# MICHIGAN STATE UNIVERSITY University Committee on Curriculum

#### SUBCOMMITTEE A - AGENDA

Via Zoom October 13, 2022 1:30 p.m.

## PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

## **COLLEGE OF NURSING**

 Request to change the requirements for the **Doctor of Nursing Practice** degree in **Nursing Practice**. The University Committee on Graduate Studies (UCGS) will consider this request at its October 17, 2022 meeting.

The concentrations in the Doctor of Nursing Practice degree in Nursing Practice are noted on the student's academic record when the requirements for the degree have been completed.

a. Under the heading **Admission** replace item 6. with the following:

Complete a 3-credit undergraduate statistics course with a grade of 2.0 (4.0 scale) or better within the last five years or complete a 3-credit graduate statistics course with a grade of 3.0 (4.0) or better within the last five years. A statistics course taken more than five years ago is acceptable with a passing grade on an Accredited Statistics Exam.

Effective Spring 2023.

## **COLLEGE OF VETERINARY MEDICINE**

- Request to change the requirements in the Master of Science degree in Comparative Medicine and Integrative Biology in the College of Veterinary Medicine. The University Committee on Graduate Studies (UCGS) will consider this request at its October 17, 2022 meeting.
  - a. Under the heading Requirements for the Master of Science Degree in Comparative Medicine and Integrative Biology make the following changes:
    - (1) Under the heading Requirements for Both Plan A and Plan B make the following changes:
      - (a) In item 1., delete the following course:
         EPI 827 The Nature and Practice of Scientific Integrity 3
         (b) In item 2., delete the following course:

PHM 980 Problems 3

Add the following course:

PHM 830 Experimental Design and Data Analysis 3

- (2) Under the heading Additional Requirements for Plan A replace the entire entry with the following:
  - One course from at least two of the following three major areas: Molecular Life Sciences, Integrative Biology, and Pathology. A list of approved courses is available from your academic advisor.
  - 2. Complete at least 10 credits of 899 Master's Thesis Research.
  - 3. Fulfill the Graduate School requirement for Responsible Conduct of Research, Scholarship and Creative Activity (RCRSCA).
  - 4. Successfully defend the master's thesis.

- (3) Under the heading Additional Requirements for Plan B replace the entire entry with the following:
  - One course from each of the following three major areas: Molecular Life Sciences, Integrative Biology, and Pathology. A list of approved courses is available from your academic advisor.
  - Fulfill the Graduate School requirement for Responsible Conduct of Research, Scholarship and Creative Activity (RCRSCA).
  - 3. Submit a satisfactory research paper.

Effective Spring 2023.

- Request to change the requirements in the Doctor of Philosophy degree in Comparative Medicine and Integrative Biology in the College of Veterinary Medicine. The University Committee on Graduate Studies (UCGS) will consider this request at its October 17, 2022 meeting.
  - a. Under the heading Requirements for the Doctor of Philosophy Degree in Comparative Medicine and Integrative Biology replace the entire entry with the following:

The student must complete a minimum of 18 credits of non-research courses, with at least 12 credits in courses at the 800 level and above. In rare cases, a student may lack sufficient background in certain areas and may be asked to complete collateral courses at the 400 or 500 level. Credits earned in such collateral courses are not counted towards the degree.

Students must complete the following requirements for the degree:

At least two enrollments in:

VM 820 Current Topics in Comparative Medicine and Integrative Biology

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- At least 14 credits in electives that are approved by the student's guidance committee and that include at least one course from each of four major areas: molecular life sciences, integrative biology, pathology, and statistics and epidemiology.
- 3. The following course (24 to 36 credits):
  - VM 999 Doctoral Dissertation Research

24 to 36

- 4. Successfully defend the doctoral dissertation.
- Fulfill the Graduate School requirement for Responsible Conduct of Research, Scholarship and Creative Activity (RCRSCA).

Effective Spring 2023.

## **PART II - NEW COURSES AND CHANGES**

#### **COLLEGE OF ENGINEERING**

CE 800 Structural Dynamics

Fall of overy year. Fall of odd years. 2(2-0) 3(3-0)

Dynamic response of single degree-of-freedom systems. Damping in structure and soils. Time and frequency domain methods. Analytical and numerical techniques. Earthquake response spectra. Classical and finite element formulation.

Effective Spring Semester 2022 Effective Fall Semester 2023

ENE 828 Land Surface Hydrological Modeling

Spring of odd years. 3(3-0) Interdepartmental with Civil Engineering. P: ENE 421 RB: ENE 421 R: Open to graduate students.

Open to graduate students.

NEW Course covers cor

Course covers concepts in modeling various land surface hydrological processes (e.g., evapotranspiration, soil and shallow groundwater movement, river-floodwater movement, reservoir operation) at varying spatial scales -- from catchment to global. A particular emphasis is placed on fully process based models that resolve both water and energy balance equations; linkages to climate system and climate change impacts is discussed. Numerical methods used to solve complex governing equations of surface water and groundwater flows. Students work on a term project using models such as the CLM. Effective Spring Semester 2023

ME 922 Thermoelacticity and Viscoelacticity

Viscoelasticity and Poroelasticity

Spring of even years. 3(3-0) RB: ME 820 and MTH 443 RB: ME 820

Thormomechanics of colids. Theory of thermoelasticity. Boundary value problems in thermoelasticity. Linear and nonlinear viscoelasticity. Model representation. Boltzmann euperposition. Correspondence principle. Linear and nonlinear viscoelasticity. Micromechanics models and constitutive theories. Frequency response. Thermal effects. Poroelasticity. Compressible and incompressible constituents. Application to gels, pastes, soft tissue, and geotechnical materials.

SA: MSM 918

Effective Fall Semester 2002 Effective Spring Semester 2024

#### **COLLEGE OF NATURAL SCIENCE**

BMB 370 Introductory Biochemistry Laboratory

Fall of every year. Spring of every year. 3(2-3) P: {(MTH 116 or LB 117) or (MTH 103 and MTH 114)} and (BS 171 or BS 101H or LB 145) and (CEM 162 or CEM 185H or LB 172L) P: {(MTH 103 and MTH 114) or (MTH 116 or LB 117) or (MTH 132 or MTH 152H or LB 118)} and (CEM 162 or CEM 185H or LB 172L) and (BS 171 or BS 191H or LB 145) R: Open to undergraduate students in the Biochemistry and Molecular Biology/Biotechnology Major or in the Biochemistry and Molecular Biology major or in the Lyman Briggs Biochemistry and Molecular Biology Coordinate Major or approval of department.

Basic quantitative laboratory introducing biochemical methods and principles for the study of proteins and nucleic acids using data analysis.

Request the use of ET-Extension to postpone grading.

The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment.

Effective Summer Semester 2022 Effective Summer Semester 2023

BMB 491 Internship in Biochemistry and Molecular Biology

Fall of every year. Spring of every year. Summer of every year. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P: (BS 161 or BS 181H or LB 145) and (BS 162 or BS 182H or LB 144) RB: BMB 370 R: Open to undergraduate students in the MB\_BS1Biochemistry and Molecular Biology/Biotechnology Major or in the BS1Biochemistry and Molecular Biology major or in the OC\_BS1Lyman Briggs Biochemistry and Molecular Biology Coordinate Major or in the OT\_BS1Lyman Briggs-Biochemistry/Biotechnology Coordinate Major. Approval of department; application required.

NEW

Supervised professional experience related to Biochemistry and Molecular Biology in Industry, Medicine, Pharmacy, Science Policy, Science Communication, Research, Patent Law

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

The work for the course must be completed and the final grade reported within 1

semester after the end of the semester of enrollment.

Effective Summer Semester 2023