**General Information**
Title of Course, Catalog Number, Section:
MBIO4201.21

Pre-requisites:
18 credits of marine biology

Class Room and Meeting Times and Dates:
Tambora Beach Hotel

Instructor:
Dr. I.R. Isquith, Dr. M. McClary

Office Location and Office Hours:
Tambora Beach Hotel

Telephone with voice mail:
201-692-2395

Email Address:
isquith@fdu.edu

**Course Description**
An integrated lecture, seminar and field course. A study of marine environments, their perturbation and remediation. Emphasis will be placed on in depth field studies and monitoring techniques. Current literature will be studied from a perspective of its relevance to marine environmental problems.

**Text and Materials**
No required text.

**Marine Biology Program Objectives**
1. use the scientific method and understand its strengths and weaknesses;
2. research a marine biological topic using traditional and computer technology;
3. read and evaluate professional scientific literature;
4. write and communicate science;
5. utilize mathematical reasoning and quantitative skills in marine biology;
6. possess observational and technical skills;
7. possess major field knowledge
8. successfully compete in marine biologically related fields

**Course Objectives (parenthetical numbers indicate which marine biology program objectives are emphasized)**
1. Carry out an original research project (1-2,6-7)
2. Research relevant background science (3)
3. Discuss and present original work (4,5)

**Teaching Methodologies/Activities**
Modes of instruction that will be used by the instructor:
1. Discussions about experimental design
2. Students (with professor’s assistance) will develop and carry out an original research project

The following will be used to assess student learning:
1. Project presented as a scientific paper
2. Lab/field performance

**Rules and Regulations**
Attendance and lateness policy:
Students are expected to be available for class work seven days per week. Since this course requires scheduling flexibility, students are expected to be in continuous contact with the professor or Sr. Ramirez about last minute changes. Students are required to follow all FDU study abroad regulations, which are enumerated elsewhere.
Grades and Grading Policy

Grade components

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<tbody>
<tr>
<td>Scientific paper</td>
<td>80%</td>
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<tr>
<td>Lab/field performance</td>
<td>20%</td>
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This average will then be placed on the following scale for your grade:

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<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tr>
<td>A</td>
<td>100-92</td>
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<tr>
<td>A-</td>
<td>91-89</td>
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<tr>
<td>B+</td>
<td>88-86</td>
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<td>B</td>
<td>85-82</td>
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<tr>
<td>B-</td>
<td>81-79</td>
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<tr>
<td>C+</td>
<td>78-76</td>
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<td>C</td>
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<td>C-</td>
<td>71-69</td>
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<td>D</td>
<td>68-60</td>
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<td>F</td>
<td>59-0</td>
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Scientific paper

Papers should consist of the following components:
- Introduction
- Materials and Methods
- Results
- Discussion
- Conclusions
- Literature Cited (Bibliography)

*Introduction:* Introduces the subject of the report. It contains materials from scientific papers and texts. All materials should be cited and included in the List of Literature section. Do not use numbered footnotes. Use a combination of the following formats:

- “Smith (1998) found a new cat species.”
- “In 1998, Smith found a new cat species.”
- “A new species of cat was found. (Smith, 1998)”

*Materials and Methods:* Exactly what you did. No detail is too small. Based on your Materials and Methods, anybody should be able to exactly reproduce what you did. This section does not include your results.

*Results:* This is the data that you produced. Whenever possible it should be in tabular form. The data are not interpreted here, but only presented in a logical, readable format.

*Discussion:* What did your data mean? What is its significance? How does it relate to published results? If your results were not the same as other peoples’, why weren’t they? Cite any references.

*Conclusions:* Basically, a very brief summary of the work.

*Literature:* Alphabetically use the following format:


Reports can be submitted once, before their due date, for an ungraded critical review. This does not alter their original due date. All parts of the report should be word processed. Data sheets are the only permitted exception. Representations of organisms can either be drawn, using a sharp, hard pencil, or digitally photographed and merged onto the data sheet. Whatever format of representation you use, the magnification should be sufficiently high as to permit observation of critical features. All pictures, no matter what format, should have an indication of the organism’s size. If you are taking pictures in the field, the easiest thing to do is to include an object of known size, *e.g.* a 10cm ruler or a quarter, in the picture.

Academic Integrity Policy:

See FDU website