

**CSUS 320
Environmental Planning and Management**

Spring 2020

152 Natural Resources Building

Mon. and Wed., 5:00 – 6:20 PM

3.0 credit hours

Instructor: Professor John J. Paskus

Office Location: 311A Natural Resources

Telephone: 517 449-1800

E-Mail: paskusjr@msu.edu

Office Hours: Wed., 3:45 - 4:45 PM
or by appointment

Catalog Course Description: Concepts, principles and objectives of environmental planning and management. Demand, supply and impacts of natural resources use. Suitability assessment for sustainable development and community/land use planning.

3 credits: weekly sessions, bi-weekly assignments, class reflections, midterm & final exams.

Course Outcomes: Students who complete this course will be able to:

1. Identify the essential components and principles of environmental planning, management and sustainable community development.
2. Identify and apply a cross-disciplinary and multifaceted approach to understanding sustainability.
3. Develop and apply critical thinking and analysis skills to evaluate the credibility of sustainability policy positions and scientific arguments.
4. Improve decision-making capabilities within the context of sustainability.
5. Use information technologies in their formal and informal learning.
6. Consider the importance of the legal and regulatory framework in undertaking environmental planning and successfully implementing environmental management projects/programs.
7. Apply systems thinking approaches in environmental planning and management.

These course outcomes support the Department of Community Sustainability undergraduate program competencies of critical thinking, systems thinking, and ethics. Successful completion of this course provides students with the background needed to frame complex problems and address them systemically in order to successfully complete additional courses in the major.

Students can learn more about the Department of Community Sustainability undergraduate program competencies at http://www.csus.msu.edu/undergraduate/sustainability_core.

In addition, this course supports Michigan State University's Undergraduate Learning Goals of analytical thinking and integrated reasoning. More information about MSU's Undergraduate Learning Goals is available at <http://learninggoals.undergrad.msu.edu/>.

Course Overview: As the title implies, this course will introduce students to and deeply explore key concepts of environmental planning and management to provide foundations for understanding, pursuing the practical objectives of, and attain a meaningful understanding of the requirements of employment in the field of environmental, watershed, community and land use planning and management.

The course is also informed by and built upon foundational concepts of sustainability. Sustainability is generally understood to require integration of theory and methods from a number of different scientific and social science disciplines. Our approach is to suggest numerous fundamental paradigms that guide sustainability in resource and community planning and environmental management today. One is grounded in the debate over limits to economic growth and the indefinite expansion of resource utilization implied by global economic development and increasing human population. Another in both social and environmental scientists' growing understanding of the fragility and vulnerability of the socio-technical and ecological systems on which human beings depend. A third is an overriding guiding principle of social and environmental justice in meaningful community-led planning and environmental management practices. These paradigms are not unrelated.

Course Methods: We will rely upon lecture and class discussion of materials that articulate and analyze the key theoretical concepts and perspectives noted above. We will also rely heavily on case studies as ways to elucidate, exemplify, and operationalize course concepts. Student performance will be evaluated in accordance with the activities discussed below under Grading.

Required Text: There is no required textbook, however, select materials will be made available from a variety of sources including: 1) Environmental Planning and Management (Randolph 2004), 2) The Environmental Handbook (Daniels and Daniels 2003), and 3) The Living Landscape: an ecological approach to landscape planning, Frederick Steiner. Course syllabus, lectures and supporting materials will be posted weekly on the CSUS 320 Desire to Learn (D2L) site (<https://d2l.msu.edu>).

Grading: Grading for this course will be based on the following point system:

Total possible points:	300 points
Mid-term exam/Exam #1	100 points
Final exam/Exam #2	100 points
Writing Assignments (6)	60 points
Class Reflections (26)	40 points

Grading Scale:

Grade	Percentage
4.0	93 - 100%
3.5	86 - 92%
3.0	80 - 85%
2.5	75 - 79%
2.0	70 - 74%
1.5	65 - 69%
1.0	60 - 64%
0.0	<60%

Week 1 (Jan. 6)**Overview of Course, and Environmental Planning & Management****Jan. 6**

Overview of the Syllabus, schedule, grading, goals of the course and course topics. We will also discuss the different perspectives of Environmental Planning and management – particularly those of the students.

Introduction to Environmental Planning and Management**Jan. 8**

Environmental Planning and Management – what is it, key issues, main components, influences, and different points of view.

Reading Assignment: Randolph 2004, chapters 1 and 2

Week 2 (Jan. 13)**Introduction to Environmental Planning and Management****Jan. 13**

Different paradigms, interdisciplinary considerations, and the various roles of the planner regarding Environmental Planning and Management.

Reading Assignment: Steiner 2000 chapter 1

Legal Foundations of Governmental Regulation**Jan. 15**

Historical foundations of Property rights, Eminent domain, and Regulatory authority in the U.S.

Reading Assignment: Randolph 2004, chapter 3

Week 3 (Jan. 20)

Legal Foundations of Governmental Regulation

Jan. 20 – University Holiday – No Class

Jan. 22

Overview of Land Use Laws, and an Introduction to Land Use Planning and Zoning in the U.S.

Reading Assignment: Daniels and Daniels 2003, chapter 2

Week 4 (Jan. 27)

Community Planning and Zoning

Jan. 27

Basics of Land Use Planning & Zoning (Part 1); Roles and responsibilities; Master Plans; planning process; and integrating Natural Resources into the Master Plan.

Reading Assignment: Steiner 2000, chapter 10

Jan. 29

Basics of Land Use Planning & Zoning (Part 2). Zoning ordinance and map; Development regulations; community decision-making; zoning board of appeals and variances.

Week 5 (Feb. 3)

Development Trends, Patterns, and Tools

Feb. 3

Development Patterns in MI over the past 50 years; Overview of Urban Sprawl (impacts and drivers); Review of Michigan's Land Division Act (1967; 1997).

Reading assignment: TBD

Feb. 5

An Overview of Michigan's Site Condominium and Subdivision Control Acts; And Conservation Tools such as Conservation Design, Purchase of Development Rights, Transfer of Development Rights, and Conservation Easements.

Reading assignment: Conservation zoning/design, MSU Extension summary

Week 6 (Feb. 10)

Tools for Natural Resource Protection

Feb. 11

Overview of State and Federal regulations that protect a variety of natural resources.

Reading assignment: Randolph 2004, Chapter 7

Feb. 12

Overview of regulatory and non-regulatory tools available to local communities in Michigan; case study of Singapore Dunes proposed development (located in Saugatuck at the mouth of the Kalamazoo River).

Reading assignment: <http://www.michiganradio.org/term/singapore-dunes-llc>

Week 7 (Feb. 17)

Planning for Community Infrastructure

Feb. 17

Community Infrastructure Planning and Investment. An overview of community infrastructure planning, impacts, and cost of community services.

Reading assignment: COCS Analysis CT

Feb. 19

Case study: Flint Water Crisis, Genesee County, Michigan. Short award-winning documentary: Here's to Flint; Infrastructure issues and proposed solutions (case studies: Breuner Marsh, CA, and Tollgate Wetlands, Lansing, MI).

Reading assignment: Novotny, Vladimir, et al. Water Centric Sustainable Communities: Planning, Retrofitting and Building the Next Urban Environment, Wiley, 2010.

Week 8 – (Feb. 24)

Feb. 24

Prep for Mid-term Exam

Feb. 26 Mid-term Exam

Week 9 (Mar. 2) – Spring Break!!

Week 10 – (Mar. 9)

Overview of the Great Lakes Region

Mar. 9

Overview of the history, natural resources, and biological diversity as well as issues such as invasive species, ownership and development patterns, legacy pollution, and exploitation associated with the Great Lakes Region.

Reading Assignment: Select articles TBD

Mar. 11

Great Lakes threats and degradation continued; Discuss ongoing efforts to protect Michigan's natural resources.

Reading Assignment: Select articles TBD

Week 11 – (Mar. 16)

Watershed Management and Planning

Mar. 16

Introduction to water and watersheds. Six key steps of a watershed management plan.

Case study: Upper and Lower Herring Lakes Protection Plan 2015 -2016, Benzie County, MI.

Reading assignment: Randolph 2004, chapter 10

Mar. 18

Six key steps of a watershed management plan continued. *Case study Upper and Lower Herring Lakes Protection Plan 2015 -2016, Benzie County, MI.*

Reading assignment: Marsh 1998, chapter 9

Week 12 – (Mar. 23)

No Classes this Week!

Week 13 – (Mar. 30)

Wetland Management and Protection

Mar. 30

What is a Wetland Anyway? Ways to Identify Wetlands; Different types of wetlands; Sources of wetland data; and different values of wetlands.

Reading assignment: Daniels and Daniels, chapter 10

April 1

Key Wetland Stressors; Tools for Protecting Wetlands; Case Study: Wetland Mitigation Banking

Reading assignment: Guidelines for Wetland Identification and Evaluation: Needs and Opportunities for Local Protection. MSUE Research Report 572.

Week 14 – (April 6)

Energy and the Environment

April 6

An overview of the sources of, demands for, and impacts of energy development on the environment in the US and Michigan.

Reading assignment: Daniels and Daniels 2003, chapter 17.

April 8

impacts of energy development continued, as well as planning, policy, zoning and regulatory solutions to minimize those impacts. Case studies: Kalamazoo River oil spill and Pipeline 5 in the Straits of Mackinac.

Reading assignment: TBD

Week 15 – (April 13)

Landscape Scale Conservation Planning

April 13

What exactly is a Landscape? What is Conservation Planning? Holistic approaches to managing ecologically defined landscapes. Explore key concepts such as scale, natural processes, and adaptive management. Examples of Past Regional Scale Conservation Plans from around the US.

Reading assignment: Steiner 2000, chapter 7

April 15

Key Elements of Conservation Planning; Current Methodologies and Case Studies.

Reading assignment: **TBD**

Week 16 – (April 20)

Landscape Scale Conservation Planning - Continued

April 20

Four different methodologies of large scale conservation planning: 1) Habitat Conservation Planning (USFWS); 2) Green Infrastructure Planning; 3) Green-Printing (TPL); and 4) Open Standards for the Practice of Conservation.

Reading Assignment:

April 22 (last day of class)

Review course material for the final exam

Final Exam - Wed. April 29, 8:00-10:00 PM. Rm 152, Natural Resources Building.

Final exam covers the second half of course materials only, not a comprehensive final exam.

Exams: No make-up exams will be scheduled. A written statement from a doctor will be required if medical reasons exist for failure to submit an exam during the examination period. In the event that absence during an examination exists, alternative means of grading student progress may be utilized.

ALSO NOTE : Michigan State University is committed to ensuring that the bereavement process of a student who loses a family member during a semester does not put the student at an academic disadvantage in their classes. If you require a grief absence, you should complete the "Grief Absence Request" web form (<https://www.reg.msu.edu/sitemap.aspx?Group=7>) no later than one week after knowledge of the circumstance. I will work with you to make appropriate accommodations so that you are not penalized due to a verified grief absence.

Reading and Viewing Assignments: No textbooks are required for CSUS 320: Environmental Planning and Management. However, Professor Paskus encourages three books that will support material covered in class: 1) Environmental Land Use Planning and Management, John Randolph, Island Press, 2004, ISBN 1-55963-948-2, 2) The Environmental Planning Handbook for Sustainable Communities and Regions, Tom and Katherine Daniels, Planners Press, 2003, ISBN 1-884829-66-X, and 3) The Living Landscape: an ecological approach to landscape planning, Frederick Steiner, McGraw Hill, 2nd edition, 2000, ISBN 0-07-079398-0.

Important Dates:

Monday, 1/6 – First day of Class

Monday, 1/20 – Martin Luther King, Jr. Day (No Classes)

Wed. 2/26 – Mid-term Exam

March 2 - 6 – Spring Break (No Classes)

Wed., 4/29 – Final Exam

Technology Use: While in class, students should turn off and put away their cell phones and other electronic devices. Sending and receiving texts or email messages by computer, tablet, or smart phone during class is distracting to students and instructors and is prohibited. The instructor will call out students who are using such devices for such purposes during class and ask them to stop or leave the classroom.

Accommodations for Students with Disabilities: Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517 -884-RCPD or on the web at rcpd.msu.edu. Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to an instructor during the second week of class and/or two weeks prior to the accommodation date (i.e., test, project, etc.). Requests received after this date may not be honored.

Academic Integrity: [Article 2.III.B.2](#) of the Academic Freedom Report states: "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Department of Community Sustainability adheres to the policies on academic honesty specified in General Student Regulation 1.0, [Protection of Scholarship and Grades](#); the all-University Policy on [Integrity of Scholarship and Grades](#); and [Ordinance 17.00](#), Examinations. Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com website to complete any course work in this course. Students who violate MSU regulations on Protection of Scholarship and Grades will receive a failing grade in the course or on the assignment.

Instances of plagiarism constitute academic dishonesty and will result in a grade of zero for the assignment in which plagiarism occurs. See <https://www.msu.edu/unit/ombud/academic-integrity/plagiarism-policy.html> for a definition and discussion of plagiarism.

Faculty are required to report all instances in which a penalty grade is given for academic dishonesty. Students reported for academic dishonesty are required to take an online course about the integrity of scholarship and grades. A hold will be placed on the student's account until such time as the student completes the course. This course is overseen by the Associate Provost for Undergraduate Education.

Citations and references: The APA format should be used for any in-text citations and reference lists when you rely on information from other sources for writing homework assignments. A good reference site for APA style can be found at <https://owl.english.purdue.edu/owl/resource/560/01/>.

Sexual Misconduct: MSU is committed to fostering a safe, productive learning environment. Title IX and MSU's policy prohibits discrimination on the basis of sex. Sexual misconduct — including harassment, domestic and dating violence, sexual assault, and stalking — is also prohibited at our school.

MSU encourages anyone experiencing sexual misconduct to talk to someone about what happened, so they can get the support they need and our school can respond appropriately. If you wish to speak confidentially about an incident of sexual misconduct, want more information about filing a report, or have questions about school policies and procedures, please contact our Title IX Coordinator, which can be found on our school's website.

Our school is legally obligated to investigate reports of sexual misconduct, and therefore it cannot guarantee the confidentiality of a report, but it will consider a request for confidentiality and respect it to the extent possible.

As a teacher, **I am required to report incidents** of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. <https://civilrights.msu.edu/>.