

CSUS 476
Natural Resource Recreation Management

Fall 2014
5:00–7:30 PM Mon. & Wed. + 2 hours arranged
221 Natural Resources Building

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Meeting Times: Tuesday and Thursday: 2:40 p.m. to 4:00 p.m.
Natural Resource Building, Room 221

Office Hours: 2:00-4:00PM Wednesdays

CATALOG DESCRIPTION

Natural resource recreation management principles, tools and models. Applications to trail, camping, watercraft and dispersed recreation settings. Security of visitors, resources and facilities. Case studies and integrated problem solving. Offered first half of semester.

INTRODUCTION

Natural resource based recreation is an integral part of our society and culture. It is a potent economic, ecological, political and social force in directing the management of public and private lands and influencing the environment. It involves the public, non-profit and commercial sectors of our society. It requires knowledge in both natural and social science and the ability to use that knowledge to plan for the future and manage people, facilities and resources. Sustaining the productive capability of the environment, while meeting the recreational and other needs of current and future generations, is the on-going challenge of natural resource recreation managers.

OBJECTIVES

This course is designed to provide you with critical information and insight in natural resource based recreation management. It will use actual situations to demonstrate approaches to management problems. It will also integrate with knowledge gained by students in related coursework and outdoor experiences including work and recreation. Finally, you will apply the knowledge you have gained to public natural resource based recreation settings.

Specific Objectives

1. Student will understand foundations and practice of sustainable natural resource recreation management.
2. Student will create, deploy and evaluate plans for management of trails, camping areas, water based recreation and dispersed recreation based on best management practices.
3. Student will understand and use visitor, facility and resource management models, techniques, tools and approaches that focus on accountability, security and sustainability.
4. Student will implement sustainable management practices in an on-site project benefiting public natural resource recreation in the Mid-Michigan area.
5. Student will integrate critical thinking, systems thinking, ecological literacy and leadership through their use of initiative and practical skills in multiple public sector field projects.
6. Student will evaluate public provision of natural resource recreation opportunity based on best management practices and suggest feasible improvements for evaluated situations.
7. Student will apply knowledge gained from objectives 1 – 6 in class participation, presentations, examinations, an on-site field project and an evaluation project.

TEXT

All readings are web based and links are provided on the CSUS 476 FS14 Class Calendar which is emailed to all so you just click on the link. This provides students considerable financial savings and the most current content, but it also requires responsibility on the part of the student. **Students need to be prepared for class by reading all assigned documents/articles before class. The readings include agency manuals, video clips and research reports. They complement lecture/discussion and are not repeated in lecture. Attendance in class is crucial. The instructor's notes/power points are NOT available on the web or in other formats outside of class.**

EXAMS

There will be 2 examinations. They may contain essay, multiple choice, true/false and matching questions. They are listed in the class calendar. Each will cover lecture, readings, films, field assignments and visits, class discussion and presentations. They will be the only activity for their assigned class period.

FOOD

Since class occurs during a dinner time for some, feel free to bring in a snack/drink to tide you over.

FIELD WORK DAYS ASSIGNMENT and POWERPOINT

There are two scheduled field work days: one at Sleepy Hollow State Park and one at Clinton Lakes County Park. They are Saturday September 6 (Sleepy Hollow) or Sunday September 7 (Clinton Lakes). In your work day project please evaluate the before condition, the management changes your team was involved in implementing and why and suggested feasible future monitoring at the project site(s). For the trail projects use the following criteria from the rules of

thumb for sustainable trails from the US Forest Service Trail Manual. Working either individually or in a group of 2-4, in a powerpoint of 8-12 slides, including photographs:

Assess how well our **Trail Triage** efforts addressed:

1. Correcting truly unsafe situations.
2. Correcting problems that were causing significant trail damage, such as erosion.
3. Restoring the trail to the planned design standard. The ease of finding and traveling the trail should match the design specifications for the recreational setting and target users.

In your powerpoint assessment, consider the components of a **Sustainable Trail**:

- Outsloped tread
- Sustainable grades
- Frequent grade reversals
- Erosion resistance
- Path that traverses along the sideslope (sidehill design)
- Provision for sheet flow of runoff
- Positive user experiences
- Low maintenance needed to sustain the trail

For the Clinton Lakes silt fence project use the Sustainable Soil and Water Quality Practices from the first class period. For bluebird boxes use appropriate information from the US Fish and Wildlife Service and for the site cleanup, use criteria number one from Trail Triage above.

The powerpoint presentation from each group or individual should be from 10 minutes long + 5 minutes for Q and A. It will be on Wednesday September 17, 2014 in class. We will have pizza and will stay until all presentations are finished. **If a student works the full day on both field work days or the equivalent (if able to arrange with the instructor and the management of Sleepy Hollow State Park or Clinton Lakes County Park/Motz Park), they will receive an extra 40 points.**

EVALUATION PROJECT

Students have two project options. Regardless of the option you choose, each student will turn in the paper October 13, 2014 in class. The project will be done in a team of 2- 4 people, unless an individual wishes to work by him/herself. Students choose their team members.

Option 1

Mid-Michigan is blessed with a wide array of public and private natural resource based recreation options. The public options include state and local parks, state game, wildlife, research and recreation areas, public water access sites and non-motorized trail corridors. There are also commercial/non-profit natural resource venues such as commercial campgrounds, youth camps, shooting preserves, watercraft liveries, etc. After selecting such a venue (for private sector must get permission from management) and receiving approval in writing from the instructor, in a paper of **5 – 8 pages, the student team will examine one of the five sets of facilities/opportunities:**

Waterfront/Beach/Boat launch
Family and organization campgrounds
Dispersed recreation opportunities (shore/pier fishing, nature observation, hunting)
Day use/non-waterfront facilities (shelters, picnic areas, sports fields, playgrounds)
Visitor comfort/need facilities (restrooms, parking, drinking fountains, signage)

Be sure to review the rules regarding each facility/opportunity area in your examination.

In this examination, accomplish the following:

- a. Describe the site, its managing organization and approximate level of annual site visitation.
- b. Describe the planned and actual situation with the set of facilities/opportunities chosen
- c. Document your description photographically
- d. Identify and document two key management situations that need to be improved for the site to achieve the planned situation for the facility/opportunity set chosen. This should be both written and photographic. Base your selection on readings from the literature (including materials from this course and other sources), lecture and other knowledge such as that gained from work experience, recreational experience, other courses, etc.
- e. Provide one or more specific management recommendations based on best management practices for each of the two challenges identified.
- f. Prioritize your proposed management actions. Explain rationale for your priority ranking.
- g. Provide cost estimates for each management recommendation. Be realistic and look to get things done efficiently. Think of the size/budget of the managing entity in your proposals and don't propose million dollar projects for small organizations.

For this assignment, there are more likely to be right and wrong management. If you choose to evaluate a site with a fee, you will be responsible for paying that fee.

Option 2

1. In a paper of 10 – 14 pages, with a minimum of 7 references the student team will:

- I. Identify and provide background on a critical challenge currently facing natural resource based recreation. It may be a general issue, such as privatizing of public recreation or a specific issue, such as conflict on a specific section of trail among trail users.
 - a. Describe the current situation and the factors that led to it.
 - b. Project the consequences if the situation continues on its current course for the next decade.
 - c. Which specific management entities or type of management entities does this concern? They may be public, non-profit or commercial.

- II. Discuss in depth a preferred set of management actions for the management entity identified.
- Describe the key management entity and its role in providing this type of natural resource based recreation.
 - Describe the two most important management actions that should take place to resolve the challenge.
 - Consider how the actions you suggest may be realistically funded and how they should be implemented.
 - Compare and contrast your proposed actions with the plans of the current managing organization for the next decade to address the challenge. Does the current manager consider the challenges you note as important? How do your proposed management actions differ from theirs for the next decade in relationship to the challenges you cited? Explain.

There are likely to be fewer right or wrong answers with this option. Rather, there are well-researched, persuasive points of view, and poorly researched, weak points of view. Work and succeed at writing the former.

LITERATURE CITED

In your paper, use a scientific writing format (e.g. link specific literature to an idea, concept or fact, use author(s) name (s) and year of publication, provide full web address for on-line information, etc.) to document your paper.

EVALUATION

All grading will be on a straight scale. There will be no opportunities for extra credit other than those the instructor provides to all students on the 2 scheduled exams.

Assignments	Points	Percentage = Grade	Points
Evaluation Project	100	$\geq 90.0\% =$	4.0 360 – 400
Exams	200	85% - 89.95%=3.5	340 – 359
Field Day Work/Powerpoint	100	80% - 84.95%=3.0	320 - 339
Total	400	75% - 79.95%=2.5	300 – 319
		70% - 74.95%=2.0	280 – 299
		65% - 69.95%=1.5	260 – 279
		60% - 64.95%=1.0	240 – 259
		< 60% = 0.0	< 240

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.

CSUS 476 CLASS CALENDAR FS14

This is a 4 credit half semester class (8/27-10/15) with 6 class hours per week plus an additional 2 hours per week arranged. The hours arranged will be met through participation in one of two field days.

- 8/27 Class Introductions, Responsibilities, Field Work Days, Student Career Goals & NR Recreation Experiences
Limiting Negative Environmental Impacts of Recreation with Best Management Practices to Protect Soil and Water
http://www.michigan.gov/dnr/0,1607,7-153-30301_31154_31261---,00.html. (only chap 5-7 + Appendices A and E)
- 9/1 **Labor Day Holiday - No Class so take the opportunity to enjoy Clinton Lakes County Park or Sleepy Hollow State Park**
- 9/3 Non-Motorized Trails: Hiking, Mountain Biking, Horseback Riding and X-C Skiing (*Building Mountain Bike Trails: Sustainable Singletrack DVD; Introduction to Mechanized Trail Equipment DVD*)
<http://www.fhwa.dot.gov/environment/fspubs/07232806/toc.htm> (read the whole document!!!)
- 9/6 Field Work Experience at Sleepy Hollow State Park, 7835 E. Price Road, Laingsburg, MI 48848 (if you need to Mapquest). Wear long pants, work shoes/boots and bring insect repellent, water, etc. so you will be comfortable and hydrated. We will be working on the non-motorized trail system with park personnel with a 9AM start, lunch provided at noon (cooked by yours truly) and done by 4PM. No flip flops, shorts, etc. We will be using shovels, loppers, hand saws, rakes, etc
- 9/7 Field Work Experience at Clinton Lakes County Park 4665 N. DeWitt Rd., St. Johns, MI 48879 (if you need to Mapquest). Wear long pants, work shoes/boots and bring insect repellent, water, etc. so you will be comfortable and hydrated. We will be working on installing a silt fence along the west shore of Little Clinton Lake, building and installing bluebird nesting boxes (materials donated by US Fish and Wildlife Service) and cleaning up plastic and metal parts from the former gravel crushing site that was missed by the large equipment. We will start at 9AM, lunch provided at noon (cooked by yours truly) and done by 4PM. No flip flops, shorts, etc. We will be using hammers, shovels, rakes, staple guns, etc.
- If you are unable to make a field day, you will make arrangements with Dr. Nelson to do alternate field work at Sleepy Hollow, Clinton Lakes or another public natural resource recreation site.
- 9/8 Managing Fire in NR Recreation Settings (*Fire Wars DVD*)

- <http://www.nwcg.gov/pms/pubs/410-1/chapter01.pdf>. (pages 1-28 employee safety)
<http://training.nwcg.gov/courses/s110.html>. (view 14 minute fire orientation video)
- 9/10 Comprehensive Planning in Natural Resource Recreation
http://www.michigan.gov/documents/dnr/IC1924-Guidelines_for_the_Development_of_Community_Park_Recreation_Open_Space_and_Greenways_Plans_-_2012_373874_7.pdf (pgs 1-27)
- 9/15 Assessing Natural Resource Recreation Use and Users
<http://trails.anr.msu.edu/?p=314> (pgs. 1-6)
- 9/17 Fieldwork Experiences Presentations with dinner provided 221 NR
- 9/22 Exam 1**
- 9/24 Understanding Maintenance and Managing Camping
- 9/29 Managing Rail-Trails
(Making the Connection - Rail Trails in MI Today DVD)
- 10/1 Managing Waterway Based Recreation
(Construction Techniques for Recreational Boating Access Facilities DVD)
<http://www.sobaus.org/documents/NASBLAWaterWayManagement.pdf> (pgs 9-47)
<http://www.nps.gov/ncrc/programs/rtca/helpfultools/launchguide.pdf> (pgs 4-13)
- 10/6 Managing Motorized Trails: Off-Road Vehicles
(Trail Planning, Monitoring, Maintenance and Signing DVD)
http://www.michigan.gov/documents/dnr/ORV2010ReportFinal_327707_7.pdf. (pages 1-5)
- 10/8 Managing Motorized Trails: Snowmobiling
http://www.michigan.gov/documents/dnr/SNOWMOBILE-RPT_322022_7.pdf.
 (pages 1-5)
http://www.snowmobilers.org/groomer_guide/GroomerGuidePart1.pdf.
 And Managing Dispersed Recreation
- 10/13 Philosophy and Practice of Security and Law Enforcement in NR Recreation
Evaluation Project Paper due at the beginning of class
- 10/15 Exam 2**

Enjoy the rest of the semester and the great outdoors. Your field work days have provided a lasting legacy for natural resource recreation. You have made Mid-Michigan a better place! I look forward to working with you on your internship in the near future if you are an NRRT/SPRT major.