# **MICHIGAN STATE UNIVERSITY**

Report of

# THE UNIVERSITY COMMITTEE ON CURRICULUM

to the Faculty Senate

November 12, 2019

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

#### MICHIGAN STATE UNIVERSITY University Committee on Curriculum

#### TO: Faculty Senate

This report is prepared and distributed for the following purposes:

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

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

#### PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES:

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

#### PART II - NEW COURSES:1

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

#### PART III - COURSE CHANGES:1

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

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

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

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

## MICHIGAN STATE UNIVERSITY

November 12, 2019

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 ARTS AND LETTERS**

- 1. Change the requirements for the **Bachelor of Arts** degree in **Experience Architecture** in the College of Arts and Letters.
  - a. Under the heading **Requirements for the Bachelor of Arts Degree in Experience Architecture** make the following changes:
    - (1) In item 1., replace paragraph two with the following:

The University's Tier II writing requirement for the Experience Architecture major is met by completing Experience Architecture 333 referenced in item 3. below.

(2) Replace item 3. with the following:

The following requirements for the major (53 credits):

a. All of the following courses (41 credits):

All of the following courses (41 credits):			
AL	250	Career Strategies for Arts and Letters Students	1
GD	160	Digital Graphic Design: Tools and Methods	3
GD	260	Concepts of Graphic Design	3
GD	303	Experimental Design Practices	3
GD	468	Interaction Design	3
PHL	355	Philosophy of Technology (W)	4
WRA	210	Introduction to Web Authoring	3
WRA	401	Rhetoric, Leadership, and Innovation	3
WRA	410	Advanced Web Authoring	3
WRA	415	Digital Rhetoric	3
XA	242	Introduction to Experience Architecture	3
XA	310	Computational Thinking for the Humanities	3
XA	333	Researching Experience Architecture (W)	3
XA	466	Experience Architecture Capstone	3
Four of t	he follow	ing courses: (12 credits):	
GD	467	Motion Design	3
STA	380	Electronic Art	3
STA	384	Experiments in Digital Video	3
STA	385	Interactive Environments and Digital Fabrication	3
XA	375	Information Architecture	3
XA	482	Experience Architecture Internship	1 to 3
WRA	260	Writing, Rhetoric, Cultures, and Community	3
WRA	320	Technical Communication (W)	3
WRA	420	Content Strategy	3

Effective Spring 2020.

b.

# ELI BROAD COLLEGE OF BUSINESS

1. Change the requirements for the **Master of Business Administration** degree in the Eli Broad College of Business. The University Committee on Graduate Studies (UCGS) approved this request at their October 14, 2019 meeting.

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

- a. Under the heading **Admission** make the following change:
  - (1) In paragraph three, item 2., add the following statement:

Equivalents may be considered with the approval of the Director of Admissions.

- b. Under the heading **Requirements for the Master of Business Administration Degree** make the following changes:
  - (1) In item 1., delete the following:
    - d. At least two approved areas of interest (6 credits per area of interest); or a second concentration (12 credits) plus an approved area of interest (6 credits).
    - e. Courses taken in an area of interest must be independent of the courses used for the concentration; and not more than 3 credits can be taken from any single department to satisfy an area of interest.
  - (2) In item 3., **Enrichment Experience**, delete the following:

Students with an approved internship may enroll in MBA 893 MBA Internship Experience for 1 credit in addition to the 61 credits that are required for the degree.

Effective Spring 2020.

# **COLLEGE OF COMMUNICATION ARTS AND SCIENCES**

- 1. Change the requirements for the **Minor in Game Design and Development** in the Department of Media and Information.
  - a. Under the heading **Prerequisites** replace the entire entry with the following:

1.	The following course (3 credits):			
	CAS	117	Games and Interactivity	3
2.	Two of	the follow	ving courses (6 credits):	
	CSE	232	Introduction to Programming II	4
	CSE	331	Algorithms and Data Structures	3
	CSE	335	Object-oriented Software Design	4
	GD	360	Graphic Design I: Graphic Form	3
	MI	227	Concept Design for Games, Film, and TV	3
	MI	230	Game Design	3
	MI	231	Game and Interactive Media Development	3
	MI	247	Three-Dimensional Graphics and Design	3
	STA	201	Fundamentals of Comic Art and Graphic Novels	3
	STA	380	Electronic Art	3

b. Under the heading **Requirements for the Minor in Game Design and Development** make the following changes in item 2.:

Delete the following courses:

CSE	410	Operating Systems	3
CSE	420	Computer Architecture	3

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GD 462 Spatial Design GD 468 Interaction Design Advanced Concept Design for Games, Film, and TV MI 327 Compositing and Special Effects MI 337 Advanced Game Development MI 431 Advanced Comic Art and Graphic Novels STA 301

Effective Spring 2020.

# **COLLEGE OF HUMAN MEDICINE**

1. Change the requirements for the **Graduate Certificate** in **Leadership in Medicine for the Underserved** in the College of Human Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its October 14, 2019 meeting.

The Graduate Certificate in Leadership in Medicine for the Underserved is a Type 2 graduate certificate and will appear on the transcript as "Graduate Certificate Program in Leadership in Medicine for the Underserved".

a.				irements for the Graduate Certificate in Leadership in served replace the entire entry with the following:	
				CRED	ITS
	Studen	ts must :	successfi	Illy complete the following:	
	1.	Partici	pation in	100 hours of didactic/experiential learning in leadership in e underserved.	
	2.			100 self-directed volunteer or clinical service hours approved b n medicine for the underserved director.	У
	3.	Completion of the following courses (12 credits):			
		HM .	629	Leadership in Medicine for the Underserved	
				Community Elective	6
		HM	631	Leadership in Medicine for Underserved	
				Urban or Global Elective	6

4. Completion of underserved-focused research project, underserved 3<sup>rd</sup> year site placement and reflection, and underserved 4<sup>th</sup> year site placement and presentation.

Effective Spring 2020.

2. Change the requirements for the Graduate Certificate in Medical Partners in Public Health in the College of Human Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its October 14, 2019 meeting.

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

Under the heading Requirements for the Graduate Certificate in Medical Partners in a. Public Health replace the entire entry with the following:

CREDITS

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Students must successfully complete the following:

- Participation in 100 hours of medical partners in public health 1. didactic/experiential learning.
- 2. Participation in 100 self-directed volunteer or clinical service hours approved by the medical partners in public health director.
- Completion of the following courses (12 credits): 3. ΗM
  - Medical Partners in Public Health Community 622 Resources and Wellness Programs HM 623 Medical Partners in Public Health Capstone Project Elective
- Completion of the Public Health Intersession. 3rd vear Community 4. Health Assessment presentation, and 4<sup>th</sup> year MD-PH group project.

Effective Spring 2020.

3. Change the requirements for the Graduate Certificate in Leadership in Rural Medicine in the College of Human Medicine. The University Committee on Graduate Studies (UCGS) approved this request at its October 14, 2019 meeting.

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

Under the heading Requirements for the Graduate Certificate in Leadership in Rural a. Medicine replace the entire entry with the following:

CREDITS

Students must successfully complete the following:

- Participation in 100 hours of leadership in rural medicine didactic/experiential 1. learning.
- 2. Participation in 100 self-directed volunteer or clinical service hours in a rural community as approved by the leadership in rural medicine director.
- 3. Completion of the two of the following courses (12 credits):
  - FM 616 Rural Family Practice Elective 6 HM 632 Rural Community Health 6 6
  - 633 Advanced Rural Community Health HM

Successful completion of the Rural Community Health Program 4. portfolio or the Rural Physician Community assignment and presentation.

Effective Spring 2020.

# COLLEGE OF LAW

- 1. Change the requirements for the **Juris Doctor** degree in the Michigan State University College of Law. The University Committee on Graduate Studies (UCGS) approved this request at its October 14, 2019 meeting.
  - a. Under the heading **Juris Doctor** make the following changes:
    - (1) In the **Trial Practice** concentration, replace the entire entry with the following:

One of the following courses:				
LAW	616B	Criminal Procedure: Investigation	3	
LAW	616C	Criminal Procedure: Adjudication	3	
All of th	e followir	ng courses:		
LAW	500P	Evidence	3	
LAW	623B	Trial Practice Institute: Pretrial I	3	
LAW	623C	Trial Practice Institute: Pretrial II	2	
LAW	623D	Trial Practice Institute: Trial I	3	
LAW	623E	Trial Practice Institute: Trial II	3	
LAW	623M	Trial Practice Institute: Trial Presentation	2	
LAW	623N	Trial Practice Institute: Scientific Evidence		
and Legal Technology 3				
Students in the Trial Practice concentration may not receive credit towards the				
requirements of the Juris Doctor degree for the following courses: Law 587B,				

587C, 590A, 591A, 617A, and 617B. The content of these courses are duplicate of the content of courses required for the Trial Practice concentration.

Effective Spring 2020.

# **COLLEGE OF SOCIAL SCIENCE**

1. Change the requirements for the **Doctor of Philosophy** degree in **Human Development and Family Studies** in the Department of Human Development and Family Studies. The University Committee on Graduate Studies (UCGS) approved this request at its October 14, 2019 meeting.

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

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

Admission to the doctoral program in human development and family studies is based on evidence of academic ability, research potential, achievement, and maturity. Admission to the program assumes a background in the behavioral sciences; collateral course work that does not count toward the doctoral degree may be required where background is inadequate. A prospective doctoral student is required to take the general sections of the Graduate Record Examination and include the results with the application. Students who apply for the Human Development and Family Studies Ph.D. program must participate in a personal interview with a selected faculty committee. Students are admitted to the degree program in fall semester only.

**Child Development**. To be admitted to the doctoral program in human development and family studies with child development as the area concentration, an applicant must have completed at minimum, a bachelor's degree, with a background in the behavioral sciences or related field. **Lifespan Human Development and Family Diversity**: To be admitted to the doctoral program in human development and family studies with lifespan human development and family diversity as the area concentration, an applicant must have completed at minimum, a bachelor's degree, with a background in the behavioral sciences or related field.

**Couple and Family Therapy**: To be admitted to the doctoral program in human development and family studies with couple and family therapy as the area of concentration, an applicant must have completed a master's degree program with a major in marriage and family therapy or related field.

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

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

1. The following course:

HDFS 901 Contemporary Scholarship in Human Development and Family Studies

- 2. Completion of 21 credits in methodology and statistics course work as approved by the student's academic advisor.
- 3. Completion of 24 credits in HDFS 999 Doctoral Dissertation Research.
- 4. Successfully defend the doctoral dissertation.

In addition, each area concentration requires the following:

*Child Development*. Completion of 63 credits, including the required course work listed above. See the department handbook at *https://hdfs.msu.edu/graduate/current-students/doctoral-student-forms*.

for additional required child development concentration course work. *Lifespan Human Development and Family Diversity*: Completion of 60 to 63 credits, including the required course work listed above. See the department handbook at *https://hdfs.msu.edu/graduate/current-students/doctoral-student-forms* for additional required lifespan human development and family diversity concentration required course work.

**Couple and Family Therapy**: Completion of 69 credits, which includes a supervised clinical internship of at least 3 credits. See the department handbook at *https://hdfs.msu.edu/graduate/current-students/doctoral-student-forms* for additional required couple and family therapy concentration course work. The Couple and Family Therapy Program at Michigan State University has been accredited by the Commission on Accreditation for Marriage and Family Therapy Education of the American Association for Marriage and Family Therapy.

Effective Spring 2020.

# PART II - NEW COURSES

# **COLLEGE OF ARTS AND LETTERS**

XA 310 Computational Thinking for the Humanities

Effective Summer 2020

Fall of every year. Spring of every year. 3(3-0) P: (XA 242 and WRA 210) and completion of Tier I writing requirement R: Open to undergraduate students. Approval of college. Develops critical and ethical engagement with computational thinking. Uses problem-solving processes including pattern recognition, data representation, and algorithms. Explore relationships between computation and user experience, rhetoric, and design.

# DEPARTMENT OF ENGLISH

ENG 482Seminar in Feminist Literary and Cultural Theory<br/>Spring of every year. 3(3-0) Interdepartmental with Women's Studies. A student may earn a<br/>maximum of 6 credits in all enrollments for this course. P: (ENG 280 or ENG 353 or ENG 448 or<br/>WS 202) and completion of Tier I writing requirement R: Open to juniors or seniors in the<br/>Department of English or in the Women, Cender and Secial Justice Specialization.<br/>R: Open to<br/>juniors or seniors in the Department of English or in the Women's and Gender Studies Minor.REINSTATEMENTAdvanced analysis in feminist literary, critical, and cultural theory and its implications for<br/>reading and studying literature.<br/>Effective Spring 2020

## DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

CE 485 Landfill Design Spring of every year. 3(3-0) Interdepartmental with Environmental Engineering. P: ENE 280 and CE 312 REINSTATEMENT Geotechnical and environmental design of solid waste landfills. Effective Spring 2020

# **DEPARTMENT OF EMERGENCY MEDICINE**

EM 633	Emergency Medicine Sub-Specialty Clinical Elective
	Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a
	maximum of 24 credits in all enrollments for this course. P: HM 556 R: Open to graduate-
	professional students in the College of Human Medicine.
	Care of patients with emergent conditions in one or more EM sub-specialty domains:
	toxicology, point-of-care ultrasound, pediatric medicine, wilderness medicine among
	others.
	Request the use of the Pass-No Grade (P-N) system.
	Request the use of ET-Extension to postpone grading.
	The work for the course must be completed and the final grade reported within 2
	semesters after the end of the semester of enrollment.
	Effective Fall 2019

# DEPARTMENT OF INTEGRATIVE BIOLOGY

 IBIO 358 Streams to Gulf: Environmental Change in America's Deep South Summer of every year. 3(3-0) Interdepartmental with Fisheries and Wildlife and Plant Biology. P: IBIO 355 RB: IBIO 357 R: Approval of department; application required. A study away course of anthropogenic impacts, habitat alteration, and environmental policy in surrounding water. Effective Spring 2020

### **COLLEGE OF OSTEOPATHIC MEDICINE**

OST 597 Biomedical Research Structure and Methods Spring of every year. 2(2-0) P: OST 598 Intensive review of biomedical research methods and statistical analyses for mentored clinical research projects. <u>Request the use of the Pass-No Grade (P-N) system.</u> Effective Spring 2020

# **DEPARTMENT OF RADIOLOGY**

ANTR 880 Advanced Human Gross Anatomy for Education or Research Fall of even years. 5(4-1) R: Approval of department. Human gross anatomy using prosections, medical imaging, and multimedia resources. Effective Fall 2019

### **COLLEGE OF SOCIAL SCIENCE**

SSC 442 Social Science Data Analytics Applications Fall of every year. Spring of every year. 3(3-0) Interdepartmental with Geography and Political Science. P: PLS 202 Application of computational tools for data collection and visualization to various topics in social science research. Effective Fall 2019

### **DEPARTMENT OF WRITING, RHETORIC AND AMERICAN CULTURES**

 WRA 872 Methods of Research in Rhetoric and Writing Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students in the Department of Writing, Rhetoric and American Cultures.
REINSTATEMENT Specific methods modules. Practices, concepts and procedures for designing, evaluating, and conducting research in rhetoric and writing using specifically designated methods. SA: AL 872, ENG 872 Effective Fall 2020

# PART III – COURSE CHANGES

# **COLLEGE OF ARTS AND LETTERS**

<u>AL 242</u> <u>XA 242</u>	Introduction to Experience Architecture Fall of every year. <u>Spring of every year.</u> 3(3-0) <u>P: Completion of Tier I Writing Requirement</u> RB: Understanding of how to use a personal computer, web browsers, and mobile devices. R: Approval of college. Basic principles of user-centered design as applied to user experience. Usability, information architecture, interaction design, and service design practices, tools, conventions, and professional community. SA: AL 242 Effective Fall 2013 Effective Summer 2020
AL 333 XA 333	Researching Experience Architecture (W) Fall of every year. <u>Spring of every year.</u> 3(3-0) <del>P: (AL 242) and completion of Tier I writing</del> requirement <u>P: (XA 242) and completion of Tier I writing requirement</u> RB: Understanding of how to use a personal computer, web browsers, and mobile devices. R: Approval of college. Researching for product, services, and processes as applied to user experience. Contextual inquiry, field studies, card sorting, participatory design, interviewing, focus groups, and usability testing. Field trip required. SA: AL 333 <u>Effective Fall 2013</u> <u>Effective Summer 2020</u>
<del>AL 366</del> <u>XA 366</u>	Managing Experience Architecture Projects Spring of every year. 3(3-0) <u>P: (XA 242) and completion of Tier I writing requirement</u> RB: Understanding of how to use a personal computer, web browsers, and mobile devices. R: Approval of college. Managing user experience projects. Project management, staffing projects, scheduling projects, managing process, writing specifications, sales, budgeting. SA: AL 366 <u>Effective Fall 2013</u> <u>Effective Summer 2020</u>
<del>AL 375</del> <u>XA 375</u>	Information Architecture Fall of every year. 3(3-0) <del>P:</del> (AL 242) and completion of Tier I writing requirement <u>P:</u> (XA 242) and completion of Tier I writing requirement R: Open to undergraduate students in the Experience Architecture Major or approval of college. Theory and practice for architecting information, including understanding and developing taxonomies, folkonomies, site structures, tagging systems, and guided navigation for user experience. SA: AL 375 Effective Spring 2016 Effective Summer 2020
<u>AL 444</u> <u>XA 444</u>	Prototyping Experience Architecture Fall of every year. <u>Spring of every year.</u> 3(3-0) <u>P: (XA 242) and completion of Tier I writing</u> <u>requirement</u> RB: Understanding of how to use a personal computer, web browsers, and mobile devices. R: Approval of college. Process models used in the planning and designing of interactive experiences. Organization of information, user interactions, visual design attributes, prototyping methods, and interface design. SA: AL 444 <u>Effective Fall 2013</u> <u>Effective Summer 2020</u>

#### AL 466 XA 466 Experience Architecture Capstone Spring of every year. 3 to 6 credits. P: AL 242 P: (XA 242) and completion of Tier I writing requirement RB: Understanding of how to use a personal computer, web browsers, and mobile devices. R: Open to juniors or seniors or approval of college. Integrate knowledge and skills acquired from previous courses. Conceptualization, planning, implementation, and assessment of a project, service, system or an idea in a collaborative setting. SA: AL 466 Effective Fall 2013 Effective Summer 2020 <u>AI 482</u> XA 482 **Experience Architecture Internship** Fall of every year. Spring of every year. Summer of every year. 1 to 3 credits. P: (XA 242) and completion of Tier I writing requirement RB: Understanding of how to use a personal computer, web browsers, and mobile devices. R: Open to juniors or coniers or approval of college. R: Open to sophomores or juniors or seniors or approval of college. Field experience in a professional environment that supports, user experience, interaction design, design research, usability, information architecture, project management, interface development, and/or web development. Work under the supervision of a professional. SA: AL 482 Effective Fall 2013 Effective Summer 2020

## DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

GLG 435 Geomicrobiology

Fall of every year. <u>Spring of every year.</u> 4(3-2) Interdepartmental with Microbiology and Molecular Genetics. RB: GLG 201 or MMG 201 or BS 161 or LB 145 R: Open to juniors or seniors or graduate students in the College of Natural Science or in the Lyman Briggs College.

Ceological and microbiological perspectives on microbial activities in diverse environmental settings, including geological change mediated by microorganisms, microbial evolution driven by geologically diverse habitate, including the evolution of life on Earth, the search for life on other planets, the study of life in extreme environments, and industrial applications of geomicrobiology. Geological and microbiological perspectives on microbial activities in diverse environmental settings, including geological change mediated by microorganisms, microbial evolution driven by geologically diverse habitats. Effective Fall 2017 Effective Fall 2019

### **DEPARTMENT OF EMERGENCY MEDICINE**

EM 631 Clinical Experience in Emergency Medicine Fall of every year. Spring of every year. Summer of every year. <u>3 to 6 credits.</u> A student may earn a maximum of 24 credits in all enrollments for this course. P: (HM 556) or (FM 608 and MED 608 and PHD 600 and PSC 608 and OGR 608 and SUR 608) R: Open to graduateprofessional students in the College of Human Medicine. Two wook elective in elinical diagnosis and treatment of the undifferentiated patient in the omorgoney department cetting. Intended for students not planning to apply to an Emergency Medicine Residency.-Clinical diagnosis of the undifferentiated patient in the emergency department 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 Fall 2018 Effective Summer 2020

# DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

EPI 495 Epidemiology and Behavioral Health in Society

Summer of every year. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. R: Open to juniors or seniors or graduate students.

Introduction to opidemiology as applied to behavioral health issues in contemporary society. Life span developmental perspective from preterm births to late life Alzheimer's disease and the dementias. Offered first half of semester. Introduction to epidemiology as applied to behavioral health issues in contemporary society. Life-span developmental perspective from preterm births to late life Alzheimer's disease and the dementias. Effective Summer 2014 Effective Fall 2019

# **COLLEGE OF HUMAN MEDICINE**

HM 612	Pain Medicine Fall of every year. Spring of every year. Summer of every year. 6(6-0) <u>3 to 6 credits.</u> A student may earn a maximum of 18 credits in all enrollments for this course. R: Open to students in the College of Human Medicine. Evaluation and management of pain in acute and chronic disease settings. Evidence- based principles of pain medicine. Pain pharmacology. Trigger point injections, bursa injections, joint injections, peripheral nerve blocks and injections. Pain rehabilitation, prevention and interdisciplinary management. 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 2016 Effective Summer 2020
HM 622	Practical Application of Public Health Principles Planning a Community Project     Medical Partners in Public Health Community Resources and Wellness Programs     Fall of every year. Spring of every year. Summer of every year. 6(6-0) <u>3 to 6 credits. A student may</u> earn a maximum of 12 credits in all enrollments for this course. P: HM 823 P: HM 556 R: Approval of college.     Research and planning for a group community project. Practical application of public health principles including opidemiology, biostatistics, health and public policy, public health administration structure and function, health behavior, health education, onvironmental health and community accessment. Systematic exploration of community resources culminating in the construction and implementation of evidence-based and feasible community programming.     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 2015   Effective Summer 2020
HM 623	Practical Application of Public Health Principles Implementing a Community Project     Medical Partners in Public Health Capstone Project Elective     Fall of every year. Spring of every year. Summer of every year. 6(6-0) 3 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: HM 622 P: HM 556 RB:     Completion of 6 credits of HM 622 R: Approval of college.     Implementation, analysis, and documentation of group community project planned in HM 622_Practical application of public health principles, epidemiology, biostatistics, health and public policy, public health administration, health behavior, health education, and environmental health.     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 2015   Effective Summer 2020

HM 629	Leadership in Medicine for Underserved Community Elective Fall of every year. Spring of every year. Summer of every year. Geredite: 3 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: PHD 600 and MED 608 and FM 608 and PSC 608 and OGR 608 and SUR 608 P: HM 556 R: Open to graduate-professional students in the College of Human Medicine. Approval of college: Issues involved in securing access to medical care and community resources for families in medically underserved communities. Culturally appropriate, patient centered, and community-based experience working with underserved populations. Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment. SA: MED 629 Effective Fall 2014 Effective Summer 2020
HM 631	Advanced Leadership in Medicine for Underserved or Vulnerable Communities Leadership in Medicine for Underserved Urban or Global Elective Fall of every year. Spring of every year. Summer of every year. Geredite- 3 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: HM 629 P: HM 556 RB: HM 629 R: Open to graduate professional students in the College of Human Medicine. Approval of college. R: Approval of college. Continuation of HM 629. Medical care of an underserved or vulnerable population in a rural, urban, or international setting. Development of abilities to intervene in the public health issues of this population. Patient centered and community-based experience working with an urban and/or international underserved population. Request the use of the Pass-No Grade (P-N) system. Request the use of ET-Extension to postpone grading. The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment. SA: MED 631 Effective Summer 2011 Effective Summer 2020
HM 632	Rural Community Health <u>Fall of every year.</u> Spring of every year. <u>Summer of every year.</u> 3 to 6 credits. <u>A student may earn a</u> <u>maximum of 24 credits in all enrollments for this course.</u> <u>A student may earn a maximum of 12</u> <u>credits in all enrollments for this course.</u> <u>P: HM 556</u> <del>RB: Completion of preclinical requirements for</del> the Leadership in Rural Medicine Certificate. R: Approval of college. Patient centered and community based experience in rural medicine and rural medical health systems. 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. <u>Effective Summer 2018</u> <u>Effective Summer 2020</u>
HM 633	Advanced Rural Community Health <u>Fall of every year.</u> Spring of every year. <u>Summer of every year.</u> 3 to 6 credits. <u>A student may earn a maximum of 24 credits in all enrollments for this course.</u> <u>A student may earn a maximum of 12 credits in all enrollments for this course.</u> <u>P: HM 556 RB: Completion of proelinical requirements for the Leadership in Rural Medicine Certificate.</u> <u>RB: HM 632 or FM 616</u> R: Approval of college. Advanced clinical skills, knowledge, and experience in rural patient medicine, rural community medicine, and rural medical health systems. 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. <u>Effective Summer 2018</u> <u>Effective Summer 2020</u>

HM 822	Introduction to Core Disciplines of Public Health for Medical Students Fall of every year. Spring of every year. Summer of every year. 3(3-0) RB: Medical students with interest in public health R: Open to students in the Human Medicine Major or approval of college. Introduction to philosophy and concepts of discipline of public health and its relationship to clinical medicine. History and development of the profession; ethical, legal and political considerations. <u>Request the use of the Pass-No Grade (P-N) system.</u> <u>Request the use of ET-Extension to postpone grading.</u> The work for the course must be completed and the final grade reported within 2 semesters after the end of the semester of enrollment. <u>DELETE COURSE</u> Effective Summer 2019
HM 823	Medical Partners in Public Health: Special Seminars     Fall of every year. Spring of every year. Summer of every year. 3(3-0) P: HM 822 RB: Medical students with interest in public health R: Open to students in the Human Medicine Major or approval of college.     Analysis, discussion, and application of key public health competencies in the community 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.     DELETE COURSE     Effective Summer 2019
HM 892	Public Health Applied Practice Experience Fall of every year. Spring of every year. Summer of every year. 1 to 8 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P: HM 801 and HM 891 RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Approval of college. Professional practicum. Request the use of the Pass-No Grade (P-N) system. Effective Summer 2010 Effective Summer 2020 DEPARTMENT OF MATHEMATICS
MTH 132	Calculus I Fall of every year. Spring of every year. Summer of every year. 3(3-0) <del>P: (MTH 103 and MTH 114)</del> or (MTH 116 or designated score on Mathematics Placement test.) <u>P: (MTH 116) or (MTH 103 and MTH 114) or (MTH 103B and MTH 114) or LB 117 or Designated score on Mathematics Placement</u>

#### test

Limits, continuous functions, derivatives and their applications. Integrals and the fundamental theorem of calculus. <u>Effective Fall 2013</u> Effective Fall 2019

# **DEPARTMENT OF MEDICINE**

MED 634 Advanced Internal Medicine: Intensive Care Medicine/Critical Care Fall of every year. Spring of every year. Summer of every year. 3 to

Fall of every year. Spring of every year. Summer of every year. 3 to 6 credits. A student may earn a maximum of 24 credits in all enrollments for this course. <u>P: MED 608 or MED 641</u> <del>RB: HM 556 or MED 608</del> R: Open to graduate-professional students in the College of Human Medicine.

Experience in managing critically ill patients.

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

Request the use of ET-Extension to postpone grading.

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

semesters after the end of the semester of enrollment.

Effective Fall 2018 Effective Fall 2019

# DEPARTMENT OF PHYSICS AND ASTRONOMY

 PHY 321 Classical Mechanics I Fall of every year. Spring of every year. 3(3-0) P: ((PHY 215 or concurrently)) or (PHY 215B or concurrently)) and ((MTH 235 or concurrently) or (MTH 340 or concurrently) or (MTH 347H or concurrently)) P: ((PHY 215 or concurrently) or (PHY 215B or concurrently) or (MTH 235 or concurrently) or (MTH 340 or concurrently) or (PHY 215B or concurrently)) and CMSE 201 Newtonian point particles. Oscillations. One-particle chaos. Central-force motion. Systems of particles. Effective Spring 2017 Effective Spring 2020
PHY 862 Accelerator Systems Fall of every year. 2(2-0) 3(3-0) RB: PHY 422 and PHY 482 R: Open to graduate students in the College of Engineering or in the College of Natural Science.

Introduction to large accelerator systems, including the physics and engineering of accelerators and key components of accelerators. <u>Effective Fall 2018</u> Effective Summer 2020