Syllabus for
EHI 311 Ecosystem-Based Management
Thursday 2:30 to 5:20 pm in Sustainability Studies Conference Room W0518, Melville Library

Instructor: Dr. James Hoffmann
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Phone: 631-632-5366
Email: james.hoffmann@stonybrook.edu
Office Hours: Tuesdays 4:00 to 5:00 pm and Fridays 3:00 to 4:00 pm, and by appointment
Blackboard: blackboard.stonybrook.edu

Course Description: Ecosystem-Based Management (EBM) is an emerging management paradigm for balancing ecosystem health and human activities. EBM stresses that management must 1) integrate ecological, social, economic, and institutional views, 2) produce sustainable results, 3) consider uncertainty and risks in making management decisions, and 4) utilize adaptive management practices. This course will examine these principles and identify ways they may be put into practice.

Prerequisites: SBC 111 or ENS 101; BIO 351

Additional Course Information: Class consists of an interactive mix of lectures, discussion of assigned readings, student-led discussion of case studies, and a student team-based class project that results in a Wiki report and presentation. We begin with a brief review of the principles of biological communities, ecosystem and landscape ecology, and conservation biology as they pertain to EBM. We then discuss the four elements of EBM and examine how they are implemented via specific case studies. Then student teams participate in a field trip to familiarize themselves with one local example of EBM (i.e. Piping Plover protection programs, Carmans River Master Plan, NYS Pine Barrens Preserve, Peconic Bay Estuary Program, Mashomack Preserve). Subsequently, students conduct an in-depth information gathering (interviewing managers, reviewing and analyzing agency documents and news articles...) to evaluate the chosen locality’s compliance with the four elements of EBM and then summarize their findings.

Learning Objectives:

- Explain why and how the principles of conservation biology and community, ecosystem and landscape ecology are incorporated into the EBM approach.
- Execute a variety of data gathering and analysis techniques for evaluating the effectiveness of EBM through specific case studies.
- Critique the effective incorporation and integration among ecological, social, economic, and institutional views as implemented in specific EBM plans.
- Evaluate the effectiveness of EBM plans for sustainable results.
- Explain how uncertainty is incorporated into risk management decisions in EBM plans and assess their effectiveness in specific situations.
- Describe and evaluate different adaptive management practices and their degree of success through analyses of specific case studies of EBM.
• Conduct an extensive assessment of a local example of EBM and produce a Wiki-based report and give a presentation of your findings.

Required Text:
None, all readings are posted on Blackboard and include scientific articles, chapters from text books, news articles, web-based readings, and UN and governmental reports.

Course Requirements:

Attendance and participation: Students are responsible for attending all course meetings. Attendance is taken each week at the beginning of class and counts toward your final grade. Unexcused absences, excessive lateness (more than 15 minutes) or leaving class early without prior permission will result in not earning attendance points (10 points per class).

Mid-Term Exam: This will be a short answer and essay-based written exam assessing your knowledge of (1) the principles of biological communities, ecosystem and landscape ecology, and conservation biology as they pertain to EBM, and (2) the four elements of EBM. The exam will be scheduled for week 6 (see meeting schedule below).

Case study assignment: Each student will be assigned a site-specific EBM case study and will be responsible for leading a class discussion of this site. They will also be responsible for providing a one-page summary handout of their findings that will be used to guide the class discussion. Specific details of this assignment will be provided on the class BlackBoard site.

Project: Conduct an in-depth study of how EBM is being applied at a local Long Island site. The project consists of the following two activities:
1. Creating a comprehensive Wiki report containing all research data on the chosen site.
2. Presenting an oral summary report of your findings using an annotated PowerPoint file. Specific details of this assignment will be provided on the class BlackBoard site.

Grading:
Attendance and participation 20%
Mid-term exam 20%
Case study assignment 20%
Project
• Wiki-based report 20%
• Presentation 20%

Basis for grading:

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100 - 95</td>
<td>A</td>
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<tr>
<td>94 - 91</td>
<td>A-</td>
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<tr>
<td>90 - 88</td>
<td>B+</td>
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<td>87 - 84</td>
<td>B</td>
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<td>80 - 78</td>
<td>C+</td>
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<td>77 - 74</td>
<td>C</td>
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### Tentative Meeting Schedule:

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPICS</th>
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<tbody>
<tr>
<td>Week 3 – 9/12/2013</td>
<td>Discussion of the basic principles and structure/function of conservation biology. Discussion of assigned readings.</td>
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<tr>
<td>Week 4 – 9/19/2013</td>
<td>Discussion of the basic principles and structure/function of landscape ecology. Discussion of assigned readings.</td>
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<td>Week 5 – 9/26/2013</td>
<td>Discussion of the basic principles of EBM. Discussion of assigned readings.</td>
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<td>Week 6 – 10/3/2013</td>
<td>EXAM; Begin Case Studies</td>
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<td>Week 7 – 10/10/2013</td>
<td>EBM Case Studies; Project scope</td>
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<td>Week 8 – 10/17/2013</td>
<td>EBM Case Studies; Work on project in class</td>
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<td>Week 9 – 10/24/2013</td>
<td>EBM Case Studies; Work on project in class</td>
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<td>Week 10 – 10/31/2013</td>
<td>EBM Case Studies; Work on project in class</td>
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<td>Week 11 – 11/7/2013</td>
<td>EBM Case Studies; Work on project in class</td>
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<td>Week 12 – 11/14/2013</td>
<td>Work on project in class</td>
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<td>Week 13 – 11/21/2013</td>
<td>Work on project in class</td>
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<td>Week 14 – 11/28/2013</td>
<td>THANKSGIVING NO CLASS</td>
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<tr>
<td>Week 15 – 12/5/2013</td>
<td>Completion of Wiki and Project Presentations</td>
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Blackboard: You can access class information, documents, and assignments on-line at: http://blackboard.stonybrook.edu If you used Blackboard during the previous semester, your login information (NetID and Password) has not changed. If you have never used Stony Brook's Blackboard system: for help or more information see: http://it.stonybrook.edu/services/blackboard For problems logging in, go to the helpdesk in the Main Library SINC Site or the Union SINC Site, you can also call: 631-632-9602 or e-mail: helpme@ic.sunysb.edu

Student’s Responsibility: Students are required to use their Stony Brook University e-mail for all official communications. Ensure you have entered a working email account in your Black Board account. Access your BB account and make sure that you have access to this class, send yourself a test email using the email option within BB. Adhere to deadlines for term paper and other assignments. Adhere to the formatting instructions for the term paper. Seek help from instructor when problems arise. Should you have a disability, follow the regulations spelled out below so that it can be evaluated as soon as possible.

Cell Phone and Electronic Devices: Use of cell phones, blackberries, laptop computers, iPods, MP3 players, and other audio and telecommunications devices is strictly prohibited during class. The only exceptions are through permission granted by the instructor for special purposes. Clickers are excluded from this prohibition, if required for the class. During regular class sessions, cell phones must be either in ‘vibrate mode’ or turned off. Calls cannot be answered. Text messaging is not allowed during class. Cell phones must be turned off and enclosed in a case, book bag, briefcase, or the like during tests and exams. YOU are responsible for ensuring this policy is followed. Students MAY NOT have cell phones, electronic dictionaries, calculators, pagers or other “information rich” devices (anything that can receive and/or store many pages of text) in their possession during tests and exams.

Academic Dishonesty Policy: Academic dishonesty is a serious offense and a breach of academic integrity that may result in failure of the course or failure for the individual paper or assignment. The “Code of Student Conduct” states that all forms of academic dishonesty, including the following are prohibited (see student handbook):

- Plagiarism – the intentional use of ideas or words of another as one’s own paper or other academic assignments. If you are unsure of what constitutes Plagiarism visit this document http://www.wpacouncil.org/positions/WPAplagiarism.pdf or ask the instructor.
- Cheating during examinations, whether by copying from a fellow student or by using information in the form of unauthorized aids brought to the examination.
- The submission of work for any assignment that has been prepared by another student.

Academic Integrity Statement:
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their
school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Classroom Policy: Students are expected to follow the Stony Brook Code of Conduct while in the classroom. If you are not familiar with the Code you can find it at: http://studentaffairs.stonybrook.edu/sites/handbook/Code_1-22-03.pdf Behavior that is disruptive to the function of the class, other students, or the instructor will not be tolerated. Poor class behavior or violations to the Code of Conduct will lead to removal from the class, possible withdrawal, or suspension. Food is not permitted in class. Beverages are OK, but please bring a container the can be closed to reduce spills. If a spill occurs please clean it up immediately.

Instructional Responsibilities: The University's statement of Minimal Instructional Responsibilities and Minimal Undergraduate Student Responsibilities are protocols with which you may already be familiar. They were established by the University Senate in 1996. If you have not already done so, please review them carefully. Both statements may be found beginning on page 81 of the Academic Policies and Regulations section of the on-line Undergraduate Bulletin: http://www.stonybrook.edu/ugrbulletin/current/index.shtml

DISABILITY SUPPORT SERVICES (DSS) STATEMENT
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: http://www.stonybrook.edu/ehs/fire/disabilities

CRITICAL INCIDENT MANAGEMENT:
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.

Course Content:
Course material accessed from Blackboard, SB Connect, SB Capture or a Stony Brook Course website is for the exclusive use of students who are currently enrolled in the course. Content from these systems cannot be reused or distributed without written permission of the instructor and/or the copyright holder.

Duplication of materials protected by copyright, without permission of the copyright holder is a violation of the Federal copyright law, as well as a violation of Stony Brook's Academic
Integrity and Student Conduct Codes
http://www.stonybrook.edu/uaa/academicjudiciary/policies.shtml

**Electronic Communication Statement**
Email and especially email sent via Blackboard (http://blackboard.stonybrook.edu) is one of the ways the faculty officially communicates with you for this course. It is your responsibility to make sure that you read your email in your official University email account. For most students that is Google Apps for Education (http://www.stonybrook.edu/mycloud), but you may verify your official Electronic Post Office (EPO) address at http://it.stonybrook.edu/help/kb/checking-or-changing-your-mail-forwarding-address-in-the-epo.

If you choose to forward your official University email to another off-campus account, faculty are not responsible for any undeliverable messages to your alternative personal accounts. You can set up Google Mail forwarding using these DoIT-provided instructions found at http://it.stonybrook.edu/help/kb.setting-up-mail-forwarding-in-google-mail.

If you need technical assistance, please contact Client Support at (631) 632-9800 or supportteam@stonybrook.edu.