MICHIGAN STATE UNIVERSITY University Committee on Curriculum

SUBCOMMITTEE B - AGENDA

Via Zoom March 31, 2022 1:30 p.m.

PART I – NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES

COLLEGE OF SOCIAL SCIENCE

 Request to establish a **Minor** in **Climate Science** in the Department of Geography, Environment, and Spatial Sciences. The University Committee on Undergraduate Education (UCUE) recommended approval of this request at its January 10, 2022 meeting.

a. **Background Information**:

An interdepartmental academic program in Atmospheric Science was first created in the early 2000s at MSU, and was moved to the Department of Geography, Environment, and Spatial Sciences (GEO) around 2016. This existing academic program is an Atmospheric and Climate Sciences concentration as an option within the Bachelor of Science Degree in Environmental Geography. The concentration requires 24 credits of CEM, MTH, and PHY course work and includes an additional 12 to 16 credits of selective course work in CSE, GEO, and GLG. Currently, no academic program exists at MSU that focuses entirely on Climate Science course work offered by GEO. A program that does not require course work in CEM, CSE, GLG, MTH, and PHY will complement a number of MSU's BA/BS degree programs spanning both arts (e.g., Journalism BA) and sciences (e.g. Data Science BS).

Currently, there is no Climate Science minor is offered by any Michigan university. University of Michigan offers a Climate and Space Sciences and Engineering minor, while Western Michigan University offers a Climate Change Studies minor. Central Michigan University offers a Meteorology BS program, but no minor program is available. MSU has long housed Michigan's State Climatologist office, which leads the way in furthering our understanding of Michigan and Great Lakes climate science, making MSU an appropriate home for a Climate Science minor.

Michigan's State Climatologist office resides within MSU-GEO. A number of faculty members in the department have climate science expertise, including five in the tenure system, as well as other faculty and staff in the continuing and fixed-term systems. Completing a minor of required and selected course work will provide an undergraduate with a strong foundation of climate science.

Students will be exposed to introductory and advanced information regarding climate science. Students will use climate science information, as well as qualitative, quantitative, and geospatial application in order to better understand climate problems and solutions. Students will practice effective verbal and written communication of introductory and advanced climate science information, application, problems, and solutions.

b. Academic Programs Catalog Text:

The Minor in Climate Science, which is administered by the Department of Geography, Environment, and Spatial Sciences, provides a foundation to students who are interested in issues related to climate and climate change, including students who wish to prepare themselves for degree programs in communication, data science, environmental geoscience, environmental science, environmental studies, environmental policy, journalism, quantitative risk analytics, sustainability, or related fields.

The minor is available as an elective to students who are enrolled in bachelor's degree programs at Michigan State University other than the Bachelor of Science Degree Environmental Geography with the Atmospheric and Climate Sciences concentration in the Department of Geography, Environment, and Spatial Sciences. With the approval of the department and college that administer the student's degree program, the courses that are used to satisfy the minor may also be used to satisfy the requirements for the bachelor's degree.

Students who plan to complete the requirements for the minor should consult the undergraduate academic advisor in the Department of Geography, Environment, and Spatial Sciences.

PART I - NEW ACADEMIC PROGRAMS AND PROGRAM CHANGES – continued - 2 March 31, 2022

Stude	ents must c	omplete	a minimum of 18 credits from the following:	
1.	Both of the following courses (6 credits):			
	GEO	203	Introduction to Meteorology	3
	GEO	409	Global Climate Change and Variability	3
2.	One of the following courses (3 credits):			
	GEO	302	Climates of the World	3
	GEO	303	Severe and Hazardous Weather	3
3.	Three of the following courses (9 to 11 credits):			
	GEO	402	Agricultural Climatology	3
	GEO	403	Dynamic Meteorology (W)	3
	GEO	405	Weather Analysis and Forecasting	4
	GEO	410	Geography of Food and Agriculture	3
	GEO	424	Advanced Remote Sensing	4
	GEO	429	Geoprocessing	3

Effective Fall 2022.

PART II - NEW COURSES AND CHANGES

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

CSUS 811 Community, Food and Agriculture: A Survey

Fall of odd years. 3(3-0)

Philosophical, socio-economic, health and political issues related to food and farming in the United States.

SA: ACR 811

Effective Fall 2014 Effective Fall 2022

CSUS 833 Program Evaluation in Agriculture and Natural Resources

Spring of every year. Spring of even years. 3(3-0)

Concepts, theories, procedures and applications of program evaluation. Planning and implementing evaluations of food, agriculture and natural resources programs. Logic models, evaluation plans and instruments, data analysis and written reports.

SA: ACR 833

Effective Summer 2016 Effective Fall 2022

CSUS 838 Participatory Modes of Inquiry

Fall of odd years. 3(3-0) RB: CSUS 800, CSUS 802, a graduate philosophy of science course, or a graduate-level research methods course.

Participatory and action research literature across the disciplines. Epistemological and theoretical foundations, fields of application, points of emphasis for practice. Skill building in reflexivity, surfacing assumptions, dialogue, and active listening.

SA: ACR 838

Effective Fall 2016 Effective Fall 2022

CSUS 848 Community Based Natural Resource Management in International Development

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

Community-based natural resource management in developing countries. Determinants of conservation, productivity, and income distribution. Interaction of human and natural systems, perceptions of scarcity, property rights, collective action, and governance. Policy tools for promoting conservation.

SA: ACR 848, RD 823

Effective Fall 2014 Effective Fall 2022

MSU COLLEGE OF LAW

LAW 593K Business Ethics and the Law

NEW

On Demand. 0 to 6 credits. P: LAW 500M R: Open to Law students or law advanced students in

the MSU College of Law.

This seminar will explore how prominent moral and ethical codes are expressed in U.S. business law and policy. This includes the legal definitions of "unfair competition" and "the

morals of the marketplace." Effective Spring 2023

OFFICE OF THE PROVOST

MS 110 Army Leadership and Officer Development

Fall of every year. 4 to 2 credite. 1(1-0) RB: MS 110L or concurrently

Duties and responsibilities of the Army officer and noncommissioned officer.

Organizational structure of the Army, Army Reserve, and National Guard. The Army's role in joint operations. Introduction to Army values, leadership, customs, and traditions.

SA: MS 101, MS 101A

Effective Fall 2015 Effective Fall 2022

MS 110L Army Leadership and Officer Development Laboratory

Fall of every year. 1(0-2) RB: MS 110 or concurrently

NEW Introduction to leader tasks in a field environment, regular practical exercises and fitness

evaluations per Army, Army Reserve, and National Guard standards.

Effective Fall 2022

MS 120 Introduction to Army Leadership and Problem Solving

Spring of every year. 1 to 2 credite. <u>1(1-0)</u> RB: MS 110 <u>RB: MS 110 and MS 110L and (MS 120L or</u>

concurrently)

Fundamentals of basic Army leadership. Military problem solving process. Military briefing

and writing skills. Goal setting and time management. Introduction to the Army's

developmental counseling program. Effective Fall 2015

MS 120L Introduction to Army Leadership and Problem-Solving Laboratory

Spring of every year. 1(0-2) RB: MS 110 and MS 110L and MS 120

NEW Introduction to team operations and tactics in a field environment, regular practical

exercises and fitness evaluations per Army, Army Reserve, and National Guard

standards.

Effective Fall 2022

MS 210 Values and Ethics of Army Leaders

Fall of every year. 2 to 3 credits. 2(2-0) RB: MS 120 and MS 110 RB: MS 120 and MS 110 and MS

110L and MS 120L and (MS 210L or concurrently)

Application of military case studies. Critical dilemmas in combat situations and the ethical decicions Army leaders make to ensure mission success. Understanding how to improve Army organizations and soldier performance. Introduction to the Army's leadership development program, battle drills, land navigation, and combat decision making. Critical dilemmas in combat situations and the ethical decisions Army leaders make to ensure mission success. Understanding how to improve Army organizations and soldier performance. Introduction to the Army's leadership development program, battle drills, land navigation, and combat decision making.

SA: MS 201, MS 201A

Effective Summer 2018 Effective Fall 2022

MS 210L Values and Ethics of Army Leaders Laboratory

Fall of every year. 1(0-2) RB: MS 110 and MS 110L and MS 120 and MS 120L and (MS 210 or

concurrently)

NEW Introduction to squad-level operations and tactics in a field environment, regular practical

exercises and fitness evaluations per Army, Army Reserve, and National Guard

standards.

Effective Fall 2022

MS 220 Army Doctrine and Team Development

Spring of every year. 2 to 3 credits. 2(2-0) RB: MS 110 or MS 120 or MS 210 RB: MS 110 and MS 120 or MS 210 or MS 21

120 and MS 210 and MS 110L and MS 120L and MS 210L and (MS 220L or concurrently)

Application of Army doctrine to field-based leadership decisions. Army values, teamwork, and warrior ethos in relationship to the law of land warfare and philosophy of military service. Investigation of leading and following using case studies and exercises in small units up to squad-level.

SA: MS 202A, MS 202B

Effective Summer 2018 Effective Fall 2022

MS 220L Army Doctrine and Team Development Labratory

Spring of every year. 1(0-2) RB: MS 110 and MS 110L and MS 120 and MS 120L and MS 210 and

MS 210L and (MS 220 or concurrently)

NEW Application of advanced squad-level operations and tactics in a field environment, regular practical exercises and fitness evaluations per Army, Army Reserve, and National Guard

standards.

Effective Fall 2022

MS 310

Leading and Problem Solving in Army Units

Fall of every year. 3 to 4 credits. 3(3-0) RB: (MS 110 and MS 120 and MS 210 and MS 220) and Completion of basic training, or the leader training source. RB: (MS 110 and MS 120 and MS 210 and MS 210 and MS 210L and MS 210L

Planning and executing military activities in small Army units. Recognizing and analyzing problems in challenging situations. Implementing the skills required to communicate decisions and supervise subordinates. Applying fundamentals of map reading and land navigation.

SA: MS 301

Effective Fall 2015 Effective Fall 2022

MS 310I

Leading and Problem Solving in Army Units Laboratory

Fall of every year. 1(0-2) RB: MS 110 and MS 110L and MS 120 and MS 120L and MS 210 and MS 210L and MS 220L and (MS 310 or concurrently)

NEW

Introduction to platoon-level operations and tactics in a field environment, regular practical exercises and fitness evaluations per Army, Army Reserve, and National Guard standards.

Effective Fall 2022

MS 320

Army Small Unit Tactics and Leadership

Spring of every year. 3 to 4 credits, 3(3-0) RB: MS 110 and MS 120 and MS 210 and MS 220 and MS 310 RB: (MS 320L or concurrently) and MS 120 and MS 210 and MS 220 and MS 310 and MS 120L and MS 210L and MS 220L and MS 310L and MS 110

Fundamentals of military tactics and battle drills. Applying troop leading procedures to military tactical operations. Implementing tactical skills and making decisions to lead small Army units on the battlefield. Integrate terrain analysis into military planning and operations.

SA: MS 302

Effective Fall 2015 Effective Fall 2022

MS 320L

Army Small Unit Tactics and Leadership Laboratory

Spring of every year. 1(0-2) RB: (MS 320 or concurrently)MS 120MS 120LMS 210MS 210LMS 220MS 220LMS 310MS 310L

NEW

Application of advanced platoon-level operations and tactics in a field environment, regular practical exercises and fitness evaluations per Army, Army Reserve, and National Guard standards.

Effective Fall 2022

MS 410

Adaptive Army Leadership

Fall of every year. 3 to 4 credite. 3(3-0) RB: MS 110 and MS 120 and MS 210 and MS 220 and MS 310 and MS 320 RB: (MS 410L or concurrently) and MS 120 and MS 210 and MS 220 and MS 310 and MS 320 and MS 210L and MS 220L and MS 310L and MS 320L

Application of military case studies. Skills and attributes military leaders use to make decisions in combat situations. Practical exercises in problem solving and crisis counseling. Fundamentals of Army Training Management, the military justice system, and the law of land warfare.

SA: MS 401

Effective Fall 2015 Effective Fall 2022

MS 410L

Adaptive Army Leadership Laboratory

Fall of every year. 1(0-2) RB: (MS 410 or concurrently) and MS 320 and MS 320L and MS 120L and MS 210 and MS 210L and MS 220 and MS 220L and MS 310 and MS 310L

NEW

Application of Army planning and training processes to introduce MS 110, 210 and 310 students to platoon and below operations in field settings, regular practical exercises and fitness evaluations per Army, Army Reserve, and National Guard standards. Effective Fall 2022

MS 420 Army Leadership in a Complex World

Spring of every year. 3 to 4 credits. 3(3-0) RB: MS 110 and MS 120 and MS 210 and MS 220 and MS 310 and MS 320 and MS 410 RB: (MS 420L or concurrently) and MS 410 and MS 410L and MS 320 and MS 320L and MS 310L and MS 310L and MS 220L and MS 210

Application of military case studies to the principles of the law of land warfare, and rules of engagement in the face of international terrorism. Importance of ethics in military leadership. Integration of the media into military operations. Evaluation of interaction with non-governmental organizations, civilians, and host nation support on the battlefield. SA: MS 402

Effective Fall 2015 Effective Fall 2022

MS 420L Army Leadership in a Complex World Laboratory

Spring of every year. 1(0-2) RB: (MS 420 or concurrently) and MS 410L and MS 410 and MS 320L

and MS 320 and MS 310L and MS 310 and MS 220L and MS 220 and MS 210L

Application of Army planning and training processes to teach advanced tactics to MS 110, 210 and 310 students for platoon and below operations in field settings, regular practical

exercises and fitness evaluations per Army, Army Reserve, and National Guard standards.

Effective Fall 2022

COLLEGE OF SOCIAL SCIENCE

HDFS 881 Quantitative Methods in Human Development

<u>Fall of every year.</u> Spring of every year. 3(3-0) RB: (HDFS 880) or equivalent course in research methods. R: Open to master's students or doctoral students in the Department of Human Development and Family Studies.

Application of quantitative techniques to the analysis of human development and family studies research data.

SA: FCE 881

Effective Summer 2018 Effective Fall 2022

HDFS 901 Contemporary Scholarship in Human Development and Family Studies

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

Multiple perspectives on human development and family studies scholarship. Emerging research; professional development strategies.

SA: FCE 901

Effective Fall 2010 Effective Fall 2022

ISS 205 Big Ideas in the Social Sciences

Fall of every year. Spring of every year. Summer of every year. 4(4-0)

Introduction to the inquiry and research of complex issues in the social, behavioral, and economic sciences. Special topics to engage new students' interests, analyze complex

ideas, and consider empirical evidence.

Effective Fall 2022

NEW

NEW