MICHIGAN STATE UNIVERSITY

Report of THE UNIVERSITY COMMITTEE ON CURRICULUM to the Faculty Senate

February 18, 2020

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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.

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

Prerequisite monitored in SIS

C: = Corequisite R: Restriction

Recommended background

RB: = SA: = Semester Alias

MICHIGAN STATE UNIVERSITY

February 18, 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 **Bachelor of Science** degree in **Forestry** in the Department of Forestry.
 - a. Under the heading **Requirements for the Bachelor of Science Degree in Forestry** make the following changes:
 - (1) Replace paragraph two with the following:

The University's Tier II writing requirement for the Forestry major is met by completing Forestry 330, 340L, 405, 406L, 414, and 462. Those courses are referenced in item 3. a. below.

- (2) In item 3. a. change the total credits from '61' to '64'.
- (3) In item 3. a. delete the following courses:

FOR	404	Forest Ecology	3
FOR	404L	Forest Ecology Laboratory	1
FOR	412	Wildland Fire	2
FOR	472	Ecological Monitoring and Data Analysis	3
FW	419	Applications of Geographic Information	
		Systems to Natural Resources	4

Add the following courses:

FOR	215	Introduction to Wildland Fire	2
FOR	340	Forest Ecology	3
FOR	340L	Forest Ecology Laboratory	1
FOR	372	Ecological Monitoring and Data Analysis	3
FOR	413	Wildland Fire Ecology and Management	3
FOR	419	Applications of Geographic Information Systems	
		to Natural Resources Management	4

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

One of	the follo	owing (1 to 3 credits):	
FOR	490	Independent Study in Forestry	1 to 3
FOR	493	Professional Internship in Forestry	1 to 3
An approved study abroad experience 1 to			

Effective Fall 2020.

COLLEGE OF ARTS AND LETTERS

1. Delete the curriculum and degree requirements for the **Disciplinary Teaching Minor** in **English**, available for elementary certification, in the Department of English. 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 Fall 2019, 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 English through the College of Arts and Letters prior to Fall 2019 will have to change their minor.

- 2. Change the requirements for the **Minor** in **Lesbian, Gay, Bisexual, Transgender, Queer and Sexuality Studies** in the Program in Women, Gender and Social Justice.
 - a. Under the heading Requirements for the Specialization in Lesbian, Gay, Bisexual, Transgender, Queer and Sexuality Studies make the following changes:

(1)	In item 2., delete the following courses:					
	LB LB	333 492		n History of Science (W) Seminar (W)	4 4	
	Add the	following	course:			
	WS	424	Semina	r in Queer Studies	3	
(2)	In item	4., add th	e followin	g course:		
	WS	424	Semina	r in Queer Studies	3	
(3)	In item 4., add the following statement to the existent paragraph:					
				124 to fulfill this requirement may not use ement 2. above.		
(4)		he option g change		to Social Science majors make the		
	(a)	In item	2. add the	e following course:		
		SOC	216	Sex, Gender, and Sexuality	3	
	(b)	In item	3. add the	e following course:		
		WS	424	Seminar in Queer Studies	3	

Effective Fall 2020.

3. Change the name of the **Master of Arts** degree in **French** to **French and Francophone Studies** in the Department of Romance and Classical Studies.

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

Students admitted to the major Fall 2020 and forward will be awarded a Master of Arts Degree in French and Francophone Studies.

Effective Fall 2020.

- 4. Change the requirements for the **Master of Arts** degree in **French and Francophone Studies** in the Department of Romance and Classical Studies. The University Committee on Graduate Studies (UCGS) approved this request at its January 13, 2020 meeting.
 - a. Under the heading **Admission** delete the following item 3.:

FRN

FRN

FRN

840

850

890

- 3. The results of the Graduate Record Examination General Test (GRE) forwarded to the Department of Romance and Classical Studies.
- b. Under the heading **Requirements for the Master of Arts Degree in French and Francophone Studies** make the following change:

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

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

Complete one of the following concentrations (33 or 34 credits): *Interdisciplinary Studies*

Interdis	ciplinary	Studies	,				
1.	The following course (3 credits):						
	ROM	803	Foundations of Contemporary Language Teaching	3			
2.	Complet	e 18 cred	lits from the following courses:				
	FRN	810	Understanding the Early Modern Culture				
			in the Francosphere	3			
	FRN	820	Minority Perspectives in the Francosphere	3			
	FRN	830	Language(s) in the Francosphere	3			
	FRN	840	Understanding France through Literary and				
			Cultural Productions	3			
	FRN	850	Francophone Postcolonial and Cultural Studies	3			
	FRN	890	Independent Study	3			
3.	Complete 9 credits of electives approved by the academic advisor						
	which in	cludes a	research methods course.				
Literary	and Cul	tural Stu	dies				
1.	The follo	wing cou	rse (3 credits):				
	ROM	803	Foundations of Contemporary Language Teaching	3			
2.	Complet	e 21 cred	lits from the following courses:				
	FRN	810	Understanding the Early Modern Culture	3			
	FRN	820	Minority Perspectives in the Francosphere	3			
	FRN 830 Language(s) in the Francosphere 3						

Additional courses at the 800-level as approved by the academic advisor.

Understanding France through Literary and

Francophone Postcolonial and Cultural Studies

3

3

3

Cultural Productions

Complete 3 credits in a research methods or critical theory course approved by the academic advisor.

Independent Study

4. Complete 3 credits of elective approved by the academic advisor.

- (2) Under the heading Additional Requirements for Plan B replace the entire entry with the following:
 - 1. Complete 3 credits of FRN 898 Master's Research Project.
 - 2. Pass a final oral examination that covers the student's program of study, master's project, and reading list.

Effective Fall 2020.

5. Change the name of the **Doctor of Philosophy** degree in **French** to **French and Francophone Studies** in the Department of Romance and Classical Studies.

Students admitted to the major prior to Fall 2020 will be awarded a Doctor of Philosophy Degree in French.

Students admitted to the major Fall 2020 and forward will be awarded a Doctor of Philosophy Degree in French and Francophone Studies.

Effective Fall 2020.

- 6. Change the requirements for the **Doctor of Philosophy** degree in **French and Francophone Studies** in the Department of Romance and Classical Studies. The University Committee on Graduate Studies (UCGS) approved this request at its January 13, 2020 meeting.
 - a. Under the heading **Admission** replace the entire entry with the following:

To be considered for admission to the Doctor of Philosophy degree program in French and Francophone Studies, an applicant must:

- Have a master's degree in French or equivalent, or a total of 30 credits of approved course work.
- 2. Have a grade-point average of at least 3.00 in graduate courses in French.
- 3. Have letters of recommendation from three professors who are qualified to assess the applicant's ability to pursue advanced graduate study in French.
- 4. Have academic writing samples in French and English.
- 5. Have a reading knowledge of a language other than French and English. This requirement may be completed once admitted into the program through additional course work. Nonnative speakers of French are also required to submit a language proficiency evaluation form.
- b. Under the heading **Guidance Committee** replace the entire entry with the following:

Initially, the student's guidance committee must consist of three or four tenure-stream Michigan State University faculty members. After the student has passed the Ph.D. examinations, the dissertation committee consists of at least four faculty members, two of which must be members of the Department of Romance and Classical Studies. The chair of the dissertation committee must be a tenure-stream faculty member in French.

c. Under the heading Requirements for the Doctor of Philosophy Degree in French and Francophone Studies replace the entire entry with the following:

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

 Complete one of the following concentrations. A maximum of 9 credits in courses that were completed prior to enrollment in this degree program may be used to satisfy this requirement:

Interdisciplinary Studies

- 1. The following course (3 credits):
 - ROM 803 Foundations of Contemporary Language Teaching

3

- 2. Complete 12 credits in FRN courses at the 800-level.
- 3. Complete 12 credits of electives in a related area approved by the academic advisor which includes a research methods course.
- 4. The following course (3 credits):

	FRN	896	Ph.D. Exam Preparation in French and	
			Francophone	3
	Literar	y and C	ultural Studies	
1.	The fol	lowing co	ourse (3 credits):	
	ROM	803	Foundations of Contemporary Language Teaching	3
2.	Comple	ete 21 cr	edits from the following courses:	
	FRN	810	Understanding the Early Modern Culture	
			in the Francosphere	3
	FRN	820	Minority Perspectives in the Francosphere	3
	FRN	830	Language(s) in the Francosphere	3
	FRN	840	Understanding France through Literary and	
			Cultural Productions	3
	FRN	850	Francophone Postcolonial and Cultural Studies	3
	Additio	nal cours	ses at the 800-level as approved by the academic advis	sor.
3.	Comple	ete 3 cre	dits in a research methods or critical theory course	
	approv	ed by the	e academic advisor.	

- 4. The following course (3 credits):
- FRN 896 Ph.D. Exam Preparation in French and Francophone 3
- 2. Complete additional course work as required by the student's guidance committee.
- 3. Pass a three-part Ph.D. examination that corresponds to the student's concentrations. The three parts include:
 - a. a publishable quality article.
 - b. a take-home examination on an area other than that of the article and based on an extensive reading list.
 - c. an oral examination on both elements.

A student who fails any part of the Ph.D. examination may retake that examination only once.

- 4. Submit a dissertation proposal and successfully defend it.
- 5. Submit a dissertation or equivalent research project as applicable or relevant to the field (multi-media, digital humanities) which demonstrates mastery of subject matter in the field of inquiry, sound critical judgment, and a contribution of original thought and research to the topic.

Effective Fall 2020.

COLLEGE OF COMMUNICATION ARTS AND SCIENCES

 Delete the curriculum and degree requirements for the Specialization in Design in the College of Communication Arts and Sciences. 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 Fall 2015. No students are to be readmitted to the program effective Fall 2015. Effective Spring 2020, coding for the program will be discontinued and the program will no longer be available in the College of Communication Arts and Sciences. Students who have not met the requirements for the Design Specialization through the College of Communication Arts and Sciences prior to Spring 2020 will have to change their program.

- Change the requirements for the Minor in Public Relations in the Department of Advertising and Public Relations.
 - Under the heading Requirements for the Minor in Public Relations make the following changes:
 - (1) In item 1., delete the following courses:

ADV	325	Public Relations Techniques and Ethics	3
ADV	425	Public Relations Strategy	3

Add the following courses:

PR	325	Intermediate Social Media and Public Relations	
		Techniques	3
PR	425	Public Relations Strategy in a Digital World	3

Effective Summer 2020.

- Change the requirements for the Minor in Sales Leadership in the Department of Communication. The
 University Committee on Undergraduate Education (UCUE) approved this request at its January 23, 2020
 meeting.
 - a. Under the heading **Admission** replace the entire entry with the following:

To be considered for admission, a student must have been formally admitted to a bachelor's degree program at Michigan State University. Students must be enrolled in or have completed Marketing 313, Consultative Selling, and have demonstrated mastery of course content. Other admission criteria include an application with a statement of purpose, a sales aptitude test, and work experience. Each applicant will be interviewed by a faculty program administrator and each student's application will be rank ordered. Admission decisions will be made after reviewing the student application materials, a personal interview including a 5 to 7 minute sales role play based on content delivered in MKT 313, and a review of students' final grades in MKT 313.

To apply to the program, students should complete an application found on the minor Web site at www.salesleader.msu.edu by the deadline indicated.

Students must:

- apply at mid-semester by the published deadline while enrolled in MKT 313 or after completing the course;
- 2. provide their overall grade-point average in their major;
- 3. provide a statement of purpose indicating why they want to enter the minor;
- 4. provide their score on a sales aptitude test that measures values, behaviors, and skills;
- 5. participate in a personal interview to determine their interest in and readiness for the minor in which performance in the interview will be assessed and used as a criterion for admission.
- b. Under the heading **Requirements for the Minor in Sales Leadership** replace the entire entry with the following:

Students must complete 16 credits from the following courses:

				CREDITS
1.	All of th	ne follow	ing courses (16 credits):	
	COM Or	325	Interpersonal Influence and Conflict	3
	CAS	492	Special Topics	3
			(Made in Italy Study Abroad only)	
	COM	360	Advanced Sales Communication	3
	COM	483	Practicum in Sales Communication	1
	MKT	313	Personal Selling and Buying Processes	3
	MKT	383	Sales Management	3
	MKT	430	Key Account and Customer Relationship	
			Management	3

2. Completion of a minimum of 500 hours of experiential learning outside of course work that must be preapproved by the managing director. Required hours include a professional sales internship (300 hours completed while enrolled in COM 483), active membership in Global Sales Leadership Society (50 hours), working with a mentor for a semester (15 hours), participation in the All-MSU Sales Competition (spring, 10 hours), participation in the Professional Development Conference (fall, 10 hours), participation in at least one job shadow of a sales person or sales manager (8 hours), and at least one GSLS Boot Camp (5 hours). Optional hours to get to 500 may include a part-time sales job (150 hours maximum), participating in a national sales competition (60 hours). Holding

an executive office in a registered student organization (50 hours), and other experiences as appropriate.

Effective Fall 2020.

4. Delete the curriculum and degree requirements for the **Bachelor of Science** degree in **Media and Information**, in the Department of Media and Information. 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 Fall 2016. No students are to be readmitted to the program effective Fall 2016. Effective Fall 2020, coding for the program will be discontinued and the program will no longer be available in the College of Communication Arts and Sciences. Students who have not met the requirements for the Bachelor of Science Degree in Media and Information through the College of Communication Arts and Sciences prior to Fall 2020 will have to change their major.

 Delete the tracking major associated with the curriculum and degree requirements for the Linked Bachelor of Science/Master of Arts degree in Media and Information, in the Department of Media and Information.

Effective Fall 2020, coding for the **Bachelor of Science** degree program will be discontinued and the program will no longer be available in the College of Communication Arts and Sciences. Students who have not met the requirements for the Bachelor of Science Degree in Media and Information through the College of Communication Arts and Sciences prior to Fall 2020 will have to change their major.

COLLEGE OF EDUCATION

- 1. 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 January 13, 2020 meeting.
 - a. Under the heading **Admission** replace the items 1., 2., and 3. with the following:
 - 1. A bachelor's degree in an appropriate field from a recognized educational institution, with a grade—point average of 3.0 (B) or better in the last two years of undergraduate study;
 - 2. A written statement of academic goals and career objectives that is 1 or 2 pages single spaced typed in length, that describes the applicant's professional goals as they related to the Master of Arts degree program in Rehabilitation Counseling:
 - 3. Scores from the Graduate Record Examination General Test if the applicant's grade–point average is less than 3.0;
 - 4. Three letters of recommendation, with at least two from professors or employers.
 - b. Under the heading **Requirements for the Master of Arts Degree in Rehabilitation Counseling** make the following changes:
 - (1) Change the total credits required for the degree from '48' to '60'.
 - (2) In item 1., add the following courses and change the total credits from '9' to '15':

CEP	874	Counseling Ethics	3
CEP	878	Group Counseling and Group Work	3

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

CEP 876 Professional Issues in Rehabilitation Counseling 3

Add the following course:

HDFS 810 Theories of Human Development

(4) Add the following item 5.:

Electives (6 credits): Complete 6 credits of electives as approved by the academic advisor.

Effective Fall 2020.

COLLEGE OF MUSIC

 Establish a Graduate Certificate in Music Career Development in the College of Music. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its October 14, 2019 meeting.

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

a. **Background Information**:

Since 2015, 77 students have enrolled in 400-level College of Music courses on career-related topics (MUS 466, MUS 496, MUS 491-301) and there have been over 2500 attendees at Running Start workshops (inside and outside of classes) - the College of Music's program focused on career development. In addition, the Running Start office holds an average of 162 advising appointments each year with graduate music students.

Given the level of student engagement around professional development, it seems an appropriate time to recognize these students' efforts towards career preparation with a graduate-level music career development certificate.

This certificate is modeled after the Graduate Certification in College Teaching in that most musicians will have advanced training in their discipline, but few will have participated in programs that prepare themselves for the other aspects of a career in music. The aspects of career development that are especially relevant to musicians include self-employment skills, self-promotion and marketing skills, administrative skills, writing skills, and skills to manage a portfolio career that includes multiple streams of employment.

The certificate is similar to other graduate level minors and concentrations offered by music schools, including the University of Michigan Certificate in Arts Entrepreneurship and Leadership, the Ball State Certificate in Entrepreneurial Music and the University of North Texas Related Field in Music Entrepreneurship.

The National Association of Schools of Music has no requirement for course work in the area of career development. It does, however, offer the following: Career Development: *Many of those who earn graduate degrees in music will be engaged for several decades in a variety of music and music related professions. Students should be encouraged to acquire the career development and entrepreneurial techniques necessary to advance themselves according to their area of specialization and their own career objectives.*

This program addresses a demonstrated interest and need (see above) and is in alignment with the graduate school's mission to support the professional development of graduate students through a variety of programs. This type of program is becoming more and more common at music schools around the country, especially at the graduate level. Moreover, 75% of our graduate student alumni have been or are currently self-employed (SNAAP 2016 MSU Data Highlights). 70% of our graduate alumni select entrepreneurial skills as important in their profession or work life, and 79% identify financial and business management (SNAAP 2016 MSU Data Highlights). This graduate certificate will provide courses that address these areas, and help students organize their electives coherently to build expertise in the market and skills that will serve them well as they direct their future careers.

By the completion of the Graduate Certificate in Music Career Development students should be able to explain how artists see opportunities, marshal resources, innovate, and create value;

explain the interdependent relationship between their creative practices and their business practices; construct goals related to their graduate experiences and career objectives; implement project management tools to effectively execute these goals; effectively operate as an independent contractor in the U.S. arts ecosystem; and demonstrate developing expertise in an area outside their primary instrument or degree area.

b. **Academic Programs Catalog Text:**

The Graduate Certificate in Music Career Development increases students' awareness of the diversity of careers and roles in the music field, and supports students developing varied interests during their program, encouraging heterogeneity of thought and artistic development. The certificate is available to masters or doctoral students in the College of Music at Michigan State University. Students who wish to complete the certificate must consult with the Director of Career Services and Music Entrepreneurship prior to beginning course work in the program.

Requirements for the Graduate Certificate in Music Career Development

CREDITS

	OILEDITO			
Comp	lete a min	imum of	9 credits as specified below:	
1.	Both of	the follo	wing courses (3 or 4 credits):	
	MUS	496	Your Music Business	1 or 2
	MUS	893	Topics in Music Entrepreneurship	2
2.	One of	the follo	wing courses (1 or 2 credits):	
	MUS	865	Capstone in Music Career Development	1 or 2
	MUS	866	Graduate Internship in Music	1 or 2
3.	Two of	the follo	wing courses (4 to 6 credits):	
	ACM	461	Strategies of Arts and Cultural Management	3
	ACM	462	Promotion and e-Commerce in Arts and	
			Cultural Management	3
	ACM	463	Event Production and Planning for Arts	
			and Culture	3
	ACM	801	Introduction to Arts and Cultural Management	3 3 2 2
	ADV	492	Special Topics in Advertising	3
	MUS	442	Advanced Techniques in Real Time Performance	2
	MUS	487	Music Preparation and Presentation	
	MUS	830	Research Methods and Materials in Music	3
	MUS	844	Secondary or Special Emphasis: Piano	1
	MUS	845	Secondary or Special Emphasis: Voice	1
	MUS	846	Secondary or Special Emphasis: String	1
	MUS	847	Secondary or Special Emphasis: Brass	1
	MUS	848	Secondary or Special Emphasis: Woodwind	1
	MUS	856	Chamber Music	1 or 2
	MUS	877	Scoring for Orchestra and Band	2

Students who select MUS 442 must enroll in the Film Scoring section. Students who select ADV 492 must enroll in either the Independent Music Industry Culture and Society section or the Advanced Independent Music Industry Culture and Society section. With the approval of the Associate Dean of Graduate Studies, students may substitute other appropriate courses to fulfill this requirement.

4. Attend six Running Start workshops sponsored by the College of Music Office of Career Services and Music Entrepreneurship.

Effective Summer 2020.

COLLEGE OF NATURAL SCIENCE

 Establish a Graduate Certificate in Accelerator Science and Engineering in the Department of Physics and Astronomy. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its October 14, 2019 meeting.

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

a. Background Information:

Recent Department of Energy (DOE) and National Science Foundation (NSF) studies detailed issues with producing a sufficient number of highly trained Accelerator Science and Engineering (AS&E) specialists to meet needs in both DOE laboratory facilities, discovery science, and technology/industry. Fulfilling these needs is critical to maintaining U.S. leadership in accelerator technology and enhancing economic growth. In 2017 the DOE issued a Funding Opportunity Announcement for Traineeship in AS&E. MSU's proposal was the sole recipient of a DOE grant to address critical workforce needs in AS&E. Historically, MSU has produced a highly technical workforce in AS&E due to the presence of the National Superconducting Cyclotron Laboratory (NSCL). For decades, many graduate students have been trained at the NSCL under NSF-sponsored cooperative agreements and other federal funding. Currently MSU offers master's and doctoral degrees in physics and in engineering. MSU now has the opportunity to offer an exciting training opportunity in accelerator science and engineering. The AS&E Traineeship (ASET) program at MSU is supported by the DOE and leverages the unique campus-based equipment, systems, and experts at the Facility for Rare Isotope Beams (FRIB) and NSCL. It also makes use of the many MSU faculty involved with the ASET program across several MSU academic programs and couples them with resources at U.S. DOE national laboratories. Partnering academic programs at MSU include the Departments of Physics and Astronomy, and Chemistry in the College of Natural Science in addition to the Department of Electrical and Computer Engineering in the College of Engineering. MSU has established a novel AS&E graduate student program to address all the major need areas stressed in the recent DOE and NSF studies: (1) Physics and engineering of large accelerators; (2) Superconducting RF (SRF) accelerator physics and engineering; (3) RF power engineering; (4) Large-scale cryogenic systems.

Students completing the curriculum will be certified, well trained, and ready for productive careers in AS&E where there are critical workforce needs nationally. An AS&E graduate certificate allows MSU graduate students to show future employers that they have an expertise in accelerator technology.

With the recent development of FRIB at MSU, the opportunities for graduate student training in AS&E at MSU have multiplied. Presently, MSU is building FRIB, a new ~\$1B national-user facility for nuclear science funded by the DOE, MSU, and the state of Michigan. FRIB provides numerous training opportunities in the areas one through four listed above in a large facility. The large increase in scale constituted by FRIB (~ 5x larger) relative to the NSCL results in national-lab-scale facilities that can be exploited to do much more in AS&E training at MSU relative to historic levels to help address critical needs in the field. FRIB's location on campus provides unique opportunities for AS&E student training at a world-class accelerator facility while the students are enrolled in Physics and Engineering courses.

b. Academic Programs Catalog Text:

The Graduate Certificate in Accelerator Science and Engineering provides graduate students the opportunity to further their understanding of accelerator science and technology. Graduates will be certified, well trained, and ready for productive careers in Accelerator Science and Engineering. Research is supported by the Accelerator Science and Engineering Traineeship (ASET) Program. The certificate is available to masters or doctoral students at Michigan State University. Students can apply for the certificate at any time prior to receiving their graduate degree. Students who wish to complete the certificate must consult with the Graduate Program Director in Accelerator Science and Engineering prior to beginning course work in the program.

Requirements for the Graduate Certificate in Accelerator Science and Engineering **CREDITS**

Complete a minimum of 9 credits from the following with a grade-point average of 3.0:

1.	The fol	lowing co	ourse (3 credits):	
	PHY	862	Accelerator Systems	3
2.	At leas	t two cou	urses from the following or any other 800	
	or 900-	level acc	celerator science-focused courses as	
	approv	ed by the	e Physics and Astronomy Graduate	
	Progra	m Directo	or (6 credits):	
	ECE	837	Computational Methods in Electromagnetics	3
	ECE	850	Electrodynamics of Plasmas	3
	ECE	989	Advanced Topics in Plasmas	3
	PHY	861	Beam Physics	3
	PHY	905	Special Problems	3
	PHY	961	Nonlinear Beam Dynamics	3
	PHY	962	Particle Accelerators	3
	PHY	963	U.S. Particle Accelerator School	3
	PHY	964	Seminar in Beam Physics Research	3
	Studer	its who e	nroll in PHY 905 must obtain approval of the Physics and	

Astronomy Graduate Program Director to ensure appropriate content. PHY 905 may be taken more than once as long as the topic taken is different.

Effective Summer 2020.

COLLEGE OF NURSING

Establish a Graduate Certificate in Adult-Gerontology - Clinical Nurse Specialist in the College of 1. Nursing. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its November 11, 2019 meeting.

The Graduate Certificate in Adult-Gerontology - Clinical Nurse Specialist is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Adult-Gerontology - Clinical Nurse Specialist".

Background Information: a.

Individuals with Adult Practice Registered Nurse (APRN) certification and license authority from the state may wish to extend their scope of practice to provide care for clients outside their original competency set from their graduate education verified by their national certification. This may allow them to care for a broader group of patients, for example, an APRN certified in women's health or pediatrics is restricted to those populations. If they wish to provide care in a setting that included adult men, an additional certification would be necessary. Obtaining a post-graduate certificate in both Family of Adult-Gerontology and successfully writing for certification in that specialty would allow them to do so. A primary care Nurse Practitioner (NP) may want preparation for in-patient services and select the Adult-Gerontology Clinical Nurse Specialist with acute care focus. The five clinical courses required for the post-graduate certificate provides the didactic content and clinical practice hours required by the national certification bodies.

b. **Academic Programs Catalog Text:**

The Graduate Certificate in Adult-Gerontology - Clinical Nurse Specialist is for individuals with Advanced Practice Registered Nurse certification and license authority from the state who wish to extend their scope of practice to provide broader care for patients outside their original competency set from their graduate education verified by their national certification.

Admission

To be considered for admission to the Graduate Certificate in Adult-Gerontology - Clinical Nurse Specialist, an applicant must:

1. Submit a university application and a curriculum vita or resume.

- 2. Complete a graduate degree in Nursing from an accredited college or university.
- 3. Possess a current unrestricted license to practice nursing as a registered nurse in the applicant's state or country. For those applicants practicing in Michigan, a current registered nurse Michigan license is required. Applicants who hold registered nurse licensure from other states or countries and who are a Nurse Practitioner may be admitted provisionally with the requirement that a United States and Michigan registered nurse license must be obtained prior to progression.
- Possess current certification from a U.S. National Certifying Board as an NP, CNS, CRNA or CNM.
- 5. Have a minimum grade-point average of 3.0 (4.0 scale) for total credits completed during the graduate nursing program.
- 6. Submit a written essay that addresses the applicant's career goals and motivations for additional graduate study in the selected area of specialty nursing practice; nurse practitioner, or adult-gerontology clinical nurse.
- 7. Submit three letters of recommendation. The reference letters must be from a source that has direct knowledge of the applicant's work and educational experience specifying the applicant's ability to do graduate work.
- 8. Complete an admission interview with the college of Nursing faculty. Recommendations for admission are made by the faculty committee to the Dean of the College based on the requirements for admission and the personal interview.
- 9. If the applicant's native language is not English, the applicant must complete the Test of English as a Foreign Language (TOEFL) with a minimum average score of 550, no subscore below 52 on the paper-based test (PBT). If the applicant completes the Internet-based test (iBT), no subscore below 19 for reading, listening, and speaking; no writing subscore below 22 and a minimum average score of 80. Applicants should have all test scores sent from the testing agency directly to the Michigan State University Office of Admissions.

A gap analysis will be conducted to assess competency and prior course work in the three core APRN clinical courses (3Ps).

NUR	907	Advanced Pathophysiology for the Advanced Practice Registered Nurse
NUR	908	
NUR	909	,
NUR NUR	908 909	Advanced Physical Assessment for the Advanced Practice Registered Nurse Advanced Pharmacology for the Advanced Practice Registered Nurse

Applicants may choose to take any of the above courses for refresher. Faculty will assess compatibility of previous courses in these areas and may require one or all before enrolling in the graduate certificate. The student must demonstrate pharmacology course work (credit and/or continuing education credit) within the past five years.

Requirements for the Graduate Certificate in Adult-Gerontology - Clinical Nurse Specialist CREDITS

The stu	udent mu	ust complete all of the following courses (27 credits):	
NUR	931	Wellness Promotion for Diverse Populations	3
NUR	932	Clinical Decision Making and Management of Acute	
		Chronic Complex Conditions	6
NUR	933	Clinical Nurse Specialist Advanced Practice Role	
		Development I	6
NUR	934	Clinical Nurse Specialist Advanced Practice Role	
		Development II	6
NUR	935	Clinical Nurse Specialist Advanced Practice Role	
		Development III	6

Effective Fall 2020.

2. Establish a **Graduate Certificate** in **Nurse Practitioner - Psychiatric Mental Health** in the College of Nursing. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its November 11, 2019 meeting.

The Graduate Certificate in Nurse Practitioner - Psychiatric Mental Health is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Nurse Practitioner - Psychiatric Mental Health".

a. **Background Information**:

Individuals with Adult Practice Registered Nurse (APRN) certification and license authority from the state may wish to extend their scope of practice to provide care for clients outside their original competency set from their graduate education verified by their national certification. This may allow them to care for a broader group of patients, for example, an APRN certified in women's health or pediatrics is restricted to those populations. If they wish to provide care in a setting that included adult men, an additional certification would be necessary. Obtaining a post-graduate certificate in both Family of Adult-Gerontology and successfully writing for certification in that specialty would allow them to do so. A primary care Nurse Practitioner (NP) may want preparation for in-patient services and select the Adult-Gerontology Clinical Nurse Specialist (CNS) with acute care focus. Mental Health professionals are in particularly acute demand. Obtaining a certificate and obtaining certification as a psychiatric mental health nurse practitioner would support adding care for these clients to the competency of a nurse certified in any of the APRN roles. The five clinical courses required for the post-graduate certificate provides the didactic content and clinical practice hours required by the national certification bodies.

b. Academic Programs Catalog Text:

The Graduate Certificate in Nurse Practitioner - Psychiatric Mental Health is for individuals with Advanced Practice Registered Nurse certification and license authority from the state who wish to extend their scope of practice to provide broader care for patients outside their original competency set from their graduate education verified by their national certification.

Admission

To be considered for admission to the Graduate Certificate in Nurse Practitioner - Psychiatric Mental Health, an applicant must:

- 1. Submit a university application and a curriculum vita or resume.
- 2. Have completed a graduate degree in Nursing from an accredited college or university.
- 3. Possess a current unrestricted license to practice nursing as a registered nurse in the applicant's state or country. For those applicants practicing in Michigan, a current registered nurse Michigan license is required. Applicants who hold registered nurse licensure from other states or countries and who are a Nurse Practitioner may be admitted provisionally with the requirement that a United States and Michigan registered nurse license must be obtained prior to progression.
- Possess current certification from a U.S. National Certifying Board as an NP, CNS, CRNA or CNM.
- 5. Have a minimum grade-point average of 3.0 (4.0 scale) for total credits completed during the graduate nursing program.
- 6. Submit a written essay that addresses the applicant's career goals and motivations for additional graduate study in the selected area of specialty nursing practice; nurse practitioner, or adult-gerontology clinical nurse.
- 7. Submit three letters of recommendation. The reference letters must be from a source that has direct knowledge of the applicant's work and educational experience.
- 8. Complete an admission interview with the college of Nursing faculty. Recommendations for admission are made by the faculty committee to the Dean of the College based on the requirements for admission and the personal interview.
- 9. If the applicant's native language is not English, the applicant must complete the Test of English as a Foreign Language (TOEFL) with a minimum average score of 550, no subscore below 52 on the paper-based test (PBT). If the applicant completes the Internet-based test (iBT), no subscore below 19 for reading, listening, and speaking; no writing subscore below 22 and a minimum average score of 80. Applicants should have all test scores sent from the testing agency directly to the Michigan State University Office of Admissions.

A gap analysis will be conducted to assess competency and prior course work in the three core APRN clinical courses (3Ps).

NUR	907	Advanced Pathophysiology for the Advanced Practice Registered Nurse
NUR	908	Advanced Physical Assessment for the Advanced Practice Registered Nurse
NUR	909	Advanced Pharmacology for the Advanced Practice Registered Nurse

Applicants may choose to take any of the above courses for refresher. Faculty will assess compatibility of previous courses in these areas and may require one or all before enrolling in the graduate certificate. The student must demonstrate pharmacology course work (credit and/or continuing education credit) within the past five years.

Requirements for the Graduate Certificate in Nurse Practitioner - Psychiatric Mental Health CREDITS

The stu	ident mus	st complete all of the following courses (27 credits):	
NUR	952	Psychopharmacology and Neuropathological Basis	
		of Mental Illness	3
NUR	953	Clinical Diagnosis and Management I - Psychiatric	
		Assessment and Diagnosis	6
NUR	954	Clinical Diagnosis and Management II – Evidence-	
		Based Therapeutic Interventions	6
NUR	955	Clinical Diagnosis and Management III - Special	
		Populations and Group	6
NUR	956	Clinical Diagnosis and Management IV - Complex	
		and Collaborative Mental Health Care	6

Effective Fall 2020.

3. Establish a **Graduate Certificate** in **Nurse Practitioner - Adult-Gerontological Primary Care** in the College of Nursing. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its November 11, 2019 meeting.

The Graduate Certificate in Nurse Practitioner - Adult-Gerontological Primary Care is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Nurse Practitioner - Adult-Gerontological Primary Care".

a. Background Information:

Individuals with Adult Practice Registered Nurse (APRN) certification and license authority from the state may wish to extend their scope of practice to provide care for clients outside their original competency set from their graduate education verified by their national certification. This may allow them to care for a broader group of patients, for example, an APRN certified in women's health or pediatrics is restricted to those populations. If they wish to provide care in a setting that included adult men, an additional certification would be necessary. Obtaining a post-graduate certificate in both Family of Adult-Gerontology and successfully writing for certification in that specialty would allow them to do so. A primary care Nurse Practitioner (NP) may want preparation for in-patient services and select the Adult-Gerontology Clinical Nurse Specialist (CNS) with acute care focus. The five clinical courses required for the post-graduate certificate provides the didactic content and clinical practice hours required by the national certification bodies.

b. Academic Programs Catalog Text:

The Graduate Certificate in Nurse Practitioner - Adult-Gerontological Primary Care is for individuals with Advanced Practice Registered Nurse certification and license authority from the state who wish to extend their scope of practice to provide broader care for patients outside their original competency set from their graduate education verified by their national certification.

Admission

To be considered for admission to the Graduate Certificate in Nurse Practitioner - Adult-Gerontological Primary Care, an applicant must:

- 1. Submit a university application and a curriculum vita or resume.
- 2. Have completed a graduate degree in Nursing from an accredited college or university.
- 3. Possess a current unrestricted license to practice nursing as a registered nurse in the applicant's state or country. For those applicants practicing in Michigan, a current registered nurse Michigan license is required. Applicants who hold registered nurse licensure from other states or countries and who are a Nurse Practitioner may be admitted provisionally with the requirement that a United States and Michigan registered nurse license must be obtained prior to progression.
- Possess current certification from a U.S. National Certifying Board as an NP, CNS, CRNA or CNM.
- 5. Have a minimum grade-point average of 3.0 (4.0 scale) for total credits completed during the graduate nursing program.
- 6. Submit a written essay that addresses the applicant's career goals and motivations for additional graduate study in the selected area of specialty nursing practice; nurse practitioner, or adult-gerontology clinical nurse.
- 7. Submit three letters of recommendation. The reference letters must be from a source that has direct knowledge of the applicant's work and educational experience.
- 8. Complete an admission interview with the college of Nursing faculty. Recommendations for admission are made by the faculty committee to the Dean of the College based on the requirements for admission and the personal interview.
- 9. If the applicant's native language is not English, the applicant must complete the Test of English as a Foreign Language (TOEFL) with a minimum average score of 550, no subscore below 52 on the paper-based test (PBT). If the applicant completes the Internet-based test (iBT), no subscore below 19 for reading, listening, and speaking; no writing subscore below 22 and a minimum average score of 80. Applicants should have all test scores sent from the testing agency directly to the Michigan State University Office of Admissions.

A gap analysis will be conducted to assess competency and prior course work in the three core APRN clinical courses (3Ps).

NUR	907	Advanced Pathophysiology for the Advanced Practice Registered Nurse
NUR	908	
NUR	909	,
NUR NUR	908 909	Advanced Physical Assessment for the Advanced Practice Registered Nurse Advanced Pharmacology for the Advanced Practice Registered Nurse

Applicants may choose to take any of the above courses for refresher. Faculty will assess compatibility of previous courses in these areas and may require one or all before enrolling in the graduate certificate. The student must demonstrate pharmacology course work (credit and/or continuing education credit) within the past five years.

Requirements for the Graduate Certificate in Nurse Practitioner - Adult-Gerontological Primary Care CREDITS

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The stu	ıdent mı	ust complete all of the following courses (27 credits):	
NUR	913	Health Promotion – Adult-Gerontology	3
NUR	925	Clinical Diagnosis and Management I – Adult-Gerontology	6
NUR	926	Clinical Diagnosis and Management II – Adult-Gerontology	6
NUR	927	Clinical Diagnosis and Management III – Adult-Gerontology	6
NUR	928	Clinical Diagnosis and Management IV – Adult-Gerontology	6

Effective Fall 2020.

 Establish a Graduate Certificate in Nurse Practitioner - Family in the College of Nursing. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its November 11, 2019 meeting.

The Graduate Certificate in Nurse Practitioner - Family is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Nurse Practitioner - Family".

a. **Background Information**:

Individuals with Adult Practice Registered Nurse (APRN) certification and license authority from the state may wish to extend their scope of practice to provide care for clients outside their original competency set from their graduate education verified by their national certification. This may allow them to care for a broader group of patients, for example, an APRN certified in women's health or pediatrics is restricted to those populations. If they wish to provide care in a setting that included adult men, an additional certification would be necessary. Obtaining a post-graduate certificate in both Family of Adult-Gerontology and successfully writing for certification in that specialty would allow them to do so. A primary care Nurse Practitioner (NP) may want preparation for in-patient services and select the Adult-Gerontology Clinical Nurse Specialist (CNS) with acute care focus. The five clinical courses required for the post-graduate certificate provides the didactic content and clinical practice hours required by the national certification bodies.

b. Academic Programs Catalog Text:

The Graduate Certificate in Nurse Practitioner - Family is for individuals with Advanced Practice Registered Nurse certification and license authority from the state who wish to extend their scope of practice to provide broader care for patients outside their original competency set from their graduate education verified by their national certification.

Admission

To be considered for admission to the Graduate Certificate in Nurse Practitioner - Family, an applicant must:

- 1. Submit a university application and a curriculum vita or resume.
- 2. Have completed a graduate degree in Nursing from an accredited college or university.
- 3. Possess a current unrestricted license to practice nursing as a registered nurse in the applicant's state or country. For those applicants practicing in Michigan, a current registered nurse Michigan license is required. Applicants who hold registered nurse licensure from other states or countries and who are a Nurse Practitioner may be admitted provisionally with the requirement that a United States and Michigan registered nurse license must be obtained prior to progression.
- Possess current certification from a U.S. National Certifying Board as an NP, CNS, CRNA or CNM.
- 5. Have a minimum grade-point average of 3.0 (4.0 scale) for total credits completed during the graduate nursing program.
- 6. Submit a written essay that addresses the applicant's career goals and motivations for additional graduate study in the selected area of specialty nursing practice; nurse practitioner, or adult-gerontology clinical nurse.
- 7. Submit three letters of recommendation. The reference letters must be from a source that has direct knowledge of the applicant's work and educational experience.
- 8. Complete an admission interview with the college of Nursing faculty. Recommendations for admission are made by the faculty committee to the Dean of the College based on the requirements for admission and the personal interview.
- 9. If the applicant's native language is not English, the applicant must complete the Test of English as a Foreign Language (TOEFL) with a minimum average score of 550, no subscore below 52 on the paper-based test (PBT). If the applicant completes the Internet-based test (iBT), no subscore below 19 for reading, listening, and speaking; no writing subscore below 22 and a minimum average score of 80. Applicants should have all test scores sent from the testing agency directly to the Michigan State University Office of Admissions.

CREDITS

A gap analysis will be conducted to assess competency and prior course work in the three core APRN clinical courses (3Ps).

NUR	907	Advanced Pathophysiology for the Advanced Practice Registered Nurse
NUR	908	Advanced Physical Assessment for the Advanced Practice Registered Nurse
NUR	909	Advanced Pharmacology for the Advanced Practice Registered Nurse

Applicants may choose to take any of the above courses for refresher. Faculty will assess compatibility of previous courses in these areas and may require one or all before enrolling in the graduate certificate. The student must demonstrate pharmacology course work (credit and/or continuing education credit) within the past five years.

Requirements for the Graduate Certificate in Nurse Practitioner - Family

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The stu	udent mu	ust complete all of the following courses (27 credits):	
NUR	912	Health Promotion - Family	3
NUR	915	Clinical Diagnosis and Management I - Family	6
NUR	916	Clinical Diagnosis and Management II - Family	6
NUR	917	Clinical Diagnosis and Management III - Family	6
NUR	918	Clinical Diagnosis and Management IV - Family	6

Effective Fall 2020.

COLLEGE OF OSTEOPATHIC MEDICINE

- Change the requirements for the Master of Science degree in Global Health in the College of Osteopathic Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its January 13, 2020 meeting.
 - a. Under the heading **Admission** delete item 4., and renumber item 5. to item 4.
 - b. Under the heading **Requirements for the Master of Science Degree in Global Health** make the following changes:
 - (1) Change the total credits for the degree from '42' to '30'.
 - (2) Change item 2. to 'Complete 3 credits from the following courses' and add the following courses:

PSY	880	Foundations of Evaluation Practice	3
PSY	881	Evaluation Design	3

- (3) Delete item 3.
- (4) Renumber item 4. to item 3.

Effective Summer 2020.

3

 Change the requirements for the Graduate Certificate in Global Health in the College of Osteopathic Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its January 13, 2020 meeting.

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

- a. Under the heading **Admission** delete item 4., and renumber item 5. to item 4.
- Under the heading Requirements for the Graduate Certificate in Global Health replace the entire entry with the following:

 CREDITS

The cert	tificate pr	ogram is	available online only. Students must complete			
9 credits	from the	e followin	g:			
1.	Comple	te the fol	lowing course:			
	OST	822	Introduction to Global Health Practice	3		
2.	Comple	Complete 6 credits from the following courses:				
	OST 821 One Health – The Theory and Added Value of Transdiscipling					
			Collaborations to			
			Global Health	3		
	OST	823	Global Burden of Disease	3		
	OST	824	Emerging Topics in Global Health	3		

Independent Study in Global Health

Effective Summer 2020.

- 3. Establish a **Master of Science** degree in **PA Medicine** in the Department of PA Medicine. The University Committee on Graduate Studies (UCGS) recommended approval of this request at its November 11, 2019 meeting.
 - a. Background Information:

OST

830

The state of Michigan has a well-known physician shortage that educators, legislators and health advocates are working to address. The Michigan Health Council in January 2012 reported, of the 5,472 family physicians in Michigan, 45% planned to retire by 2022. According to the Association of American Medical Colleges, by 2020 there will be a shortage of 8,000-12,000 physicians in Michigan, of which 4,000 will be primary care physicians. These statistics become even more concerning when the Center for Healthcare Research and Transformation data showed that the uninsured in Michigan has decreased from 10% of the population in 2009 to 5% in 2015. This means fewer healthcare providers are caring for an increasing insured population.

A recent federal report "Reforming America's Healthcare System through choice and competition" by The U.S. Department of Health and Human Services called for the utilization of physician assistants (PA) and other providers to address physician shortages. The report also recommends expanding scope of practice in states to allow PAs to practice to the full extent of their license and training.

As a way to address the healthcare needs of Michigan, Michigan State University College of Osteopathic Medicine will develop a PA Medicine program that would join the six other currently accredited PA programs in the State. The mission of the Michigan State University Department of PA Medicine is to develop a team-based educational program that produces practice ready PAs. To achieve this goal, the department has partnered with the Hub for Innovation in Learning and Technology at Michigan State University to design a "Day 1 practice ready" PA curriculum. The Hub employed learning design and research expertise to lead the PA faculty through a Backward Design process to develop Program Outcomes and aligned assessments and to map the curriculum.

The Hub has helped to build connections with MSU's College of Human Medicine, College of Nursing, College of Business, College of Natural Science, and School of Social Work for potential broader interprofessional education after program development. The Hub continues to provide

support researching assessment models for the program, including peer assessment, competency and mastery assessment models, and interprofessional education assessment.

This innovative curricular model integrates osteopathic and PA medical students to maximize collaborative experiences during their training. The vision for MSU PAs will be to improve access and patient health outcomes while innovating optimal collaborative medical care. One key issue the program will look to address is rural health care exposure throughout Michigan. As a land grant University, this will be a core value for the MSU PA Medicine program.

The College of Osteopathic Medicine has a long history of training physicians where the majority of graduates stay to practice in Michigan. The college will use this experience to innovate a PA program that will address the shortages of healthcare providers in the State of Michigan and have the first program in the state to train PAs side-by-side with physicians. Interprofessional education has long been a goal for many medical educators however, few programs have been able to successfully integrate other health professionals into training programs.

b. Academic Programs Catalog Text:

The Department of PA Medicine in the College of Osteopathic Medicine at Michigan State University offers a 27-month curriculum leading to a Master of Science Degree in PA Medicine. PAs are medical professionals who diagnosis illness, develop and manage treatment plans, prescribe medication, and often serve as a patient's principal healthcare provider. PAs practice in every medical specialty and collaborate in a team-based environment to provide medical care to a diverse patient population.

The curriculum leading to the degree includes four semesters of classroom and laboratory course work, and three semesters of community-based clinical courses. The curriculum is divided into two components: the preclinical curriculum, presented in the first four semesters which focuses on the basic medical sciences and detailed coverage of the human body systems, and the development of clinical skills required to practice medicine; and the clinical curriculum during the final three semesters of the 27-month PA Medicine program which includes clinical training in community hospitals, clinics, and private practice offices affiliated with the Michigan State University College of Osteopathic Medicine PA Medicine from across the State of Michigan.

In addition to meeting the requirements of the University and the College of Osteopathic Medicine, students must meet the requirements below.

Admission

To be considered for admission to the Master of Science degree in PA Medicine, an applicant must submit the following:

- 1. The MSU Graduate School application.
- 2. The CAPSA (Central Application Service for Physician Assistants) application.
- 3. A transcript showing a completed undergraduate degree.
- A personal statement describing interest and experience in PA Medicine, including career goals.
- 5. Three letters of reference.
- 6. A test of English language proficiency for students for whom English is not a first language. The minimum requirement TOEFL score may vary from the general university requirements. The exam must be taken by May 1 of the application cycle year and the score received by June 15 of the same year. A score of 100 on the IbT (Internet based testing) must be attained.
- 7. A transcript showing completion of prerequisite courses in anatomy, biochemistry, developmental psychology, English composition, general chemistry, human physiology microbiology with laboratory, and statistics. Students are allowed only two course retakes.

Students will be evaluated by an MSU College of Osteopathic Medicine PA Medicine screening team who will employ a rubric inclusive of the evaluation of academic performance, interview outcome, extracurricular experiences, letters of recommendation, and personal statements to determine eligibility for admission. Membership in professional organizations are preferred, but not required. Final admission decisions will be determined by the screening team which consists of PA Medicine and College of Osteopathic Medicine faculty, as well as community healthcare providers.

Requirements for the Master of Science Degree in PA Medicine

CREDITS

The Master of Science degree in PA Medicine is available only under Plan B (non-thesis). Students must complete 108 credits as specified below:

1.	Complet	te all of th	ne following courses (108 credits):	
	PA	801	PEAK Study Skills	1
	PA	810	Clinical Human Anatomy	8
	PA	828	Genetics	2
	PA	832	Microbiology	2
	PA	839	Pathophysiology	2
	PA	851	Physical Examination I	3
	PA	852	Physical Examination II	3
	PA	853	Physical Examination III	3
	PA	854	Physical Examination IV	3
	PA	855	Procedures and Diagnostics I	1
	PA	856	Procedures and Diagnostics II	1
	PA	857	Procedures and Diagnostics III	2
	PA	858	Procedures and Diagnostics IV	2
	PA	864	Pharmacology	2
	PA	871	Medicine I	3
	PA	872	Medicine II	4
	PA	873	Medicine III	4
	PA	874	Medicine IV	4
	PA	880	Medical History and Documentation	3
	PA	881	Medical Ethics	2
	PA	882	Primary Care Applications	2
	PA	883	Introduction to Clinical Rotations	1
	PA	884	Business of Healthcare	2
	PA	900	Pediatrics Clinical Practicum	4
	PA	908	Behavioral Health Clinical Practicum	4
	PA	910	Clinical Elective	4
	PA	920	Family Medicine Clinical Practicum	4
	PA	940	Internal Medicine Clinical Practicum	4
	PA	950	Internal Medicine Subspecialty Elective	4
	PA	951	Women's Health Clinical Practicum	4
	PA	953	Surgery Clinical Practicum	4
	PA	955	Surgical Subspecialty Elective	4
	PA	957	Emergency Medicine Clinical Practicum	4
	PA	958	Ambulatory Medicine Elective	4
	PA	990	PA Medicine Competence Experience	1
	PA	992	Public Health and Disease Prevention	1
	PA	993	Osteopathic Manipulation Medicine	1
	PA	998	Research and Evidence Based Medicine	1
2.	Success	fully com	plete a final evaluation.	

Effective Summer 2021.

COLLEGE OF SOCIAL SCIENCE

Delete the curriculum and degree requirements for the Bachelor of Science degree in Global and Area Studies-Social Science in the College of Social Science. The University Committee on Undergraduate Education (UCUE) provided consultative commentary to the Provost after considering this request at its November 7, 2019 meeting. The Provost made the determination to discontinue the program after considering the consultative commentary from the University Committee on Undergraduate Education.

No new students are to be admitted to the program effective Summer 2016. No students are to be readmitted to the program effective Summer 2016. Effective Summer 2019, coding for the program was discontinued and the program is no longer be available in the College of Social Science. Students who have not met the requirements for the Bachelor of Science Degree in Global and Area Studies-Social Science through the College of Social Science prior to Summer 2019 will have to change their major.

- Change the requirements for the Minor in Environment and Health in the Department of Geography.
 - a. Under the heading **Requirements for the Minor in Environment and Health** make the following changes:
 - (1) In item 2. delete the following course: ANP 370 Culture, Health and Illness 3 Add the following courses: Geography of Health and Disease **GEO** 435 3 SOC 252 Introduction to Environmental Sociology 3 (2) In item 3. Delete the following course: **EEP** 260 World Food, Population and Poverty 3 Add the following course: **EEM** World Food, Population and Poverty 3 260 (3) In item 4. delete the following course: **GEO** 3 435 Geography of Health and Disease Add the following course: ANP 370 Culture, Health and Illness 3

Effective Summer 2020.

PART II - NEW COURSES

DEPARTMENT OF ANIMAL SCIENCE

ANS 801 Methods of Teaching Animal Science

Fall of every year. Spring of every year. 1(0-2) A student may earn a maximum of 6 credits in all enrollments for this course. RB: One year of graduate coursework and an interest in teaching, outreach, or extension at the college level. R: Open to graduate students in the Department of Animal Science.

Techniques and approaches for developing and teaching animal science courses and assessing student learning.

Effective Fall 2020

COLLEGE OF ARTS AND LETTERS

AL 111 Introduction to Accessibility in the Humanities

Fall of every year. 1(1-0)

Introduction to humanities-focused understanding of accessibility and disability theories and practices. Interdisciplinary introduction to principles and products to improve accessibility. Discussion of the ethics of human and technology interactions for

accessibility. Effective Fall 2020

DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE

CHE 972 Viscoelasticity and Flow of Polymeric Materials

Spring of odd years. 3(3-0)

REINSTATEMENT Time dependent and steady flow properties of polymeric materials related to molecular

and structural parameters. Examples of polymeric blends and composites with

thermoplastic and thermoset components.

Effective Spring 2021

DEPARTMENT OF COMMUNITY SUSTAINABILITY

CSUS 459 Clean Energy System Policy

Fall of every year. 3(3-0) P: CSUS 259 or approval of department R: Open to juniors or seniors.

Policies regarding clean energy systems, transitions, and sovereignty. Modeling social,

cultural, economic and ecological impacts of clean energy.

Effective Fall 2020

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY, AND SPECIAL EDUCATION

CEP 874 Counseling Ethics

Spring of every year. 3(3-0)

American Counseling Association and Commission on Rehabilitation Counselor Certification ethics codes, unique ethical dilemmas and legal aspects in rehabilitation

counseling, awareness and skills for ethical practice and decision-making.

Effective Spring 2021

CEP 878 Counseling and Group Work

Fall of every year. 3(3-0) P: CEP 862 and CEP 874

Group work and counseling theory. Factors in development and facilitation of group work, and critical issues (e.g., disability, special populations). Experiential practice as a group

leader and member. Effective Fall 2021

COLLEGE OF ENGINEERING

EGR 893 Graduate Experiential Education

Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to graduate students in the College of Engineering. Approval of department.

Faculty-mentored graduate research or educational employment experience in industry or government.

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 2020

EGR 993 Engineering Research Writing

Fall of every year. Spring of every year. Summer of every year. 1(1-0) R: Open to graduate students in the College of Engineering. Approval of department.

Support for students engaged in substantial writing projects such as thesis or dissertation.

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

Effective Fall 2020

DEPARTMENT OF FORESTRY

FOR 215 Introduction to Wildland Fire

Spring of every year. 2(2-0) R: Open to undergraduate students in the Department of Forestry or approval of department.

Fundamental processes of wildland fire behavior and management consistent with the National Wildfire Coordinating Group (NWCG) curriculum. Field trips required.

SA: FOR 412

Effective Summer 2021

FOR 360 Forest Ecosystems, Carbon and Climate Change

Fall of every year. 3(3-0) P: WRA 101

Forest ecosystem analysis and measurement, with a focus on policy and science of the

global carbon cycle and climate change.

Effective Fall 2020

FOR 413 Wildland Fire Ecology and Management

Fall of every year. 3(3-0) P: (FOR 340 or concurrently) or (IBIO 355 or concurrently) RB: FOR 204

Role of fire in regulating forest ecosystem distribution, composition, structure, and

function. Field trips required.

Effective Fall 2020

DEPARTMENT OF GEOGRAPHY, ENVIRONMENT, AND SPATIAL SCIENCES

GEO 331 Geography of Canada

Spring of every year. 3(3-0)

Geographic examination of Canadian landscapes, cultures, government structure, health care system, and economies. Interactions of human, economic, and physical geographies

in Canada's regions and sub-regions.

Effective Fall 2020

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

HDFS 138 Introduction to Financial Literacy

Fall of every year. 2(1-0) R: Open to freshmen or sophomores.

Design, develop, and integrate a comprehensive plan to achieve financial goals. Topics will have an immediate impact on everyday life to achieve financial freedom and success. Effective Fall 2019

JAMES MADISON COLLEGE

MC 324B Regional Politics, Cooperation, and Conflict in Sub-Saharan Africa

Fall of even years. 4(3-0) P: (MC 220 or PLS 160) or completion of Tier I writing requirement RB:

MC 221 or concurrently

REINSTATEMENT Domestic and international politics of sub-Saharan African countries. Conflict and

cooperation among states of the region. Government policies to promote security,

democracy, and growth. Effective Spring 2021

LYMAN BRIGGS COLLEGE

LB 271 Organic Chemistry

Fall of every year. Spring of every year. 3(3-0) P: CEM 141 or CEM 151 or CEM 181H or LB 171 R: Open to undergraduate students in the Lyman Briggs College. Not open to students with credit in CEM 251.

Common classes of organic compounds including their nomenclature, structure, bonding, reactivity, spectroscopic characterization, and the relationship of organic chemistry

concepts as they are related to chemistry practices.

Effective Fall 2020

DEPARTMENT OF MATHEMATICS

MTH 800 Quantitative Foundations for Machine Learning

Fall of every year. 3(3-0) Interdepartmental with Statistics and Probability. P: MTH 132 and MTH 133 or approval of department

Advanced calculus and linear algebra tools for machine learning algorithms.

Effective Summer 2020

COLLEGE OF MUSIC

MUS 865 Capstone in Music Career Development

Fall of every year. Spring of every year. 1 to 2 credits. A student may earn a maximum of 2 credits in all enrollments for this course. R: Open to graduate students in the College of Music.

Demonstrate mastery of music career skills through creation of a professional project

related in entrepreneurship or self-employment.

Effective Fall 2019

MUS 866 Graduate Internship in Music

Fall of every year. Spring of every year. 1 to 2 credits. A student may earn a maximum of 2 credits in all enrollments for this course. R: Open to graduate students in the College of Music.

Supervised pre-professional field experience. Full semester (14 week) internship at the

organization of choice (typically arts based).

Effective Fall 2019

MUS 893 Topics in Music Entrepreneurship

Fall of every year. 2(2-0) A student may earn a maximum of 8 credits in all enrollments for this

course. R: Open to graduate students in the College of Music or approval of college.

Advanced topics related to entrepreneurship and professional development.

Effective Fall 2019

DEPARTMENT OF PA MEDICINE

PA 801 PEAK Study Skills

Summer of every year. 1(1-0) R: Open to students in the Department of PA Medicine.

Learning skills to maximize cognitive potential.

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

PA 810 Clinical Human Anatomy

Summer of every year. 8(6-6) R: Open to students in the Department of PA Medicine.

Macroscopic human structure, landmarks, and spatial relationships with clinical

correlations. Clinical-anatomical language.

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

Effective Summer 2021

PA 828 Genetics

Fall of every year. 2(2-0) R: Open to students in the Department of PA Medicine.

Basic principles of human medical genetics.

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

Effective Summer 2021

PA 839 Pathophysiology

Summer of every year. 2(2-0) R: Open to students in the Department of PA Medicine.

Human disease and abnormal processes, including frequency, significance, diagnosis and

treatment.

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

Effective Summer 2021

PA 851 Physical Examination I

Summer of every year. 3(2-1) R: Open to students in the Department of PA Medicine.

Physical examination skills needed to practice medicine utilizing a body systems

approach.

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

Effective Summer 2021

PA 852 Physical Examination II

Fall of every year. 3(2-1) P: PA 851 R: Open to students in the Department of PA Medicine.

Continuation of PA 851.

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

Effective Summer 2021

PA 853 Physical Examination III

Spring of every year. 3(2-1) P: PA 852 R: Open to students in the Department of PA Medicine.

Continuation of PA 852.

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

Effective Summer 2021

PA 854 Physical Examination IV

Spring of every year. 3(2-1) P: PA 853 R: Open to students in the Department of PA Medicine.

Continuation of PA 853.

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

Effective Summer 2021

PA 855 Procedures and Diagnostics I

Summer of every year. 1(1-1) R: Open to students in the Department of PA Medicine.

Medical procedures and interpretation of diagnostic testing relevant to the body systems.

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

Effective Summer 2021

PA 856 Procedures and Diagnostics II

Fall of every year. 1(1-1) P: PA 855 R: Open to students in the Department of PA Medicine.

Continuation of PA 855.

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

Effective Summer 2021

PA 857 Procedures and Diagnostics III

Spring of every year, 2(1-1) P: PA 856 R: Open to students in the Department of PA Medicine.

Continuation of PA 856.

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

PA 858 Procedures and Diagnostics IV

Summer of every year. 2(1-1) P: PA 857 R: Open to students in the Department of PA Medicine.

Continuation of PA 857.

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

Effective Summer 2021

PA 864 Pharmacology

Fall of every year. 2(2-0) R: Open to students in the Department of PA Medicine.

Basic principles of pharmacology, toxicology, and selected drugs.

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

Effective Summer 2021

PA 871 Medicine I

Summer of every year. 3(3-0) R: Open to students in the Department of PA Medicine.

A systematic approach to the etiology, diagnosis, treatment, and prevention of clinical

disorders.

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

Effective Summer 2021

PA 872 Medicine II

Fall of every year. 4(4-0) P: PA 871 R: Open to students in the Department of PA Medicine.

Continuation of PA 871.

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

Effective Summer 2021

PA 873 Medicine III

Spring of every year. 4(4-0) P: PA 872 R: Open to students in the Department of PA Medicine.

Continuation of PA 872.

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

Effective Summer 2021

PA 874 Medicine IV

Summer of every year. 4(4-0) P: PA 873 R: Open to students in the Department of PA Medicine.

Continuation of PA 873.

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

Effective Summer 2021

PA 880 Medical History and Documentation

Fall of every year. 3(2-1) R: Open to students in the Department of PA Medicine.

Patient interviewing techniques, medical history, and documentation of patient encounters.

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

Effective Summer 2021

PA 881 Medical Ethics

Spring of every year. 2(2-1) R: Open to students in the Department of PA Medicine.

Cultural awareness, sensitivity, ethical standards, and legal principles.

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

Effective Summer 2021

PA 882 Primary Care Applications

Spring of every year. 2(1-1) R: Open to students in the Department of PA Medicine.

Health-care related hospital and community experiences. Request the use of the Pass-No Grade (P-N) system.

Effective Summer 2021

PA 883 Introduction to Clinical Rotations

Summer of every year. 1(1-0) R: Open to students in the Department of PA Medicine.

Transition to clinical applications of medicine.

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

PA 884 Business of Healthcare

Summer of every year. 2(2-0) R: Open to students in the Department of PA Medicine.

Economics of healthcare in the United States.

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

Effective Summer 2021

PA 900 Pediatrics Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Supervised clinical exposure in pediatric 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 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 908 Behavioral Medicine Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Supervised clinical exposure in behavioral 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 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 910 Clinical Elective

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Focused clinical medicine exposure in a specialty area.

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

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 920 Family Medicine Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Clinical exposure in family 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 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 940 Internal Medicine Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Clinical exposure 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 2

semesters after the end of the semester of enrollment.

PA 950 Internal Medicine Subspecialty Elective

Fall of every year. Spring of every year. Summer of every year. 4 credits. P: PA 940 R: Open to students in the Department of PA Medicine.

Clinical exposure in a selective subspecialty of 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 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 951 Women's Health Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Women's health with practical exposure to the evaluation and management of the prenatal through postpartum patient.

Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 953 Surgery Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Clinical exposure and skill development in a surgical setting.

Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 955 Surgical Subspecialty Elective

Fall of every year. Spring of every year. Summer of every year. 4 credits. P: PA 953 R: Open to students in the Department of PA Medicine.

Clinical exposure in a surgical subspecialty setting. Request the use of the Pass-No Grade (P-N) system.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 957 Emergency Medicine Clinical Practicum

Fall of every year. Spring of every year. Summer of every year. 4 credits. R: Open to students in the Department of PA Medicine.

Clinical exposure in emergency 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 2

semesters after the end of the semester of enrollment.

Effective Summer 2021

PA 958 Ambulatory Medicine Elective

Fall of every year. Spring of every year. Summer of every year. 4 credits. P: PA 920 R: Open to students in the Department of PA Medicine.

Clinical exposure in a variety of ambulatory medicine settings.

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.

PA 990 PA Medicine Competence Experience

Summer of every year. 1(1-0) R: Open to students in the Department of PA Medicine.

Summation of clinical and didactic assessment of various patient populations to ensure student readiness for clinical practice of 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 2021

PA 992 Public Health and Disease Prevention

Spring of every year. 1(1-0) R: Open to students in the Department of PA Medicine.

Trends in public health, public health epidemics, disease prevention and patient

counseling.

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 2021

PA 993 Osteopathic Manipulative Medicine

Summer of every year. 1(1-1) R: Open to students in the Department of PA Medicine.

Osteopathic manipulative skills and clinical knowledge leading to diagnosis and treatment.

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 2021

PA 998 Research and Evidence Based Medicine

Fall of every year. 1(1-0) R: Open to students in the Department of PA Medicine.

Evidence-based medicine, research design concepts, and critical appraisal of medical

literature

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 2021

DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

PHM 481L Independent Laboratory Research

Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Human Biology, Neuroscience,

Physiology, Biochemistry, Microbiology, Chemistry, Integrative Biology R: Approval of department.

Research experience in laboratories of and under supervision of faculty in Department of

Pharmacology and Toxicology.

Effective Fall 2020

PHM 811 Global Health: Pharmacology and Toxicology Perspective

Summer of every year. 2(2-0) P: PHM 350 or concurrently or approval of department RB: biology and/or pathology and/or toxicology R: Approval of department.

General concepts of global health that are relevant to pharmacology and toxicology.

SCHOOL OF PLANNING, DESIGN AND CONSTRUCTION

PDC 420 Advanced Digital Graphic Communications

Spring of every year. Summer of every year. 3(3-0) P: PDC 120 or approval of school R: Open to juniors or seniors or graduate students.

Advanced skills for digital graphic communications. Digital rendering using advanced graphic software programs.

Effective Spring 2020

DEPARTMENT OF ROMANCE AND CLASSICAL STUDIES

FRN 103 Intensive Elementary French Abroad I

Summer of every year. 3(2-2) Not open to students with credit in FRN 101.

Build foundations for continued development in competency in the spoken and written French language through a variety of texts, videos, and multimedia to present contemporary culture in the French-speaking world.

Effective Summer 2020

FRN 104 Intensive Elementary French Abroad II

Summer of every year. 3(2-2) P: (FRN 101 or FRN 103) or designated score on French Placement test Not open to students with credit in FRN 102.

Expand knowledge to ensure continued development in competency in the spoken and written French language through a variety of texts, videos, and multimedia to present contemporary culture in the French-speaking world.

Effective Summer 2020

FRN 203 Intensive Intermediate French Abroad I

Summer of every year. 3(2-2) P: (FRN 102 or FRN 104) or designated score on French Placement test Not open to students with credit in FRN 201.

Develop ability to produce more authentic and more accurate French speech, to comprehend more sophisticated structures in written and oral form, and to broaden understanding of contemporary culture and society in the French-speaking world through a variety of texts, videos, and multimedia.

Effective Summer 2020

FRN 204 Intensive Intermediate French Abroad II

Summer of every year. 3(2-2) P: (FRN 201 or FRN 203) or designated score on French Placement test Not open to students with credit in FRN 202.

Continuation of FRN 203. Effective Summer 2020

FRN 210 Delving into the History of France

Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: ((FRN 201 or concurrently) or FRN 203) or designated score on French Placement test R: Not open to juniors or seniors or approval of department.

Discovering key moments in the history of France. Reading and discussing written works (from pop culture and/or literary productions) and/or studying other media focusing on historical events (including but not limited to films, songs, paintings, comics, etc.) in their context.

Effective Fall 2020

FRN 220 Delving into the Minorities in the Francopshere

Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: ((FRN 201 or concurrently) or FRN 203) or designated score on French Placement test R: Not open to juniors or seniors or approval of department.

Study of minority populations in the French-speaking world. Reading written works (from pop culture and/or literary productions) and/or studying other media by or about minorities and discussing these productions (including but not limited to films, songs, blogs, graffiti, etc.) in their context.

Effective Fall 2020

FRN 230 Delving into French Pronunciation

Fall of every year. Spring of every year. 1(1-0) A student may earn a maximum of 2 credits in all enrollments for this course. P: ((FRN 201 or concurrently) or FRN 203) or designated score on French Placement test R: Not open to juniors or seniors or approval of department.

Discovering key elements in French pronunciation; focusing on discriminating similar sounds in listening and speaking; enhancing oral comprehension of French Effective Fall 2020

FRN 240 Delving into French Readings

Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: ((FRN 201 or concurrently) or FRN 203) or designated score on French Placement test R: Not open to juniors or seniors or approval of department.

Discovering the literature of the French-speaking world through the reading and discussion of selected literary texts. Reading written literary productions and interpreting them. Discovering the time period and context in which they were written. Effective Fall 2020

FRN 250 Delving into the Francosphere

Fall of every year. Spring of every year. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. P: ((FRN 201 or concurrently) or FRN 203) or designated score on French Placement test R: Not open to juniors or seniors or approval of department.

Discovering the diversity of the French-speaking world. Reading written works (from pop culture and/or literary productions) and/or studying other media productions (including but not limited to films, songs, blogs, graffiti, etc.) produced in or about the French-speaking world. Discovering the context in which they were written. Effective Fall 2020

FRN 810 Understanding the Early Modern Culture in the Francosphere

Fall of every year. Spring of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students or approval of department.

Literary, philosophical, historical, scientific and/or political approaches to the Early Modern Period through cultural artifacts from that period and its contemporary interpretation, including literary texts, theater, art, graphic novels, and film. Understanding the development of humanist and religious perspectives on the world as well as debates regarding society. Effective Fall 2020

FRN 820 Minority Perspectives in the Francosphere

Fall of every year. Spring of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students or approval of department.

Topics related to cultural expressions and linguistic studies of the experience of minority groups as defined by gender, sexuality, ethnicity, religion, race, class, disability, national and regional origin, age, etc. in the French-speaking world. Effective Fall 2020

FRN 840 Understanding France through Literary and Cultural Productions

Fall of every year. Spring of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students or approval of department.

Major movements of literature, cinema, and the visual arts from the 19th to the 21st century in metropolitan France, as well as their social, philosophical, historical, scientific and/or political contexts. Understanding the development of modern and post-modern cultures from that period as well as their present interpretations, through literary texts, theater, art, graphic novels, and film.

Effective Fall 2020

FRN 896 Ph.D. Exam Preparation in French and Francophone

Fall of every year. Spring of every year. 3(3-0) R: Open to doctoral students in the Department of Romance and Classical Studies. Approval of department.

Preparation for the Ph.D. exam through creation of an article proposal.

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

Effective Fall 2020

COLLEGE OF SOCIAL SCIENCE

SSC 497 Flint Community Internship

Summer of every year. 3 to 12 credits. A student may earn a maximum of 12 credits in all

enrollments for this course. R: Approval of college; application required.

Methods and concepts identifying community assets in Flint
Request the use of the Pass-No Grade (P-N) system.

Effective Summer 2020

SSC 498 Innovate Gov Internship

Summer of every year. 3 to 12 credits. A student may earn a maximum of 12 credits in all

enrollments for this course. R: Open to juniors or seniors. Approval of college; application required.

Methods and concepts to provide critical capacity in Detroit Request the use of the Pass-No Grade (P-N) system.

PART III - COURSE CHANGES

DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEMS

ACC 250 Preparing for an Accounting Career

> Fall of every year. Spring of every year. 1(1-0) R: Open to freshmen or cophemeres and open to juniors in the Department of Accounting and Information Systems or approval of department. R: Open to freshmen or sophomores and open to undergraduate students in the Business - Admitted major and open to juniors in the Department of Accounting and Information Systems or approval of department.

Changing environment and career management in professional accounting. Change management, ethics, professional certification, improving writing and speaking skills, globalization, and technology.

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

Effective Spring 2013 Effective Fall 2020

ITM 818 Data Management and Visualization in Analytics

Fall of every year. 3(3-0) 1 to 3 credits. R: Open to graduate students in the Business Analytics Major or approval of department.

Role of analytics in shaping competitive strategy and improving the design and implementation of business processes. Emphasis on enterprise data management and visualization skill development. Analysis of enterprise data identifying findings and making recommendations. Real-world cases of successes and failures with analytics-based business strategies.

Effective Fall 2017 Effective Spring 2020

DEPARTMENT OF ADVERTISING AND PUBLIC RELATIONS

ADV 325

PR 325 Public Rolations Techniques and Ethics

Intermediate Social Media and Public Relations Techniques

Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: COM 300 or STT 200 or STT 201 P: (COM 300 or STT 200 or STT 201) or (PR 300 and PR 305 and PR 310) R: Open to undergraduate students in the Public Relations Minor. R: Open to undergraduate students in the Public Relations Minor or approval of department.

Production of written messages to achieve strategic organizational communication objectives. Development of the student's public relations portfolio. Public relations as a etrategic management function. Production of social media and public relations messages to achieve strategic organizational communication objectives. Techniques for measuring success. Development of public relations portfolio.

SA: ADV 325

Effective Summer 2017 Effective Summer 2020

ADV 425

PR 425 **Public Relations Strategy**

Public Relations Strategy and Ethics in a Digital World

Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: COM 300 or STT 200 or STT 201 P: (COM 300 or STT 200 or STT 201) or (PR 300 and PR 305 and PR 310) R: Open to undergraduate students in the Public Relations Minor. Approval of college; application required. R: Open to undergraduate students in the Public Relations Minor or approval of department.

Classic and current public rolations cases. Strategies to communicate in business contexts. Exposure to specific business problems and their solutions. Strategic planning and ethical considerations in public relations, social media and digital media.

Effective Fall 2017 Effective Summer 2020

DEPARTMENT OF ANTHROPOLOGY

ANP 236 The Anthropology of Peace and Justice

Fall of every year. Spring of odd years. Spring of every year. Summer of every year. 3(3-0)

Anthropological, theoretical, ethnographic, and interdisciplinary approaches to the study of peace and justice. Violence, nonviolence, international law, social movements, economic justice, environmental racism, memory and trauma.

SA: ANP 336

Effective Summer 2014 Effective Fall 2019

BIOMEDICAL LABORATORY DIAGNOSTICS PROGRAM

BLD 214L Biomedical Laboratory Research Techniques

Summer of every year. 2(1-3) P: MTH 103 or MTH 116 or MTH 124 or approval of department P: MTH 103 or MTH 103B or MTH 116 or MTH 124 or approval of department

Basic techniques, skills and safety in biomedical research. Ethical conduct of research and regulatory principles such as Good Laboratory Practice. Maintaining a research notebook for legal and intellectual property purposes. Offered second half of semester.

Effective Fall 2016 Effective Spring 2020

BLD 313 Quality in Clinical Laboratory Practice

Fall of every year. Spring of every year. 3(3-0) P: (BLD 213L) and ((STT 201 or STT 200 or STT 231) and completion of Tier I writing requirement) P: ((BLD 121 or concurrently) and BLD 213L) and ((STT 201 or STT 2031) and completion of Tier I writing requirement) BLD 213L) and ((STT 201 or STT 201

Concepts and principles of clinical laboratory analysis and the statistical evaluation of the data produced as related to quality.

SA: BLD 414, BLD 417

Effective Fall 2018 Effective Spring 2020

BLD 314L Advanced Clinical Laboratory Methods

Fall of every year. Spring of every year. 1(0-3) P: BLD 213L P: BLD 213L and (BLD 324 or concurrently) RB: BLD 204 and BLD 324 RB: BLD 204 R: Open to students in the Biomedical Laboratory Science Major or in the Lyman Briggs Biomedical Laboratory Science Coordinate Major.

Diagnostics assays across various disciplines within the clinical laboratory including homatology, immunohematology, coagulation, urinalycis, and molecular diagnostics. Data interpretations and problem solving skills. Diagnostics assays within the clinical laboratory including hematology, immunohematology, coagulation, urinalysis, and molecular diagnostics. Data interpretations and problem solving skills.

Effective Fall 2018 Effective Spring 2020

BLD 366 Infectious Diseases of East Africa

Summer of every year. 4(1-6) P: (BLD 213) or BLD 214L or (CEM 162 and BS 171) or (LB 145 and LB 172L) P: (BLD 213L) or BLD 214L or (CEM 162 and BS 171) or (LB 145 and LB 172L) RB: Prehealth professional undergraduate students with junior or senior status. R: Approval of department.

Biology and laboratory diagnosis of the most common infectious disease of the region. Health disparities and healthcare system organization.

Effective Summer 2017 Effective Spring 2020

BLD 402 Advanced Clinical Chemistry

Fall of every year. Spring of every year. 4(4-0) P: (BLD 302 and BMB 401) or (BLD 302 and BMB 461 and BMB 462)

Differences in clinical laboratory testing results between normal and diseased populations. Metabolic and endocrine systems, acquired and inherited diseases, therapeutic drug monitoring and toxicology.

Effective Spring 2017 Effective Spring 2020

BLD 890 Selected Problems in Clinical Laboratory Science

Fall of every year. Spring of every year. Summer of every year. 1 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to graduate students in the Clinical Laboratory Sciences major. R: Open to graduate students in the College of Natural Science or in the Biomedical Laboratory Diagnostics Program or in the Clinical Laboratory Sciences Major or in the Biomedical Laboratory Science Major.

Non-thesis research for Plan B master's students. Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 4

semesters after the end of the semester of enrollment.

SA: MT 890

Effective Summer 2008 Effective Spring 2020

DEPARTMENT OF BIOSYSTEMS AND AGRICULTURAL ENGINEERING

BE 484 Water Resource Recovery Engineering

Spring of every year. 3(3-0) <u>Interdepartmental with Environmental Engineering. P: BE 360 or approval of department P: BE 360 or (ENE 487 or concurrently) or approval of department R: Open to juniors or seniors or graduate students in the College of Agriculture and Natural Resources or in the College of Engineering.</u>

Municipal, industrial, and rural wastewater characteristics. Selection of best site- and management-specific treatment strategy, including the influence of governmental policy and societal needs.

Effective Fall 2019 Effective Spring 2020

DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE

CHE 301 Chemical Engineering as a Profession

Spring of every year. 1(2-0) P: (CHE 201 or concurrently) and completion of Tier I writing requirement RB: Junior standing in chemical engineering

Professional aspects of chemical engineering. Communication skills, professionalism and ethics, teamwork skills, contemporary engineering issues, career planning, project management, and industrial processes.

Effective Fall 2017 Effective Fall 2020

DEPARTMENT OF COUNSELING, EDUCATIONAL PSYCHOLOGY, AND SPECIAL EDUCATION

CEP 861 Counceling Theory, Philosophy, and Ethics

Counseling Theories

Fall of every year. 3(3-0) R: Open only to graduate students in the Counseling major or Rehabilitation Counseling major or School Psychology major.

Selected counseling theories. Foundations of ethical decision making. Professional etandarde, guidelines, and issues concerning the training and work of the counselor and school psychologist. Legal issues and procedents. Foundations, applications, critiques of counseling theories and techniques from rehabilitation and mental health perspective. Evidence-based research to inform interventions, assessments, planning, program evaluation, outcome analysis, and consumer satisfaction.

Effective Fall 1992 Effective Fall 2020

CEP 862 Introduction to Individual and Group Councoling

Individual Counseling and Helping Relationships

Spring of every year. 3(3-0) P: CEP 861 R: Open to graduate students in the College of Education and open to graduate students in the School of Social Work and open to graduate students in the Department of Human Development and Family Studies.

Forming, working with, and ending groups. Building relationships. Handling obstacles. Developing and carrying out agendae in counseling. Simulated individual and group practice. Microskills in counseling, person-centered counseling theory, relationship building, and principles of empathy, positive regard, and genuineness. Development of self-awareness, sensitivity, and competence in authentic communication.

Effective Spring 2015 Effective Spring 2021

CEP 864 Career Counceling

Career Development

Summer of every year. 3(3-0) R: Open to graduate students in the College of Education.

Career development theories and labor market and escupational information. Accessing and planning aspects of career counseling with various populations. Career development theory, counseling, decision-making, advocacy, labor market trends, inclusion and retention of people with disabilities at work.

Effective Spring 2014 Effective Summer 2021

CEP 868 Medical Aspects of Disability

Spring of every year. Summer of every year. 3(3-0) RB: CEP 861 and CEP 870

Types of physical disabilities and their implications for vocational rehabilitation. Theories of adjustments to and adaptation to physical disabilities. Medical terminology, medical aspects of physical, sensory and developmental disabilities. Impact on function, accommodation, and adjustment. Implications for service provision.

Effective Summer 2014 Effective Summer 2021

CEP 870 Foundations of Rehabilitation Counseling

Foundations of Rehabilitation Counseling and the Counseling Profession

Fall of every year. 3(3-0) R: Open only to master's students in the Rehabilitation Counseling major.

Hictory, philosophy, values, logislation, policy and practice of the field of rehabilitative counseling. Rehabilitation counseling and related professions. History, philosophy, practice, professional identity, organizations, credential, and community resources.

Psychosocial aspects of disability.

Effective Summer 1997 Effective Fall 2020

CEP 871 Cognitive and Psychological Aspects of Disability

Spring of every year. Summer of every year. 3(3-0) RB: CEP 870

Types of cognitive and emotional disabilities and their implications for vecational rehabilitation. Psychosocial adjustments to chronic disease and disability. Cognitive, psychological and psychiatric disabilities (diagnosis, case conceptualization, and biopsychosocial interventions). Impact of mental illness on individual, family and community integration. Critique of interventions.

Effective Fall 2008 Effective Summer 2021

CEP 872 Social and Environmental Aspects of Rehabilitation

Social and Cultural Diversity in Disability

Spring of every year. 3(3-0)

Social and political factors that handicap individuals with disabilities. The Independent Living movement, philosophy, legislation and services. Accommodations and enabling technology. Attitude medification and client empowerment. Social, cultural, and political aspects of counseling, advocacy for individuals with disabilities, and client self-advocacy; barriers, prejudices, and processes of oppression and discrimination; and inclusion, participation, access, and universal design.

Effective Fall 1992 Effective Spring 2021

CEP 893A Rehabilitation Counseling Internship

Fall of every year. Spring of every year. Summer of every year. 3 to 9 credits. 1 to 12 credits. A student may earn a maximum of 9 credits in all enrollments for this course. A student may earn a maximum of 12 credits in all enrollments for this course. P: CEP 870 and CEP 861 and CEP 862 and CEP 874 and CEP 878 and CEP 894A RB: CEP 894A RB: Open only to master's students in the Rehabilitation Counseling Major.

Supervised internship experience in community rehabilitation settings. Community-based rehabilitation counseling internship.

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

Effective Summer 1997 Effective Fall 2021

CEP 894A Rehabilitation Counseling Practicum

Fall of every year. Summer of every year. 6(3-12) <u>P: CEP 870 and CEP 861 and CEP 862</u> and <u>CEP 874 and CEP 878</u> RB: CEP 862 R: Open only to master's students in the Rehabilitation Counseling Major.

Supervised practicum in a rehabilitation or human services setting. Community-based

rehabilitation counseling practicum.

Effective Summer 1997 Effective Fall 2021

SCHOOL OF CRIMINAL JUSTICE

CJ 824 Forensic Serology

Fall of even years. 3(2-4) R: Open to graduate students in the Forensic Science Major.

Identification of body fluids of forensic interest, including blood, semen, and saliva.

Sources of false positive and negative results.

<u>DELETE COURSE</u> Effective Spring 2020

CJ 825 DNA Profiling

Spring of every year. 3(2-4) R: Open only to graduate students in the Forensic Science major.

DNA profiling. Nuclear and mitochondrial DNA analysis of blood, semen, hair, saliva, and

other tissues of forensic interest.

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.

<u>DELETE COURSE</u> Effective Spring 2020

DEPARTMENT OF ECONOMICS

EC 821A Cross Section and Panel Data Econometrics I

Fall of every year. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability P: EC 820B

Analyses of systems of equations, panel data models, instrumental variables and generalized method of moments, M-estimation, quantile regression, maximum likelihood estimation, binary and multinomial response models, Tobit and two-part models, and other selected topics.

SA: EC 821

Effective Fall 2008 Effective Fall 2020

EC 821B Cross Section and Panel Data Econometrics II

Spring of every year. 3(3-0) Interdepartmental with Agricultural, Food, and Recourse Economics and Finance and Statistics and Probability P: EC 821A

Analyses of quasi-maximum likelihood estimation, count data models, fractional response models, duration models, sample selection and attrition, stratified sampling, estimating treatment effects, stochastic frontier models, and other advanced topics.

Effective Summer 2016 Effective Fall 2020

EC 822A Time Series Econometrics I

Fall of every year. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability P: EC 820B

Analyses of time series regression, stationary time series analysis, ARMA models, Wold decomposition, spectral analysis, vector autoregressions, generalized method of moments, functional central limit theorem, nonstationary time series, unit root processes, cointegration, and other advanced topics.

SA: EC 822

Effective Fall 2008 Effective Fall 2020

EC 822B Time Series Econometrics II

Spring of every year. 3(3-0) Interdepartmental with Agricultural Economics and Finance and Statistics and Probability P: EC 822A

Analyses of multivariate time series, time series volatility models, long memory, nonlinear time series models, and other advanced topics.

Effective Fall 2008 Effective Fall 2020

DEPARTMENT OF ENGLISH

FLM 499 Senior Thesis Research (W)

On Demand. 1 to 4 credits. <u>A student may earn a maximum of 4 credits in all enrollments for this course.</u> P: (FLM 230) and completion of Tier I writing requirement R: Open to seniors. Approval of department.

Faculty-supervised research project that demonstrates ability to do independent research and submit or present a major paper.

Effective Spring 2015 Effective Fall 2020

DEPARTMENT OF FINANCE

FI 311 Financial Management

Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: (ACC 201 or ACC 230) and (STT 200 or STT 201 or STT 315) P: (ACC 201 or ACC 230) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 430 or STT 441) R: Open to undergraduate students in the Accounting major or in the Business - Admitted major or in the Human Resource Management Major or in the Management Major or in the Supply Chain Management Major or in the Finance Major or in the Actuarial Science Major or in the Actuarial Science Minor. Not open to students with credit in FI 311H.

Overview of financial management for business majors. Analysis of financial statements, markets, and assets. Risk and valuation, corporate budgeting and investment decisions. International and ethical implications. Current events applications.

Effective Summer 2018 Effective Fall 2020

FI 311H Financial Management

Fall of every year. 3(3-0) P: ACC 201 or ACC 230 P: (ACC 201 or ACC 230) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 430 or STT 441) R: Open to sophomores or juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management and not open to students in the School of Hospitality Business. Not open to students with credit in Fl 311.

Analysis of financial statemente, markets, assets, and liabilities. Risk and valuation, capital budgeting and investment decisions. International and ethical implications. Current events and applications. Analysis of financial statements, markets, assets, and liabilities. Risk and valuation, capital budgeting and investment decisions. International and ethical implications. Current events applications.

Effective Spring 2016 Effective Fall 2020

FI 370 Introduction to Wealth Management

Introduction to Financial Planning and Wealth Management

Fall of every year. 3(3-0) P: FI 311 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Techniques used to develop and implement comprehensive plans to achieve a person's overall financial objectives. Budgeting, liability management, investing, tax planning, risk management, employee benefits, retirement planning, and estate planning.

Effective Fall 2019 Effective Fall 2020

FI 470 Advanced Wealth Management

Advanced Financial Planning and Wealth Management

Spring of every year. 3(3-0) P: FI 370 R: Open to juniors or seniors in the Eli Broad College of Business and The Eli Broad Graduate School of Management.

Advanced estate, tax and retirement planning. Client management, planning tools and software applications. Creation of a comprehensive financial plan.

Effective Fall 2019 Effective Fall 2020

FI 480 Financial Risk Management

Spring of every year. 3(3-0) P: (FI 311 or FI 320) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 315 or STT 421 or STT 441) P: (FI 311 or FI 320) and (STT 200 or STT 201 or STT 231 or STT 315 or STT 351 or STT 421 or STT 441) and FI 380 RB: Knowledge of calculus is recommended but not required. R: Open to students in the Insurance and Risk Management Minor or approval of department.

Ways in which risks are quantified and managed by financial institutions. Nature of financial institutions and their regulation, the Basel Accords, coherent risk measures, value at risk, copulas, credit risk, operational risk, liquidity risk, and the financial crisis of 2007.

Effective Fall 2018 Effective Spring 2020

DEPARTMENT OF FORESTRY

FOR 412 Wildland Fire

Spring of every year. 2(2-0) P: (FOR 404 or concurrently) or (IBIO 355 or concurrently) R: Not open to freshmen or sophomores.

Fire in wildland forest and grassland communities as a physical and ecological process. Fire history, culture, and management. Global perspectives, strategies for prevention and suppression of wildfires. Techniques for using prescribed fire. Field trips required.

<u>DELETE COURSE</u> Effective Spring 2021

DEPARTMENT OF GEOGRAPHY, ENVIRONMENT, AND SPATIAL SCIENCES

GEO 330 Geography of the United States and Canada

Geography of the United States

Fall of every year. Spring of every year. Summer of every year. 3(3-0)

Regional analysis. Evolution and status of environmental, demographic, economic, and sociocultural patterns and processes. Geographic examination of United States landscapes, cultures, and economies. Investigation of interactions between human, economic, and physical geographies in U.S. regions.

SA: GEO 230

Effective Fall 2017 Effective Fall 2020

GEO 986 Theories and Philosophies in Geography

<u>Fall of even years.</u> Spring of odd years. 3(3-0) R: Open to doctoral students in the Geography Major.

Historical development of the discipline within social and intellectual contexts.

Philosophical approaches behind geographic research and theory.

Effective Fall 2017 Effective Fall 2020

DEPARTMENT OF HORTICULTURE

HRT 430 Exploring Wines and Vines

Fall of every year. Spring of every year. 3(3-0) RB: Must be 21 years of age. RB: Must be 21 years of age before the first day of class. Must present valid photo ID. R: Approval of department.

Consumer oriented study of wine history, production methods, elimatic influences, cultural impacts, social responsibility, and economic impact of wine industry as part of modern agriculture. Sensory evaluation and its relationship to food pairings. Field trip required. Consumer-oriented study of wine history, production methods, climatic influences, cultural impacts, social responsibility, and economic impact of wine industry as part of modern agriculture. Sensory evaluation and its relationship to food pairings.

Effective Fall 2014 Effective Spring 2020

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

HDFS 961 Applied Structural Equation Modeling

Fall of every year. 3(3-0) RB: HDFS 881 R: Open to doctoral students in the Department of Human

Development and Family Studies or in the Department of Psychology. Application of structural equation models to data analysis.

Effective Spring 2019 Effective Spring 2020

HDFS 962 Longitudinal Structural Equation Modeling

Spring of every year. 3(3-0) R: Open to doctoral students in the Department of Human

Development and Family Studies or in the Department of Psychology.

Application of structural equation modeling to the analysis of longitudinal data.

Effective Spring 2019 Effective Spring 2020

JAMES MADISON COLLEGE

MC 319 Asian American History

Fall of every year. Spring of every year. 4(3-0) Interdepartmental with History. R: Not open to

freshmen or sophomores.

Survey of Asian American history from mid-nineteenth century to present. Analysis of shared and different experiences of the Chinese, Japanese, Korean, Filipino, Vietnamese,

Hmong, and East Indian peoples who have come to the United States.

Effective Fall 2014 Effective Fall 2020

MC 335 Israeli Politics, Cultures and Society

Fall of every year. Spring of even years. 4 credits. P: Completion of Tier I Writing Requirement R: Not open to freshmen.

Analysis of Israeli politics and society. Relationship between society and: social and ethnic cleavages, culture and politics, political institutions and parties, and democracy and the Jewish nature of the state. Israel's foreign policy and its influence of foreign policy on shifting nationalism and political contestations.

Effective Fall 2014 Effective Fall 2020

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

LLT 856 Language Identity and Ideology in Multilingual Settings

> Spring of every year, 3 credits. Interdepartmental with Teacher Education, R: Open to graduate students in the College of Education or in the Department of Linguistics and Germanic, Slavic, Asian and African Languages or in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major. R: Open to graduate students in the College of Education or in the Department of Linguistics and Germanic, Slavic, Asian and African Languages or in the Second Language Studies Major or in the Teaching English to Speakers of Other Languages Major or in the Sociology Disciplinary Teaching Minor.

Current debates on the relationship between language, identity, and ideology. Theories of identity and ideology related to a variety of educational settings. Negotiation of identity and ideology with respect to social relationships between writer and reader, teacher and student, classroom and community.

Effective Spring 2019 Effective Spring 2020

LYMAN BRIGGS COLLEGE

LB 155 Introduction to Quantitative Science and Research

> Fall of every year, 3(2-3) P: (MTH 1825 or concurrently) or (MTH 103 or concurrently) P: (MTH 103 or concurrently) or MTH 103B R: Open to freshmen in the Lyman Briggs College.

Exploration of fundamental chemistry, biology, physics, mathematics and statistics. Quantitative analysis and research.

Effective Spring 2014 Effective Spring 2020

DEPARTMENT OF MARKETING

MKT 327

Introduction to Marketing

Fall of every year. Spring of every year. Summer of every year. 3(3-0) R: Open to juniors or seniors and not open to students in the Accounting major or in the Business - Admitted major or in the Business - Admitted major or in the Business - Preference 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 Supply Chain Management Major. R: Open to juniors or seniors and not open to students in the Accounting major or in the Business - Admitted major or in the Business-Preference major or in the Finance Major or in the Human Resource Management Major or in the Management Major or in the Supply Chain Management Major or in the Marketing Major. Not open to students with credit in MKT 300 or HB 375.

Buyer behavior, segmentation, positioning, demand analysis, information, pricing, promotion, channels, product policies, and ethics in consumer, reseller, industrial, and service markets.

SA: MSC 327

Effective Spring 2017 Effective Fall 2020

DEPARTMENT OF PATHOBIOLOGY AND DIAGNOSTIC INVESTIGATION

PDI 870

Laboratory Animal Pathology

Summer of odd yeare. Summer of even years. 2(1-2) RB: Background in histopathology, veterinary medicine, and systemic pathology R: Approval of department.

Diseases and pathology of laboratory animal species including mice, rats, ferrets, rabbits, primates, and fish. Use of laboratory animals for toxicological pathology in industry. 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 Summer 2020

DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY

PHM 801

Fundamental Principles of Pharmacology and Toxicology

Fall of every year. 3(3-0) R: Open to graduate etudents in the College of Natural Science or in the Department of Pharmacelegy and Toxicelegy or approval of department. R: Open to doctoral students in the College of Natural Science or in the College of Human Medicine or in the College of Osteopathic Medicine or in the College of Veterinary Medicine or approval of department.

Core principles of pharmacology and toxicology including pharmacokinetics, toxicokinetics (drug/toxicant absorption, distribution, metabolism, olimination, medeling), pharmacodynamics (drug receptor and drug enzyme interactions), and drug discovery.

Pharmacology and toxicology, pharmacodynamics and drug discovery.

Effective Fall 2016 Effective Spring 2020

PHM 819

Principles of Drug-Tissue Interactions

Fall of every year. Summer of every year. 2(2-0) R: Open to graduate students and open to lifelong graduate students. R: Open to graduate students in the Integrative Pharmacology Major or in the Pharmacology and Toxicology Major. Approval of department. Not open to students with credit in PHM 801.

General principles relevant to the interaction of chemicals with biological systems. Topics include pharmacokinetics and/or pharmacodynamics. General principles of interaction of chemicals with biological systems.

Effective Fall 2017 Effective Summer 2020

SCHOOL OF PLANNING, DESIGN AND CONSTRUCTION

HRT 883

<u>LA 883</u> Environmental Design Seminar

Fall of every year. Spring of every year. 3(3-0) Interdepartmental with Human Environment and Design and Landscape Architecture and Park, Recreation and Tourism Resources.

Interdepartmental with Horticulture and Interior Design RB: Undergraduate design degree. R: Open to graduate students in the Department of Horticulture or in the School of Planning, Design and Construction.

Examination of the breadth of environmental design projects. Literature review of focused projects. Development of practicum or thesis proposals.

SA: HRT 883

Effective Spring 2013 Effective Summer 2020

UP 824 Geographic Information Systems and Design Tools for Planning

Fall of every year. Spring of every year. 3(0-3) R: Open to graduate students in the Master in Urban and Regional Planning or approval of school.

Introduction to geographic information systems and its applicability to planning. Methods and techniques for analyzing land use and planning issues.

Effective Spring 2018 Effective Fall 2020

DEPARTMENT OF PSYCHOLOGY

PSY 440 Attitudes and Social Cognition (W)

Fall of even years. 3(3-0) P: (PSY 235 and PSY 295) and completion of Tier I writing requirement R: Open to juniors or seniors in the Department of Psychology.

Psychological research on the cognitive foundations of social behavior. Attribution,

stereotyping, impression formation, social memory, and persuasion.

DELETE COURSE Effective Spring 2020

PSY 475 Personality Theories (W)

Spring of odd years. 3(3-0) P: (PSY 236 and PSY 295) and completion of Tier I writing requirement R: Open to juniors or seniors in the Department of Psychology.

Major personality theories of development, structure, and dynamics. Implications for behavioral disorders and therapy.

<u>DELETE COURSE</u> Effective Spring 2020

DEPARTMENT OF ROMANCE AND CLASSICAL STUDIES

FRN 830 Studios in 19th Contury Literature

Language(s) in the Francosphere

<u>Fall of every year.</u> Spring of even years. Spring of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students in the French major or in the French, Language and Literature major. R: Open to graduate students in the French Major or in the French, Language and Literature Major or approval of department.

Major authors and selected topics in poetry, prose, and drama of the nineteenth century. Topics related to the French language and/or other languages spoken in the French-speaking world, such as a historical perspective, a focus on minority languages and their legal status, an analysis of cultural productions focused on language and language ideology, a linguistics description of the French language in one or more specific countries.

Effective Fall 2012 Effective Fall 2020

FRN 850 Introduction to Critical Theory

Francophone Postcolonial and Cultural Studies

Fall of every year. Spring of every year. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students or approval of department.

Fundamentals of critical theory emphasizing the evolution of French and Francephone thought. Topics such as structuralism, deconstruction, post modernism, feminism, post-colonialism, epistemology, psychology, and ethics. History, theory and practice of postcolonial thought within the Francophone world, as it intersects with other 20th-century strands of cultural studies. Overview of fundamentals of interdisciplinary study and methods of inquiry into the field of culture in the French-speaking world and its complex interactions with various contemporary social, political, economic, and global phenomena and institutions.

Effective Fall 2012 Effective Fall 2020

COLLEGE OF SOCIAL SCIENCE

SSC 293 Introduction to Asian Pacific American Studies

Fall of every year. Spring of every year. 3(3-0)

Issues that define the study of Asian Pacific American communities, including Asian Pacific American history, immigration, psychology, literature, family, women's issues, activism politics, and community.

SA: SSC 291

Effective Fall 2014 Effective Spring 2020

SCHOOL OF SOCIAL WORK

SW 493A Social Work Field Education: Integrative Field Seminar I

Fall of every year. 1(1-0) P: SW 430 or concurrently P: (SW 430 or concurrently) and (SW 440 or concurrently) R: Open to seniors in the School of Social Work. C: SW 440 concurrently and SW 494A concurrently. C: SW 494A concurrently.

Classroom-based integration and application of competencies and concepts in social work practice.

Effective Fall 2019 Effective Summer 2020

SW 493B Social Work Field Education: Integrative Field Seminar II

Spring of every year. 1(1-0) P: SW 493A and SW 494A P: SW 493A and SW 494A and (SW 441 or concurrently) R: Open to seniors in the School of Social Work. C: SW 441 concurrently and SW 494B concurrently. C: SW 494B concurrently.

Continuation of classroom-based integration and application of competencies and concepts in social work practice.

Effective Spring 2020 Effective Summer 2020