MICHIGAN STATE UNIVERSITY

Report of

THE UNIVERSITY COMMITTEE ON CURRICULUM

to the Faculty Senate

September 14, 2021

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

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.
- To provide information to members of the faculty in each department about academic programs and 3. courses in all colleges, departments, and schools of the University.

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

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES:

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

PART II - NEW COURSES:1

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

PART III - COURSE CHANGES:1

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

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

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

- P: Prerequisite monitored in SIS =
- C: = Corequisite
- R: = Restriction
- Recommended background
- RB: = SA: = Semester Alias

MICHIGAN STATE UNIVERSITY

September 14, 2021

- 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 **Agricultural Technology Certificate** in **Agricultural Industries** in The Institute of Agricultural Technology.
 - a. Under the heading **Requirements for Agricultural Industries** make the following changes:
 - (1) In item 1. delete the following courses:

ABM	100	Decision-making in the Agri-Food System	3
ABM	130	Farm Management I	3
CSS	105	Agricultural Industries Seminar	1
Add the	following	courses:	
AFRE	100	Decision-making in the Agri-Food System	3
AFRE	130	Farm Management I	3
CSS	192	Professional Development Seminar I	1
In item 3	3. delete	the following courses:	
ABM	222	Agribusiness and Food Industry Sales	3
ABM	225	Commodity Marketing I	3
Add the	following	courses:	
AFRE	222	Agribusiness and Food Industry Sales	3
AFRE	232	Commodity Marketing I	3

Effective Fall 2021.

1.

(2)

- 2. Change the requirements for the **Agricultural Technology Certificate** in **Electrical Technology** in the Institute of Agricultural Technology.
 - a. Under the heading **Electrical Technology** replace the entire entry with the following:

Requirements for Electrical Technology

CREDITS

All of the following courses (38 to 41 credits): Electrical Lighting for Residential and Agricultural AE 102 Facilities 2 AE 172 Electrical Wiring I 4 173 **Electrical Occupations** 1 AE AE 182 Electrical Wiring II 3 AE 185 **Electrical Applications** 3 192 Electrical Wiring III 4 AE AE 194 Electrical Systems Planning 4 AT 045 Agricultural Communications 2

AT	071	Technical Mathematics	2
AT	293	Professional Internship in Agricultural Technology	3
TSM	121	Fundamentals of Electricity	4
TSM	130	Energy Efficiency and Conservation in	
		Agricultural Systems	3
TSM	222	Fundamentals of Automation and Controls	3
Student	s who dei	monstrate proficiency through placement testing for	
AT 045	and AT 0	71 will take elective course work to substitute the	
credit in	those co	urses.	
The follo	owing cou	irse or equivalent certification:	
KIN	125	First Aid and Personal Safety	3
Equivale	ent certific	cation is current first aid and CPR certification.	
Comple	te 8 to 14	credits of additional Agricultural Technology courses	
chosen	in consult	tation with and approved by the program coordinator.	

Effective Summer 2022.

2.

3.

- 3. Change the requirements for the **Bachelor of Science** degree in **Agriculture, Food and Natural Resources Education** in the Department of Community Sustainability. The Teacher Education Council (TEC) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Requirements for the Bachelor of Science Degree in Agriculture, Food and Natural Resources Education** make the following changes:
 - (1) In item 3. a. change the total credits from '56 to '55'.
 - (2) In item 3. a. delete the following courses:

	ANS TE	110 250	Introductory Animal Agriculture Human Diversity, Power and Opportunity in Social Institutions	4 3				
	Add the	Add the following courses:						
	ANS TE	110 101	Introductory Animal Agriculture Social Foundations of Justice and Equity Education	3 3				
(3)	In item 3. b. delete the following courses:							
	ABM ABM	100 130	Decision-making in the Agri-Food System Farm Management I	3 3				
	Add the	following	g courses:					
	AFRE AFRE	100 130	Decision-making in the Agri-Food System Farm Management I	3 3				
(4)	Delete i	item 3. e.						

(5) Reletter item 3. f. to item 3. e.

Effective Fall 2021.

COLLEGE OF ARTS AND LETTERS

- 1. Change the requirements for the **Graduate Certificate** in **Global Studies in the Arts and Humanities** in the College of Arts and Letters. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its April 12, 2021 meeting.
 - (1) Under the heading **Requirements for the Graduate Certificate in Global Studies in the Arts** and Humanities make the following changes:
 - (1) Change item 3. to the following:

Completion of a 3-credit international experience through participation in a study abroad program, an approved internship with a global dimension, advanced language studies, or mentored research experience (independent study). The experience is chosen by the student in consultation with their primary advisor and approved by the Director of the Global Studies in the Arts and Humanities program.

(2) Delete item 4.:

Demonstration of oral proficiency in a language beyond one that is required by the student's degree program. Demonstrating oral proficiency in a language that only reading proficiency is required by the student's degree program can also meet this requirement. Students can meet this requirement by:

- a. Successful completion of an appropriate language course at the 400-level or above, or
- b. Completion of an oral proficiency exam conducted by the Center for Language Teaching Advancement (CeLTA).

Effective Spring 2022.

2. Establish a **Minor** in **Writing** in the Department of Writing, Rhetoric and American Cultures. The University Committee on Undergraduate Education (UCUE recommended approval of this request at its February 18, 2021 meeting.

a. Background Information:

The Minor in Writing, administered by the Department of Writing, Rhetoric, and American Cultures, will support students who wish to develop as writers beyond what is offered in Tier I or Tier II but who do not wish to become professional writing majors. These students are committed to another area of research or praxis, but recognize the value of writing for their field and communities. This dual attention—to a distinct professional field and its intersection with public writing—is distinctive of students in the minor.

The creation of a Minor in Writing is an opportunity to engage with MSU undergraduates in the SPARTANS WILL mission. Spartan alumni, community advocates, and industry professionals with expertise in writing for specific audiences can better work for change within our global information economy. Students must be sophisticated communicators to work for change in our increasingly interconnected world. This minor supports MSU's land grant mission of cross- and interdisciplinary enterprises by helping students to connect

the humanities to the sciences and professions.

b. Academic Programs Catalog Text:

The Minor in Writing, which is administered by the Department of Writing, Rhetoric and American Cultures, provides exposure to rhetorical analysis, community-based research, and writing strategies of the discipline of writing and rhetoric. This knowledge and skill base may be used to complement majors in a wide range of fields. The minor is intended for students who wish to develop as writers beyond what is offered in Tier I or Tier II but who do not wish to become professional writing majors, but recognize the value of writing for their field and communities.

CREDITS

3

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University except those in the Bachelor of Arts Degree in Professional and Public Writing. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the requirements for the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements of the minor should consult an undergraduate advisor in the Department of Writing, Rhetoric and American Cultures.

Requirements for the Minor in Writing

Complete a minimum of 15 credits from the following: 1. Both of the following courses (6 credits): 202 Introduction to Professional and Public Writing 3 WRA Writing Research in Communities and Cultures WRA 330 3 2. One of the following courses (3 credits): WRA 325 Writing and Multimodality 3 WRA 415 Digital Rhetoric 3 3. One of the following courses (3 credits): WRA Writing in the Public Interest (W) 3 331 WRA 333 Writing in Corporate Contexts 3 WRA 335 Writing in Scientific Contexts 3 WRA 337 Writing and Public Policy 3 Complete 3 to 6 credits of electives in WRA or XA at the 200-level or 4. or higher as approved by the student's academic advisor.

Effective Spring 2022.

ELI BROAD COLLEGE OF BUSINESS

- 1. Change the requirements for the **Master of Science** degree in **Accounting** in the Department of Accounting and Information Systems. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Requirements for the Master of Science Degree in Accounting**, make the following changes:
 - (1) In item 1. add the following course:

ACC 827 Accounting Analytics

(2) In item 2., in the **Information Systems** concentration, delete the following course:

ACC 827 Accounting Analytics 3

(3) In item 3., **Electives**, change the credits from '12 to 15' to '9 to 12'.

Effective Fall 2021.

- 2. Change the requirements of the **Bachelor of Arts** degree in **Hospitality Business** in The School of Hospitality Business.
 - a. Under the heading **Requirements for the Bachelor of Arts Degree Hospitality Business** make the following changes:

(1)	In item	2. a., cha	2. a., change the total credits from '21' to '24' and add the following course:					
	FI	320	Introdu	ction to Finance	3			
(2)	In item	2. b. cha	nge the to	otal credits from '39' to '36' and delete the following co	urse:			
	HB	311	Hospita	lity Finance	3			
(3)	In item	2. d., ma	ke the fol	lowing changes:				
	(a)	Under	Events d	elete the following course:				
		HB	349	Hospitality Facilities Management	3			
	(b)	Under	Food and	d Beverage delete the following course:				
		HB	349	Hospitality Facilities Management	3			
	(c)	Delete	the <i>Lodg</i>	<i>ing</i> area.				
	(d)	(d) Rename the <i>Real Estate</i> area to <i>Lodging and Real Estate</i> and delete the following courses:						
		HB HB	349 492	Hospitality Facilities Management Hospitality Business Real Estate	3			
		ПВ	492	Professional Skills Workshop	1 to 3			
	(e)	Under	Other add	d the following course:				
		HB	349	Hospitality Facilities Management	3			

Effective Spring 2022.

3. Change the requirements for the **Minor in Hospitality Real Estate** in the School of Hospitality Business.

a.	g Admission delete the following course:			
	CSE	101	Computing Concepts and Competencies	3
b.	Under the heading Minor in Hospitality Real Estate delete the following course:			
	HB	311	Hospitality Finance	3

Effective Spring 2022.

COLLEGE OF EDUCATION

1. Establish a **Master of Arts** degree in **Applied Behavior Analysis and Autism Spectrum Disorder** in the Department of Counseling, Educational Psychology, and Special Education. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its February 8, 2021 meeting.

a. Background Information:

The proposed Master of Arts Degree in Applied Behavior Analysis and Autism Spectrum Disorder will replace the Graduate Certificate in Applied Behavior Analysis (GC-ABA).

MSU currently has two graduate programs to prepare students to become eligible to be credentialed as a Board Certified Behavior Analyst (BCBA). The M.A. in Applied Behavior Analysis provides the course work and experience and supervision required for BCBA credentialing. This program is offered in a hybrid format, with a mixture of online and in-person classes and experiences. The program is limited to around 8 students a year to meet accreditation requirements. The second route to BCBA credentialing is the Graduate Certificate in Applied Behavior Analysis (GC-ABA). The GC-ABA was designed for students in the Master of Arts Degree in Special Education (autism spectrum disorder [ASD] emphasis) to earn 9 additional credit hours of course work needed to qualify for the BCBA credential. Students taking this path are responsible for getting required professional experiences and supervision elsewhere in settings employing ABA practices.

For various reasons—increased credit requirements for the BCBA credential, declining enrollment in the Master of Arts Degree in Special Education, and decreased eligibility for financial aid—enrollment in and demand for the GC-ABA has dropped. At the same time, demand for professionals with the BCBA credential is extraordinarily high. A recent market analysis conducted by BurningGlass Technologies (*https://www.bacb.com/wp-content/uploads/2020/05/US-Employment-Demand-for-Behavior-Analysts_2020_.pdf*) indicates 19,563 job openings for professionals with a BCBA credential in the United States. In 2019 in Michigan, there were 612 job postings for professionals with a BCBA credential.

To increase accessibility to graduate education that leads to a credential in this high demand area, we propose replacing the GC-ABA with a fully online 30-credit Master of Arts program focusing on Applied Behavior Analysis and Autism Spectrum Disorder. The program will provide the course work required for the BCBA credential. Students will be responsible for their own supervision and experiences required for the BCBA credential, which is common with many M.A. ABA programs around the country. The program will also include development of expertise in autism spectrum Disorder (ASD), which is a primary application area of ABA and will enhance marketability of graduates.

Once the new Master of Arts Degree in Applied Behavior Analysis and Autism Spectrum Disorder is in place, we will discontinue the GC-ABA. With increased credentialing requirements, the GC-ABA is no longer viable as a separate graduate certificate.

The Master of Arts Degree in Applied Behavior Analysis will continue to provide full preparation for BCBA certification for a small number of students. The new Master of Arts Degree in Applied Behavior Analysis and Autism Spectrum Disorder will offer a route to BCBA credentialing to a larger number of students by providing the course work portion of credentialing requirements.

Although several institutions throughout the country offer graduate programs to fulfill course work requirements to earn the BCBA credential, few universities in Michigan offer such degree programs. The need for experts in Applied Behavior Analysis (ABA) and autism spectrum disorder is high, with the demand for professionals with a BCBA credential far exceeding the supply.

b. Academic Programs Catalog Text:

The Master of Arts degree in Applied Behavior Analysis and Autism Spectrum Disorder is designed to prepare students to effectively implement the science of Applied Behavior Analysis (ABA) and become experts in autism intervention in schools, clinics, or homes. The program provides the opportunity to develop in-depth knowledge and skills for implementing effective autism interventions based on the principles of Applied Behavior Analysis.

The program offers the graduate-level course work required to be eligible for taking the national examination for certification by the Behavior Analyst Certification Board in accordance with governing bodies in behavior analysis. The program does not include the supervised fieldwork component required for certification eligibility. Students are responsible for securing an appropriate fieldwork site with credentialed supervision and completing their fieldwork independent of the program. Students desiring a program that includes supervised fieldwork should consider the Master of Arts in Applied Behavior Analysis.

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

Admission

An applicant to the Master of Arts Degree in Applied Behavior Analysis and Autism Spectrum Disorder program must:

- Submit both departmental and University application forms. 1.
- 2. Submit three letters of recommendation from professionals knowledgeable about the applicant's academic potential to pursue graduate study and competence or potential to implement Applied Behavior Analysis with people with autism. It is highly recommended that at least one letter comes from a current or former professor.
- 3. Submit a statement of professional goals that clearly describe the applicant's reasons for pursuing the master's degree and the goals the degree will help them attain.

Applicants are reviewed by faculty who look for indicators of a high probability of success. The following factors are significant in determining admission to the Master of Arts Degree in Applied Behavior Analysis and Autism Spectrum Disorder:

- A grade-point average of 3.00 or higher in the last two years of undergraduate and 1. graduate courses.
- 2. Experience working with children and youth with disabilities in a school or other educational setting.
- Professional goals that are consistent with the objectives of the degree program. 3.
- 4. A test of English proficiency for students for whom English is not a first language.

Admission to the program is competitive and subject to space and availability. Not all students who meet the above requirements will be admitted. Students will be admitted only during the Fall semester. Applications must be submitted by February 1st.

Requirements for the Master of Arts Degree in Applied Behavior Analysis and Autism Spectrum Disorder

The program is available under Plan B (without thesis) and online only. Students must complete a total of 30 credits from the following: CREDITS

				UNEDITS
1.	All of t	he follow	ing courses (27 credits):	
	CEP	843	Autism Spectrum Disorders: Characteristics	
			and Educational Implications	3
	CEP	844	Applied Behavior Analysis for Teachers	3
	CEP	845	Autism Spectrum Disorders: Assessment	
			and Intervention	3
	CEP	846	Autism Spectrum Disorders: Advanced Topics	3
	CEP	848	Supervision in Applied Behavior Analysis	3
	CEP	851	Concepts and Principles in Applied Behavior	
			Analysis	3
	CEP	854	Ethics in Behavior Analysis	3
	CEP	855	Verbal Behavior in Education	3
	CEP	942	Single-case Experimental Designs for Intervention	
			Research	3
2.	Compl	ete 3 ado	ditional credits in courses approved by the student's aca	demic advisor.

- 2. plete 3 additional credits in courses approved by the student's academic advisor.
- 3. Completion of a final evaluation.

- 2. Change the requirements for the **Master of Arts** degree in **Rehabilitation Counseling** in the Department of Counseling, Educational Psychology and Special Education. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Requirements for the Master of Arts Degree in Rehabilitation Counseling** make the following changes:
 - (1) Delete the following courses:

CEP	893A	Rehabilitation Counseling Internship	9
CEP	894A	Rehabilitation Counseling Practicum	6
Add the	e following	g courses:	
CEP	893A	Rehabilitation Counseling Internship	12
CEP	894A	Rehabilitation Counseling Practicum	3

Effective Fall 2021.

3. Establish a **Graduate Specialization** in **Education Policy and Social Sciences** in the Department of Educational Administration. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its February 8, 2021 meeting.

a. Background Information:

Educational policy research increasingly relies on interdisciplinary approaches and mixed methods research to address complex real-world policy challenges. The joint interests of faculty from the departments of educational administration, economics, and political science have led to successful proposals for research projects and federal support for students interested in gaining expertise in Education Policy and Social Sciences. This specialization program will train doctoral students to conduct research on improving education systems through rigorous exploratory and efficacy methodologies.

MSU is particularly well-situated to offer this programming to our graduate students. The College of Education is home to the Education Policy Innovation Collaborative (EPIC) - a research center that serves as strategic partner to the Michigan Department of Education. We have faculty across different disciplines (educational policy, K-12 education, HALE, economics, and political science) who conduct rigorous mixed methods research on education policy and implementation. This program will knit together existing resources at MSU to offer comprehensive course work to train students to conduct research in Education Policy and Social Sciences.

The objective of the Specialization in Education Policy and Social Sciences is to provide enrolled doctoral students with a firm understanding of the implementation and outcomes of education policies, as well as the methodological skills to evaluate education policies both in terms of their implementation and outcomes. The eventual goal is for students to graduate with the ability to help researchers, practitioners, and policymakers understand how policies are developed and implemented, and how this may lead to differential outcomes. At the same time, through their courses in economics and political science, students will gain an understanding of how to apply theory and methods from these fields to education policy research.

b. Academic Programs Catalog Text:

The Graduate Specialization in Education Policy and Social Sciences, which is administered by the Department of Educational Administration, trains doctoral students to conduct research on improving education systems through rigorous exploratory and efficacy methodologies.

The specialization is available as an elective to students who are enrolled in doctoral degree programs at Michigan State University. With the approval of the department and college that administers the student's degree program, the courses that are used to satisfy the specialization may also be used to satisfy the requirements for the doctoral degree. The students program of study must be approved by the advisor for the specialization.

Admission

Students must declare intention to pursue the Graduate Specialization in Education Policy and Social Sciences prior to the start of the 3rd year in a Ph.D. program.

Requirements for the Graduate Specialization in Education Policy and Social Sciences

Students must complete the following with a 3.5 grade-point average in courses across the specialization (18 credits): CREDITS

				CREDITS
1.	Both of	the follow	ving courses (6 credits):	
	EAD	932	Education Policy Implementation	3
	EAD	933		3
2.	One of	the follow	ving courses (3 credits):	
	EAD	907	Education Policy for Immigrant and English	
			Language Learner Students	3
	EAD	925	Policy an d Practice in Education	3
	EAD	926	School Finance and Operations	3 3 3
	EAD	948	Advanced Economics of Education	3
	EAD	949	Advanced Seminar in Education Policy	3
	EAD	967	Policy Development and Analysis in Postsecondary	
			Education	3
3.	At least	two of th	e following courses (6 credits):	
	EAD	948	Advanced Economics of Education	3
	EC	835	Public Expenditures	3 3 3 3 3 3 3 3
	EC	880	Labor Economics I	3
	EC	881	Labor Economics II	3
	PLS	811	Proseminar in Policy Analysis	3
	PLS	820	Proseminar in American Politics	3
	PLS	821	State Government and Politics	3
	PLS	822	Urban Government and Politics	3
			o fulfill item 2. may not be used to fulfill item 3.	
4.	At least	one of th	ne following courses (3 credits):	
	EAD	946B	Econometric Analysis for Education Policy	3
	EC	821A	Cross Section and Panel Data Econometrics I	3 3 3
	EC	823	Applied Econometrics	3
5.		a policy l entation.	orief summarizing research findings on education polic	y evaluation or

6. Submit a dissertation that, in the judgment of the student's dissertation committee, represents the integration of education policy and social sciences and the student's primary field and includes research that is relevant to practical issues in United States education.

Effective Fall 2021.

- 4. Change the requirements for the **Doctor of Philosophy** degree in **Kinesiology** in the Department of Kinesiology. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Doctor of Philosophy** make the following change:
 - (1) Change the name of the 'Athletic Training' concentration <u>to</u> 'Athletic Injury and Rehabilitation'.

Effective Fall 2021.

5. Establish a **Graduate Certificate** in **Sport Leadership and Administration** in the Department of Kinesiology. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its March 15, 2021 meeting.

a. Background Information:

The new Graduate Certificate in Sport Leadership and Administration is an expansion of existent curricular offerings. It maintains coherence with requested changes to the Master of Science degree in Sport Coaching, Leadership, and Administration by mapping onto requirements for a new Sport Administration concentration within the degree. The existent Graduate Certificate in Sport Coaching and Leadership, which is being renamed to Sport Coaching, is being realigned to mirror requirements for the revised Coaching concentration in the master's degree program. The addition of this graduate certificate will allow students greater choice of a curricular offering that fits with their career goals.

b. Academic Programs Catalog Text:

The Graduate Certificate in Sport Leadership and Administration provides opportunities for students to develop expertise in the operational and administrative functions required for careers in sport organizations at the intercollegiate, interscholastic, and community sports levels. It exposes students to knowledge of the legal, financial, managerial, governance and ethical aspects of sport. The certificate is available only online.

Admission

To be considered for admission to the Graduate Certificate in Sport Leadership and Administration students must:

- 1. have completed a bachelor's degree.
- 2. complete the Intent to Enroll form if you are currently enrolled in a graduate degree program at Michigan State University.

Students who are not enrolled at Michigan State University must:

- 1. submit a university application and application fee.
- 2. provide transcripts from all previous institutions of higher education.
- 3. submit an academic statement of 750 words that clearly describes the applicant's reasons for pursuing the certificate and the goals that the certificate will help them attain.
- 4. submit a current resume of no more than two pages.
- 5. take a test of English language proficiency for students for whom English is not a first language.

Applications are reviewed by faculty who look for indications of high probability of success. Factors that are significant in determining admission are:

- 1. a grade-point average of 3.0 or higher in the last two years of all undergraduate and graduate course work.
- 2. professional goals that are consistent with the objectives of the graduate certificate.
- 3. evidence of an understanding of the fundamentals of the sport industry.
- 4. relevant career experiences, including employment, internships, or field experiences.

Requirements for the Graduate Certificate in Sport Leadership and Administration

CREDITS

Studer	nts must	complete 13 credits from the following:	
KIN	849	Theory and Practice of Modern Sport Leadership	3
KIN	851	The Sport Enterprise	3
KIN	852	Ethics in Sport Coaching, Leadership, and Administration	1
KIN	853	Athletic Administration and Governance	3
KIN	854	Legal Aspects of Sport	3

Effective Fall 2022.

COLLEGE OF HUMAN MEDICINE

- 1. Change the requirements for the **Master of Science** degree in **Biostatistics** in the Department of Epidemiology and Biostatistics. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Requirements for the Master of Science** degree in **Biostatistics** replace the entire entry with the following:

The program is available under either Plan A (with thesis) or Plan B (without thesis). A total of 33 credits is required for both Plan A or Plan B, with no more than 6 credits at the 400-level. The student's program of study must be approved by the student's academic advisor and guidance committee with the approval of the Dean of the College of Human Medicine.

In addition to meeting the requirements of the university and of the College of Human Medicine, the student must meet the following:

CREDITS

			(REDITS
1.	All of th	e followin	ig courses (11 credits):	
	EPI	808B	Advanced Biostatistics	3
	EPI	810	Introductory Epidemiology	3
	EPI	826B	Categorical Data Analysis	3
	EPI	828	Seminar in Responsible Conduct of Research	1
	EPI	856	Statistical Consulting in Public Health	1
2.			the following courses (3 credits):	
	EPI	853B	Statistical Computing	3
	STT	802	Statistical Computation	3
3.			dits (Plan A) or 15 credits (Plan B) in biostatistics elective	-
0.	followin			
	EC	9. 821A	Cross Section and Panel Data Econometrics I	3
	EC	821B	Cross Section and Panel Data Econometrics I	3
	EPI	851	SAS Programming I: Essentials	1
	EPI	852	SAS Programming II: Data Management and Analysis	1
	EPI	855	Biostatistical Modeling in Genomic Data Analysis	3
	EPI	858	Clinical Trials	3
	EPI	951	Latent Variable Modeling	3
	EPI	952	Duration and Severity Analysis	3 3 3
	EPI	952 953	Analytical Strategies for Observational Studies	3
	FOR	953 875	R Programming for Data Sciences	
	STT	675 464	Statistics for Biologists	ა ა
	STT	464 465		3 3 3 4 3 3 3 3
	STT		Bayesian Statistical Methods	ა ი
		801	Design of Experiments	3
	STT STT	814	Advanced Statistics for Biologists	4
		825	Sample Surveys	3
	STT	847	Analysis of Survival Data	3
	STT	861	Theory of Probability and Statistics I	3
	STT	862	Theory of Probability and Statistics II	3
			e courses may be chosen with advisor approval.	
4.			tional credits of epidemiology electives from the following	:
	EPI	805	Readings in the Historical Roots of Epidemiological	•
		040	Thought	3
	EPI	812	Causal Inference in Epidemiology	3
	EPI	815	Epidemiology of Cardiovascular Disease	3 3
	EPI	816	Perinatal Epidemiology	3
	EPI	817	Epidemiology of Communicable Diseases	3
	EPI	819	Spatial Epidemiology and Medical Geography	3
	EPI	823	Cancer Epidemiology	3
	EPI	835	Neuroepidemiology	3
	EPI	890	Independent Study in Epidemiology and Biostatistics	1 to 3
	EPI	910	Themes in Contemporary Epidemiology	3
	EPI	977	Social Epidemiology	3
	EPI	979	Advanced Topics of Infectious Disease Epidemiology	3
	LCS	829	Design and Conduct of Epidemiologic Studies	0
			and Clinical Trials	3

5. Attend all MSU Graduate School Responsible Conduct of Research (RCR) Workshops (Human).

Additional Requirements for Plan A

- 1. The following course (4 credits):
 - EPI 899 Master's Thesis Research
- 2. Pass an oral defense of the thesis.

Additional Requirements for Plan B

- 1. Complete a capstone project through enrollment in 1 credit of EPI 890 Independent Study in Epidemiology and Biostatistics.
- 2. Pass a final oral examination or evaluation of the capstone project.

Effective Fall 2021.

- 2. Change the requirements for the **Doctor of Philosophy** degree in **Biostatistics** in the Department of Epidemiology and Biostatistics. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Admission**, in the second paragraph, change 'the first 30 credits' to 'the first 33 credits'.
 - b. Under the heading **Requirements for the Doctor of Philosophy Degree in Biostatistics** replace the entire entry with the following:

The doctoral degree program offers three concentration areas: design and analysis of medical studies; big data and statistical genetics; and ad biometry, a flexible option for students with diverse interests. The concentration is selected in consultation with a faculty advisor and guidance committee.

CREDITS

1.

2.

Comple	ete all of	the follow	ing courses (13 credits):					
EPI	810	Introdu	Introductory Epidemiology					
EPI	828	Semina	Seminar in Responsible Conduct of Research					
EPI	860	Advand	ced Inference for Biostatistics	3				
STT	867	Linear	Model Methodology	3 3				
STT	868	Mixed I	Models: Theory, Methods and Applications	3				
Comple	ete one o	of the follo	wing concentrations:					
Design	n and An	alysis of	Medical Studies					
1.	One of	the follov	ving courses (3 credits):					
	EPI	858	Clinical Trial I	3				
	EPI	952	Duration and Severity Analysis	3				
	Or							
	STT	847	Analysis of Survival Data	3				
2.	Compl	ete 11 cre	edits of elective course work:					
	ANS	814	Advanced Statistics for Biologists	4				
	CSE	331	Algorithms and Data Structures	3				
	CSE	480	Database Systems	3 3 3				
	CSE	482	Big Data Analysis	3				
	CSE	847	Machine Learning	3				
	CSE	881	Data Mining	3				
	EC	821A	Cross Section and Panel Data					
			Econometrics I	3				
	EC	821	Cross Section and Panel Data					
			Econometrics II	3				
	EPI	812	Causal Inference in Epidemiology	3				
	EPI	855	Biostatistical Modeling in Genomic					
			Data Analysis	3				
	EPI	880	Selected Topics in Biostatistics	3				

4

	EPI	920	Advanced Methods in Epidemiology	
			and Applied Statistics	3
	EPI	950	Advanced Biostatistical Methods	
			in Epidemiology	3
	EPI	952	Duration and Severity Analysis	3
	EPI	953	Analytical Strategies for Observational	
			Studies	3
	EPI	990	Independent Study	3
	STT	801	Design of Experiments	3
	STT	825	Sample Surveys	3
	STT	855	Statistical Genetics	3
	STT	861	Theory of Probability and Statistics I	3
	STT	862	Theory of Probability and Statistics II	3
	STT	873	Statistical Learning and Data Mining	3
	STT	874	Introduction to Bayesian Analysis	3
			es may be chosen with advisor approval.	
Big Dat			Genetics	
1.	One of	the follow	ing courses:	
	EPI	855	Biostatistical Modeling in Genomic	
			Data Analysis	3
	Or			
	STT	855	Statistical Genetics	3
	CSE	231	Introduction to Programming I	3
	Or			
	CSE	232	Introduction to Programming II	4
	STT	456	Actuarial Models II	3
2.	Comple	ete 11 cre	dits of elective course work:	
	ANS	814	Advanced Statistics for Biologists	4
	CSE	331	Algorithms and Data Structures	3
	CSE	480	Database Systems	3
	CSE	482	Big Data Analysis	3
	CSE	847	Machine Learning	3
	CSE	881	Data Mining	3
	EC	821A	Cross Section and Panel Data	
			Econometrics I	3
	EC	821	Cross Section and Panel Data	
			Econometrics II	3
	EPI	812	Causal Inference in Epidemiology	3
	EPI	858	Clinical Trials	3
	EPI	880	Selected Topics in Biostatistics	3
	EPI	920	Advanced Methods in Epidemiology	
			and Applied Statistics	3
	EPI	950	Advanced Biostatistical Methods	
			in Epidemiology	3
	EPI	952	Duration and Severity Analysis	3
	EPI	953	Analytical Strategies for Observational	
			Studies	3
	EPI	990	Independent Study	3
	STT	801	Design of Experiments	3
	STT	825	Sample Surveys	3
	STT	861	Theory of Probability and Statistics I	3
	STT	862	Theory of Probability and Statistics II	3
	STT	873	Statistical Learning and Data Mining	3
	STT	874	Introduction to Bayesian Analysis	3
	Additior	nal course	es may be chosen with advisor approval.	

Biometry

1.

Comple	ete 14 cr	redits of elective course work:	
ANS	814	Advanced Statistics for Biologists	4
CSE	331	Algorithms and Data Structures	3
CSE	480	Database Systems	3
CSE	482	Big Data Analysis	3
CSE	847	Machine Learning	3
CSE	881	Data Mining	3

EC	821A	Cross Section and Panel Data	
		Econometrics I	3
EC	821	Cross Section and Panel Data	
		Econometrics II	3 3
EPI	812	Causal Inference in Epidemiology	3
EPI	855	Biostatistical Modeling in Genomic	
		Data Analysis	3
EPI	858	Clinical Trials	3 3 3
EPI	880	Selected Topics in Biostatistics	3
EPI	920	Advanced Methods in Epidemiology	
		and Applied Statistics	3
EPI	950	Advanced Biostatistical Methods	
		in Epidemiology	3 3
EPI	952	Duration and Severity Analysis	3
EPI	953	Analytical Strategies for Observational	
		Studies	3
EPI	990	Independent Study	3
STT	801	Design of Experiments	3
STT	825	Sample Surveys	3
STT	847	Survival Analysis	3 3 3 3 3 3 3 3 3 3 3 3 3
STT	855	Statistical Genetics	3
STT	861	Theory of Probability and Statistics I	3
STT	862	Theory of Probability and Statistics II	3
STT	873	Statistical Learning and Data Mining	3
STT	874	Introduction to Bayesian Analysis	3
Addition	al course	es may be chosen with advisor approval.	

- 2. Attend all MSU Graduate School Responsible Conduct of Research (RCR) Workshops (human).
- 3. Attend 80% of department-sponsored Seminars.
- 4. Attend 80% of department Ph.D. Journal Club meetings.
- 5. Present at one Ph.D. Journal Club meeting.
- 6. Pass a comprehensive examination.
- 7. Complete 24 credits of EPI 999 Doctoral Dissertation Research.
- 8. Pass an oral defense of the doctoral dissertation.

Academic Standards

Students will sit for a comprehensive examination after the necessary course work is completed, typically at the end of the first year of study. A student who fails the comprehensive examination may repeat it only once. A retake examination will generally be given in January.

Effective Fall 2021.

- 3. Change the requirements for the **Master of Science** degree in **Epidemiology** in the Department of Epidemiology and Biostatistics. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Requirements for the Master of Science** degree in **Epidemiology** make the following changes:
 - (1) Change the entry paragraph to the following:

Students must complete 40 credits, with no more than 6 credits at the 400-level.

(2) Replace items 3. and 4. with the following:

3.	An additional 6 credits of elective course work from the				
	following list of approved courses:				
	EPI	805	Readings in the Historical Roots of Epidemiological		
			Thought	3	
	EPI	815	Epidemiology of Cardiovascular Disease	3	

4.

EPI	816	Perinatal Epidemiology	3		
EPI	823	Cancer Epidemiology	3		
EPI	835	Neuroepidemiology	3		
EPI	890	Independent Study in Epidemiology and Biostatistics	1 to 3		
EPI	910	Themes in Contemporary Epidemiology	3		
EPI	920	Advanced Methods in Epidemiology and			
		Applied Statistics	3		
EPI	950	Advanced Biostatistical Methods in Epidemiology	3		
EPI	952	Duration and Severity Analysis	3		
EPI	953	Analytical Strategies for Observational Studies	3		
EPI	977	Social Epidemiology	3		
EPI	979	Advanced Topics of Infectious Disease Epidemiology	3		
STT	847	Analysis of Survival Data	3		
Additional elective courses may be chosen with advisor approval.					
Attend all MSU Graduate School Responsible Conduct of Research (RCR)					

- Workshops (Human).
- 5. Pass an oral examination in defense of the thesis.

Effective Fall 2021.

- 4. Change the requirements for the **Doctor of Philosophy** degree in **Epidemiology** in the Department of Epidemiology and Biostatistics. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Admission** replace item 1. with the following:
 - 1. an applicant must have earned a bachelor's, master of science or a master of public health in epidemiology degree with at least 40 credits.
 - b. Under the heading **Requirements for the Doctor of Philosophy** degree in **Epidemiology** replace the entire entry with the following:

Students must complete 51 credits for the degree with no more than 6 credits at the 400-level.

1.	All of the following courses (7 credits):				
	EPI	805	Readings in the Historical Roots of Epidemiological		
			Thought	3	
	EPI	828	Seminar in Responsible Conduct of Research	1	
	EPI	910	Themes in Contemporary Epidemiology	3	
2.	Two of t	he followi	ing courses (6 credits):		
	EPI	855	Biostatistical Modeling in Genomic Data Analysis	3	
	EPI	920	Advanced Methods in Epidemiology and Applied Statistics	3	
	EPI	950	Advanced Biostatistical Methods in Epidemiology	3	
	EPI	952	Duration and Severity Analysis	3	
	EPI	953	Analytical Strategies for Observational Studies	3	
3.	Complet	te a minin	num of 15 credits of elective course work from the following list	st of	
	approve	d courses	s. Additional courses may be chosen with advisor approval.		
	EPI	815	Epidemiology of Cardiovascular Disease	3	
	EPI	816	Perinatal Epidemiology	3 3	
	EPI	823	Cancer Epidemiology	3	
	EPI	835	Neuroepidemiology	3	
	EPI	890	Independent Study in Epidemiology and Biostatistics	1 to 3	
	EPI	910	Themes in Contemporary Epidemiology	3	
	EPI	920	Advanced Methods in Epidemiology and Applied Statistics	3 3	
	EPI	950	Advanced Biostatistical Methods in Epidemiology	3	
	EPI	952	Duration and Severity Analysis	3	
	EPI	953	Analytical Strategies for Observational Studies	3	
	EPI	977	Social Epidemiology	3	
	EPI	979	Advanced Topics of Infectious Disease Epidemiology	3 3	
	STT	847	Analysis of Survival Data	3	
	A 11 I				

4. Attend all MSU Graduate School Responsible Conduct of Research (RCR) Workshops.

- 5. Attendance at 80% of all presentations in the departmental epidemiology seminar series during the period of course work.
- 6. Attendance at 80% of Ph.D. Journal Club meetings.
- 7. Present at one Ph.D. Journal Club meeting.
- 8. Pass a Qualifying Examination at the end of the first year of study.
- 9. Pass a Comprehensive Examination.
- 10. Successfully complete 24 credits of Epidemiology 999 Doctoral Dissertation Research.
- 11. Successfully defend the oral defense of the doctoral dissertation.

Effective Fall 2021.

LYMAN BRIGGS COLLEGE

1. Recognize the **Forestry** major leading to the Bachelor of Science degree in the College of Agriculture and Natural Resources as a **Coordinate Major in Lyman Briggs College**.

Effective Fall 2021.

COLLEGE OF NATURAL SCIENCE

- 1. Change the requirements for the **Disciplinary Teaching Minor** available for secondary certification in **Biology** in the College of Natural Science. The Teacher Education Council (TEC) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Biology** make the following changes:
 - (1) Under the second requirement 'All of the following courses', change the total credits from '14 to 16' to '16 to 18' and add the following courses:

TE	409	Crafting Teaching Practices in the Secondary Teaching Minor	1
TE	503	Internship in Teaching Diverse Learners in Additional Endorsement Areas	1

(2) Change the total credits from '23 to 26' to '25 to 28'.

Effective Fall 2021.

- 2. Change the requirements for the **Disciplinary Teaching Minor** in **Chemistry** in the Department of Chemistry. The Teacher Education Council (TEC) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Chemistry** make the following changes:
 - (1) Delete the following:

The following course: CEM 383 Introductory Physical Chemistry I

3

Add the following:

One of	the follo	wing courses:	
CEM	444	Chemical Safety	1
ISE	401	Science Laboratories for Secondary Schools (W)	4
The fol	lowing c	ourses:	
CEM	383	Introductory Physical Chemistry I	3
TE	409	Crafting Teaching Practice in the Secondary	
		Teaching Minor	1
TE	503	Internship in Teaching Diverse Learners in	
		Additional Endorsement Areas	1

(2) Change the total credits from '23' to '26 to 29'.

Effective Fall 2021.

- 3. Change the requirements for the **Disciplinary Teaching Minor** in **Earth Science** in the Department of Earth and Environmental Sciences. The Teacher Education Council (TEC) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Earth Science** make the following changes:
 - (1) Delete the following course:

GLG	303	Oceanography	4
Add the	e followin	g courses:	
GLG TE	303 409	Oceanography Crafting Teaching Practice in the Secondary	3
TE	503	Teaching Minor Internship in Teaching Diverse Learners in Additional Endorsement Areas	1

(2) Change the total credits from '22' to '23'.

Effective Fall 2021.

(1)

(2)

- 3. Change the requirements for the **Disciplinary Teaching Minor** in **Mathematics-Secondary** in the Department of Mathematics. The Teacher Education Council (TEC) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Mathematics-Secondary** make the following changes:

In item 2. delete the following course:				
MTH	317H	Honors	Linear Algebra	3
Add the	following	course:		
MTH	317H	Honors	Linear Algebra	4
Add the following item 5.:				
5.	Both of TE	the follow 409	ing courses (2 credits): Crafting Teaching Practice in the	
	TE	503	Secondary Teaching Minor Internship in Teaching Diverse Learners	1
			in Additional Endorsement Areas	1

(3) Change the total credits from '20 to 24' to '23 to 27'.

Effective Fall 2021.

- 4. Change the requirements for the **Disciplinary Teaching Minor** in **Physics** in the Department of Physics and Astronomy. The Teacher Education Council (TEC) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Physics** make the following changes:
 - (1) Add the following courses:

TE	409	Crafting Teaching Practice in the Secondary	
		Teaching Minor	1
ΤE	503	Internship in Teaching Diverse Learners in	
		Additional Endorsement Areas	1

(2) Change the total credits from '20' to '22'.

Effective Fall 2021.

COLLEGE OF SOCIAL SCIENCE

1. Establish a **Master of Arts** in **Criminal Justice** in the School of Criminal Justice. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its February 8, 2021 meeting.

a. Background Information:

The School of Criminal Justice (SCJ) Master of Science (M.S.) degree is currently offered in an oncampus and online format. The on-campus program primarily serves individuals who wish to pursue a career in research and/or teaching or pursue a doctoral degree, whereas the online program is the preferred method of delivery for professional students who are seeking a terminal degree and intend to advance in careers in the field. Both formats have identical core requirements and are conferred as the same degree; however, the online program does not require or permit students to complete a thesis. Instead, students complete a capstone course focused on policy analysis. After a recent curriculum audit by the MSU Graduate School, the SCJ was informed that if the on-campus and online programs were indeed identical, then students in the online format had to be provided the option of completion of a thesis. Given the format and the differing career goals of the populations served by the M.S. in SCJ, we propose to maintain the current curriculum for the on-campus M.S. and transition the online program to a Master of Arts (M.A.) degree.

The rationale for this proposal is based on an analysis of data relating to the career objectives of current and former MSU SCJ online students, as well as a comparison to other top-ranked online criminal justice master's programs in the U.S.

A review of applicant personal statements indicates that 79% of current students are practitioneroriented individuals who are seeking employment or advancement within the field of criminal justice. Specifically, 44% are pursuing promotion to a position of leadership or advancement to a more desirable position, such as a federal probation officer, or project manager. Further, 35% are interested in criminal justice related employment upon graduation. Conversely, only 16% of current students are working toward research and teaching positions; 9% plan to pursue a Ph.D., and 7% are interested in undergraduate teaching.

Data on graduates was obtained from a LinkedIn name search of all 163 graduates of the M.S. online program since inception. Of those, 77 (47%) were located. Information regarding occupational focus and level of management indicate that 47% percent of graduates hold a leadership or management position, 40% are line employees, 5% are either pursuing a Ph.D. or teaching criminal justice classes and the remaining 8% are crime analysts.

CREDITS

In terms of their occupation focus within the field of criminal justice, there are a wide range of concentrations, with the greatest percentage (25%) employed in private security, followed by policing (17%), and non-criminal justice employment (14%).

The second part of the review consisted of examining competitor university offerings and requirements. Data were collected from the U.S. News and World Reports (USN&WR) 2020 Best Online Master's in Criminal Justice Programs publication. The top ten schools and the two closest in geographical proximity (Bowling Green and Wayne State University) were compared in terms of required number of classes for degree completion, topical areas of classes offered, and opportunities for specialization. These data provide several noteworthy findings. The number of required core courses is consistent with the current SCJ requirement of five courses plus the capstone class. The mean and median required number of courses for competitor programs is five and the mode is four. In addition, all programs have a capstone requirement. Further, all schools in the analysis offer a general master's degree, while 11 of the 12 also offer a criminology degree, 9 of the 12 offer a criminal justice administration degree and 7 offer a policing focus.

The purpose of this request is to decouple it from our on-campus M.S. in criminal justice offering, while maintaining the high quality online program that people have come to expect.

b. Academic Programs Catalog Text:

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

Admission

While a criminal justice undergraduate major comparable to that offered by this school is not required for admission to the Master of Arts degree program, the applicant must have a background of education and occupational experience appropriate to the successful pursuit of graduate work. Occupational experience is highly desirable before undertaking graduate study in some fields of criminal justice.

All applicants must have at least 12 credits of undergraduate course work in political science, economics, sociology, psychology, anthropology, history, social work, or any combination thereof. At least 6 of these credits must be in sociology, psychology, social work, or any combination of such courses.

Regular Status

1.

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

- 1. submit a personal statement regarding their academic and professional goals.
- 2. submit scores from a GRE general exam taken within the last five years. The GRE exam is waived for candidates with a cumulative undergraduate grade-point average of 3.2 or higher from an accredited and recognized institution, and for applicants with a completed graduate degree.

Applicants insufficiently prepared for graduate study in criminal justice may have to complete collateral course work or pursue individualized study to satisfy deficiencies. Collateral course work does not count towards degree requirements.

Requirements for the Master of Arts Degree in Criminal Justice

The program is available under Plan B (without thesis) and online only. The student must complete a total of 30 credits distributed as follows:

			ONCEDITO	
All of t	the follow	ing courses (18 credits):		
CJ	801	Crime Causation, Prevention and Control	3	
CJ	810	Proseminar in Criminal Justice	3	
CJ	812	Criminal Justice Management Seminar	3	
CJ	857	Criminal Justice Behavior and Ethics	3	
CJ	889	Fundamentals of Basic and Translational Research	3	
CJ	896	Policy Analysis under Conditions of Change	3	
Complete 6 credits of 800-level criminal justice electives				

- 2. Complete 6 credits of 800-level criminal justice electives.
- 3. Complete 6 credits of electives approved by the student's academic advisor.

CREDITS

4. Completion of a final examination or evaluation.

Effective Fall 2021.

- 2. Change the requirements for the **Master of International Planning Studies** degree in **International Planning Studies** in the School of Planning, Design and Construction. The University Committee on Graduate Studies (UCGS) approved this request at its April 12, 2021 meeting.
 - a. Under the heading **Requirements for the Master of International Planning Studies Degree** replace the entire entry with the following:

The program is available only online under Plan B (without thesis). The student must complete at least 30 credits as specified below.

The student must

1.	Complete the following core courses (11 credits):			
	UP	801	Concepts and Issues in Planning and Development	4
	UP	844	Planning Theory and Ethics	3
	UP	894	Planning Practicum	4
2.	Comp	Complete one of the following courses (4 credits):		
	UP	890	Independent Study	4
	UP	893	Internship in Urban Planning	4
3.	Complete a minimum of 15 elective credits approved by the student's academic advisor.			
	~			

4. Complete a final evaluation.

Effective Fall 2021.

PART II - NEW COURSES

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION

CEP 865 Foundations of Forensic Rehabilitation Spring of even years. 3(3-0) RB: Prior academic or professional work in rehabilitation counseling, litigation, insurance claims, or disability determination. R: Open to master's students in the Rehabilitation Counseling Major and open to doctoral students in the Rehabilitation Counselor Education Major or approval of department. Roles and functions of forensic rehabilitation professionals, vocational opinions, knowledge and skills analysis, instrument utilization, logal issues related to catastrophic

knowledge and skills analysis, instrument utilization, legal issues related to catastrophic injury, loss of earnings capacity, ethical standards, rules of evidence, and common situations in the litigation process. Effective Fall 2021

CEP 891C Special Topics in Rehabilitation Counseling Fall of every year. Spring of every year. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Prior academic or professional work in rehabilitation counseling, or related field of academic study or applicable professional work. R: Open to graduate students.

Various topics in rehabilitation counseling. Effective Fall 2021

DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

GLG 871	Introduction to Seismology Fall of odd years. 3(3-0) RB: Introductory mathematics, including calculus and multivariable calculus; Introductory physics, including classical mechanics and optics; Introductory geology. Stress and strain, elastic wave propagation in layered media, earthquake mechanism, and semi-quantitative understanding of common seismic methods for studying the Earth's interior. Effective Fall 2021
GLG 875	Modern Geodesy and Applications Fall of even years. 3(3-0) RB: Introductory mathematics, including calculus and multivariable calculus; experience with linear algebra recommended; Introductory physics, including classical mechanics and optics; Introductory geology. Modern geodetic methods including the Global Positioning System, measuring steady or time-variable motions, the physical models that are used to interpret these observations, and applications to active geological processes, the cryosphere, and hydrology. Effective Fall 2022
	DEPARTMENT OF EDUCATIONAL ADMINISTRATION
EAD 932	Education Policy Implementation Fall of every year. 3(3-0) Interdepartmental with Political Science. Process and politics of policy implementation in education. Effective Fall 2021
EAD 933	Evaluation of Education Policy Implementation

Spring of every year. 3(3-0) Interdepartmental with Political Science. Methodological tools for evaluating policy design and implementation. Effective Fall 2021

DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION

FSC 423	Functional Foods and Human Health Spring of even years. 3(3-0) P: {HNF 150 or (HNF 311 or concurrently)} and (MMG 205 or MMG 301 or FSC 342) and ((BMB 200 or concurrently) or (BMB 401 or concurrently))
REINSTATEMEN	T Concept, nature and classification of functional foods. Spectrum of biological activity. Positive and negative impacts on health, and regulatory aspects. Effective Fall 2021
FSC 854	Global Regulation of Food Contact Substances and Packaging Spring of odd years. 3(3-0) RB: Prior coursework or equivalent professional experience in food safety, food law, or food science Regulation of food contact substances (FCSs) and materials (FCMs); FCS/FCM scientific and health issues related to regulation; Codex Alimentarius; regulations in the U.S. and around the globe; future regulatory developments in plastics and packaging. Effective Fall 2021
HNF 844	Management and Professional Skills in Dietetics Fall of every year. 3(3-0) RB: Completion of a practicum in dietetics after undergraduate dietetic and nutrition courses. R: Open to master's students in the Nutrition and Dietetics Major or approval of department. Dietetic career skills including collaboration, communication, human resources, budgeting, goal setting, and team productivity. Effective Fall 2021
	DEPARTMENT OF KINESIOLOGY
KIN 901	Grant Writing in Kinesiology Spring of even years. 3(3-0) R: Open to graduate students in the Department of Kinesiology or approval of department. Preparing and writing successful federal and foundational grant applications in Kinesiology. Effective Fall 2021
KIN 921	Biopsychosocial Aspects of Athletic Injury Fall of odd years. 3(3-0) R: Open to graduate students in the Department of Kinesiology or approval of department. Biopsychosocial approach to treating patients experiencing athletic injury and undergoing rehabilitation. Application and synthesis of biopsychosocial theories and biopsychosocial therapeutic interventions into athletic injury research and clinical practice. Effective Fall 2021
KIN 922	Assessment Methods for Physically Active Pathological Populations Spring of even years. 3(3-0) R: Open to graduate students in the Department of Kinesiology or approval of department. Theoretical basis and measurement techniques commonly utilized in clinical research to assess physically active pathologic populations. Development of analytical skills needed to capture and analyze outcome measures related to human movement, clinical imaging, and muscle function. Effective Fall 2021
KIN 923	Translation of Research Evidence Fall of even years. 3(3-0) R: Open to graduate students in the Department of Kinesiology or approval of department. Critical evaluation of research evidence, clinical translation, and effective dissemination of evidence in sports medicine. Effective Fall 2021

MSU COLLEGE OF LAW

LAW 511B	Employment Discrimination Law		
REINSTATEMEN	f every year. 2 to 4 credits. R: Open to students in the MSU College of Law. Development of individual employee rights, including at-will employees as well as protected employees under NLRA and FLSA. SA: DCL 330 Effective Spring 2022		
LAW 533S	w/Network Regulations • every year. 2 to 4 credits. R: Open to students in the MSU College of Law.		
REINSTATEMEN	Legal policy issues arising from the Internet, with an emphasis on (1) impact on traditional legal causes of action; (2) government regulation; (3) international aspects and the interplay among United States and foreign jurisdictions. Effective Fall 2021		
LAW 541C	N		
REINSTATEMEN	Spring of every year. 2 to 4 credits. R: Open to students in the MSU College of Law. IT Legal needs of elder clients and their families. SA: DCL 510 Effective Fall 2021		
LAW 558A	Bioethics and the Law		
REINSTATEMEN	Spring of every year. 2 to 4 credits. R: Open to students in the MSU College of Law. IT Legal, ethical, and economic problems generated by biomedical technologies. SA: DCL 339 Effective Fall 2021		
LAW 635A	ed Topics in American Indian Law very year. Spring of every year. Summer of every year. 1 to 4 credits. A student may earn a m of 10 credits in all enrollments for this course. P: LAW 635B R: Open to students in the ollege of Law.		
REINSTATEMEN	-		
	COLLEGE OF NATURAL SCIENCE		
NSC 844	Tools for Women in STEM Spring of every year. 2(2-0) R: Open to graduate students in the College of Engineering or College of Natural Science. Approval of college. Directed at graduate students that identify as female considering a career in STEM. Practical tools helpful to students that identify as women in advancing their goals and mitigating the challenges they may encounter. Effective Spring 2021		
	DEPARTMENT OF WRITING, RHETORIC AND AMERICAN CULTURES		
WRA 333	Writing in Corporate Contexts Spring of every year. Summer of every year. 3(3-0) P: WRA 202 or concurrently RB: Completion of Tier I Writing Requirement Rhetorical and cultural dimensions of corporate writing. Practice in messaging across corporate contexts and composing for professional and consumer audiences. Effective Spring 2022		
WRA 335	Writing in Scientific Contexts Spring of every year. Summer of every year. 3(3-0) P: WRA 202 or concurrently RB: Completion of Tier I Writing Requirement Rhetorical and cultural dimensions of medical and scientific writing. Study of and practice with rhetorical affordances and expectations in scientific contexts. Effective Spring 2022		

WRA 337 Writing and Public Policy Fall of every year. Summer of every year. 3(3-0) A student may earn a maximum of 3 credits in all enrollments for this course. P: WRA 202 or concurrently RB: Completion of Tier I Writing Requirement R: Open to undergraduate students.

Rhetorical and cultural dimensions of composing in public and civic spaces. Study of and practice with policy research, analysis, evaluation, narration, advocacy, and argumentation.

Effective Spring 2022

PART III - COURSE CHANGES

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

BMB 461 Advanced Biochemistry I

Fall of every year. Spring of every year. 3(3-0) P: (CEM 251 or CEM 351) and (CEM 252 or CEM 352) and (MTH 124 or MTH 132 or MTH 152H or LB 118) and (BS 161 or BS 181H or LB 145) and ((BS 162 or concurrently)) or (BS 182H or concurrently) or (LB 144 or concurrently)) P: (CEM 251 or CEM 351 or LB 271) and (CEM 252 or CEM 352) and (MTH 124 or MTH 132 or MTH 152H or LB 118) and (BS 161 or BS 181H or LB 145) and ((BS 162 or concurrently) or (BS 182H or CEM 352) and (MTH 124 or MTH 132 or MTH 152H or LB 118) and (BS 161 or BS 181H or LB 145) and ((BS 162 or concurrently) or (BS 182H or concurrently) or (CEM 145) and (CEM 145) and

Structure, function, and biophysical properties of biomolecules in a wide variety of organisms. Emphasis on proteins and carbohydrates including enzyme catalysis and kinetics, the central metabolic pathways, and photosynthesis. SA: BCH 461

Effective Summer 2014 Effective Summer 2022

BMB 864 Plant Specialized Metabolism

Biotechnology and Plant Biochemistry Spring of every year. Spring of even years. 3(3-0) Interdepartmental with Plant Biology. P: BMB 461 or BMB 462 or (PLB 866 or concurrently) RB: Enrolled in a graduate program related to plant melecular sciences. <u>RB: Interest in applied biotech, basic knowledge in molecular bio, genomics, or</u> <u>biochemistry.</u>

BMB 801 or BMB 961

Specialized metabolism unique to photosynthetic organisms including aspects of nitrogen and culfate assimilation and essential amine acid synthesis relevant to specialized metabolism, vitamin synthesic, mone, di, tri and tetra torponoid synthesis, synthesis of phenylpropanoids and other aromatic compounds and synthesis of various alkaleids. Biotechnological applications of plant biochemistry. Development of concepts and ideas that may have the potential for commercialization. SA: BCH 864

Effective Summer 2018 Effective Summer 2022

DEPARTMENT OF BIOSYSTEMS AND AGRICULTURAL ENGINEERING

AE 182 Electrical Wiring II Spring of every year. 2(1-3) 3(2-3) RB: AE 172 R: Open to students in the Institute of Agricultural Technology. Installation of electrical circuits for residential, light commercial and agricultural installations. Offered first ten weeks of semester. SA: AE 082 <u>Effective Summer 2015</u> <u>Effective Summer 2022</u>

DEPARTMENT OF COMMUNICATION

COM 340 Leadership and Group Communication Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: (COM 300 or concurrently) or MKT 313 R: Open to cophomorec or juniors or coniors in the Communication Major or in the Sales Leadership Minor. <u>R: Open to sophomores or juniors or seniors in the</u> <u>Communication Major or in the Sales Leadership Minor or in the Broadcast Journalism Minor or in</u> <u>the Communication Leadership and Strategy major.</u> Theory and research on dyadic and group relations within organizations. Leadership, motivation, decision making, and teamwork.

Effective Fall 2018 Effective Fall 2021

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY AND SPECIAL EDUCATION

CEP 240	Diverse Learners in Multicultural Perspective Fall of every year. Spring of every year. Summer of every year. 3(3-0) R: Opon to undergraduate students in the Department of Communicative Sciences and Disorders or in the Kinesiology major or in the Special Education Learning Disabilities major and open to undergraduate students in the Department of Child Development major. R: Open to undergraduate students in the Department of Communicative Sciences and Disorders or in the Kinesiology major or in the Special Education- Learning Disabilities Major and open to undergraduate students in the Education Major or in the Child Development Major or in the Elementary Teacher Certification Program (Admitted) or in Secondary Teacher Certification Program (Admitted). Communicative, linguistic, physical, sensory, behavioral, affective, and cognitive differences in learning in multicultural classrooms. Factors that mediate access to knowledge. Effective Spring 2014 Effective Fall 2021
CEP 301	Literacy Instruction for Students With Mild Impairments (W) Spring of every year. 3(3-1) P: Completion of Tior I Writing Requirement <u>P: (CEP 449) and</u> <u>completion of Tier I writing requirement</u> R: Open to juniors or seniors in the Special Education- Learning Disabilities Major and open to graduate students in the Special Education Major. C: TE 301 concurrently. Reading and writing instruction for struggling learners. Characteristics of literacy problems in students with mild impairments. Adaptation for teaching reading and writing. <u>Effective Spring 2014</u> <u>Effective Summer 2022</u>
CEP 452	Assistive Technology for Students with Disabilities Fall of every year. 3(3-0) P: CEP 240 <u>P: CEP 240 and CEP 451</u> R: Open to students in the Special Education-Learning Disabilities Major. Assistive technology for advancing educational outcomes in PK-12 students with disabilities; applications of technology to compensate for disabilities and improve educational, social, and behavioral competences. <u>Effective Fall 2020</u> <u>Effective Fall 2021</u>
CEP 921	Psychometric Theory I Spring of every year. 3(3-0) P: CEP 920 and CEP 933 <u>P: CEP 933</u> RB: Experience using a statistical package. Theory-oriented introduction to psychometrics and the measurement of educational and psychological traits. Measurement, scaling, validity, true score test theory, measurement error, reliability, generalizability theory, item response theory, measurement bias, and factor analysis. <u>Effective Spring 2015</u> <u>Effective Fall 2021</u>
CEP 944C	Clinical Practice Practicum in Rehabilitation Counseling Summer of every year. 6(3-12) <u>1 to 6 credits.</u> R: Open to doctoral students in the Rehabilitation Counselor Education Major. Supervised counseling experience in human services, rehabilitation or educational settings to further develop skills, knowledge, and behaviors appropriate for professional counseling practice. Effoctive Summer 2019 Effective Fall 2021
HM 639	Northern Wilderness, Emergency and Sports Medicine <u>Fall of every year.</u> Spring of every year. <u>Summer of every year.</u> 6 credits. R: Open to students in the College of Human Medicine. Approval of college. Development of knowledge, skills and attitudes to address the needs of patients outside of the hospital with wilderness or sports related injuries.

- Request the use of the Pass-No Grade (P-N) system.
 - Request the use of ET-Extension to postpone grading.
- The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.
- Effective Summer 2013 Effective Summer 2021

SCHOOL OF HUMAN RESOURCES AND LABOR RELATIONS

 HRLR 493
 Internship in Human Capital and Society

 Fall of every year. Spring of every year. Summer of every year. 3 to 12 credits. <u>A student may earn</u>

 a maximum of 12 credits in all enrollments for this course.
 RB: HRLR 201 R: Open to

 undergraduate students in the College of Social Science or approval of school. Not open to

 students with credit in SSC 493.

 Faculty-guided internship in field related to human capital & society

 Request the use of the Pass-No Grade (P-N) system.

 Effective Summer 2021

COLLEGE OF NATURAL SCIENCE

BS 172	Organismal and Population Biology Laboratory Fall of every year. Spring of every year. Summer of every year. 2(1-3) Interdepartmental with Integrative Biology and Plant Biology. Interdepartmental with Plant Biology P: (BS 162 or concurrently) or (BS 182H or concurrently) Not open to students with credit in BS 192H or LB 144. Nature and process of organismal biology including experimental design, statistical methods, hypothesis testing in genetics, ecology, and evolution. SA: BS 110, BS 158H Effective Fall 2016 Effective Summer 2022
BS 182H	 Honors Organismal and Population Biology Fall of every year. 3(3-0) Interdepartmental with Integrative Biology and Lyman Briggs and Plant Biology. Interdepartmental with Plant Biology Not open to students with credit in LB 144. Diversity and basic properties of organisms, with emphasis on genetic principles, ecological interactions, and the evolutionary process. Historical approach to knowledge discovery. SA: BS 148H, BS 110 Effective Summer 2017 Effective Summer 2022
BS 192H	Honors Organismal and Population Biology Laboratory Fall of every year. 2(1-3) Interdepartmental with Integrative Biology and Lyman Briggs and Plant Biology. Interdepartmental with Plant Biology P: BS 182H or concurrently Not open to students with credit in LB 144. Nature and process of organismal biology, including experimental design and statistical methods, hypothesis testing, genetics, ecology, and evolution. SA: BS 158H, BS 110 Effective Summer 2017 Effective Summer 2022
	DEPARTMENT OF WRITING, RHETORIC AND AMERICAN CULTURES
WRA 341	Nature and Environmental Writing Fall of even years. 3(3-0) Interdepartmental with Fisheries and Wildlife. P: Completion of Tier I

Writing Requirement R: Open to undergraduate students in the Department of Forestry or in the Professional Writing major or in the Fisheries and Wildlife major or approval of department. Place-based writing that engages the environmental imagination, shaped by the variety of human relationships with place. SA: AL 341

DELETE COURSE

Effective Spring 2021