirements for the Bachelor of Arts Degree in Human Geography** 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 Arts degree in Human Geography.

         The University’s Tier II writing requirement for the Human Geography major is met by completing Geography 480. That course is referenced in item 3. below.

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

      3. The following courses with a minimum 2.0 grade-point average across all attempted GEO courses (34 to 35 credits):

         ![CREDITS](chart)

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

            GEO 113 Introduction to Economic Geography 3
            GEO 151 Introduction to Human Geography 3
            GEO 221 Introduction to Geographic Information 3
            GEO 221L Introduction to Geographic Information Laboratory 1
            GEO 480 Undergraduate Seminar in Geography (W) 3

         b. One of the following groups of courses (3 or 4 credits):

            (1) GEO 206 Physical Geography 3
            (2) GEO 201 Introduction to Plant Geography 3
            GEO 206L Physical Geography Laboratory 1
            (3) GEO 203 Introduction to Meteorology 3
            GEO 206L Physical Geography Laboratory 1
            (4) GEO 306 Environmental Geomorphology 3
            GEO 206L Physical Geography Laboratory 1
c. One of the following courses (3 credits):
   GEO 330  Geography of the United States  3
   GEO 331  Geography of Canada  3
   GEO 333  Geography of Michigan and the
            Great Lakes Region  3
   GEO 335  Geography of Latin America  3
   GEO 336  Geography of Europe  3
   GEO 337  Geography of Asia-Pacific  3
   GEO 338  Geography of Africa  3
   GEO 339  Geography of the Middle East and
            North Africa  3

   d. Two of the following courses (6 credits):
      GEO 410  Geography of Food and Agriculture  3
      GEO 413  Urban Geography  3
      GEO 414  Geography of Transportation  3
      GEO 415  Location Theory and Land Use Analysis  3
      GEO 418  The Ghetto  3
      GEO 435  Geography of Health and Disease  3
      GEO 436  Spatial Analysis of Populations  3
      GEO 440  Geopolitics  3
      GEO 441  Cultural Geography  3
      GEO 453  Metropolitan Environments: Urban Forms
                and Land Uses  3
      GEO 459  Tourism in Regional Development  3

   e. Three additional credits in GEO courses at the 100-level or above
      approved by the student's academic advisor.
   f. Six additional credits in GEO courses at the 300-level or above
      approved by the student's academic advisor.

Effective Fall 2023.

2. Change the requirements for the Bachelor of Science degree in Sociology in the Department of Sociology.
   a. Under the heading Requirements for the Bachelor of Science Degree in Sociology 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 Sociology.  
         The University’s Tier II writing requirement for the Sociology
         major is met by completing Sociology 488 or 499. Those courses
         are referenced in item 3. a. below.
      2. The requirements of the College of Social Science for the Bachelor of Science degree.
      3. The following required major courses (36 credits):

         a. All of the following courses:
            SOC 100  Introduction to Sociology  4
            SOC 214  Social Inequality  3
            SOC 215  Race and Ethnicity  3
            SOC 216  Sex, Gender, and Sexuality  3
            SOC 281  Social Research Methods  4
            SOC 282  Quantitative Analysis for Social Research  4
            SOC 488  Sociological Theory (W)  3
            SOC 499  Social Issues and Change in Contemporary
                     Society (W)  3

         b. A minimum of 9 credits of additional Sociology courses at the
            300-level or higher, at least 3 credits of which must be at the
            400 level.
4. Complete at least 12 additional credits in STEM:
   a. One of the following courses:
      STT 200  Statistical Methods       3
      STT 201  Statistical Methods       4
      STT 421  Statistics I              3
      The course used to fulfill this requirement may also be used to
      fulfill the College of Social Science STEM requirement.
   b. Three of the following courses:
      CSS 101  Introduction to Crop Science   3
      CSS 210  Fundamentals of Soil Science   3
      ENT 205  Pests, Society, and Environment 3
      FOR 202  Introduction to Forestry       3
      FOR 212  Introduction to Sustainable Bioproducts 3
      FOR 414  Renewable Wood Products       3
      IBIO 150  Integrating Biology: From DNA to
                Populations                        3
      IBIO 355  Ecology                      3
      MMG 141  Introductory Human Genetics   3
      MMG 201  Fundamentals of Microbiology  3
      PSL 250  Introductory Physiology       4
      PSL 310  Physiology for Pre-Health Professionals 4
      PSL 431  Human Physiology I            4
      PSL 432  Human Physiology II           4
      The courses used to fulfill this requirement may also be used to
      fulfill the College of Social Science STEM requirement.

Effective Spring 2023.
PART II - NEW COURSES

DEPARTMENT OF ANTHROPOLOGY

ANP 465  Field Methods in Digital Heritage
Summer of even years. 6(6-0)
REINSTATEMENT Applied experience in the tools and techniques required to creatively apply digital
technology to heritage materials and questions.
Effective Summer Semester 2023

COLLEGE OF ARTS AND LETTERS

DH 450  Digital Humanities Capstone
Fall of even years. Spring of every year. 3(3-0) P: DH 285 R: Open to undergraduate students in the
Digital Humanities Minor.
Create portfolio and professional documents in preparation for life beyond academia and
connect with digital humanities community through lecture and event attendance.
Effective Spring Semester 2023

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY, AND SPECIAL EDUCATION

CEP 856  Learning Design Leadership
Fall of every year. 3(3-0) R: Open to graduate students.
Coaching and mentorship models, project management and communication practices,
conceptualization of how a project moves from idea to evaluation to support learning design
as a leader.
Effective Fall Semester 2023

CEP 857  Current Topics and Trends in Learning Design
Fall of every year. 3(3-0) R: Open to graduate students.
Current and promising practices in learning design, foundational theories and cutting-edge
innovations, social and ethical implications of technology and design, industry standards,
and the needs of instructors, learners, facilitators, and clients.
Effective Fall Semester 2023

CEP 858  Upskilling in Learning Design
Spring of every year. 3(3-0) R: Open to graduate students.
Self-driven exploration and development in learning design, identification of individual goals
for professional growth, building and pursuing a plan to advance knowledge and skills in
those target areas.
Effective Fall Semester 2023

DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

EPI 819  Spatial Epidemiology and Medical Geography
Spring of every year. 3(3-0) Interdepartmental with Geography. P: EPI 810 or GEO 865 R: Open to
graduate students in the Department of Epidemiology and Biostatistics or in the Department of
Geography or approval of department.
REINSTATEMENT Concepts, techniques, and utilization of spatio-epidemiologic analyses for human health.
SA: HM 819
Effective Spring Semester 2023
MSU COLLEGE OF LAW

**LAW 535V** Brand Protection Practicum
On Demand. 0 to 6 credits. P: LAW 533N or LAW 535D R: Open to Law students or law advanced students.
Fundamentals of brand protection, including trademark registration, prosecution, enforcement, infringement, licensing, and overall business and marketing strategy.
Effective Spring Semester 2023

**LAW 580D** Higher Education Law and Policy
On Demand. 0 to 6 credits. R: Open to Law students or law advanced students.
Overview of historic and current cases, statutes, regulations and secondary sources on law and policy that is foundational knowledge for anyone considering a professional role in higher education.
Effective Spring Semester 2023

DEPARTMENT OF MEDICINE

**MED 617** Sleep Medicine
Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: HM 556 RB: FM 641 and MED 641 and OGR 641 and PHD 641 and PSC 641 and SUR 641 and SUR 642 R: Open to graduate-professional students in the College of Human Medicine.
Clinical elective in Sleep Medicine includes ambulatory patient care and interpretation of sleep studies.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
Effective Fall Semester 2022

SCHOOL OF PLANNING, DESIGN AND CONSTRUCTION

**UP 410** Urban Design
Spring of every year. 3(3-0)
Fundamentals of urban design and design tools for planners. Topics such as why aesthetics matter, what good design looks and functions like, and theories of urban design.
Effective Fall Semester 2023

**UP 434** Race and the City
Spring of every year. 2 to 4 credits.
Explores how the city is experienced and imagined differently when using race as our lens. Topics such as racial segregation, concentrated poverty, and public policy structures.
Effective Spring Semester 2023

DEPARTMENT OF RELIGIOUS STUDIES

**REL 208** Black Prophetic Tradition and Social Movements
Fall of every year. 3(3-0)
Historical survey of the foundations of the black freedom movement in North America using pre-colonial history; antebellum history; folk culture (slave narratives, tales, and music); and rhetoric.
Effective Spring Semester 2023

**REL 308** Black Spirituality and Religion
Spring of every year. 3(3-0)
Genealogical survey of Black religious experiences, expressions, motivations, and sources. Study of Black religion and questions of meaning.
Effective Spring Semester 2023
REL 450  Sexuality, Gender, and Religion
Fall of even years. 3(3-0) P: Completion of Tier I Writing Requirement
Seminar-style course that examines how different religious traditions and people understand sexuality and gender and analyzes the scholarship about religion, sexuality, and gender.
Effective Fall Semester 2024
PART III – COURSE CHANGES

DEPARTMENT OF CHEMISTRY

CEM 252  Organic Chemistry II
Fall of every year. Spring of every year. Summer of every year. 3(4-0) P: CEM 251 or LB 271
Not open to students with credit in CEM 352.
Continuation of CEM 251 with emphasis on polyfunctional compounds, particularly those of biological interest.
Effective Fall Semester 2013
Effective Spring Semester 2023

COLLEGE OF HUMAN MEDICINE

HM 639  Northern Wilderness, Emergency and Sports Medicine
Fall of every year. Spring of every year. Summer of every year. 6 credits. R: Open to students in the College of Human Medicine. Approval of college.
Development of knowledge, skills and attitudes to address the needs of patients outside of the hospital with wilderness or sports related injuries.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment. The work for the course must be completed and the final grade reported within 3 semesters after the end of the semester of enrollment.
Effective Summer Semester 2021
Effective Spring Semester 2023

COLLEGE OF MUSIC

MUS 340  Methods and Literature for Voice
Vocal Pedagogy and Methods
Fall of every year. 3(3-0) RB: Four semesters of MUS 151. R: Open to students in the College of Music.
Methods of teaching voice. Literature for both private lessons and classrooms.
Introduction to the basic concepts of vocal pedagogy and the physiology of singing through the study of repertoire, language, vowel production and the art of singing through listening to historic singers.
Effective Fall Semester 2015
Effective Fall Semester 2023

DEPARTMENT OF NEUROLOGY AND OPHTHALMOLOGY

NOP 620  Ophthalmology Clerkship
Fall of every year. Spring of every year. Summer of every year. 1 to 24 credits. A student may earn a maximum of 24 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. RB: Successful completion of College of Osteopathic Medicine, Doctor of Osteopathic Medicine pre-clerkship curriculum. R: Open to graduate-professional students in the College of Osteopathic Medicine.
Study in general or specialty neurology and ophthalmology.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 4 semesters after the end of the semester of enrollment.
Effective Summer Semester 2010
Effective Fall Semester 2022
PART III – COURSE CHANGES

NOP 657  Neurology Specialty Clerkship
Fall of every year. Spring of every year. Summer of every year. 1 to 24 credits. A student may earn a maximum of 51 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine.

Clinical exposure in specialties of Neurology. Proficiency in motor skills and aptitudes; comprehension of concepts and principles; patient evaluation; diagnosis; management; therapy.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 4 semesters after the end of the semester of enrollment.
Effective Summer Semester 2014 Effective Fall Semester 2022

DEPARTMENT OF OSTEOPATHIC MEDICAL SPECIALTIES

IM 621  Clinical Tropical Medicine Clerkship
Spring of every year. 1 to 20 credits. A student may earn a maximum of 20 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. RB: IM 618 R: Open to graduate-professional students in the College of Osteopathic Medicine.
Supervised clinical experiences in a large African teaching hospital and its outpatient clinics; students must spend at least six weeks on site. Small group discussions led by MSU faculty.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
SA: CMS 621 Effective Fall Semester 2013 Effective Fall Semester 2022

IM 666  Emergency Medicine Toxicology
Fall of every year. Spring of every year. Summer of every year. 3 to 18 credits. A student may earn a maximum of 18 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine.
Evaluation and management of patients who suffer from an exposure to any form of toxins, the typical clinical presentation, evaluation and management including antidotes.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 4 semesters after the end of the semester of enrollment.
Effective Summer Semester 2014 Effective Fall Semester 2022

IM 667  Emergency Medicine Hyperbaric Medicine and Wound Management
Fall of every year. Spring of every year. Summer of every year. 3 to 18 credits. A student may earn a maximum of 18 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine.
Management of wounds from all causes, including the use of a hyperbaric chamber as a treatment strategy.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 4 semesters after the end of the semester of enrollment.
Effective Summer Semester 2014 Effective Fall Semester 2022
IM 668  Emergency Medicine EMS and Disaster Management  
Fall of every year. Spring of every year. Summer of every year. 3 to 18 credits. A student may earn a maximum of 18 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine.  
Emergency Medical Services and Disaster Management designed to expose the student to multiple facets of emergency care in the community and outside the emergency department, including community disaster preparedness.  
Request the use of the Pass-No Grade (P-N) system.  
Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 4 semesters after the end of the semester of enrollment.  
*Effective Summer Semester 2014 Effective Fall Semester 2022*  

IM 669  Emergency Medicine Ultrasound  
Fall of every year. Spring of every year. Summer of every year. 3 to 18 credits. A student may earn a maximum of 18 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine.  
Bedside ultrasound, integrating curriculum related to the physics and orientation of ultrasound images to obtaining images at the bedside to begin a portfolio.  
Request the use of the Pass-No Grade (P-N) system.  
Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 4 semesters after the end of the semester of enrollment.  
*Effective Summer Semester 2014 Effective Fall Semester 2022*  

COLLEGE OF OSTEOPATHIC MEDICINE  

OST 604  Essential Clinical Skills for the Senior Medical Student  
Fall of every year. Spring of every year. Summer of every year. 1 to 2 credits. 2(1-2) Interdepartmental with Osteopathic Manipulative Medicine. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open to seniors in the College of Osteopathic Medicine.  
Longitudinal experience addressing essential skills for senior osteopathic medical students.  
Request the use of the Pass-No Grade (P-N) system.  
Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.  
*Effective Summer Semester 2019 Effective Summer Semester 2023*  

OST 615  Biomedical Research Clerkship  
Fall of every year. Spring of every year. Summer of every year. 3 to 18 credits. A student may earn a maximum of 18 credits in all enrollments for this course. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine. Approval of college.  
Mentored exposure to either basic or clinical research and development of skills to perform clinical or basic science research. Research topic is arranged with the research director or clinician researcher.  
Request the use of the Pass-No Grade (P-N) system.  
Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.  
*Effective Summer Semester 2013 Effective Fall Semester 2022*
DEPARTMENT OF PEDIATRICS

PED 601  Pediatrics Specialty Clerkship
Fall of every year. Spring of every year. Summer of every year. 3 to 24 credits. A student may earn a maximum of 24 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Osteopathic Medicine.
Clinical exposure in specialties of Pediatrics. Proficiency in motor skills and aptitudes; comprehension of concepts and principles; patient evaluation; diagnosis; management; therapy.
Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
Effective Summer Semester 2018 Effective Fall Semester 2022

DEPARTMENT OF PSYCHOLOGY

PSY 899  Master's Thesis Research
Fall of every year. Spring of every year. Summer of every year. 1 to 8 credits. A student may earn a maximum of 35 credits in all enrollments for this course. R: Open only to graduate students in the Department of Psychology. R: Open to graduate students in the Department of Psychology.
Master's thesis research.
Request the use of the Pass-No Grade (P-N) system.
Effective Summer Semester 2003 Effective Fall Semester 2023