SPECIAL TOPICS: Dolphin Husbandry, Training and Research  
Department of Life Sciences  
Summer 2015

A. COURSE INFORMATION

Course number/section: BIOL-4590.I01  
Class meeting time: May 30-August 7 (10 weeks) 2015  
Class location: TAMU-CC and Dolphinaris – Riviera Maya, Mexico

B. INSTRUCTOR INFORMATION

Instructor: Elizabeth Jensen  
Office hours: TBD  
Telephone: (203) 550-5274  
e-mail: ejensen1@islander.tamucc.edu  
Appointments: Students may make appointments to see me or find time during the day pending schedules. If I am unavailable text/call me when on site in Mexico.

C. COURSE DESCRIPTION

This course takes place at Dolphinaris facilities (a group of 5 interactive dolphin facilities in the Cancun, Maya Riviera and Cozumel area), and introduces students to the specialized field of cetacean care, training, and research and all that is entailed in the daily routines and operations of a marine mammal facility. Students will study the biology of bottlenose dolphins, their behavior, the ethical issues of dolphins under human care as well as the specialized care needed for dolphins including nutrition, husbandry, medical care. Operant conditioning and positive reinforcement are major components of this course with a heavy emphasis of progressive training methods. Students will use these techniques on a regular basis with the facility’s collection of bottlenose dolphins. Record keeping, life support, water quality and all other relative functions in the daily operations of a dolphin facility will also be addressed.

Each student will actively take part in a research project and students will also gain extensive experience in public speaking while educating and articulating dolphin research in an engaging manner to Dolphinaris visitors. Other aspects of the tourism industry will be emphasized such as providing high level guest relations to Dolphinaris visitors and learning how to deal with an international clientele. Students will be expected to participate in this practicum for a minimum of 40 hours a week at Dolphinaris facilities in Mexico and also take part in physical exercise, including swimming, in the mornings led by Dolphinaris staff.
D. PREREQUISITES AND COREQUISITES

Prerequisites
BIOL-1407-Biology, Ecology, Psychology is required. BIOL-3430-Physiology, and BIOL-4319-Marine Mammals are recommended.

Corequisites
SMTE-0091

E. REQUIRED TEXTBOOK(S), READINGs AND SUPPLIES

Required Textbook(s)
Don’t Shoot The Dog by Karen Pryor,
International Code of Best Practices for Dolphin Facilities (Alliance of Marine Mammal Parks and Aquariums),
AMMPA Standardized Bottlenose Dolphin Information
Selected papers in Animal Behavior, by Ken Ramirez.
Selected research papers from Cetacean Behavior: Mechanisms and Functions, edited by Lou Herman and The Bottlenose Dolphin edited by Stephan Leatherwood

Supplies:
- Flash Drive
- Laptop
- Composition Book

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

The objective of this course is to provide students with extensive training as a marine mammal specialist. The course contains four modules with specific aims.

Aim 1: To give students skills in behavior modification while gaining a working, hands on understanding of operant conditioning techniques with bottlenose dolphins. They will also become knowledgeable in many aspects in the highly specialized field of dolphin care, husbandry and medical procedures.
Aim 2: To give students a strong broad base of dolphin biology, physiology, behavior, conservation issues and other pertinent issues for a more comprehensive understanding of dolphins. Students will also participate in lectures and research paper discussions to get more exposure to the field of marine mammals. These papers will be critically analyzed and discussed in class.

_Aim 3:_ Expose students to the current research project we will be conducting for the summer 2015 term. Students will get an overall understanding of the research to be conducted as well as to actively take part in the training and running trials for the research.

_Aim 4:_ To investigate ways to effectively communicate educational talking points for Dolphinaris guests during orientations and interaction programs to educate visitors.

Each student’s performance at Dolphinaris will be evaluated and graded. There will be written exams, daily journal entries and a presentation about a topic of interest to Dolphinaris staff in the classroom. After satisfactory performance of this class, students will receive a “certificate of completion” at the end of the course.

**G. INSTRUCTIONAL METHODS AND ACTIVITIES**

Each student will actively take part in a research project and students will also gain extensive experience in public speaking while educating and articulating dolphin research in an engaging manner to Dolphinaris visitors. Other aspects of the tourism industry will be emphasized such as providing high level guest relations to Dolphinaris visitors and learning how to deal with an international clientele. Students will be expected to participate in this practicum for a minimum of 40 hours a week at Dolphinaris facilities in Mexico and also take part in physical exercise, including swimming, in the mornings lead by Dolphinaris staff.

**PRACTICUM REQUIREMENTS:** All students are required to attend all classes and to be on site as assigned by Dolphinaris staff 5 days a week. If there are unusual circumstances, such as the birth of a calf or an animal that needs care 24 hrs per day, students may be asked to be on site as needed. All students must adhere to Dolphinaris procedures and policies and report to their instructor and assigned Dolphinaris supervisors as needed. If unable to attend any lecture or scheduled work, students must notify their instructor to make arrangements to make up any classes missed. Unexcused absences are not allowed and will result in expulsion from the program. Students will have required reading assignments and maintain a daily journal.

**H. MAJOR COURSE REQUIREMENTS AND GRADING**

Your final letter grade will be based on the points you earn in the direct independent study. The final grading scale will also be determined at the end of the semester, but the cut-off for each grade will be no higher than the following:

\[ A \geq 90\% > B \geq 80\% > C \geq 70\% > D \geq 60\% > F \]

Final course grades will be determined by the following:
I. COURSE CONTENT/SCHEDULE

TENTATIVE LECTURE SCHEDULE:

<table>
<thead>
<tr>
<th>Section (dates)</th>
<th>Content</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 30</td>
<td>Depart Corpus Christi - <strong>Arrive in Cancun</strong>, Shuttle to apartments</td>
<td></td>
</tr>
<tr>
<td>June 2-7</td>
<td>Orientation to Dolphinaris, policies and procedures, training fundamentals, ethics and history of marine mammals under human care, biology of the bottlenose dolphin, Observe, cleaning and assisting trainers, Don’t Shoot The Dog .................................................................Chpt 1-3</td>
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<tr>
<td>June 9-14</td>
<td>Training fundamentals, Scientific Research (Creating a hypothesis, experimental design, analyzing and interpreting the results, writing a scientific paper) Marine mammal physiology, Articulate Dolphin Research in engaging format for Dolphinaris visitors, Observe, cleaning and assisting trainers, Don’t Shoot The Dog .........................................................Chpt. 4-6</td>
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<tr>
<td>June 10</td>
<td>Exam I-Training Terminology</td>
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<tr>
<td>June 16-21</td>
<td>Training fundamentals, behavior of bottlenose dolphins, assisting trainers, cleaning, assigned tasks</td>
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<tr>
<td>June 17</td>
<td>Exam II-Training Terminology</td>
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<tr>
<td>June 22-Aug 7</td>
<td>Take part in daily operations and programs as assigned</td>
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<td>June 27</td>
<td>Present new orientation and talking points for Dolphinaris</td>
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<td>July 1</td>
<td>Exam III - Dolphin biology, behavior and classification</td>
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<tr>
<td>August 1</td>
<td>Presentation</td>
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**Home work assignments, journal reviews, quizzes and practical evaluations will be announced**
Aug 2-6   Final Journal review, Final Written Exam

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Attendance/Tardiness
All students are required to attend all classes and to be on site as assigned by Dolphinaris staff 5 days a week. Unexcused absences are not allowed and will result in expulsion from the program. Tardiness will not be tolerated. If a student needs to arrive late, they must notify the instructor as soon as possible. If there are unusual circumstances, such as the birth of a calf or a dolphin that needs medical care 24 hrs. per day, students may be asked to be on site as needed.

Late Work and Make-up Exams
If unable to attend any lecture or scheduled exam, students must notify their instructor to make arrangements to make up any classes missed. Work that is late will be automatically docked 10 pts each day.

Cell Phone Use
Cell phones are allowed and encouraged for safety reasons and for communication in case there is an unexpected change in Dolphinaris scheduling. Cell phones use will not be allowed on site at Dolphinaris during working hours.

Laptop Use
Laptops are required for this course. Use of social media will not be tolerated while on site at Dolphinaris

Missed Exam
Missed exams will result in no points

Participation
This is an experiential learning course. Participation is mandatory. Students are required to be on site actively taking part in the daily operations at Dolphinaris as well as in class

Others
Students are representing TAMU-CC as well as Dolphinaris during this 10 week course. All students are required to uphold dress code. If not, they will be sent home. Students are also required to maintain a professional manner with each other, Dolphinaris staff as well as Dolphinaris guests. Failure to uphold this may result in termination of the course and
the student will be sent home at their cost.

K. COLLEGE AND UNIVERSITY POLICIES

- **Academic Integrity (University)**
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- **Classroom/Professional Behavior**
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- **Statement of Civility**
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- **Deadline for Dropping a Course with a Grade of W (University)**
  The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

- **Grade Appeals (College of Science and Engineering)**
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a
student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
  The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

  If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

  http://disabilityservices.tamucc.edu/

- **Statement of Academic Continuity**
  In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

**L. OTHER INFORMATION**

- **Academic Advising**
  The College of Science & Engineering requires that students meet with an Academic
Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**GENERAL DISCLAIMER**

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.