Spring
Stony Brook University, School of Marine and Atmospheric Sciences
MAR 315, 3 credits

Marine Conservation

This course satisfies the DEC category H
This course satisfies the SBC categories:
ESI (Evaluate and Synthesize Researched Information), STAS (Explore Interconnectedness), & SPK (Speak Effectively Before an Audience)

Description: An exploration of how the fundamental concepts of Conservation Biology, a synthetic field that incorporates principles of ecology, biogeography, population genetics, systematics, evolutionary biology, environmental sciences, sociology, anthropology, and philosophy are being applied toward the conservation of biological diversity in the marine environment. Course Prerequisites: Ecology or Marine Ecology

Course Learning Objectives:
By assessing scientific information (data, concepts, & models), students will understand and explain:

● factors affecting the distribution of marine life and the dynamics of marine populations.
● contemporary and historic human interactions with marine life.
● appropriate terminology used in the discussion of marine conservation.

By locating, analyzing, and synthesizing relevant scientific information, students will develop and present an oral argument before the class, fulfilling the requirements of the ESI, STAS, and SPK SBC categories.

These objectives will also be met through participation in lectures and discussions, as well as reading assigned course material. Progress will be assessed through performance on three examinations and periodic quizzes, in-class discussions, and submission of synthesis forms after each guest lecturer.

Lecture: TBA

Instructor: Dr. Kurt Bretsch
Office hours: TBA
(or by email appointment) Kurt.Bretsch@stonybrook.edu


Attendance: Required at all lectures. Many topics, such as current events, are not in your reading assignments and will be discussed in lecture. One full week advance notice is required if you must miss a lecture; we will discuss your options. Absences due to illness are excusable, but require submission of a signed doctor’s note. Each unexcused absence will typically result in a reduction of 2 points from your final grade.
Grade Breakdown

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<th>Activity</th>
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<tr>
<td>Exam 1</td>
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<td>Exam 2</td>
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<td>Exam 3</td>
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<tr>
<td>Presentation</td>
<td>14</td>
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<tr>
<td>In class assessment</td>
<td>17</td>
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<tr>
<td>Seminar response form</td>
<td>+3 (optional)</td>
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Completion of all activities is a requirement to pass the course.

**Presentation:** You will independently explore a topic within marine conservation biology (e.g. a marine system, an issue, a taxon, the policies of a specific region or country, etc.) and develop your presentation skills by sharing your findings with the class via a concise 11 min PowerPoint presentation. As an audience member, expect to ask questions; a portion of your presentation grade will be based on the number and quality of questions you ask. Refer to the 2 documents posted on blackboard for presentation instructions and evaluation criteria. Presentations will occur during the last 3 meeting times.

**In class assessment:** You will be evaluated on your preparation for class and level of participation in discussions and other class activities. Expect to have periodic, but typically unannounced, assessments of your reading comprehension (ie. quizzes).

You are also required to submit short synthesis forms (SRFs) after each guest lecturer.

**Seminar response form (SRF) (extra credit, 3 pts):** Attend a marine science seminar this spring and submit a completed SRF (download from Blackboard, under Course Documents) to add 3 pts to your final course grade. Only one form may be submitted for extra credit. I strongly recommend that you take advantage of this opportunity. Do not wait until the end of the semester when your workload is high.

Seminars are usually held in Endeavour 120 at noon on most Wednesdays and Fridays. Seminars are also held at the Southampton campus at 7:30 pm on designated Fridays. On these dates, a SoMAS van will leave SoMAS at 6:00 pm and the SAC loop at 6:10 pm and return to Stony Brook campus from Southampton by 9:30 - 10:00 pm. To reserve a seat, email Bill Wise (william.wise@stonybrook.edu) by noon on the day of the talk. The van will not run unless there are at least two reservations.

The seminar schedule can be viewed at:
http://www.somas.stonybrook.edu/news_events/seminar.html

Note that the seminar you choose for this class can not fulfill a requirement in another course. If you would like to attend a marine conservation relevant seminar that is not in the SoMAS or Southampton schedules, you must obtain permission from me (via email) at least one week before the seminar date.
Other:

Incomplete lecture notes will be posted on Blackboard by noon the day before each lecture. Print out the notes or bring your laptop to class. Laptops can only be used during class for Marine Conservation activities.

Mobile communication devices must remain off during class.

All class announcements/communications will be through your University email. If you prefer a different email account, you must set up your University account to forward messages to your preferred account. Check your email frequently.

Americans with Disabilities Act:

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.

Academic Integrity:

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/uaa/academicjudiciary/

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. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.
## Marine Conservation

**MAR 315**  
**Spring 2015**

<table>
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<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Text Readings</th>
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| 01   | TBA   | Introduction to course  
Intro. to Conservation Biology | --  
Forward & Preface |
| 02   | TBA   | Intro. to Marine Conservation Biology  
Taxonomy I | Chs 1 & 2  
Ch 3 |
| 03   | TBA   | Taxonomy II & Census of Marine Life  
Marine Populations & Extinction Risks | Ch 4  
Ch 5 |
| 04   | TBA   | Nutrient Over Enrichment  
Guest speaker 1 – TBA | Ch 7  
TBA |
| 05   | TBA   | Exam 1  
Bioinvasions | --  
Ch 8 |
| 06   | TBA   | Diseases  
Multiple Stressors | Ch 9  
Ch 10 |
| 07   | TBA   | Fisheries I  
Fisheries II | Chs 11, 12  
Ch 13, 14, 15 |
| 08   | TBA   | **Spring Break – No Class** | ---  
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| 09   | TBA   | Marine Protected Areas (see MPA reading)  
Guest speaker 2 – TBA | Chs 16 & 17  
TBA |
| 10   | TBA   | Exam 2  
Conservation in the Open Ocean & Metapopulations | --  
Chs 18 & 19 |
| 11   | TBA   | Guest speaker 3 – TBA  
Cross-cultural Practices and Ethics | TBA  
Ch 20 |
| 12   | TBA   | Shark Conservation & Film pt 1  
Film pt 2, Legal Regimes and Uncertainty | TBA  
Chs 21 & 22 |
| 13   | TBA   | Guest speaker 4 - Christie Pfortner, MA MCP  
**Topic Due**  
Restoration & Behavioral Approaches to Mar Cons | TBA  
Chs 6 & 23 |
| 14   | TBA   | Exam 3  
Presentations | --  
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| 15   | TBA   | Presentations  
Presentations | --  
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**Take note:**
- The schedule will likely change due to the availability of guest lecturers or weather events.
- Exam dates are fixed.
- Additional readings will be assigned throughout the semester.
- TBA = To Be Announced
- There will NOT be a final exam.