SHORT REPORT of the UNIVERSITY COMMITTEE ON CURRICULUM (UCC)
September 8, 2020
To view the full UCC Report visit: www.reg.msu.edu/Read/UCC/fs090820.pdf
PROGRAM ACTIONS

Highlights:

Communication Leadership and Strategy, B.A., effective Fall 2020
Cyber Criminology and Cyber Security, Graduate Certificate, effective Fall 2020
Games and Interactive Media, B.A., effective Fall 2020
Information Science, B.A., effective Fall 2020
Music Cognition, Graduate Certificate, effective Fall 2020
Social Science, 3 + 3 Option, effective Fall 2020

College	Department	Program Name	Award Type	Action
Agriculture and Natural Resources	Agricultural, Food, and Resource Economics	Agricultural, Food, and Resource Economics	M.S.	C
			Ph.D.	C
	Food Science	Food Science	M.S.	C
			Ph.D.	C
Arts and Letters		Second Language Studies	Ph.D.	C
	English	English	Ph.D.	C
		Literature in English	M.A.	C
	Linguistics & Germanic, Slavic, Asian and African Language	German Studies	M.A.	C
			Ph.D.	C
		Teaching English to Speakers of Other Languages	M.A.	C
	Romance and Classical Studies	Italian - Secondary	Disciplinary Teaching Minor	D
	Women, Gender and Social Justice	Women's and Gender Studies	B.A.	C
Business		Business Administration	M.B.A.	C
		Corporate Master of Business Administration	M.B.A.	D
	Hospitality Business	Hospitality Business	B.A.	C
Communication Arts and Sciences	Communication	Communication Leadership and Strategy	B.A.	N

College	Department	Program Name	Award Type	Action
Communication Arts and Sciences	Media and Information	Games and Interactive Media	B.A.	N
		Information Science	B.A.	N
Education	Counseling, Educational Psychology and Special Education	Applied Behavior Analysis in Special Education	Certificate	C
Engineering	Chemical Engineering and Materials Science	Chemical Engineering	M.S.	C
			Ph.D.	C
		Materials Science and Engineering	Ph.D.	C
	Computer Science and Engineering	Computer Science	M.S.	C
			Ph.D.	C
Human Medicine		Human Medicine	M.D.	C
Music		Music Cognition	Certificate	N
Natural Science		Genetics and Genome Sciences	M.S.	C
			Ph.D.	C
	Biochemistry and Molecular Biology	Biochemistry and Molecular Biology	B.S.	C
			M.S.	C
			Ph.D.	C
		Biochemistry and Molecular Biology/Biotechnology	B.S.	C
	Biomedical Laboratory Diagnostics Program	Biomedical Laboratory Operations	M.S.	C
		Biomedical Laboratory Science	M.A.	C
		Clinical Laboratory Sciences	M.S.	C
	Chemistry	Chemistry	M.S.	C
	Computational Mathematics, Science, and Engineering	Computational Mathematics, Science, and Engineering	Minor	C
	Integrative Biology	Integrative Biology	M.S.	C

College	Department	Program Name	Award Type	Action
Natural Science	Integrative Biology	Integrative Biology	Ph.D.	C
	Microbiology and Molecular Genetics	Microbiology and Molecular Genetics	M.S.	C
Osteopathic Medicine		Ostseopathic Medicine	D.O.	C
	Pharmacology and Toxicology	Integrative Pharmacology	M.S.	C
		Pharmacology and Toxicology	M.S.	C
			Ph.D.	C
		Safety Pharmacology	Certificate	C
Social Science		Chicano/Latino Studies	Certificate	C
			Ph.D.	C
		Environmental Science and Policy	Specialization	D
		Judicial Administration	M.S.	D
		Social Science 3 + 3	Option	N
	Criminal Justice	Cyber Criminology and Cyber Security	Certificate	N
	History	History	M.S.	C
			Ph.D.	C
	Human Development and Family Studies	Human Development and Family Studies	Ph.D.	C
	Human Resources and Labor Relations	Human Resources and Labor Relations	Ph.D.	C
	Planning, Design and Construction	Linked Urban and Regional Planning	B.S./M.U.R.P.	N
		Urban and Regional Planning	M.U.R.P.	C
	Psychology	Program Evaluation	Certificate	C
			M.A.	C
		Psychology	M.A.	C
			Ph.D.	C

College	Department	Program Name	Award Type	Action
Social Science	Sociology	Sociology	Ph.D.	C

C = Change   D=Deletion   N=New

	Totals	New:	7	Change:	51	Deletion:	4

COURSE ACTIONS
September 8, 2020

College	Department	Subject	New	Changes	Deleted
Agriculture and Natural Resources	Planning, Design, & Construction	PDC	1	0	0
	Plant Soil and Microbial Sciences	CSS	0	3	0
Arts and Letters	English	ENG	1	0	0
	Linguistic,Germ,Slavic,Asian&Afr Lg	LLT	0	4	0
Business	Hospitality Business	HB	2	30	1
	Department of Supply Chain Mgt	SCM	0	1	0
Communication Arts and Sciences	Communication	COM	3	0	0
	Journalism	JRN	1	1	0
Education	Kinesiology	KIN	1	0	0
Human Medicine	Human Medicine Dean	HM	6	5	0
Natural Science	Biomedical Laboratory Diagstcs Prog	BLD	0	1	0
	Neuroscience Program	NEU	1	0	0
Osteopathic Medicine	Osteopathic Medical Specialties COM	IM	1	0	0
	Osteopathic Medicine Dean	OST	0	1	0
Social Science	Anthropology	ANP	0	2	0
	Criminal Justice	CJ	4	5	6
	Economics	EC	0	1	0
Total			**21**	**54**	**7**

INFORMATION ITEMS
September 8, 2020

Moratorium –

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

Discontinuation –

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

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

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

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

Other –

None.

MICHIGAN STATE UNIVERSITY

Report of

THE UNIVERSITY COMMITTEE ON CURRICULUM

to the Faculty Senate

September 8, 2020

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

MICHIGAN STATE UNIVERSITY
University Committee on Curriculum

September 8, 2020

TO: Faculty Senate

This report is prepared and distributed for the following purposes:

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

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

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES:

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

PART II - NEW COURSES:[1]

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

PART III - COURSE CHANGES:[1]

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

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

[1]One or more of the abbreviations that follow may be included in a course entry:
  P: =   Prerequisite monitored in SIS
  C: =   Corequisite
  R: =   Restriction
  RB: =   Recommended background
  SA: = Semester Alias

MICHIGAN STATE UNIVERSITY

September 8, 2020

TO: Faculty Senate

FROM: University Committee on Curriculum

SUBJECT: New Academic Programs and Program Changes:
               New Courses and Course Changes

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

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

   a.   Add the following **Admission** section:

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

   Several criteria are used to evaluate applications including:

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

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

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

   (1)   Under the heading **Requirements for Both Plan A and Plan B**, replace the entire entry with the following:

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

c.   Add the following **Guidance Committee** section:

New students are assigned a temporary major professor by the Graduate Program Director, in consultation with the student and faculty member. The student is responsible for assembling a long-term major professor and guidance committee via consultation with faculty and, if desired, the Graduate Program Director. Students must have a major professor and guidance committee by the end of their second semester. The guidance committee consists of at least three members, two from the Department of Agricultural, Food and Resource Economics and one from outside the department.

Effective Fall 2020.

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

a.   Add the following **Admission** section:

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

Several criteria are used to evaluate applications including:

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

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

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

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

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

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

2.   Complete 9 credits in one of three major fields in Agricultural, Food and Resource Economics: development economics, environmental and resource economics, or food and agricultural economics.
3.   Complete an additional 12 credits of advanced course work at the 800- or 900-level, at least 6 credits must be AFRE courses.
4.   Complete a minimum of 24 credits of AFRE 999 Doctoral Dissertation Research.
5.   Pass written qualifying examinations in microeconomic theory and econometrics no later than the end of the second year.
6.   Pass the comprehensive examination no later than the end of the third year.
7.   Present and obtain formal approval for the proposed dissertation research by the end of the fourth year.
8.   Pass a final oral examination at which the student presents their dissertation results.
9.   Attend at least 6 AFRE (or joint AFRE-EC) seminars in any single academic year before the end of the fourth year.

10. Have a grade point average of at least 3.0 in the student's approved course program before the student can be certified for graduation. Collateral courses are not included in this calculation.

c. Add the following **Guidance Committee** section:

New students are assigned a temporary major professor by the Graduate Program Director, in consultation with the student and faculty member. The student is responsible for assembling a long-term major professor and guidance committee via consultation with faculty and, if desired, the Graduate Program Director. Students must have a major professor and guidance committee by the end of their third semester. The guidance committee consists of at least four members, three from the Department of Agricultural, Food and Resource Economics and one from outside the department.

Effective Fall 2020.

3. Change the requirements for the **Master of Science** degree in **Food Science** in the Department of Food Science and Human Nutrition. The University Committee on Graduate Studies approved this request at its April 13, 2020 meeting.

a. Under the heading *FOOD SCIENCE* replace the entire entry with the following:

Admission

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

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

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

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

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

Requirements for the Master of Science Degree in Food Science

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

Students must:
1. Complete 16 credits at the 800-level or above. Two courses (6 credits) must be FSC courses excluding FSC 890, 892, 898, and 899. Focus areas of courses will be selected in consultation with the student's guidance committee.
2. Complete 1 credit of FSC 892 Food Science Seminar, in which students will present one seminar. Students may re-enroll in FSC 892 for a maximum of 2 credits towards the master's degree.

3. Complete a total of at least 15 credits in upper-level courses in each of the following areas: food processing, food engineering, food chemistry, food safety, and food microbiology. 400-level courses taken in these areas may be counted if approved in advance by the advisor, guidance committee, and Director of Graduate Studies.

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

Additional Requirements for Plan B
1. Complete 1 to 5 credits of FSC 898 Master's Research.
2. Complete an oral examination with the guidance committee.

Effective Fall 2020.

4. Change the requirements for the **Doctor of Philosophy** degree in **Food Science** in the Department of Food Science and Human Nutrition. The University Committee on Graduate Studies approved this request at its April 13, 2020 meeting.

a. Under the heading **FOOD SCIENCE** replace the entire entry with the following:

Admission

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

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

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

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

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

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

Requirements for the Doctor of Philosophy Degree in Food Science

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

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

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

Effective Fall 2020.

COLLEGE OF ARTS AND LETTERS

1.   Change the requirements for the **Doctor of Philosophy** degree in **Second Language Studies** in the College of Arts and Letters. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

   a.   Under the heading **Requirements for the Doctor of Philosophy Degree in Second Language Studies** make the following changes:

      (1)   Replace item 2. delete the following course:

LIN	875	Advanced Studies in Computational Linguistics	3

Add the following courses:

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

        (2)   Add the following sentence to item 3.:

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

Effective Fall 2020.

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

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

        (1)   Replace item 1. with the following:

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

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

        (2)   In item 2. change the credits from '24' to '21'.

Effective Fall 2020.

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

    a.   Under the heading **Requirements for the Doctor of Philosophy Degree in English** make the following changes:

        (1)   Replace item 1. with the following:

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

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

        (2)   In item 2., change the credits from '21' to '18'.

Effective Fall 2020.

4.   Change the requirements in the **Master of Arts** degree in **German Studies** in the Department of Linguistics and Germanic, Slavic, Asian and African Languages. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

    a.   Under the heading **Admission** delete the following in paragraph one:

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

    b.   Under the heading **Requirements for the Master of Arts Degree in German Studies** make the following change:

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

GRM	810	Theory and Practice of Teaching German	3

             Add the following course:

LLT	807	Language Teaching Methods	3

      Effective Fall 2020.

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

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

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

      Effective Fall 2020.

6.   Change the requirements for the **Master of Arts** degree in **Teaching English to Speakers of Other Languages** in the Department of Linguistics and Germanic, Slavic, Asian and African Languages. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

      a.   Under the heading **Requirements for the Master of Arts Degree in Teaching English to Speakers of Other Languages** make the following changes:

             (1)   In item 1., change the total credits from '24' to '21' and delete the following course:

LLT	841	Topics in Second/Foreign Language Learning and Teaching	3

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

             3.   One TESOL related elective (3 credits).

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

             1.   Two TESOL related electives (6 credits).

      Effective Fall 2020.

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

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

8.   Change the requirements for the **Bachelor of Arts** degree in **Women's and Gender Studies** in the
        Program in Women, Gender and Social Justice.

        a.   Under the heading **Requirements for the Bachelor of Arts Degree in Women's and Gender
                Studies** make the following changes:

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

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

                        Add the following courses:

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

                (2)   In item 3. c. under *Gender, Race, Ethnicity, and History* delete the following courses:

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

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

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

                        Add the following courses:

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

                (4)   In item 3. c. under *Gender and the Arts and Humanities* delete the following courses:

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

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

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

Add the following courses:

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

Effective Fall 2020.

ELI BROAD COLLEGE OF BUSINESS

1.   Change the requirements for the **Master of Business Administration** degree in the Eli Broad College of Business. The University Committee on Graduate Studies (UCGS) approved this request at their April 13, 2020 meeting.

The concentrations in the Master of Business Administration degree are noted on the student's academic record when the requirements for the degree have been completed.

a.   Under the heading **Requirements for the Master of Business Administration Degree** make the following changes:

(1)   In item 1. a., add the following:

MBA	802	Financial Accounting and Reporting Strategy	1.5
MBA	804	Applied Data Analysis for Managers	1.5
MBA	808	Leadership and Teamwork	1.0
MBA	812	Accounting for Decision-Making and Control	1.5
MBA	814	Applied Economics	1.5
MBA	816	Managerial Communication Strategy and Tactics	1.5
MBA	817	Designing and Delivering Impactful Business Presentations	1.5
MBA	820	Marketing Management	1.5
MBA	821	Introduction to Supply Chain Management Concepts	1.5
MBA	822	Corporate Investment Decisions	1.5
MBA	823	Information Technology Strategy	1.5
MBA	824	Managing the Workforce	1.5
MBA	830	Marketing Strategy Execution	1.5
MBA	831	Supply Chain Management Applications	1.5
MBA	832	Corporate Financing Decisions	1.5
MBA	843	Career Management	1.0
MBA	845	Integrative Action Projects	4.0
MBA	846	MBA Executive Lecture Series	1.0
MBA	850	Strategic Management	1.5

Effective Fall 2020.

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

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

3.   Change the requirements of the **Bachelor of Arts** degree in **Hospitality Business** in The School of Hospitality Business. The University Committee on Undergraduate Education (UCUE) approved this request at its March 26, 2020 meeting.

     a.   Under the heading **Admission** replace item 2. b. with the following:

        Statistics 200 or approved substitution.

     b.   Under the heading **Requirements for the Bachelor of Arts Degree Hospitality Business** make the following changes:

        (1)   In item 1., paragraph three, delete Statistics and Probability 201.

        (2)   Replace item 2. with the following:

The following requirements for the major:

a. **Hospitality Business Core**. All of the following courses (21 credits):

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

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

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

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

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

c. One hospitality business international elective course approved by the student's academic advisor (3 credits)

d. A minimum of 12 credits in hospitality business specialized electives selected from the following:

Events

HB	349	Hospitality Facilities Management	3
HB	380	Event Planning and Management	3
HB	420	The Business of Golf	3
HB	485	Hospitality Foodservice Operations	3

Food and Beverage

HB	345	Hospitality Food Production Systems	3
HB	345L	Hospitality Food Production Systems Lab	1
HB	347	Hospitality Supply Chain Process	3
HB	349	Hospitality Facilities Management	3
HB	405	Hospitality Foodservice Cost Control	3
HB	409	Introduction to Wine	3

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

Effective Summer 2021.

COLLEGE OF COMMUNICATION ARTS AND SCIENCES

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

   a.   **Background Information:**

   The Bachelor of Arts degree in Communication Leadership and Strategy (CLS) will train students in the integrated and purposeful use of communication theory and methods, primarily derived from interpersonal, social influence, organizational, and mass communication, as well as research methods, to achieve expansive goals and outcomes in support of organizational grand strategy. The field involves comprehensive audience and information-environment analysis, and leverages multiple communication competencies to inform, influence, and motivate internal and external stakeholders.

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

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

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

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

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

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

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

b.   **Academic Programs Catalog Text:**

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

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

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

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

2.   The requirements of the College of Communication Arts and Sciences for the Bachelor of Arts degree.

3.   The following requirements for the major:

CREDITS

a.   All of the following courses (38 credits):

COM	100	Human Communication	3
COM	225	An Introduction to Interpersonal Communication	3
COM	240	Introduction to Organizational Communication	4
COM	275	Effects of Mass Communication	3
COM	280	Principles, Practices and Ethics of Strategic Communication	4
COM	300	Methods of Communication Inquiry	4
COM	325	Interpersonal Influence and Conflict	3
COM	340	Leadership and Group Communication	3
COM	380	Crisis Communication and Rapid Response	3
COM	475	Communication Campaign Design and Analysis (W)	4
COM	480	Capstone in Communication Leadership and Strategy	4

b.   One course from each of the following areas (9 credits):

Research Methods and Analytics

ADV	442	Digital Analytics	3
COM	301	Special Topics in Communication Science, Analytics and Research Methods	3
MI	220	Methods for Understanding Users	3
MI	350	Evaluating Human-Centered Technology	3
MI	355	Media and Information Research	3
PLS	202	Introduction to Data Analytics and the Social Sciences	3
PSY	295	Data Analysis in Psychological Research	3
PSY	342	Stereotypes, Prejudice, and Discrimination	3
SOC	281	Social Research Methods	4
SOC	282	Quantitative Analysis for Social Research	4
STT	200	Statistical Methods	3

Computer-Mediated Communication and Social Media

ADV	420	New Media Driver's License	3
ADV	431	Monitoring and Measuring Social Media of Brands	3
COM	302	Special Topics in Health Communication	3
COM	304	Special Topics in Interpersonal Communication	3
COM	305	Special Topics in Mediated Communication	3
JRN	203	Visual Storytelling	3
MI	101	Understanding Media and Information	3
MI	201	Introduction to Information Science	3
MI	305	Media and Information Policy	3
MI	462	Social Media and Social Computing	3

Culture and Diversity

ANP	200	Navigating Another Culture	2
COM	310	Intercultural Communication	3
COM	320	Diversity and Communication	3
COM	440	Organizational Communication Structure (W)	4
JRN	475	International News and Government Dynamics	3
MI	480	Information and Communication Technologies and Development	3
PR	310	Diversity, Equity, and Inclusion in Public Relations and Advertising	3
PSY	342	Stereotypes, Prejudice, and Discrimination	3

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

Effective Fall 2020.

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

    a.   **Background Information:**

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

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

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

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

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

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

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

    b.   **Academic Programs Catalog Text:**

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

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

Admission

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

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

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

3. A cumulative grade-point average of 2.0.

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

1. The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of the catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Games and Interactive Media.
   The University's Tier II writing requirement for the Games and Interactive Media major is met by completing one of the following courses: Media and Information 402, 430, 447, 477, 482, 484, 486, or 498 . Those courses are referenced in item 3. below.
2. The requirements of the College of Communication Arts and Sciences for the Bachelor of Arts degree.
3. The following requirements for the major (36 credits):

CREDITS

a. All of the following courses (12 credits):

CAS	116	Media Sketching and Graphics	3
CAS	117	Games and Interactivity	3
MI	101	Understanding Media and Information	3
MI	339	Games and Society	3

b. Two of the following courses (6 credits):

MI	201	Introduction to Information Science	3
MI	220	Methods for Understanding Users	3
MI	301	Bringing Media to Market	3
MI	305	Media and Information Policy	3
MI	355	Media and Information Research	3

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

Game Design

MI	230	Game Design	3
MI	330	Game Level Design	3
MI	332	Game Interface Design	3
MI	334	eSports and Online Broadcasting	3
MI	344	Sound Design for Cinema, Television, and Games	3
MI	402	Topics in Game Studies	3
MI	430	Game Writing (W)	3
MI	445	Game Design and Development I	3
MI	455	Game Design and Development II	3
MI	482	Building Virtual Worlds (W)	3
MI	486	Serious Game Design (W)	3
MI	497	Game Design Studio	3
MI	498	Collaborative Game Design (W)	3

Game Graphics and Animation

MI	227	Concept Design for Games, Film, and TV	3
MI	247	Three-Dimensional Graphics and Design	3
MI	327	Advanced Concept Design for Games, Film, and TV	3
MI	337	Compositing and Special Effects	3
MI	347	Advanced Three-Dimensional Computer Animation	3
MI	377	Advanced 3D Modeling	3

MI	447	Graphics and Animation Portfolio (W)	3
MI	477	Character Design (W)	3

Game Development

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

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

Effective Fall 2020.

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

    a.   **Background Information:**

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

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

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

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

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

b.   **Academic Programs Catalog Text:**

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

Requirements for the Bachelor of Arts Degree in Information Science

1.   The University requirements for bachelor's degrees as described in the *Undergraduate Education* section of the catalog; 120 credits, including general elective credits, are required for the Bachelor of Arts degree in Information Science.
        The University's Tier II writing requirement for the Information Science major is met by completing one of the following courses: Media and Information 401, 450, or 488. Those courses are referenced in item 3. below.
2.   The requirements of the College of Communication Arts and Sciences for the Bachelor of Arts degree.
3.   The following requirements for the major:

				CREDITS
a.	All of the following core courses (9 credits):			
	MI	101	Understanding Media and Information	3
	MI	201	Introduction to information Science	3
	MI	304	Information and Society	3
b.	Two of the following methods courses (6 credits):			
	MI	220	Methods of Understanding Users	3
	MI	320	Reasoning with Data	3
	MI	355	Media and Information Research	3
	MI	425	Advanced Data Analysis	3
c.	Six courses from the following focus areas with at least four courses in the same focus area and at least one course from a different focus area (18 credits):			
	Human-Centered Technologies			
	MI	250	Introduction to Applied Programming	3
	MI	349	Web Design and Development	3
	MI	350	Evaluating Human-Centered Technology	3
	MI	420	Interactive Prototyping	3
	MI	449	Advanced Web Development and Database Management	3
	MI	450	Creating Human-Centered Technology (W)	3
	Media and Information			
	ITM	444	Information Technology Project Management	3
	MI	349	Web Design and Development	3
	MI	360	Media and Information Management	3
	MI	361	IT Network Management and Security	3
	MI	401	Topics in Information Science (W)	3
	MI	449	Advanced Web Development and Database Management	3
	MI	452	Media Entrepreneurship and Business Strategies	3
	MI	462	Social Media and Social Computing	3
	MI	472	Digital Business and Commerce	3
	Information and Society			
	MI	239	Digital Footprints: Privacy and Online Behavior	3
	MI	302	Networks, Markets, and Society	3
	MI	305	Media and Information Policy	3
	MI	401	Topics in Information Science (W)	3
	MI	462	Social Media and Social Computing	3
	MI	480	Information and Communication Technologies and Development	3

| | MI | 488 | Information and Communication Technology Development Project (W) | 3 |

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

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

Effective Fall 2020.

COLLEGE OF EDUCATION

1.   Change the requirements for the **Graduate Certificate** program in **Applied Behavior Analysis in Special Education** in the Department of Counseling, Educational Psychology, and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

    a.   Under the heading **Graduate Certificate in Applied Behavior Analysis in Special Education** make the following changes:

        (1)   Change the total credits from '24' to '21'.

        (2)   Delete the following course:

| CEP | 846 | Autism Spectrum Disorders: Advanced Topics | 3 |

Effective Fall 2020.

COLLEGE OF ENGINEERING

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

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

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

| CHE | 802 | Research Methods | 3 |

        (2)   Add the following item 3.:

Complete 2 credits of CHE 892 Seminar.

Effective Summer 2020.

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

      a.   Under the heading **Admission** add the following paragraph:

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

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

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

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

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

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

            2.   Complete 5 credits of CHE 992 Seminar.

            3.   Students entering the program with a master's degree must complete 12 additional credits in consultation with the guidance committee. Students may receive a waiver for some of the required courses. Students who have a bachelor's degree are required to complete a minimum of 16 additional credits chosen in consultation with the guidance committee.

            4.   Pass a qualifying examination consisting of a written component and an oral component.

            5.   Pass a comprehensive examination in the form of a research proposal defense containing a written proposal and an oral defense.

            6.   Complete a minimum of 24 credits and no more than 36 credits of CHE 999 Doctoral Dissertation Research and successfully defend the dissertation.

            7.   Present the results of the research in a public seminar during the final oral examination.

      Effective Fall 2020.

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

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

            (1)   Under the heading **Requirements for Both Plan A and Plan B** replace the entire entry with the following:

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

                    System Design and Analysis

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

CSE	824	Advanced Computer Networks and Communications	3
CSE	825	Computer and Network Security	3
CSE	870	Advanced Software Engineering	3

Theory and Algorithms

CSE	830	Design and Theory of Algorithms	3
CSE	835	Algorithmic Graph Theory	3
CSE	836	Probabilistic Models and Algorithms in Computational Biology	3
CSE	860	Foundations of Computing	3

Data Analysis and Applications

CSE	802	Pattern Recognition and Analysis	3
CSE	803	Computer Vision	3
CSE	841	Artificial Intelligence	3
CSE	842	Natural Language Processing	3
CSE	843	Language and Interaction	3
CSE	845	Multidisciplinary Research Methods for the Study of Evolution	3
CSE	847	Machine Learning	3
CSE	848	Evolutionary Computing	3
CSE	872	Advanced Computer Graphics	3
CSE	881	Data Mining	3

(2)   Under the heading **Additional Requirements for Plan A** replace the entire entry with the following:

The student must complete:

1.   A minimum of 21 credits in 800-900 level course courses chosen in consultation with the student's advisor, excluding Computer Science and Engineering 801, 890, 898, and 899.
2.   At least 6, but not more than 8, credits of CSE 899 Master's Thesis Research.

(3)   Under the heading **Additional Requirements for Plan B** replace the entire entry with the following:

1.   Complete a minimum of 24 credits in 800-900 level courses chosen in consultation with the student's advisor, excluding Computer Science 801, 890, 898, and 899.

Effective Summer 2020.

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

a.   Under the heading **Requirements for the Doctor of Philosophy Degree in Computer Science** replace the entire entry with the following:

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

System Design and Analysis

CSE	812	Distributed Systems	3
CSE	820	Advanced Computer Architecture	3
CSE	822	Parallel Computing	3
CSE	824	Advanced Computer Networks and Communications	3
CSE	825	Computer and Network Security	3
CSE	870	Advanced Software Engineering	3

Theory and Algorithms

CSE	830	Design and Theory of Algorithms	3
CSE	835	Algorithmic Graph Theory	3
CSE	836	Probabilistic Models and Algorithms in Computational Biology	3
CSE	860	Foundations of Computing	3

Data Analysis and Applications

CSE	802	Pattern Recognition and Analysis	3
CSE	803	Computer Vision	3
CSE	841	Artificial Intelligence	3
CSE	842	Natural Language Processing	3
CSE	843	Language and Interaction	3
CSE	845	Multidisciplinary Research Methods for the Study of Evolution	3
CSE	847	Machine Learning	3
CSE	848	Evolutionary Computing	3
CSE	872	Advanced Computer Graphics	3
CSE	881	Data Mining	3

4. Complete a minimum of 24 credits in 800-900 level courses chosen in consultation with the student's advisor, excluding Computer Science 801, 890, 898, and 899.

5. Pass a qualifying examination consisting of a written and an oral part, generally within two years of beginning the Ph.D. program.

6. Pass the comprehensive examination that includes a program statement presenting the student's learning and professional background and goals, and provides a rationale for the students declared focus areas.

7. Complete 24 credits of CSE 999 Doctoral Dissertation Research and successfully defend the dissertation. Present the results of the research in a public seminar during the final oral examination.

Effective Summer 2020.

5. Change the requirements in the **Doctor of Philosophy** degree in **Materials Science and Engineering** in the Department of Chemical Engineering and Materials Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

   a. Under the heading **Admission** add the following paragraph:

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

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

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

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

CHE	802	Research Methods	1
MSE	851	Thermodynamics of Solids	3

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

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

Effective Summer 2020.

COLLEGE OF HUMAN MEDICINE

1. Change the requirements for the **Professional Program in Human Medicine** leading to the **Doctor of Medicine** (M.D.) degree. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

    a. Under the heading **PROGRAM IN HUMAN MEDICINE** make the following changes:

        (1) Under the heading **Admission to the Program in Human Medicine** replace the 'Minimum requirements which must be fulfilled prior to enrollment in the program in human medicine' with the following:

             1. Be a U.S. or Canadian citizen or permanent resident of the United States.
             2. Have a valid U.S. or Canadian Driver's License and reliable vehicle upon matriculation.
             3. Have completed at least a four-year high school education or equivalent.
             4. Have completed all premedical requirements, including a bachelor's degree earned in the U.S. or Canada.
             5. Have taken the Medical College Admission Test (MCAT).
             6. Have taken the CASPer Test.

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

        (2) Under the heading **Requirements for the Doctor of Medicine Degree** add the following:

             1. All of the following courses (132 credits):

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

	MED	641	Internal Medicine Clerkship in the Late Clinical Experience	6
	OGR	641	Obstetrics and Gynecology Clerkship in the Late Clinical Experience	6
	PHD	641	Pediatric Clerkship in the Late Clinical Experience	6
	PSC	641	Psychiatry and Behavioral Science Clerkship in the Late Clinical Experience	6
	SUR	641	Surgery in the Late Clinical Experience I	6
	SUR	642	Surgery in the Late Clinical Experience II	6
2.	One of the following Critical Care Selective courses (6 credits):			
	MED	643	Medicine Critical Care	6
	PHD	643	Pediatric Critical Care	6
	SUR	643	Surgical Critical Care	6
3.	One of the following Primary Care Selective courses (6 credits):			
	FM	610	Outpatient Family Medicine Clerkship	6
	FM	611	Geriatric Clerkship	6
	FM	616	Rural Family Practice Elective	6
	FM	617	Sports Medicine Clerkship	6
	FM	618	Palliative and End of Life Care Clerkship	6
	MED	619	Advanced Internal Medicine-Ambulatory	6
	MED	624	Geriatric Clerkship	6
	MED	636	Advanced Internal Medicine: Medicine/Pediatrics	6
	PHD	602	Ambulatory Pediatric Clerkship	6
4.	Completion of 20 weeks of Elective Clerkships (30 credits):			
	ANTR	685	Directed Study in Clinical Prosection	3 or 6
	EM	630	Emergency Medicine Clerkship	6
	EM	631	Clinical Experience in Emergency Medicine	3 or 6
	EM	632	Senior Clinical Elective in Emergency Medicine	6
	EM	633	Emergency Medicine Sub-Specialty Clinical Elective	3 or 6
	FM	610	Outpatient Family Medicine Clerkship	3 or 6
	FM	611	Geriatric Clerkship	3 or 6
	FM	612	Inpatient Family Medicine Clerkship	3 or 6
	FM	613	Clinical Research in Family Practice	6
	FM	616	Rural Family Practice Elective	6
	FM	617	Sports Medicine Clerkship	3 or 6
	FM	618	Palliative and End of Life Care Clerkship	3 or 6
	FM	620	Family Practice Subinternship	6
	HM	608	Sub-Specialty Clerkships	6
	HM	609	Laboratory Medicine Clerkship	3 or 6
	HM	610	Pathology Clerkship	3 or 6
	HM	611	Hospice Clerkship	3 or 6
	HM	612	Pain Medicine	3 or 6
	HM	613	Complementary Medicine Clerkship	3 or 6
	HM	614	Student-Designed Elective Clerkship	3 or 6
	HM	615	Global Health Experience in India	3 or 6
	HM	616	Radiation Oncology Clerkship	3 or 6
	HM	622	Medical Partners in Public Health Community Resources and Wellness Programs	3 or 6
	HM	623	Medical Partners in Public Health Capstone Project Elective	3 or 6
	HM	629	Leadership in Medicine for the Underserved Community Elective	3 or 6
	HM	631	Leadership in Medicine for Underserved Urban or Global Elective	3 or 6
	HM	632	Rural Community Health	3 or 6
	HM	633	Advanced Rural Community Health	3 or 6
	HM	639	Northern Wilderness, Emergency and Sports Medicine	6
	HM	691	Research Clerkship	3 or 6
	MED	609	Hematology Clerkship	3 or 6
	MED	610	Oncology Clerkship	3 or 6
	MED	611	Cardiology Clerkship	3 or 6
	MED	612	Nephrology Clerkship	3 or 6
	MED	613	Dermatology Clerkship	3 or 6

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

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

Effective Fall 2020.

COLLEGE OF MUSIC

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

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

a.   **Background Information**:

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

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

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

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

b.   **Academic Programs Catalog Text**:

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

Admission

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

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

Requirements for the Graduate Certificate in Music Cognition

CREDITS

The student must complete 11 to 14 credits from the following:
1.   Both of the following courses (5 credits):
   MUS   973   Readings in Music Theory   2
   PSY   802   Basic Cognitive Processes   3
2.   One of the following courses (2 or 3 credits):
   MUS   868   Topics in Music Analysis   3
   MUS   872   Tonal Forms   2
   MUS   879   Tonal Literature and Analysis   3
3.   One of the following courses (3 credits)
   PSY   801   Sensation and Perception   3
   PSY   803   Higher Order Cognitive Processes   3
   PSY   867   Nature and Practice of Cognitive Science   3
   PSY   992   Seminar in Psychology   3
4.   Active participation in relevant music theory area events, including colloquia and guest lectures, and active participation in the Timing, Attention and Perception Lab (TAP lab) including relevant events in the Psychology/Cognitive Science program.
5.   **Research Requirement** (1 to 3 credits):
   A capstone research essay approximately 15-20 pages in length and a public presentation in the model of a conference presentation. The topic could emerge from the research project undertaken within MUS 973 or could come from research conducted in conjunction with the TAP lab. Alternatively, the topic could draw connections between what the student has learned in other courses undertaken as part of the student's primary degree program. The topic will be approved by a member of the faculty of the theory area within the College of Music or from the Department of Psychology, who will advise the project and certify its completion. Students will register for 1 to 3 credits of MUS 898 Master's Research or PSY 891 Special Topics in Psychology with the faculty advisor. An alternative independent research course may be substituted if deemed appropriate by the faculty advisor.

Effective Fall 2020.

COLLEGE OF NATURAL SCIENCE

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

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

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

Effective Fall 2020.

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

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

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

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

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

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

1.	Both of the following courses (4 to 6 credits):		
	BMB	801	Molecular Biology	3
	GEN	810	Theory and Practice of Teaching Genetics	1 to 3
2.	One of the following courses (3 credits):		
	MMG	833	Microbial Genetics	3
	MMG	835	Eukaryotic Molecular Genetics	3
3.	Complete 4 to 10 credits of Genetics 899, Master's Thesis Research.		
4.	Submission of a written thesis.		
5.	Presentation of a final research seminar.		
6.	Pass a final oral examination.		

        Effective Fall 2020.

3.   Change the requirements for the **Doctor of Philosophy** degree in **Genetics and Genome Sciences** in the College of Natural Science. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

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

                Admission to the Doctor of Philosophy degree program with a major in genetics and genome sciences is through the BioMolecular Science Gateway – First Year (BMS). The BMS does not establish minimum cut-off values from any indices, however, the successful applicant will typically have: a bachelor's degree (four-year or equivalent) or Master of Science degree that includes course work that demonstrates proficiency in math and science; a grade point average of 3.5 or above; significant research experience (equivalent to a minimum of one full-time summer research experience or four semesters of part-time research experience); and strong letters of reference. The GRE is not required to apply to the BMS. Students admitted through the BMS typically perform three research rotations during their first two semesters before they choose their Ph.D. laboratory, and join the Ph.D. program of their choice during the spring semester of their first year in the BMS.

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

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

                The student must:

1.	Complete one of the following courses:		
	MMG	833	Microbial Genetics	3

		MMG	835	Eukaryotic Molecular Genetics	3
2.	Complete both of the following courses:				
		GEN	810	Theory and Practice of Teaching Genetics	1 to 3
		GEN	840	Genetics Writing Skills	1 to 6

3. Complete a minimum of 12 credits of additional graduate course work approved by the student's guidance committee in genetics, molecular biology, and/or biochemistry, including at least one 3-credit course in genomics, quantitative or computational biology.

4. Complete a minimum of four 1-credit seminar courses approved by the student's guidance committee and the Genetics and Genome Sciences director.

5. Complete a minimum of 24 credits of GEN 999 Doctoral Dissertation Research.

6. Pass a comprehensive examination that includes a written research proposal, public seminar and oral examination with the student's guidance committee.

7. Write and defend a research dissertation, which shows original treatment of an important research problem.

Effective Fall 2020.

4. Change the requirements for the **Bachelor of Science** degree in **Biochemistry and Molecular Biology** in the Department of Biochemistry and Molecular Biology.

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

   (1) In item 3. a. change the total credits from '64 to 70' to '61 to 69'.

   (2) Change item 3. a. (7) to the following:

   One of the following courses (3 credits):
   | CEM | 383 | Introductory Physical Chemistry I | 3 |
   | CEM | 484 | Molecular Thermodynamics | 3 |

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

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

   (4) In item 3. b. delete the following course:

   | BMB | 472 | Advanced Molecular Biology Laboratory | 3 |

   Add the following course:

   | BMB | 470 | Advanced Molecular Biology Laboratory | 3 |

Effective Summer 2020.

5.   Change the requirements for the **Bachelor of Science** degree in **Biochemistry and Molecular Biology/Biotechnology** in the Department of Biochemistry and Molecular Biology.

        a.   Under the heading **Requirements for the Bachelor of Science Degree in Biochemistry and Molecular Biology/Biotechnology** make the following changes:

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

BMB	472	Advanced Molecular Biology Laboratory	3

                        Add the following course:

BMB	470	Advanced Molecular Biology Laboratory	3

        Effective Summer 2020.

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

        a.   Under the heading **Requirements for the Master of Science Degree in Biochemistry and Molecular Biology** add the following:

               1.   Complete all of the following courses (11 credits):

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

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

               2.   Complete two additional 800-level courses as approved by the student's guidance committee.

               3.   Complete a minimum of 4 credits with no more than 15 credits of BMB 899 Master's Thesis Research.

               4.   Successfully pass an oral examination covering both a defense of the thesis and course work.

        Effective Fall 2020.

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

        a.   Under the heading **Requirements for the Doctor of Philosophy Degree in Biochemistry and Molecular Biology** add the following:

               1.   Complete all of the following courses (14 credits):

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

                        Biochemistry and Molecular Biology 978 is completed in four separate 1 credit enrollments. Equivalent course work involving student presentations may be substituted for BMB 960 and BMB 961 with approval by the Graduate Program Director.

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

Effective Fall 2020.

8.   Change the requirements for the **Master of Science** degree in **Biomedical Laboratory Operations** in the Biomedical Laboratory Diagnostics Program. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

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

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

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

Applicants must:

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

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

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

Effective Fall 2020.

9.   Change the requirements for the **Master of Arts** degree in **Biomedical Laboratory Science** in the Biomedical Laboratory Diagnostics Program. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

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

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

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

      Applicants must:

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

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

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

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

      Effective Fall 2020.

10.   Change the requirements for the **Master of Science** degree in **Clinical Laboratory Sciences** in the Biomedical Laboratory Diagnostics Program. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

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

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

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

      Applicants must:

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

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

3.   Submit a letter of intent or purpose statement that addresses why you want to enter graduate education, including career goals and educational goals. Highlight exceptional achievements or explain low performance or withdrawal from undergraduate courses.

4.   Submit a brief resume.

5.   Submit General Record Examination (GRE) scores. The GRE exam score can be waived in lieu of a professional credential.

6.   Submit scores from the Test of English as a Foreign Language (TOEFL) if English is not the first language.

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

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

Effective Fall 2020.

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

a.   Under the heading **Requirements for the Master of Science Degree in Chemistry** delete the following paragraph:

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

Effective Fall 2020.

12.   Change the requirements for the **Minor** in **Computational Mathematics, Science, and Engineering** in the Department of Computational Mathematics, Science, and Engineering.

a.   Under the heading **Requirements for the Minor in Computational Mathematics, Science, and Engineering** make the following changes:

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

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

Add the following courses:

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

(2)   Change the note following item 2. to the following:

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

Effective Fall 2020.

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

a.   Under the heading **Requirements for the Master of Science Degree in Integrative Biology** add the following:

Requirements for Both Plan A and Plan B
1.   Complete 3 credits of course work at the 800-level or above in biology chosen in consultation with the student's guidance committee.

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

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

Effective Fall 2020.

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

a.   Add the following statement:

Requirements for the Doctor of Philosophy Degree in Integrative Biology

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

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

Effective Fall 2020.

15.   Change the requirements in the **Master of Science** degree in **Microbiology and Molecular Genetics** in the Department of Microbiology and Molecular Genetics. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

      a.   Under the heading **Requirements for the Master of Science Degree in Microbiology and Molecular Genetics** add the following:

            Students may select from the following courses:

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

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

      Effective Fall 2020.

COLLEGE OF OSTEOPATHIC MEDICINE

1.   Change the requirements for the **Professional Program in Osteopathic Medicine** leading to the Doctor of Osteopathic Medicine degree the College of Osteopathic Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

      a.   Under the heading **Requirements for the Doctor of Osteopathic Medicine Degree** replace the entire entry with the following:

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

            1.   Completion of each required course in the preclerkship and clerkship phase with a passing grade or successful remediation.

            2.   Passing score on the National Board of Osteopathic Medical Examiners (NBOME) COMLEX-USA Level 1, COMLEX-USA Level 2 Cognitive Evaluation (CE), and COMLEX-USA Level 2 Performance Evaluation (PE) licensure examinations, with no more than three (3) attempts permitted on each examination.

            3.   Compliance with annual training requirements of the Responsible Conduct of Research (RCR) program.

            4.   Achievement of the academic requirements and professional conduct expectations of the D.O. program as outlined in the policies and procedures of MSUCOM and MSU.

      b.   Under the heading **PreClerkship Curriculum** replace the entire entry with the following:

            The preclerkship curriculum consists of 98 required credit hours across seven semesters, representing years one and two of the four-year program. The courses are offered in a predefined sequence. Successful completion of each course in a semester is required to advance to the following semester.

The following courses are required:

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

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

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

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

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

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

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

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

ANTR	685	Directed Study in Clinical Prosection	1 to 6
FCM	621	Family Medicine Specialty Rotation	1 to 24
HM	610	Pathology Clerkship	3 to 6
IM	621	Clinical Tropical Medicine Clerkship	1 to 20
IM	651	Cardiology Clerkship	1 to 20
IM	652	Gastroenterology Clerkship	1 to 20
IM	653	Oncology and Hematology Clerkship	1 to 20
IM	654	Pulmonary Disease Clerkship	1 to 20
IM	655	Nephrology Clerkship	1 to 20
IM	659	Medical Critical Care Clerkship	1 to 20
IM	661	Internal Medicine Specialty Clerkship	1 to 20
IM	662	Urgent Care Clerkship	1 to 20
IM	663	Emergency Medicine/Wilderness/Austere Medicine Clerkship	1 to 20
IM	664	Pediatric Emergency Medicine Clerkship	1 to 20
IM	665	Emergency Medicine Advanced Clerkship	1 to 20
IM	666	Emergency Medicine Toxicology	3 to 18
IM	667	Emergency Medicine Hyperbaric Medicine and Wound Management	3 to 18
IM	668	Emergency Medicine EMS and Disaster Management	3 to 18
IM	669	Emergency Medicine Ultrasound	3 to 18
NOP	657	Neurology Specialty Clerkship	1 to 24
OMM	601	Osteopathic Manipulative Medicine Clerkship	1 to 20
OST	615	Biomedical Research Clerkship	3 to 18
OST	685	International Clerkship Rotations	1 to 20
OST	686	Global Health: Mexico – Clinical Immersion	1 to 20
OST	687	Global Health: Peru – Clinical Immersion	1 to 20
OST	688	Global Health: Cuba – Clinical Immersion	1 to 20
OST	689	Global Health: Haiti – Clinical Immersion	1 to 20
OST	690	Global Health: Dominican Republic – Clinical Immersion	1 to 20
PED	601	Pediatric Specialty Clerkship	3 to 24
PMR	601	Physical Medicine and Rehabilitation Clerkship	1 to 18
PSC	609	Adult Psychiatry Clerkship	3 to 6
PSC	610	Child Psychiatry Clerkship	3 to 6
PSC	611	Addiction Psychiatry Clerkship	3 to 6
PSC	612	Geriatric Psychiatry Clerkship	3 to 6
RAD	609	Radiology Clerkship	3 to 12
RAD	610	Core Radiology Clerkship	1 to 20

The following rotation courses are credited toward the surgery requirement:

NOP	620	Ophthalmology Clerkship	1 to 24
OSS	640	Cardio Thoracic/Vascular Surgery Clerkship	1 to 20
OSS	641	Facial and Plastic Reconstruction Surgery Clerkship	1 to 20
OSS	642	Neurosurgery Clerkship	1 to 20
OSS	643	Podiatry Clerkship	1 to 20
OSS	644	Sports Medicine Clerkship	1 to 20
OSS	645	Urology Clerkship	1 to 20
OSS	646	Maternal Fetal Medicine Clerkship	1 to 20
OSS	647	Reproductive Endocrine Clerkship	1 to 20
OSS	648	Anesthesiology Advanced Clerkship	3 to 30
OSS	652	Obstetrics and Gynecology Specialty Clerkship	1 to 20
OSS	654	Core Anesthesiology Clerkship	1 to 20
OSS	655	Pain Management Clerkship	1 to 20

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

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

Effective Fall 2020.

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

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

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

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

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

        (1)   Replace item 1. with the following:

            All of the following courses (11 credits):

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

        (2)   Add the following item 2.:

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

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

        (3)   Renumber the former items 2. and 3. to items 3. and 4. respectively.

        (4)   In item 3. add the statement 'with a minimum of 4 credits at the 800-level' and add the following course:

| PHM | 492 | Pharmacotherapy of Human Viral Infections | 2 |

        (5)   Delete the former requirement 4. a. and b.

Effective Fall 2020.

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

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

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

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

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

   (1)   Change requirement 2. to 'Complete up to 21 credits, a minimum of 7 credits of 800-level PHM courses and a maximum of 9 credits of 400-level courses, of science electives chosen from the following'.

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

   PHM   492   Pharmacotherapy of Human Viral Infections   2

   Effective Fall 2020.

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

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

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

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

   Students must complete the following required courses for the degree:

   1.   All of the following courses (10 credits):
           PHM   801   Fundamental Principles of Pharmacology
                                    and Toxicology   3
           PHM   802   Cellular, Molecular and Integrated Systems
                                    Pharmacology   3
           PHM   803   Chemical Disposition in Mammals   1
           PHM   816   Integrative Toxicology: Mechanisms, Pathology
                                    and Regulation   3
   2.   One of the following courses (3 or 4 credits):
           PHM   827   Physiology and Pharmacology of Excitable Cells   4
           PSL   828   Cellular and Integrative Physiology I   3
           PSL   829   Cellular and Integrative Physiology II   3
   3.   One of the following courses (3 credits):
           BMB   801   Molecular Biology   3
           BMB   802   Metabolic Regulation and Signal Transduction   3
   4.   The following course (24 to 36 credits):
           PHM   999   Doctoral Dissertation Research   24 to 36
   5.   Successfully defend the doctoral dissertation.

     c.   Under the heading **Academic Standards** replace the entry with the following:

           A candidate must maintain at least a 3.0 grade in all required PHM courses.

           Effective Fall 2020.

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

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

     a.   Under the heading **Requirements for the Graduate Certificate in Safety Pharmacology** make the following change:

           (1)   In item 1., add the following note:

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

           (2)   Add the following item 3.:

                Create an electronic portfolio.

           Effective Fall 2020.

COLLEGE OF SOCIAL SCIENCE

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

     a.   **Background Information**:

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

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

     b.   **Academic Programs Catalog Text**:

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

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

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

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

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

Effective Fall 2020.

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

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

    (1) Change the second sentence to the following:

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

    (2) Add the following paragraph two:

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

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

  b. Under the heading **Requirements for the Doctor of Philosophy Degree in Chicano/Latino Studies** make the following changes:

    (1) In item 1. a., add 'minimum of 15 credits'.

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

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

       Effective Fall 2020.

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

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

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

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

     Effective Fall 2020.

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

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

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

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

     a.   **Background Information**:

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

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

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

Importance to the School of Criminal Justice, College of Social Science, and MSU:
Cybercrime is a major area of focus for the school and 5 of the Big 10 institutions (e.g., Illinois, Maryland, Indiana, Ohio, and Minnesota) have institutes or hold summits on cybercrime. The school is one of two (University of Maryland) top 10 Ph.D. granting programs in criminology/criminal justice within the United States that offers courses for graduate students to specialize in cybercrime research through innovative course content and the ability to structure cognate courses across the campus. No criminal justice programs at AAU institutions offer a cybersecurity specialization. Within the Computer Science and Engineering degree programs, a few offer a specialization in e-crime, but it is largely focused on digital forensic training (e.g. University of Albany, USF). The school can differentiate itself through a focused certificate on cybercrime/cybersecurity with five courses total at the graduate (master's) degree.

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

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

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

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

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

b.   **Academic Programs Catalog Text**:

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

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

Requirements for the Graduate Certificate in Cyber Criminology and Cyber Security
CREDITS
Students must complete 15 credits from all of the following courses:

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

Effective Fall 2020.

6.   Delete the curriculum and degree requirements for the **Master of Science** degree in **Judicial Administration** in the School of Criminal Justice. The University Committee on Graduate Studies (UCGS) provided consultative commentary to the Provost after considering this request. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Graduate Studies.

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

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

a.   Under the heading **Admission**, delete paragraphs two, three, and four and replace with the following:

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

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

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

1.   Have a total score of 580 (paper version) or 237 (computer version) or 100 (Internet version) or above on the **Test of English as a Foreign Language** with no subscore below 55 (paper version) or 21 (computer version).
2.   Have an average score of 85 or higher on the **Michigan English Language Assessment Battery** with no subscore below 83.
3.   Have an average score of 85 or higher on the **Michigan State University English Language Center Test** with no subscore below 83.

b.   Under the heading **Requirements for Both Plan A and Plan B**, replace item 3. with the following:

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

c.   Delete the section **Academic Standards**.

Effective Fall 2020.

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

a.   Under the heading **Admission**, delete paragraphs one, two, three, and four and replace with the following:

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

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

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

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

1.   Have a total score of 580 (paper version) or 237 (computer version) or 100 (Internet version) or above on the **Test of English as a Foreign Language** with no subscore below 55 (paper version) or 21 (computer version).
2.   Have an average score of 85 or higher on the **Michigan English Language Assessment Battery** with no subscore below 83.
3.   Have an average score of 85 or higher on the **Michigan State University English Language Center Test** with no subscore below 83.

b.   Under the heading **Requirements for the Doctor of Philosophy Degree in History**, replace the entire entry with the following:

The student must:

1.   Complete HST 803 Seminar in Methodology of Historical Research (3 credits) in the first semester of their first year.

2.   Complete at least 12 credits in additional 800-900 level courses in a major field of history as specified by the student's guidance committee. The major field should be the field in which the student plans to focus research for the dissertation. The available major fields of history are referenced above.

3.   Complete at least 6 credits in each of the student's two minor fields or in one minor field of history and in one minor field in a related discipline.

4.   Student must demonstrate knowledge of two foreign languages before they may take the comprehensive examinations. This requirement for students formally admitted to the Ph.D. program can be fulfilled by one of these three options:

    a.   Competency in two foreign languages.
    b.   With approval of the student's guidance committee, the student may substitute certification in humanities computing for the second foreign language.
    c.   With the approval of the student's guidance committee, the second foreign language may be waived.

5.   Pass the written and oral comprehensive examinations:

    a.   Written examinations must be completed within a six-month period by the end of a student's third year.
    b.   An oral examination must be completed no later than two weeks after the student successfully passes the written examination.
    c.   A defense of the dissertation prospectus needs to take place either at the time of the oral examination or in a separate defense within six weeks of the oral examination.

6.   Complete 24 credits of HST 999 Doctoral Dissertation Research.

7.   Pass a final oral examination in defense of the dissertation.

c.   Delete the section **Academic Standards**.

Effective Fall 2020.

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

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

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

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

1.   The following course:
      HDFS   901   Contemporary Scholarship in Human Development
                          and Family Studies   3
2.   Completion of 21 credits in methodology and statistics course work as approved by the student's academic advisor.
3.   Completion of 24 credits in HDFS 999 Doctoral Dissertation Research.
4.   Completion of one of the concentrations noted below.
5.   Successfully pass the comprehensive examination.
6.   Successfully defend the doctoral dissertation.

One of the following concentrations:

Child Development
Complete all of the following (15 credits):

HDFS   826   Social-Emotional Development Birth to Eight Years:
                      Biology, Relationships, and Culture   3
HDFS   827   Language and Literacy Development from Infancy to
                      Formal Schooling   3
An additional 9 credits of course work chosen in consultation with the

student's guidance committee.

Couple and Family Therapy

Complete all of the following (18 credits):

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

Clinical Requirements (3 to12 credits):

HDFS	993	Internship	3 to 12

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

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

Lifespan Human Development and Family Diversity

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

HDFS	847	Theories of the Family	3

A course in diversity chosen in consultation with the student's guidance committee   3

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

Effective Fall 2020.

10.   Change the requirements for the **Doctor of Philosophy** degree in **Human Resources and Labor Relations** in the School of Human Resources and Labor Relations. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

a.   Under the heading **Requirements for the Doctor of Philosophy Degree in Human Resources and Labor Relations** replace the entire entry with the following:

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

Students must:

1.   Complete the following courses (12 credits):

HRLR	991A	Theoretical Perspectives in Human Resource Management	3
HRLR	991B	Theoretical Perspectives in Labor and Employment Relations	3
HRLR	992A	Research Perspectives in Human Resource Management	3
HRLR	992B	Research Perspectives in Labor and Employment Relations	3

2.   Complete 9 credits in three doctoral level research methods courses within other departments approved by the student's doctoral committee.

3.   Complete 15 credits in five doctoral level courses in other departments approved by the student's doctoral committee.

4.   Pass comprehensive examinations based on their course work.

    5.   Demonstrate research competence by writing an empirical research paper.
    6.   Complete 24 credits of HRLR 999 Doctoral Dissertation Research.
    7.   Successfully defend the dissertation.

        Effective Summer 2020.

11.   Change the requirements for the **Master in Urban and Regional Planning** degree in **Urban and Regional Planning** in the School of Planning, Design and Construction. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

    a.   Under the heading **Requirements for the Master in Urban and Regional Planning Degree in Urban and Regional Planning** make the following changes:

        (1)   Under the heading **Requirements for Both Plan A and Plan B** make the following changes:

            (a)   In the introductory paragraph, delete 'at least 24 of which must be in courses numbered in the 800 and 900 series'.
            (b)   In item 2., delete 'At least one 3-credit Urban Planning Special Topics course must be taken'.

            (c)   Under the heading *Additional Requirements for Plan A* replace the entry with the following:

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

        Effective Fall 2020.

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

    Per University policy:

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

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

        LINKED BACHELOR'S-MASTER'S DEGREE IN URBAN AND REGIONAL PLANNING
        Bachelor of Science Degree in Urban and Regional Planning
        Master of Urban and Regional Planning Degree in Urban and Regional Planning

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

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

Effective Fall 2020.

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

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

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

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

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

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

   Effective Summer 2020.

14.   Change the requirements for the **Graduate Certificate** in **Program Evaluation** in the Department of Psychology. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

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

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

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

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

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

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

Effective Summer 2020.

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

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

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

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

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

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

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

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

Requirements for Both Plan A and Plan B
1.   Complete the following course (3 credits):
        PSY   815   Quantitative Research Design and Analysis
                                in Psychology   3
2.   Complete course work appropriate for the student's subdiscipline as determined and approved by the student's guidance committee.
3.   Complete additional elective credits approved by the student's guidance committee.

Additional Requirements for Plan A
1.   Complete 4 credits of PSY 899 Master's Thesis Research.
2.   Preparation of an approved thesis proposal.
3.   Successful oral defense of the thesis.

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

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

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

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

Effective Summer 2020.

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

   a.   Add the heading **Requirements for the Doctor of Philosophy Degree in Psychology** and the following entry:

   To meet individual needs, every student has a guidance committee with the student's advisor as chairperson. The committee develops a program of studies in consultation with the student. Students who are accepted into the doctoral program will fulfill the following program requirements for the degree:

   1.   Complete the following course (3 credits):
          PSY   815   Quantitative Research Design and Analysis
                                 in Psychology   3
   2.   Complete additional course work required by the student's guidance committee.
   3.   Successful completion of the comprehensive examination.
   4.   Successful completion and defense of a dissertation.
   5.   Completion of 24 credits PSY 999 Doctoral Dissertation Research.

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

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

   Effective Summer 2020.

17.   Change the requirements for the **Doctor of Philosophy** degree in **Sociology**. The University Committee on Graduate Studies (UCGS) approved this request at its April 13, 2020 meeting.

   a.   Under the heading **Requirements for the Doctor of Philosophy Degree in Sociology** replace the entire entry with the following:

   Students must complete 60 credits from the following:
   1.   All of the following courses (15 credits):
          SOC   815   Classical Sociological Theory   3
          SOC   816   Contemporary Sociological Theory   3
          SOC   881   Analysis of Social Data I   3
          SOC   882   Analysis of Social Data II   3
          SOC   885   Methods of Sociological Inquiry   3
   2.   Two of the following courses (6 credits):
          SOC   883   Multi-Equation Quantitative Models   3
          SOC   884   Applied Longitudinal Data Analysis   3
          SOC   985   Qualitative Field Research   3
          SOC   986   Survey Research Principles   3
          SOC   989   Topics in Sociological Methodology   3
   3.   Complete 15 credits from 5 additional courses approved by the student's guidance committee.
   4.   Complete 24 credits of SOC 999 Doctoral Dissertation Research.
   5.   Successful completion of the departmental Graduate Teaching Assistant workshop.

6.   Successful completion of the departmental Professional Development Workshop series.
7.   Successful completion and presentation of a qualifying paper.
8.   Successful completion of the comprehensive examination.
9.   Successful defense of the dissertation proposal.
10.   Successful defense of the dissertation.

Effective Fall 2020.

PART II - NEW COURSES

DEPARTMENT OF COMMUNICATION

COM 280   Principles, Practices and Ethics of Strategic Communication
           Fall of every year. Spring of every year. Summer of every year. 4(4-0) R: Open to undergraduate
           students in the College of Communication Arts and Sciences.
                 Develop the skills necessary to apply strategic communication principles in support of
                 organizational objectives. Leadership, credibility, responsiveness, ethics and legal
                 considerations. Create targeted, innovative, research-based strategic plans to accomplish
                 long-range goals.
                 Effective Fall 2020

COM 380   Crisis Communication and Rapid Response
           Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: COM 280 R: Open to
           undergraduate students in the College of Communication Arts and Sciences.
                 Elements of crisis communication and management. Pre-crisis planning, environmental
                 scanning, strategies for crisis management and rapid response, and rebuilding public trust
                 post-crisis. Emphasis on practical application of crisis communication theory, using case
                 studies and practitioner engagement.
                 Effective Fall 2020

COM 480   Capstone in Communication Leadership and Strategy
           Fall of every year. Spring of every year. Summer of every year. 4(4-0) P: (COM 100 and COM 280
           and COM 380 and COM 475 and COM 225 and COM 340) and completion of Tier I writing
           requirement R: Open to undergraduate students in the College of Communication Arts and
           Sciences.
                 Apply and demonstrate strategic communication leadership principles and theories in a
                 semester-long comprehensive project. Course activities apply theoretical principles,
                 concepts and skills gained in their course work.
                 Effective Fall 2020

SCHOOL OF CRIMINAL JUSTICE

CJ 874   Cybercrime, Deviance and Virtual Society
           Fall of every year. 3(3-0)
                 Emergence of cybercrime and technology-engendered deviance, and the ways that
                 subcultures transcend virtual spaces to affect behavior on and off-line.
                 Effective Fall 2020

CJ 875   Digital Forensic Investigations
           Fall of every year. 3(3-0)
                 Digital forensic analyses, including computer technology, data storage, proper
                 search/seizure/imaging techniques, analysis of imaged devices, and proper presentation
                 of evidence.
                 Effective Fall 2020

CJ 876   Data Systems/Infrastructure
           Fall of every year. 3(3-0)
                 Networked resources that support the Internet and the basics of the Open Systems
                 Interconnection (OSI) Model.
                 Effective Fall 2020

CJ 877   Cyber Terror and Cyber Warfare
           Spring of every year. 3(3-0)
                 Use of technology and the Internet to further terror and extremism across the globe.
                 Effective Fall 2020

DEPARTMENT OF ENGLISH

ENG 800   Studies in Race, Gender, and the Human
                 Fall of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this
                 course.
                           The Interdisciplinary Study of Difference in the U.S. and the Humanities. Theoretical and
                           historical considerations of the category of the human. Attention to the development of
                           race, ethnicity, gender and their critical intersections in relation to the U.S. and the
                           discipline of the Humanities.
                           Effective Fall 2020

SCHOOL OF HOSPITALITY BUSINESS

HB 203   Hospitality Communication
                 Fall of every year. Spring of every year. 3(3-0) P: WRA 101 R: Open to students in the Hospitality
                 Business Major. Not open to students with credit in COM 100 or COM 225 or MKT 250.
                           Effective hospitality business communication. Selecting appropriate formats for the
                           audience. Developing and delivering effective presentations. Analyzing, writing and
                           revising hospitality business documents. Spotting, correcting and avoiding common
                           writing pitfalls.
                           Effective Summer 2020

HB 207   Hospitality Management and Leadership
                 Fall of every year. Spring of every year. 3(3-0) R: Open to students in the Hospitality Business
                 Major. Not open to students with credit in HB 267.
                           Overview of management and leadership theories and applications specific to the
                           hospitality industry. Discussion of leadership principles, management principles, change
                           management, decision-making, communications, motivational theories, and negotiation
                           skills.
                           Effective Summer 2020

COLLEGE OF HUMAN MEDICINE

HM 617   Introduction to Simulation Education Elective
                 Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a
                 maximum of 6 credits in all enrollments for this course. P: HM 556 R: Open to graduate-
                 professional students in the College of Human Medicine.
                           Learn and apply educational theory to the use of simulation in medical education.
                           Participate in a blended course to learn skills necessary to conduct training including
                           procedural or clinical skills and/or team training.
                           Request the use of the Pass-No Grade (P-N) system.
                           Request the use of ET-Extension to postpone grading.
                           The work for the course must be completed and the final grade reported within 2
                           semesters after the end of the semester of enrollment.
                           Effective Spring 2020

HM 618   Telemedicine Experiences in Rural Clinical Settings
                 On Demand. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.
                 P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.
                           Clinical, biopsycosocial, documentation, and ethical aspects of telehealth to address
                           health conditions and patient needs.
                           Request the use of the Pass-No Grade (P-N) system.
                           Request the use of ET-Extension to postpone grading.
                           The work for the course must be completed and the final grade reported within 2
                           semesters after the end of the semester of enrollment.
                           Effective Spring 2020

HM 619   Clinical Knowledge, Ethics, Epidemiology in Pandemics
Spring of every year. Summer of every year. 3(3-0) P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

> Survey of clinical knowledge and principles of necessary science, epidemiology, economics, ethics, and public health policy required in primary and tertiary health care settings during pandemics.
> Request the use of the Pass-No Grade (P-N) system.
> Request the use of ET-Extension to postpone grading.
> The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
> Effective Spring 2020

HM 620   Clinical Bioethics
Spring of every year. Summer of every year. 3(3-0) P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

> Complex bioethical issues including pandemics, physician aid-in-dying, futility/non-beneficial care, and treatment refusal by competent patients.
> Request the use of the Pass-No Grade (P-N) system.
> Request the use of ET-Extension to postpone grading.
> The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
> Effective Spring 2020

HM 624   Medical Humanities
Spring of every year. Summer of every year. 3(3-0) P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.

> Reflection on professional medical practice by employing the skills and perspectives of the humanities, specifically literary studies, visual and performing arts.
> Request the use of the Pass-No Grade (P-N) system.
> Request the use of ET-Extension to postpone grading.
> The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
> Effective Spring 2020

HM 643   Critical Care Experience
Spring of every year. 3(3-0) P: MED 641 or PHD 641 or SUR 641 R: Open to graduate-professional students in the College of Human Medicine.

> Virtual learning experience in evaluating and managing acutely ill patients
> Request the use of the Pass-No Grade (P-N) system.
> Request the use of ET-Extension to postpone grading.
> The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment.
> Effective Spring 2020

SCHOOL OF JOURNALISM

JRN 487   Creative Journey Education Abroad
Summer of every year. Abroad, Abroad, Abroad 6(6-0) R: Approval of school.

> Visual communication for the transfer of ideas, knowledge and data. Visual tools including videos, infographics, color, typography, and photography.
> Effective Summer 2020

DEPARTMENT OF KINESIOLOGY

KIN 174   Human Medical Terminology
Spring of every year. Summer of every year. 2(2-0) RB: KIN 173 R: Open to undergraduate students in the Department of Kinesiology.

> Foundational medical terminology with a focus on cardiovascular, pulmonary, musculoskeletal and neurological systems. Common prefixes, suffixes and root words organized by body system, structures and functions, diagnostic procedures and treatments.
> Effective Spring 2021

PROGRAM IN NEUROSCIENCE

NEU 499   Neuroscience Senior Research Thesis
                 On Demand. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this
                 course. P: (NEU 490) and completion of Tier I writing requirement R: Open to seniors in the
                 Neuroscience Major. Approval of department.
                           Independent research mentored by a neuroscience faculty member and conducted in their
                           laboratory.
                           Effective Spring 2020

DEPARTMENT OF OSTEOPATHIC MEDICAL SPECIALTIES

IM 690   Internal Medicine Clerkship Essentials
                 Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a
                 maximum of 24 credits in all enrollments for this course. R: Open to students in the College of
                 Osteopathic Medicine.
                           Case-based review of essential topics in internal medicine
                           Request the use of the Pass-No Grade (P-N) system.
                           Request the use of ET-Extension to postpone grading.
                           The work for the course must be completed and the final grade reported within 1 semester
                           after the end of the semester of enrollment.
                           Effective Summer 2020

SCHOOL OF PLANNING, DESIGN AND CONSTRUCTION

PDC 100   Introduction to the Built Environment
                 Fall of every year. Spring of every year. 1(2-0)
                           Overview of the fields of construction management, interior design, landscape architecture
                           and urban and regional planning. Offered first ten weeks of semester.
                           Effective Fall 2020

PART III – COURSE CHANGES

DEPARTMENT OF ANTHROPOLOGY

ANP 325　　Anthropology of the Environment and Development
Fall of every year. Spring of every year. Summer of every year. 3(3-0)
　　Anthropological approaches to contemporary environmental and development issues and
　　their inter-relation.
　　Effective Fall 2014 Effective Spring 2020

ANP 422　　Religion and Culture
Fall of every year. Spring of every year. 3(3-0) P: (ANP 201) or completion of Tier I writing
requirement
　　The anthropology of religion and the symbolic analysis of ritual. Theoretical and
　　ethnographic literature.
　　Effective Fall 2016 Effective Spring 2020

BIOMEDICAL LABORATORY DIAGNOSTICS PROGRAM

BLD 434　　Clinical Immunology
Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: BLD 204 P: PSL 250 or
PSL 310 or PSL 432 RB: MMG 201 or MMG 301 RB: (MMG 201 or MMG 301) and BLD 204 Not
open to students with credit in MMG 451.
　　Concepts of innate and adaptive immunity. Immunodeficiency and autoimmunity.
　　Principles and applications of immunoassays in medical laboratories.
　　SA: MT 432, MT 434
　　Effective Fall 2018 Effective Fall 2020

SCHOOL OF CRIMINAL JUSTICE

CJ 804　　Crime Scene Investigation
Fall of even years. Fall of odd years. 1(1-0) R: Open to graduate students in the Forensic Science
Major.
　　Introduction to crime scene investigation. Documentation, evidence collection,
　　presumptive chemical and biological tests, and collection and preservation of impression
　　evidence.
　　Effective Fall 2015 Effective Summer 2020

CJ 805　　Survey in Forensic Science
Fall of every year. Fall of even years. 3(3-0) R: Open only to students in the Forensic Science
major. R: Open to students in the Forensic Science Major.
　　Scientific analysis of physical evidence. Four major aspects of physical evidence using
　　real criminal and civil cases: generation of physical evidence by criminal activity; collection
　　and preservation of physical evidence; analysis of physical evidence by forensic science
　　laboratory; presentation of scientific expert testimony in court.
　　Effective Summer 2006 Effective Summer 2020

CJ 817　　Law and Forensic Science
Fall of even years. Fall of odd years. 2(2-0) R: Open to students in the Forensic Science Major.
　　Legal aspects of forensic science. Adjudicative process, admissibility of scientific
　　evidence, laboratory reports, hearsay, relevant case materials, and expert testimony.
　　Request the use of ET-Extension to postpone grading.
　　The work for the course must be completed and the final grade reported within 1 semester
　　after the end of the semester of enrollment.
　　Effective Fall 2010 Effective Summer 2020

CJ 820   Forensic Chemistry and Microscopic Evidence
~~Spring of every year.~~ Spring of odd years. 3(1-5) RB: CJ 819 ~~R: Open only to graduate students in the Forensic Science major.~~ R: Open to graduate students in the Forensic Science Major.
                Continuation of CJ 819. Analysis of trace evidence including hairs and fibers, paints and coatings, explosives and fire residues, glass and soil.
                ~~Effective Summer 2006~~ Effective Summer 2020

CJ 829   National and Global Trends in Court Planning
                Spring of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of school.
                Emerging judicial trends. Stakeholder expectations. Impact on judicial branch planning. Regional, national, and global trends that frame strategic issues, planning, actions, and leadership.
                DELETE COURSE
                Effective Fall 2020

CJ 860   Historical Foundations/Contemporary Frameworks of Judicial Administration
                Fall of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.
                Foundations in the legal and historical evolution of courts. Contemporary methods, practices, and theories of court administration, including purposes and responsibilities of courts, rule of law, caseflow management, and court governance and leadership models.
                DELETE COURSE
                Effective Fall 2020

CJ 861   Budget Planning and Resource Allocation for Court Performance
                Summer of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.
                Financial resources for courts and court systems. Resource acquisition and allocation strategies, output and outcome measurement for expenditure assessment, efficient and effective resource management, techniques for budget presentation in the public-sector context, alternative budget planning and justification formats, audit formats, revenue enhancement sources and strategies.
                DELETE COURSE
                Effective Fall 2020

CJ 862   Workforce Planning and Management in the Courts
                Summer of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.
                Workforce planning and management in the judicial branch. Selections and forms of employment, including elected and appointed judges and other judicial officers, at-will employees, civil servants, contractual labor and services. Succession planning, methods of employee development, coaching, mentoring, and continuing education.
                DELETE COURSE
                Effective Fall 2020

CJ 863   Courthouse Planning: Space, Technology, Security, and Disaster Recovery
                Summer of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.
                Planning for building or remodeling of courthouse and courtroom facilities. Requirements for federal and state courts. Safe public space, efficient workflow, technology infrastructure for electronic courts, security, and disaster planning and recovery.
                DELETE COURSE
                Effective Fall 2020

CJ 864   Elements of Essential Court Operations
                Spring of every year. 3(3-0) R: Open to graduate students in the School of Criminal Justice or approval of department.
                Court management infrastructure systems. Contemporary developments in problem-solving courts. Methods for measuring court inputs, outputs, and outcomes. Constitutional mandates, judicial branch independence and interdependence, transparency, and accountability.
                DELETE COURSE
                Effective Fall 2020

CJ 887   Quantitative Methods in Criminal Justice Research
                ~~Fall of every year.~~ Spring of every year. 3(3-0) P: CJ 811 ~~R: Open to graduate students in the Criminal Justice Major or in the Judicial Administration Major.~~ R: Open to graduate students in the Criminal Justice Major or in the Criminal Justice Major.
                          Descriptive and inferential statistics and computer use in criminal justice research.
                          ~~Effective Fall 2010~~ Effective Fall 2020

DEPARTMENT OF ECONOMICS

EC 335   Taxes, Government Spending and Public Policy
                Fall of every year. Spring of every year. Summer of every year. 3(3-0) ~~Interdepartmental with Environmental Economics and Policy~~. Interdepartmental with Environmental Economics and Management P: EC 201 or EC 251H Not open to students with credit in EC 435 or EC 436.
                          Economics of the public sector. Public goods, externalities, design and incidence of the tax system. Equity and efficiency effects of government programs.
                          ~~Effective Fall 2014~~ Effective Summer 2020

SCHOOL OF HOSPITALITY BUSINESS

HB 105   Service Management Principles
                Fall of every year. Spring of every year. 2(2-0) ~~RB: HB 100~~ ~~R: Not open to seniors.~~ R: Open to students in the Hospitality Business Major.
                          Concept of service organizations. Key issues in delivering and managing services. Service intangibility. Needs, expectations, habituation and customer satisfaction. Prepurchase and postpurchase behaviors.
                          ~~Effective Fall 2017~~ Effective Summer 2020

HB 201   ~~Hospitality Business Professional Development~~
                Hospitality Professional Development
                Fall of every year. Spring of every year. 1(1-0) ~~RB: HB 100 or concurrently~~ ~~R: Open to undergraduate students in the School of Hospitality Business.~~ R: Open to undergraduate students in the Hospitality Business Major.
                          Self-assessment of personal and professional interests, skills, and values. Development of professional identity. Career exploration, planning, and development. Building professional relationships through networking and mentorships. Workplace competencies including diversity and multicultural awareness, interpersonal communication, team membership, and leadership.
                          ~~Effective Summer 2018~~ Effective Summer 2021

HB 210   ~~Introduction to the Casino Industry~~
                Casino Operations and Management
                ~~Fall of odd years.~~ Spring of every year. 3(3-0)
                          Social issues of gaming, casino games of chance, management controls and marketing plans.
                          ~~Effective Spring 2013~~ Effective Summer 2021

HB 237   ~~Management of Lodging Systems~~
                Hospitality Lodging Systems
                Fall of every year. Spring of every year. 3(3-0) ~~RB: HB 100 or concurrently~~ R: Not open to seniors.
                          Interrelated systems in lodging operations for front desk/guest services, reservations, housekeeping, engineering, sales/conference services, accounting, security as well as food and beverage. Segmentation of lodging products and associated management challenges.
                          ~~Effective Summer 2014~~ Effective Summer 2021

HB 265 ~~Food Management: Safety and Nutrition~~
<u>Hospitality Foodservice Systems</u>
Fall of every year. Spring of every year. 3(3-0) ~~RB: HB 100 or concurrently~~ R: Not open to seniors. ~~Standards of microbiology, sanitation, nutrition, and other quality issues in food management. Chemical, health, and workplace standards. Management of product quality and costs.~~ <u>Food and Beverage systems that enhance food safety and quality management. Standards of microbiology, sanitation, and other quality control issues in foodservice operations. Chemical, health, and workplace safety standards. Introduction of fundamental principles of cost control concepts and techniques at different control points. Food allergen management practices and food safety technology highlighted. Emerging trends that affect different segments of food and beverage operations.</u>
~~Effective Summer 2014~~ <u>Effective Summer 2021</u>

~~HB 473~~
<u>HB 273</u>   Hospitality Business Analytics
Fall of every year. <u>Spring of every year.</u> 3(3-0) <u>P: CSE 101 or CSE 102</u> <u>RB: Basic Microsoft Excel Skills</u> ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to students in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.</u> <u>Not open to students with credit in ITM 209.</u>
          Quantitative and analytical skills used to communicate key business information effectively. Study of how business modeling and data analytics can increase decision making efficacy. Course topics include but are not limited to sensitivity and scenario analysis, financial modeling and forecasting, and applied business statistics methods.
          SA: HB 473
          ~~Effective Fall 2016~~ <u>Effective Summer 2021</u>

~~HB 382~~
<u>HB 282</u>   ~~Hospitality Business Real Estate Investment Management~~
<u>Hospitality Real Estate</u>
Fall of every year. <u>Spring of every year.</u> 3(3-0) ~~R: Open to sophomores or juniors or seniors in the School of Hospitality Business or approval of school.~~ <u>R: Open to students in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.</u>
          Process of planning and developing a commercial real estate project: conceptualization and planning, feasibility, commitment, design layout and construction, and management and operation.
          SA: HB 473
          ~~Effective Fall 2016~~ <u>Effective Summer 2021</u>

HB 302   Hospitality Managerial Accounting
Fall of every year. Spring of every year. 3(3-0) P: ACC 201 ~~R: Open to sophomores or juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to sophomores or juniors or seniors in the Hospitality Business Major.</u> Not open to students with credit in ACC 202 or ACC 230.
          Principles of managerial accounting applied to hospitality enterprises. Topics include financial statements, forecasting methods, internal control, and ethics.
          ~~Effective Fall 2015~~ <u>Effective Summer 2020</u>

HB 307   Hospitality Human Resources
Fall of every year. Spring of every year. 3(3-0) P: HB 201 RB: Completion of Level I internship. ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to juniors or seniors in the Hospitality Business Major.</u> Not open to students with credit in MGT 315.
          Human resource management and interpersonal skills in the hospitality industry. Managing in a culturally diverse workplace. Benefits, compensation, employee and labor relations, equal opportunity, ethics, interviewing, job analysis and description, labor laws, performance management and appraisal, personnel planning, recruitment, retention, risk management, strategic planning, talent management, testing and selection, training and development.
          ~~Effective Summer 2018~~ <u>Effective Summer 2020</u>

HB 311   Hospitality Finance
Fall of every year. Spring of every year. 3(3-0) ~~P: HB 302 or ACC 202 or ACC 230~~ <u>P: ACC 201 or ACC 230</u> ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to sophomores or juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.</u> Not open to students with credit in FI 311 or FI 320.
> Optimal management of a hospitality firm's assets and financing requirements. Analysis of financial statements, financial markets, risk, valuation, short-term and long-term financing and investment.
> ~~Effective Fall 2015~~ <u>Effective Summer 2020</u>

HB 320   Casino Operations and Management
Fall of even years. 3(3-0) P: HB 210 R: Open to students in the School of Hospitality Business.
> Practices and problems associated with casino management. Staffing, security, protection of table games, and control.
> <u>DELETE COURSE</u>
> Effective Summer 2020

HB 321   Club Operations and Management
<u>Fall of every year.</u> ~~Spring of every year.~~ 3(3-0) ~~P: HB 105~~ ~~R: Open to sophomores or juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to juniors or seniors in the Hospitality Business Major.</u>
> Club operations and management. City, country, yacht, and athletic clubs.
> SA: HB 211
> ~~Effective Fall 2016~~ <u>Effective Summer 2020</u>

HB 337   Hospitality Information Systems
Fall of every year. Spring of every year. 3(3-0) ~~P: (HB 237) and (CSE 101 or CSE 102)~~ <u>P: CSE 101 or CSE 102</u> ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to juniors or seniors in the Hospitality Business Major.</u>
> Technology for gathering, analyzing, storing and communicating information within the hospitality industry.
> ~~Effective Spring 2020~~ <u>Effective Summer 2020</u>

HB 345   ~~Quantity Food Production Systems~~
<u>Hospitality Food Production Systems</u>
Fall of every year. Spring of every year. 3(3-0) ~~P: HB 265 and HB 267~~ <u>P: HB 265</u> ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to sophomores or juniors or seniors in the Hospitality Business Major.</u>
> Organization of food and beverage operations. Product knowledge, especially purchasing, storing, preparing and production in food service operations. Menu development and recipe management.
> ~~Effective Summer 2019~~ <u>Effective Summer 2021</u>

HB 345L   ~~Quantity Food Production Systems Laboratory~~
<u>Hospitality Food Production Systems Lab</u>
Fall of every year. Spring of every year. 1(0-2) P: HB 345 or concurrently ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to juniors or seniors in the Hospitality Business Major.</u>
> Practical applications of organization in food and beverage operations. Product knowledge, especially purchasing, storing, preparing, and production in food service operations. Menu development and recipe management.
> ~~Effective Summer 2019~~ <u>Effective Summer 2021</u>

HB 347   ~~The Foodservice Distribution Channel~~
<u>Hospitality Supply Chain Process</u>
~~Fall of every year.~~ <u>Spring of every year.</u> 3(3-0) ~~P: HB 265 and HB 267~~ ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ <u>R: Open to juniors or seniors in the Hospitality Business Major.</u>
> Business and management of the foodservice distribution channel. Relationships among foodservice manufacturers, brokers, and distributors. Value-added services. Request for proposal (RFP) process. Current issues and future trends.
> ~~Effective Summer 2014~~ <u>Effective Summer 2021</u>

HB 349   ~~Facilities Maintenance and Systems~~
           Hospitality Facilities Management
           Fall of every year. ~~Spring of every year.~~ 3(3-0) ~~P: HB 237 R: Open to sophomores or juniors or
           seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality
           Business Major or in the Hospitality Business Real Estate Investment Management Minor.
                     Managing the physical plant of a hospitality business. Key systems, safety, preventive
                     maintenance, energy conservation.
                     ~~Effective Fall 2016~~ Effective Summer 2021

HB 358   ~~Hospitality Business Ownership~~
           Hospitality Entrepreneurship
           Spring of every year. 3(3-0) ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ R:
           Open to juniors or seniors in the Hospitality Business Major or in the Entrepreneurship and
           Innovation Minor.
                     Hospitality business ownership qualities and characteristics. Thinking like an owner and
                     resultant actions. Ownership responsibilities across all functional areas of the hospitality
                     entrepreneur business.
                     ~~Effective Spring 2013~~ Effective Summer 2021

HB 376   Hospitality Sales Process
           Fall of every year. ~~Spring of every year.~~ 3(3-0) ~~P: (HB 375 or concurrently) or (MKT 300 or
           concurrently) or (MKT 327 or concurrently) R: Open to juniors or seniors in the School of Hospitality
           Business.~~ R: Open to juniors or seniors in the Hospitality Business Major. Not open to students
           with credit in MKT 313.
                     Management of the sales process in the hospitality industry.
                     ~~Effective Summer 2014~~ Effective Summer 2020

HB 380   ~~Meeting and Event Planning and Management~~
           Event Planning and Management
           Fall of every year. 3(3-0) ~~P: (HB 375 or concurrently) or (MKT 300 or concurrently) or (MKT 327 or
           concurrently) R: Open to juniors or seniors in the School of Hospitality Business.~~ R: Open to
           juniors or seniors in the Hospitality Business Major.
                     ~~Planning, developing, budgeting, promoting, delivering, and evaluating meetings or
                     special events in the hospitality industry.~~ Identify the logistical steps for planning an event.
                     The relationship between the goal and objectives for holding an event. Pre-event planning
                     and project management. Understand the detailed components of creating an event.
                     ~~Effective Fall 2017~~ Effective Summer 2021

HB 405   ~~Advanced Management of Food and Beverage Systems~~
           Hospitality Foodservice Cost Control
           Fall of every year. ~~Spring of every year.~~ 3(3-0) ~~P: HB 345~~ P: (HB 265) and ((HB 302 or
           concurrently) or (ACC 202 or concurrently) or (ACC 230 or concurrently)) ~~R: Open to juniors or
           seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality
           Business Major.
                     Design of food and beverage control systems, emphasis on product purchasing (policies,
                     suppliers, selection and evaluation, determination of quality and quantity, ethics and use
                     of technology), inventory management and issuing systems, revenue control procedures
                     and equipment.
                     ~~Effective Summer 2019~~ Effective Summer 2021

HB 411   Hospitality Beverages
           Fall of every year. ~~Spring of every year.~~ 3(3-0) RB: Must be 21 years of age ~~R: Open to juniors or
           seniors in the School of Hospitality Business. Approval of school; application required.~~ R: Open to
           juniors or seniors in the Hospitality Business Major. Approval of school.
                     Evaluation and selection of hospitality beverages. Geographical origins of beverages,
                     beverage production, quality assessment, matching beverages with food, health and
                     social considerations.
                     ~~Effective Summer 2010~~ Effective Summer 2020

HB 437   Hospitality Revenue Management
                ~~Fall of every year.~~ Spring of every year. 3(3-0) ~~P: HB 375 or MKT 300 or MKT 327~~ P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 375 or MKT 300 or MKT 327) ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.
                Exposure to key management and marketing issues relating to the effective implementation of revenue management. The relationships between the revenue management function and other functions or departments in the hospitality organization. The role and job responsibilities of a revenue manager. The identification of distribution channels that hospitality organizations may use to distribute their inventory.
                ~~Effective Fall 2017~~ Effective Summer 2020

HB 447   Hospitality Business Law
                Fall of every year. Spring of every year. 3(3-0) ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality Business Major. Not open to students with credit in GBL 323 or GBL 385.
                Legal aspects of hospitality industry, including structure of the U.S. legal system, contracts, torts, discrimination, property and product liability. Administrative law and government regulation of the industry.
                SA: GBL 447
                ~~Effective Summer 2019~~ Effective Summer 2020

HB 482   Advanced Hospitality Finance
                Fall of every year. Spring of every year. 3(3-0) ~~P: HB 311 or FI 311 or FI 320~~ P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320) ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality Business Major or in the Hospitality Business Real Estate Investment Management Minor.
                Cash flow determination and management. Strategies for financing hospitality ventures and expansion. Determining financial viability of proposed and existing operations.
                ~~Effective Summer 2014~~ Effective Summer 2020

HB 485   Hospitality Foodservice Operations
                Fall of every year. Spring of every year. 3(1-4) ~~P: (HB 345) and ((HB 302 or concurrently) or (ACC 202 or concurrently) or (ACC 230 or concurrently))~~ P: HB 345 and HB 345L ~~R: Open to seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality Business Major.
                Beverage management and dining room service. Guest relations and current management topics. Emphasis on foodservice team projects.
                ~~Effective Summer 2019~~ Effective Summer 2020

HB 486   Advanced Hospitality Marketing
                Fall of every year. ~~Spring of every year.~~ 3(3-0) P: HB 375 or MKT 300 or MKT 327 ~~R: Open to seniors in the School of Hospitality Business.~~ R: Open to juniors or seniors in the Hospitality Business Major.
                Application of advanced marketing principles in the hospitality industry. Identifying, influencing and servicing demand for hospitality products, services, and experiences.
                SA: HB 475, HB 476
                ~~Effective Summer 2014~~ Effective Summer 2020

HB 489   Hospitality Business Strategy (W)
                Fall of every year. Spring of every year. 3(3-0) ~~P: (HB 307) and completion of Tier I writing requirement~~ P: (HB 307 or MGT 315) and completion of Tier I writing requirement ~~RB: Completion of Level I and Level II internships.~~ RB: Completion of Level I and Level 2 internships. ~~R: Open to seniors in the School of Hospitality Business.~~ R: Open to seniors in the Hospitality Business Major.
                Management problems and issues in the hospitality industry. Focus on decision-making models. Case study analysis, discussion and report writing.
                ~~Effective Summer 2018~~ Effective Summer 2020

HB 490   ~~Independent Study~~
                    Hospitality Independent Study
                    On Demand. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. ~~R: Open to juniors or seniors in the School of Hospitality Business. Approval of school.~~ R: Open to students in the Hospitality Business Major. Approval of school.
                              Supervised research in hospitality management and operations.
                              ~~Effective Fall 2017~~ Effective Summer 2021

HB 491   ~~Current Topics in Hospitality Business~~
                    Hospitality Current Topics and Trends
                    On Demand. ~~1 to 6 credits.~~ 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. ~~R: Open to juniors or seniors in the School of Hospitality Business.~~ R: Open to students in the Hospitality Business Major.
                              Emerging topics or issues confronting the hospitality service industry.
                              ~~Effective Fall 2016~~ Effective Summer 2021

HB 492   Hospitality Business Real Estate Professional Skills Workshop
                    Fall of every year. Spring of every year. ~~1 to 6 credits.~~ 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. P: ((HB 273 or concurrently) or (ITM 209 or concurrently)) and (HB 311 or FI 311 or FI 320) ~~R: Open to students in the Hospitality Business Real Estate Investment Management Minor or approval of school.~~ R: Open to juniors or seniors in the Hospitality Business Real Estate Investment Management Minor.
                              Specific knowledge and analytical skills necessary to be successful in an analyst role with a consulting, real estate development, or investment advisory organization. Workshop topics include but are not limited to hospitality real estate investment, market valuation, Excel modeling, business writing, financing hospitality enterprises, asset management, and hotel industry data analytics.
                              ~~Effective Fall 2017~~ Effective Summer 2021

COLLEGE OF HUMAN MEDICINE

HM 651   Advanced Skills and Knowledge in Medical School I
                    Fall of every year. ~~2(2-0)~~ 3(3-0) A student may earn a maximum of 20 credits in all enrollments for this course. P: HM 556 R: Open to graduate-professional students in the College of Human Medicine.
                              ~~Interdisciplinary small group course for advanced medical students combining advanced clinical skills with deep exploration of scientific and humanities literature underlying those skills.~~ Interdisciplinary small group course for advanced medical students combining advanced clinical skills, ongoing development of research skills, and principles of biomedical science and humanities.
                              Request the use of the Pass-No Grade (P-N) system.
                              Request the use of ET-Extension to postpone grading.
                              The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
                              ~~Effective Fall 2017~~ Effective Fall 2020

HM 652   Advanced Skills and Knowledge in Medical School II
                    Spring of every year. ~~2(2-0)~~ 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 651 R: Open to graduate-professional students in the College of Human Medicine.
                              ~~Interdisciplinary small group course for advanced medical students combining advanced clinical skills with deep exploration of scientific and humanities literature underlying those skills.~~ Interdisciplinary small group course for advanced medical students combining advanced clinical skills, ongoing development of research skills, and principles of biomedical science and humanities.
                              Request the use of the Pass-No Grade (P-N) system.
                              Request the use of ET-Extension to postpone grading.
                              The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
                              ~~Effective Spring 2018~~ Effective Fall 2020

HM 653   Advanced Skills and Knowledge in Medical School III
~~Fall of every year.~~ ~~Spring of every year.~~ Summer of every year. ~~2(2-0)~~ 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 652 R: Open to graduate-professional students in the College of Human Medicine.

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

Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
~~Effective Summer 2018~~ Effective Fall 2020

HM 654   Advanced Skills and Knowledge in Medical School IV
Fall of every year. ~~2(2-0)~~ 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 653 R: Open to graduate-professional students in the College of Human Medicine.

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

Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
~~Effective Fall 2018~~ Effective Fall 2020

HM 655   Advanced Skills and Knowledge in Medical School V
Fall of every year. Spring of every year. ~~2(2-0)~~ 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: HM 654 or concurrently R: Open to graduate-professional students in the College of Human Medicine.

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

Request the use of the Pass-No Grade (P-N) system.
Request the use of ET-Extension to postpone grading.
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
~~Effective Fall 2019~~ Effective Fall 2020

SCHOOL OF JOURNALISM

JRN 418   Advanced Sports Reporting
Fall of every year. Spring of every year. 3(2-2) ~~P: JRN 416~~ P: JRN 300 and JRN 317
     ~~Upper-level exploration of issues in sports journalism and directed professional work experiences at outlets such as WKAR's Current Sports (radio/TV/web) and FOX Sports.~~ Upper-level exploration of issues in sports journalism and directed professional work experiences at outlets.
~~Effective Fall 2018~~ Effective Fall 2020

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

LLT 861   Advanced Topics in Second Language Acquisition
Fall of every year. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. ~~P: LLT 860 or LLT 872~~ RB: LLT 860 or LLT 872 R: Open to graduate students in the Second Language Studies Major or approval of department.
     Advanced course in second language acquisition. Topics vary based on current topics in the field and faculty interests.
~~Effective Spring 2007~~ Effective Fall 2020

LLT 864   Second Language Psycholinguistics
Spring of every year. 3(3-0) ~~P: LLT 860~~ RB: (LLT 861 and LLT 862) and Background in SLA research. ~~R: Approval of department.~~ <u>R: Open to graduate students in the Second Language Studies Major or approval of department.</u>
> Second and foreign language learning from a psycholinguistic perspective. Discussion of major research findings and theories of second and foreign language perception, comprehension, and production.
> ~~Effective Fall 2007~~ <u>Effective Fall 2020</u>

LLT 873   Quantitative Research in Second Language Studies
~~Fall of every year.~~ Spring of every year. 3(3-0) ~~P: LLT 872~~ <u>RB: LLT 872</u> R: Open to graduate students in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major or approval of department.
> Statistical principles and techniques with particular application to investigating second language learning and teaching.
> ~~Effective Fall 2006~~ <u>Effective Fall 2020</u>

LLT 874   Qualitative Research in Second Language Studies
~~Fall of every year.~~ Spring of every year. 3(3-0) ~~P: LLT 872~~ <u>RB: LLT 872</u> ~~R: Open to doctoral students in the Second Language Studies major or in the Teaching English to Speakers of Other Languages major or approval of department.~~ <u>R: Open to graduate students in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major or approval of department.</u>
> Theories, principles, and techniques underlying qualitative research. Applications to investigating second language learning and teaching.
> ~~Effective Fall 2006~~ <u>Effective Fall 2020</u>

COLLEGE OF OSTEOPATHIC MEDICINE

OST 580   Respiratory System
Spring of every year. ~~6(4-4)~~ <u>7(5-4)</u> R: Open to graduate-professional students in the College of Osteopathic Medicine.
> Systems biology approach to the entire respiratory system.
> Request the use of the Pass-No Grade (P-N) system.
> ~~Effective Spring 2019~~ <u>Effective Spring 2021</u>

DEPARTMENT OF PLANT, SOIL AND MICROBIAL SCIENCES

CSS 202L   World of Turf Lab
Fall of every year. <u>Spring of every year.</u> Summer of every year. 1(0-2) P: CSS 202 or concurrently Not open to students with credit in CSS 232.
> Turfgrass identification. Site analysis and recommendations. On campus facility and venue visits. Mowing equipment and practices. Turf establishment. Soil cultivation and amendments. Fertilizer and pest management. Field trips required.
> ~~Effective Summer 2016~~ <u>Effective Spring 2020</u>

CSS 313   ~~Data Interpretation and Writing in the Agronomic Sciences~~
<u>Data Interpretation and Writing in the Agronomic Sciences (W)</u>
Spring of every year. 2(2-0) ~~P: (CSS 110 and CSS 210) and (CSS 101 or CSS 232)~~ <u>P: ((CSS 110 and CSS 210) and completion of Tier I writing requirement) and (CSS 101 or CSS 232)</u> R: Not open to freshmen.
> Data analysis, interpretation, integration, and technical writing in agronomic sciences.
> ~~Effective Fall 2018~~ <u>Effective Summer 2021</u>

CSS 499   Undergraduate Research
                 Fall of every year. Spring of every year. Summer of every year. 3(0-9) <u>A student may earn a maximum of 9 credits in all enrollments for this course.</u> R: Approval of department; application required.
                          Faculty supervised research in a selected area of crop and soil sciences or environmental soil science.
                          Request the use of ET-Extension to postpone grading.
                          The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
                          ~~Effective Spring 2014~~ <u>Effective Fall 2020</u>

DEPARTMENT OF SUPPLY CHAIN MANAGEMENT

SCM 303   Introduction to Supply Chain Management
                 Fall of every year. Spring of every year. Summer of every year. 3(3-0) ~~R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to undergraduate students in the School of Hospitality Business and open to students in the Agribusiness Management major or in the Applied Engineering Sciences major or in the Construction Management major or in the Food Industry Management major or in the Packaging major.~~ <u>R: Open to undergraduate students in the Accounting major or in the Finance Major or in the Human Resource Management Major or in the Management Major or in the Marketing Major or in the Business - Admitted major or in the Supply Chain Management Major or in the Applied Engineering Sciences Major.</u>
                          Objectives, processes, and functions of supply chain management activities including procurement, manufacturing, and logistics. The role of supply chain processes in creating competitive advantage with respect to quality, flexibility, lead-time, and cost.
                          SA: MGT 303, MSC 303
                          ~~Effective Spring 2013~~ <u>Effective Spring 2020</u>