

**MARINE RESERVES PCB 4467-C
ADVANCED MARINE RESERVES PCB 5418-C
A Global Learning Course
Fall 2015**

Instructor: Dr. (Claudia) Ligia Collado-Vides
Office: MMC- OE 211
Office Hours: Monday 11:00 to 1:00 and Tuesday 3:00 to 5:00
ONLY by appointment, email at colladol@fiu.edu

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Schedule

Semester: August 24th – December 11th, 2015
Lecture: Monday and Wednesday 9:00 to 10:15 AM **VH 133**
Lab: Wednesday
Section U01 11:00-1:45 PM **GC 279 A**
Section U02 3:00 – 5:45 PM **OE 100**

Introduction

Coastal zones and particularly the Caribbean region are well known for their beautiful beaches and complex ecosystems. Extremely rapid tourist development, accompanied by high population growth, has modified the structure of the human and biological communities, causing significant adverse environmental impacts to our marine resources. Coastal problems are also affected by local, regional and global stressors that need to be incorporated in any analysis. Therefore, management of these resources has become a need and a challenge. The goal of establishing Marine Protected Areas (MPA) is to protect the fisheries, ecosystems, and the biodiversity of highly affected or threatened areas or species, as well as to benefit the dependent human communities and their cultural values. Knowledge of social concepts such as co-management, respect of native cultures and property rights; and biological concepts, such as connectivity, food web size and networks, demography of threatened species, and monitoring are essential for the design and management of a successful MPA. These activities are complex, and only well-trained people with global awareness and perspective will be able to handle the different challenges of the design, establishment and management of an MPA.

Course description

The course employs active learning strategies to increase students' global awareness, global perspective, and attitude of global engagement. Global

perspectives will be achieved through lectures and different learning strategies that will provide information on biological and sociological concepts as well as methods for the design and management of marine protected areas around the globe.

This course has a lecture and laboratory sections which are very close related. The laboratory is mandatory in this class.

Lecture section:

Through lectures, guest speakers, readings and discussions students will get acquainted with MPAs' from different countries and cultures. Through the analysis of particular cases students will learn about the consequences and management strategies set in different MPAs'.

Logistics: PLEASE RED THIS IS VERY IMPORTANT

Each class you are expected to come with at least one research paper starting the second week of the semester. You will need to bring notes of the most important concepts or ideas about how your source relates to the topic of the day. This is an important part of your grade. In class you will share these sources with your group members, you will discuss and enrich your perspective about the topic. Please give a grade to each member describing its level of participation in the group discussion. The first class your paper is provided look at the Mandatory Readings sections in Blackboard. Starting second week you need to bring your own sources and notes.

Notes and discussion for the week will be used to compose a weekly one page essay to be submitted individually via Turnitin. You will submit your essay Sunday before the following working week.

For your one page essay you need to define your objectives and work towards achieving them, always in the context of your selected ecosystem and thinking globally, regional and locally.

Learning what is important, what is correct, what needs improvement is part of a professional's life. In this class you will be evaluating your work and your peers constantly.

Exams will be short question essay that will take half of the time of the class-session. The second half will be a peer evaluation of your exam. Your peer tuned by professor evaluation will count as 50% of your exam grade. The other 50% is the professor evaluation of your rubric, how much effort and how well prepared were you to grade your peer. Grading requires a deep understanding of the material. A rubric will be provided and your grade will be a combination of your peer. Professor evaluation, and your work evaluating your peer.

Objectives

Provide students with a global knowledge of biological and social methods and problems related with the management of Marine protected Areas.

Provide students with a global perspective by analyzing multiple marines protected areas around the globe. Special emphasis will be on South Florida and Caribbean within a global context.

Global Learning Course Outcomes

1. Through the study of Marine Protected Areas, students will be able to demonstrate knowledge of the interrelatedness of social concepts such as co-management, respect of native cultures and property rights; and biological concepts, such as diversity, fisheries, connectivity, food web, and coral reef networks at local, and global scales.
2. Students will be able to develop a proposal for a World Heritage site. Each proposal will try to convince the World Heritage that this particular Marine Protected Area is worth the label and protection provided by the World Heritage.
3. Students will be able to participate in a town hall meeting to solve real problems faced by Marine reserves. Students will be able to demonstrate their willingness to engage in local problem solving and interact with different cultural sectors.

Textbook

Required textbook:

Marine Protected Areas: tools for sustaining ocean ecosystems. National Academy Press. Washington D.C. 2001. 232 p. ISBN: 0-309-07286-7. Provided by instructor.

Complementary books:

Salm, R. V., J. R. Clark and J. Siirila. 2000. Marine and coastal protected areas. A guide for planners and managers. Third Edition. IUCN. Washington D.C. xxi: 371 p.

Castro, P. and M. Huber. (7th-9th editions). Marine Biology. McGraw-Hill Publishing Company. ISBN 978-0-07-352420-7.

Speight, M. and P. Henderson. 2010. Marine Ecology. Concepts and applications. Wiley-Blackwell. 276 p. ISBN 978-1-4051-2699-1 (hardcover) or ISBN 978-1-4443-445-3 (book).

MANDATORY READINGS:

Instructor will provide scientific articles published on marine reserves. (PDF uploaded in Blackboard/Mandatory readings section). Student will present the

abstract each requested papers, 250 words maximum per paper including title and name of student, and a quiz for each paper will be conducted in class. Weekly quizzes will be based on the paper read.

**Be careful there will be readings for the lecture and readings and quizzes for the lab. They will be in separate sections in Blackboard.
Lecture reading will be in the lecture section.
Lab readings will be in the lab section.**

Laboratory section

Students are expected to conduct an independent research project of a protected area of their interest (see below description of project). Students will practice case study analysis including town-hall simulation meetings; students will participate in field trips to local marine protected areas, and present their project results in lab sessions.

Detailed description of the lab projects:

Marine Protected Area Evaluation and Improvement

You are to select one Marine Protected Area of your choice, write an essay and create a power-point presentation on the MPA. The objective of the presentation is to introduce the audience to the MPA of your choice (already established), to provide us with all the necessary background information (names, location, size, objective of the reserve, legal status, category, and to provide an analysis of the status of the MPA (i.e., is there a management plan in place? Is there a monitoring program in place? Is there evidence that the MPA is working? What are the main challenges to its management?, etc.). **Remember you need to have a global, regional and local perspective.** You will need to analyze what is working and what is not working in your selected MPA and need to propose strategies that can improve its management. You will return an essay and will prepare a PPT presentation for the class. Your project was to be submitted using Turnitin tool in your Blackboard web page. The deadline to submit your essay is December 2nd, 2015 by 5:00 PM. Be sure to submit it by that time. Avoid problems with the system. **NO EXCUSES WILL BE ACCEPTED.** If you procrastinate and wait until last minute to submit and the system crashes you will not be able to submit it again.

Cross practices:

1) Interview, 2) Zonation, 3) Monitoring, Results from these practices have to be returned in a portfolio. Please see Laboratory schedule for details and grading of this section

ALL STUDENTS GRAD AND UNDERGRAD WILL PRESENT THEIR WH PROJECT AS A PPT during lab session.

Detailed description of Essays:

Lecture Weekly essays

Due date: Every Sunday night by the end of the day. Check your syllabus and attend class to check specific dates and topics.

A one page **single spaced** essay including two different sections. 1- Describe in your own words the topic addressed, 2) mention the information, facts, and discussion your sources are providing, use your own words, no quotes please. Be sure to add at the top your name and PI (1 line) . The topic of the day in a form of essay title (Max 2 lines) and then text. In a second page add the sources you use following a scientific format.

All prep assignments will be submitted through Turnitin to check for plagiarism. Half credit will be given if the assignment falls significantly short of the length requirement or has significant matches to source materials as determined by Turnitin. To avoid excessive matching please do not quote sources – generate and demonstrate your understanding by explaining in your own words – and do not paste the original questions from the assignment into the document you submit. If pasting in the original questions helps you to organize your work, that is fine, but be sure to delete them before you turn it in. All Turnitin assignments will be set up to allow you to check your own originality report so please do this before the assignment is due to make sure that no inadvertent plagiarism has slipped into your work

Lab section Essay

Due DATE : Wednesday, December 2nd, 2015

Paper Guidelines:

- Minimum **8 pages for undergraduate**, and **15 pages for graduate** of double-spaced text + figures, maps & tables as needed
- Must include a minimum reference list of 10 citations, all 10 must be scientific papers. You may use websites but they do not count for the MINIMUM of 10 peer review papers.
- Please number pages & use 12-point font, Times New Roman
- Your paper must be submitted to turnitin.com for an authenticity check before it will be graded. If any of the paper is **plagiarized**, you will get a 0 on the assignment and you will fail the class. REMEMBER: You must cite and paraphrase all work appropriately, otherwise its plagiarism (= *the wrongful appropriation and publication as one's own, of the ideas or the expression of the ideas of another*).
 - You will submit your paper via Blackboard using the turnitin tool.
 - Your paper must be posted by the due date, **Wednesday December 2nd by 5 PM**. Within 30 minutes of submission you will be able to see

the same originality report that the instructors will see. You are encouraged to submit your paper early and ensure you are paraphrasing appropriately before you submit your final version. You must ask the instructor to delete earlier versions before you submit your final version.

- The course will be evaluated based on lecture and lab activities.
- Grade scale: A: 90-100%, B: 80-89%, C: 70-79 D: 60-69%, F:<60%.

Undergraduate Grading 100 %

Lecture (60 %)

- Three written exams: 3.3 % each, adding a total of 10% of final grade
- One final oral exam: 30% of your final grade
- Homework: Weekly 10% essays of your final grade.
- Participation in class: 10% of your final grade based on your group activities, resources and notes sharing.

Lab (40 %)

- Reading summaries and quizzes: 5%
- Group activities in class 10% (Town hall meetings, monitoring, zonation)
- Group activities out of classroom 10% (Interview exercise, field trips)
- MPA Case presentation and written report: 15%

Graduate Grading 100 %

Lecture (60 %)

- Three written exams: 3.3 % each, adding a total of 10% of final grade
- One final oral exam: 30% of your final grade
- Homework: 10% weekly essay.
- Participation in class: 10% of your final grade based on your group activities, resources and notes sharing.

Laboratory (40 %)

Modifications for Graduate Grading: Graduate students are expected to return an essay and prepare a presentation on a particular Marine Protected Area (described below)

- Reading summaries and quizzes: 5%
- Group in class 10 % (Town hall meetings, monitoring, zonation)
- Group activities out of classroom 5% (Interview exercise, field trips) of final grade
- MPA Case presentation and written report: 20 % of final grade

- **There will be absolutely no make-up exams or any other extra credits! Exams will not be curved.**

Successful completion of General Biology I and II is a prerequisite.

Course expectations: Regular class attendance is **mandatory** as is **appearance on time.**

PLEASE BE RESPECTFUL WITH YOURSELF, PROFESSOR AND PEERS: No cell phones or beepers, chatting, surfing internet are tolerated during class

Instructor Communication: All instructor communication and announcements will be done by email and through the blackboard section of the course web site. Only students' FIU email address will be used. If students do not use their FIU email account, use the easy to set up automatic mail forwarding option to the email account you are using regularly.

Students are required to maintain a functional FIU email account and to observe the "News" web page. Emails that are returned due to "over quota" email accounts will not be re-sent. All email from students must contain "**PCB 4467C, or PCB 5418C**" in the subject line; student emails without proper subject line and without the student's **name** will **not** be answered!

Sexual harassment policy: FIU is committed to eliminating sexual harassment. In accordance with the FIU Faculty Senate guidelines, this syllabus includes a warning that any misconduct will be reported.

Academic misconduct: FIU is committed to not tolerating any academic misconduct by students. In accordance with the FIU Faculty Senate guidelines, this syllabus includes a warning that any academic misconduct, particularly cheating in exams, will be reported and penalized.

ALWAYS STAY INFORMED!

FOR MORE INFORMATION AND UPDATES CHECK OUT THE COURSE WEB SITE

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Do not copy without the express written consent of the instructor.

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BLACKBOARD SITE**

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