PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

1. Request to change the requirements for the Bachelor of Science degree in Crop and Soil Sciences in the Department of Plant, Soil and Microbial Sciences.

   The concentrations in the Bachelor of Science degree in Crop and Soil Sciences are noted on the student’s academic record when the requirements for the degree have been completed.

   a. Under the heading Requirements for the Bachelor of Science Degree in Crop and Soil Sciences make the following changes:

      (1) In item 3. b. change the total credits from ‘61 to 72’ to ‘63 to 74’.

      (2) In item 3. b. Agronomic Sciences concentration make the following changes:

         (a) Change the total credits from ‘61 or 62’ to ‘63 or 64’.

         (b) In item (1) add the following courses:

            - CSS 226L Weed Science Laboratory 1
            - CSS 313 Data Interpretation and Writing in the Agronomic Sciences 2
            - CSS 326 Weed Science 2

         Delete the following course:

            - CSS 288 Principles of Weed Management 3

      (3) In item 3. b. Turfgrass Management concentration make the following changes:

         (a) Change the total credits from ‘67’ to ‘69’.

         (b) In item (1) add the following courses:

            - CSS 226L Weed Science Laboratory 1
            - CSS 313 Data Interpretation and Writing in the Agronomic Sciences 2
            - CSS 326 Weed Science 2

         Delete the following course:

            - CSS 292 Management of Turfgrass Weeds 3

      (4) In item 3. b. Advanced Study concentration make the following changes:

         (a) Change the total credits from ‘72’ to ‘74’

         (b) In item (1) add the following courses:

            - CSS 226L Weed Science Laboratory 1
            - CSS 313 Data Interpretation and Writing in the Agronomic Sciences 2
            - CSS 326 Weed Science 2

         Delete the following course:

            - CSS 288 Principles of Weed Management 3

Effective Fall 2018.
2. Request to change the requirements for the Minor in Agronomy in the Department of Plant, Soil and Microbial Sciences.

   a. Under the heading Minor in Agronomy make the following changes:

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

   - CSS 135 Crop Scouting and Investigation 2
   - CSS 288 Principles of Weed Management 3

   Add the following courses:

   - CSS 135 Crop Scouting and Investigation 3
   - CSS 326 Weed Science 2
   and
   - CSS 226L Weed Science Laboratory 1

   Effective Fall 2018.

3. Request to change the requirements for the Master of Science degree in Human Nutrition in the Department of Food Science and Human Nutrition. The University Committee on Graduate Studies (UCGS) will consider this request at its March 12, 2018 meeting.

   a. Under the heading Requirements for the Master of Science Degree in Human Nutrition replace the entire entry with the following:

   The program is available under either Plan A (with thesis) or Plan B (without thesis). The student must complete at 30 credits.

   The student must complete:

   1. All of the following courses (10 credits):
      - HNF 820 Advanced Biochemical Nutrition 3
      - HNF 821 Advanced Vitamins and Minerals 3
      - HNF 823 Research Methods in Human Nutrition 3
      - HNF 892 Nutrition Seminar 1

   2. One of the following courses (3 credits):
      - HNF 840 Human Nutrition and Chronic Diseases 3
      - HNF 891 Topics in Human Nutrition 3

   3. One of the following courses (1 or 3 credits):
      - HNF 824 Nutrition Policies and Programs 1
      - Alternative public health or community nutrition course approved by guidance committee 3

   4. A 3-credit graduate level statistics course chosen in consultation with advisor and guidance committee.

   5. A minimum of 5 credits (Plan A) or 11 credits (Plan B) in course work in one or more focus areas selected in consultation with the student’s guidance committee.

   Additional Requirements for Plan A

   1. The following course (6 credits):
      - HNF 899 Master’s Thesis Research 6
      - Students may not earn more than 10 credits in HNF 899.

   2. Successfully prepare and defend the oral and written dissertation.

   Additional Requirements for Plan B

   1. The following course (1 to 5 credits):
      - HNF 898 Master’s Project 1 to 5
      - Students may not earn more than 5 credits in HNF 898.

   2. Successfully pass a qualifying examination and complete a final examination or evaluation.

   Effective Fall 2018.
4. Request to change the requirements for the Doctor of Philosophy degree in Human Nutrition in the Department of Food Science and Human Nutrition. The University Committee on Graduate Studies (UCGS) will consider this request at its March 12, 2018 meeting.

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

The student must:

C R E D I T S

1. Complete all of the following courses (10 credits):
   - HNF 820 Advanced Biochemical Nutrition 3
   - HNF 821 Advanced Vitamins and Minerals 3
   - HNF 823 Research Methods in Human Nutrition 3
   - HNF 892 Nutrition Seminar 2

2. Complete one of the following courses (3 credits):
   - HNF 840 Human Nutrition and Chronic Diseases 3
   - HNF 891 Topics in Human Nutrition 3

3. Complete one of the following courses (1 or 3 credits):
   - HNF 824 Nutrition Policies and Programs 1
   - Alternative public health or community nutrition course approved by guidance committee 3

4. Complete a 3-credit graduate level statistics course chosen in consultation with advisor and guidance committee.

5. Complete a mentored teaching experience through one of the following courses (1 or 2 credits):
   - HNF 894 Human Nutrition Practicum 1
   - ISE 870 Teaching College Science 2

6. Complete additional course work approved selected in consultation with the student’s guidance committee based on the student’s prior academic background in relation to the selected area of study and research.


8. Successfully prepare and defend the oral and written dissertation. Some student may be required to complete a qualifying examination.

Effective Fall 2018.

4. Request to change the name of the Minor in International Agriculture to Applied Development in International Agriculture and Natural Resources in the Department of Plant, Soil and Microbial Sciences.

Students admitted to the minor prior to Fall 2018 will be awarded a Minor in International Agriculture.

Students admitted to the minor Fall 2018 and forward will be awarded a Minor in Applied Development in International Agriculture and Natural Resources.

Effective Fall 2018.

5. Request to change the requirements for the Minor in Applied Development in International Agriculture and Natural Resources in the Department of Plant, Soil and Microbial Sciences.

a. Under the heading Requirements for the Minor in Applied Development in International Agriculture and Natural Resources replace the entire entry with the following:

The student must meet the requirements specified below:

Complete a minimum of 17 credits from the following:

1. Both of the following courses (5 credits):
   - CSS 294 Issues in International Agriculture 1
   - MC 430 Applied International Development 4

2. One of the following courses (3 credits):
   - ANS 480 Animal Systems in International Development 3
   - CSS 431 International Agricultural Systems 3
   - FW 481 Global Issues in Fisheries and Wildlife 3
ANS 480 may not be used to fulfill both this requirement and the Education Abroad requirement below.

3. One of the following courses (3 or 4 credits):
   - ABM 427 Global Agri-Food Industries and Markets 3
   - EEM 260 World Food, Population and Poverty 3
   - FW 445 Biodiversity Conservation Policy and Practice 3
   - GEO 410 Geography of Food and Agriculture 3
   - HNF 406 Global Foods and Culture 3
   - MC 320 Politics, Society, and Economy in the Third World 4
   - MC 450 International Environmental Law and Policy 3

4. Complete 3 credits in an Education Abroad, International Internship, or International Research Experience with approval by the advisor for the minor.

5. Complete 3 or 4 credits in a foreign language, an additional Education Abroad, International Internship or International Research Experience, or additional elective course from items 2. or 3. above with approval by the advisor for the minor.

Effective Fall 2018.

**COLLEGE OF ENGINEERING**

1. Request to change the requirements for the Bachelor of Science degree in Applied Engineering Sciences in the College of Engineering.

   The concentrations in the Bachelor of Science degree in Applied Engineering Sciences are noted on the student’s academic record when the requirements for the degree have been completed.

   a. Under the heading Requirements for the Bachelor of Science Degree in Applied Engineering Sciences make the following changes:

   (1) In item 3. a. delete the following course:
       - ECE 201 Circuits and Systems I 3
       Add the following course:
       - ECE 345 Electronic Instrumentation and Systems 3

   (2) In item 3. c. Business Law concentration delete the following course:
       - GBL 295 Business Law, Public Policy and Ethics 3
       Add the following course:
       - GBL 385 Business Law and Ethical Leadership 3

Effective Fall 2018.
2. Request to change the requirements in the **Bachelor of Science** degree in **Civil Engineering** in the Department of Civil and Environmental Engineering.

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

   (1) In item 3. change the total credits from '43' to '40' and delete the following course:
   
   GLG 301 Geology of the Great Lakes Region    3


   (3) Add the following item 3. b.:

   One of the following courses (3 or 4 credits):
   
   GLG 201 The Dynamic Earth     4
   GLG 301 Geology of the Great Lakes Region    3

   (4) Change item 3. e. from '12' credits to '12 or 13' credits.

   (5) In item 3. e. change the credits of ENE 483 from '3' to '4'.

   Effective Fall 2018.

3. Request to change the requirements in the **Bachelor of Science** degree in **Computer Science** in the Department of Computer Science and Engineering.

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

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

   IBIO 150 Integrating Biology: From DNA to Populations     3

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

   CSE 100 Computer Science as a Profession     1
   CSE 231 Introduction to Programming I     4

   (3) In item 3. b. change the total credits from '33' to '28'.

   Effective Fall 2018.
COLLEGE OF HUMAN MEDICINE

1. Request to change the requirements for the Professional Program in Human Medicine leading to the Doctor of Medicine (M.D.) degree. The University Committee on Graduate Studies (UCGS) will consider this request at its March 12, 2018 meeting.

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

      (1) Under the heading Middle Clinical Experience change ’post clinic groups’ to ’scholar groups’, and delete ‘the learning society’ in the last sentence.

      (2) Under the heading Late Clinical Experience replace the paragraph with the following:

      The Late Clinical Experience provides disciplinary clerkships to prepare students for residency and a career of learning in the specialty of their interest. The major disciplines will be included through four-week rotations in family medicine, internal medicine, obstetrics and gynecology, pediatrics, psychiatry, Surgery 1 and 2, required selectives in primary care and critical care and additional electives. Because of the clinical intensity of the Middle Clinical Experience, many of these clerkships are at the level of a sub-internship. A Human Medicine course series, Advanced Skills and Knowledge, including the recurring progress assessment suites, occurs throughout the Late Clinical Experience.

      (3) Under the heading ELECTIVES replace the entire entry with the following:

      Students are required to complete 20 weeks of approved clinical electives as a part of meeting the college graduation requirements. At least 4 of the 20 weeks must be completed in the community to which the student is assigned. Students are encouraged to study broadly and/or to pursue intensively their special interests through elective programs. Elective programs may include a variety of courses offered by the college and university, research projects, or placements in hospitals other than those associated with Michigan State University. Students may also take elective courses at other medical schools.

Effective Fall 2018.
COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

FW 439  Conservation Ethics
Spring of every year. Spring of every year. 3(3-0) P: Completion of Tier I Writing Requirement RB: Additional coursework in ecology, natural resources, philosophy, or environmental sciences. R: Open to juniors or seniors or graduate students. Ethical concepts and arguments underlying natural resources. 
Effective Fall 2014  Effective Fall 2018

FSC 441  Food Microbiology Laboratory
Fall of every year. Spring of every year. 2(0-4) Interdepartmental with Microbiology and Molecular Genetics. P: (FSC 440 or concurrently) and completion of Tier I writing requirement. P: (FSC 440 or concurrently) and completion of Tier I writing requirement RB: MMG 302
Methods for studying major groups of microorganisms important to the food industry. Isolation, enumeration, characterization, identification, and use of microorganisms. SA: MPH 441
Effective Fall 2014  Effective Fall 2018

HNF 250L  Professional Development and Career Planning in Nutrition
Fall of every year. Spring of every year. 1(0-2) P: HNF 250 or concurrently P: HNF 150 R: Open to students in the Nutritional Sciences Major and open to students in the Lyman Briggs Nutritional Sciences Coordinate Major.
Experiential learning and career opportunities in nutrition. Skills for professional and career development.
Request the use of ET-Extension to postpone grading. 
The work for the course must be completed and the final grade reported within 1 semester after the end of the semester of enrollment. 
Effective Spring 2017  Effective Fall 2018

HNF 821  Advanced Vitamins and Minerals
Spring of every year. 2(2-0) 3(3-0) P: HNF 820  or approval of department
The function of vitamins and minerals in human nutrition
Effective Fall 2013  Effective Fall 2018

HNF 823  Research Methods in Human Nutrition
Fall of every year. Spring of every year. 4(2-0) 3(3-0) RB: Statistics course RB: Statistics course, epidemiology course
Survey of research methods used in human nutrition.
Effective Fall 2013  Effective Fall 2018

HNF 840  Human Nutrition and Chronic Diseases
Fall of odd years. 3(3-0)
REINSTATEMENT Dietary intervention and treatment of chronic diseases: obesity, cardiovascular disease, diabetes, gastrointestinal disorders and cancer. 
Effective Spring 2019

PKG 322  Packaging with Paper and Paperboard
Fall of every year. Spring of every year. 4(3-2) P: ((PKG 221 or concurrently) and PKG 101) and (MTH 133 or MTH 153H or LB 119 or MTH 124) and (CEM 143 or CEM 251 or CEM 351) and (STT 200 or STT 201 or STT 315 or STT 351) P: ((PKG 221 or concurrently) and PKG 101) and (MTH 133 or MTH 153H or LB 119) and (CEM 143 or CEM 251 or CEM 351) and (STT 200 or STT 201 or STT 315 or STT 351) R: Open to sophomores or juniors or seniors or graduate students in the School of Packaging.
Physical and chemical properties, manufacture, conversion, and use of wood, paper, paperboard, and related components in packaging. Design, use, and evaluation of packages. SA: PKG 325
Effective Fall 2015  Effective Fall 2017
PKG 323  Packaging with Plastics
Fall of every year. Spring of every year. 4(3-2) P: ((PKG 221 or concurrently) and PKG 101) and (MTH 133 or MTH 153H or LB 119 or MTH 124) and (STT 200 or STT 201 or STT 315 or STT 351) and (CEM 143 or CEM 251 or CEM 351) P: ((PKG 221 or concurrently) and PKG 101) and (MTH 133 or MTH 153H or LB 119) and (STT 200 or STT 201 or STT 315 or STT 351) and (CEM 143 or CEM 251 or CEM 351) R: Open to sophomores or juniors or seniors or graduate students in the School of Packaging.
Physical and chemical properties of plastics and their relationship to selection, design, manufacture, performance, and evaluation of packages.
SA: PKG 320
Effective Fall 2014 Effective Fall 2017

PKG 455  Food Packaging
Spring of every year. 3(3-1) 4(3-2) P: PKG 322 and PKG 323 R: Open to sophomores or juniors or seniors or graduate students in the School of Packaging. R: Open to sophomores or juniors or seniors or graduate students in the School of Packaging or approval of department.
Effective Fall 2014 Effective Spring 2018

PKG 465  Packaging Value Chain
Fall of every year. Summer of every year. 3(0-0) 3(3-0) P: PKG 322 and PKG 323 and PKG 432 P: PKG 322 and PKG 323 R: Open to students in the School of Packaging.
Integrated identification and measurement of packaging supply chain components, from material extraction through processing, shipping, warehousing, sales and disposal. Integration of information technologies. Application and interrelationship of costs and financial aspects to the decision-making processes.
Effective Fall 2016 Effective Summer 2017

COLLEGE OF ENGINEERING

CSE 260  Discrete Structures in Computer Science
Fall of every year. Spring of every year. 4(4-0) 4(5-0) P: MTH 133 or MTH 126 or MTH 153H or LB 119
SA: CPS 260
Effective Spring 2014 Effective Fall 2018

AESC 210  Global Systems: Economics, Engineering, Environment
Spring of every year. 3(3-0) P: EGR 102 or CSE 231 or CSE 220 P: (EGR 102 or CSE 231 or CSE 220) and (MTH 133 or LB 119 or MTH 153H) R: Not open to freshmen.
Globalization as a process driven by economics, enabled by engineering, and constrained by the environment. Development of systems analysis tools for understanding how these themes interact globally. Enhancement of communication skills through teaming, presentations, and active listening.
SA: EGR 210
Effective Fall 2013 Effective Fall 2018
AESC 310  Sustainable Systems Analysis  
Fall of every year. 3(0-3) 3(3-0)  P: (AESC 210 and (STT 315 or concurrently)) and completion of Tier I writing requirement  
P: (AESC 210) and completion of Tier I writing requirement  R: Open to juniors or seniors in the College of Engineering and open to juniors or seniors in the Department of Marketing and open to juniors or seniors in the Department of Supply Chain Management.  
Concepts of sustainable systems; computational analysis tools for project management, life-cycle analysis, system-level representation, and six-sigma approaches. Case studies.  
Modeling and computational analysis. Concepts of sustainable systems applied to urban environments (smart cities). Computational analysis tools for large data sets. Case studies used to increase consensus-building skills.  
SA: EGR 300, EGR 310  
Effective Fall 2014 Effective Fall 2018  

COLLEGE OF NATURAL SCIENCE  

BLD 861  Emerging Infections, Emerging Technology  
Summer of every year. 2(2-0)  P: MMG 463 or approval of department  R: Undergraduate degree in medical laboratory science, microbiology or epidemiology  
Use of recent cases in infectious diseases to investigate the causes for disease emergence and the laboratory technologies used to identify the microbial causes, to describe epidemiology and to develop surveillance systems and prevention. Request the use of ET-Extension to postpone grading.  
The work for the course must be completed and the final grade reported within 3 semesters after the end of the semester of enrollment.  
Effective Summer 2015 Effective Summer 2018