Course Syllabus

Department: Environmental Conservation

Date: October 19, 2012

I. Course Prefix and Number: CON 116

Course Name: Fisheries Techniques

Credit Hours and Contact Hours: 3 credit hours and 3 contact hours

Catalog Description including pre- and co-requisites: supporting data required for grade prerequisite of ‘C’ or higher.

This hands-on course provides students with field experiences utilizing various types of fisheries equipment. Emphasis is placed on sampling techniques for both fish and aquatic habitats. Topics include small boat operation, fish identification, fish capture and handling techniques, data collection, tagging and marking, aging, electrofishing, netting, radio telemetry, hydro acoustics, habitat assessment, and equipment maintenance.

II. Course Student Learning Outcomes: State the student learning outcome(s) for the course (e.g. Student will be able to identify…)

Students will:

- Demonstrate the use of active and passive fish capture equipment
- Determine the proper sampling method for target species
- Mark and age fish species
- Demonstrate safe handling of small motor boats
- Conduct assessment surveys for small water bodies (e.g. streams and lakes)
- Collection and entry of data into spreadsheet format

College Learning Outcomes Addressed by the Course: (check each College Learning Outcome addressed by the Student Learning Outcomes)

☐ writing
☐ oral communications
☐ reading
☐ mathematics

☐ X computer literacy
☐ X ethics/values
☐ X citizenship
☐ ☐ global concerns
III. Assessment Measures (Summarize how the college and student learning outcomes will be assessed): For each identified outcome checked, please provide the specific assessment measure.

<table>
<thead>
<tr>
<th>List identified College Learning Outcomes(s)</th>
<th>Specific assessment measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer literacy</td>
<td>Student lab reports will be generated in Microsoft word with analyses and graphics generated in Microsoft excel</td>
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<tr>
<td>Ethics/Values</td>
<td>Students will capture and handle live organisms in accordance to accepted protocols</td>
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<tr>
<td>Citizenship</td>
<td>Students are learning to use and manage a public resource (i.e. fish and habitat of the state of New York)</td>
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IV. Instructional Materials and Methods

Types of Course Materials:

Text book, handouts and field equipment

Methods of Instruction (e.g. Lecture, Lab, Seminar …):

Lecture, field experiences, hands-on work with equipment

V. General Outline of Topics Covered:

1) Proper boat handling and trailering- Boating rules of the road and safety
2) Fish handling, measuring and identification
3) Seine netting pond environments
4) Electrofishing backpack small stream environments
5) Electrofishing SR16 vessel lake environments
6) Trawl utilization in lake environments
7) Trap net- utilization
8) Gill net- utilization
9) Stream inventory- Physical and biological assessment of trout streams
10) Bathymetry- Habitat mapping
11) Aging , tagging, and marking techniques