

# Cover Sheet: Request 11748

## ZOO4XXX Sea Turtle Biology

### Info

|                        |  |
|------------------------|--|
| Process                | Course New Ugrad/Pro                                       |
| Status                 | Pending at PV - University Curriculum Committee (UCC)      |
| Submitter              | Tangelyn Mitchell tney0726@ufl.edu                         |
| Created                | 7/31/2017 2:10:46 PM                                       |
| Updated                | 3/17/2018 4:54:06 PM                                       |
| Description of request | New course proposal in Sea Turtle Biology and Conservation |

### Actions

| Step   | Status   | Group   | User            | Comment   | Updated                |
|--|----------|---|-----------------|---|------------------------|
| Department   | Approved | CLAS - Biology<br>011690003                       | Ellen Davis     |   | 8/1/2017               |
| UCC1NEW Bjorndal.docx<br>Sea Turtle Biology covlet.pdf |          |   |                 |   | 7/31/2017<br>7/31/2017 |
| College  | Recycled | CLAS - College<br>of Liberal Arts<br>and Sciences | David Pharies   | (1) Course objectives must be written in the format "Students who successfully complete this course will be able to...", (2) Remove or explain "& CLAS or CALS" from the prerequisites, (3) the 35% participation grade is excessive, as there is no clear explanation of how these points are to be earned.  | 11/2/2017              |
| No document changes                                    |          |   |                 |   |                        |
| Department   | Approved | CLAS - Biology<br>011690003                       | Marta Wayne     |   | 12/4/2017              |
| Response letter UCC1Form Bjorndal.nmg.pdf              |          |   |                 |   | 12/4/2017              |
| College  | Recycled | CLAS - College<br>of Liberal Arts<br>and Sciences | Joseph Spillane | The committee requests that the changes be made on the actual submitted form, and not simply on the attached letter and UCC1. In addition, the committee requests that course objectives 2-5 be revised. The fifth should be edited down. 2 through 4 could perhaps be revised along the lines of "Students will be able to critically discuss results and implications of classic and recent research papers..." | 1/10/2018              |
| No document changes                                    |          |   |                 |   |                        |
| Department   | Approved | CLAS - Biology<br>011690003                       | Ellen Davis     |   | 2/28/2018              |
| No document changes                                    |          |   |                 |   |                        |
| College  | Approved | CLAS - College<br>of Liberal Arts<br>and Sciences | Joseph Spillane |   | 3/17/2018              |
| No document changes                                    |          |   |                 |   |                        |

| Step                              | Status  | Group                                      | User | Comment | Updated   |
|-----------------------------------|---------|--|------|---------|-----------|
| University Curriculum Committee   | Pending | PV - University Curriculum Committee (UCC) |      |         | 3/17/2018 |
| No document changes               |         |  |      |         |           |
| Statewide Course Numbering System |         |  |      |         |           |
| No document changes               |         |  |      |         |           |
| Office of the Registrar           |         |  |      |         |           |
| No document changes               |         |  |      |         |           |
| Student Academic Support System   |         |  |      |         |           |
| No document changes               |         |  |      |         |           |
| Catalog                           |         |  |      |         |           |
| No document changes               |         |  |      |         |           |
| College Notified                  |         |  |      |         |           |
| No document changes               |         |  |      |         |           |

## Course|New for request 11748

### Info

**Request:** ZOO4XXX Sea Turtle Biology

**Description of request:** New course proposal in Sea Turtle Biology and Conservation

**Submitter:** Tangelyn Mitchell tney0726@ufl.edu

**Created:** 2/27/2018 11:00:35 AM

**Form version:** 3

### Responses

**Recommended Prefix** ZOO

**Course Level** 4

**Number** XXX

**Category of Instruction** Advanced

**Lab Code** None

**Course Title** Sea Turtle Biology and Conservation

**Transcript Title** Sea Turtle Biology

**Degree Type** Baccalaureate

**Delivery Method(s)** On-Campus

**Co-Listing** No

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Rotating Topic?** No

**Repeatable Credit?** No

**Amount of Credit** 3

**If variable, # min** 0

**If variable, # max** 0

**S/U Only?** No

**Contact Type** Regularly Scheduled

**Weekly Contact Hours** 3

**Course Description** Biology of sea turtles and their roles in marine ecosystems, current major issues in sea turtle biology, and challenges in their conservation and management.

**Prerequisites** BSC2010(C) & BSC2011(C)

**Co-requisites** None

**Rationale and Placement in Curriculum** This class was offered as a Special Topics in Zoology course (ZOO4926) in Spring 2016 and Spring 2017. The course has a cap of 20 students, is very popular, and fills quickly. In both Spring 2016 and Spring 2017, I capped the waiting list at 10 students although more students were interested. The Marine Sciences major in CLAS has very few courses available in the biological sciences; this class would be a valuable addition. I do not expect any conflicts with other courses/departments.

**Course Objectives** 1. Students who successfully complete this course will be able to communicate the basic biology of sea turtles and the critical needs for sea turtle conservation.

2. Students who successfully complete this course will be able to communicate well in written and oral presentations.

3. Students who successfully complete this course will be able to work well as a member of a team.

4. Students who successfully complete this course will be able to critically discuss results and implications of classic and recent research.

5. Students who successfully complete this course will have research skills to take a project from a dataset through analyses, interpretation, and presentation of a polished poster.

**Course Textbook(s) and/or Other Assigned Reading** There is no assigned textbook. Readings are classic papers and recent literature.

For example, for Climate Change:

1. Hawkes LA, Broderick AC, Godfrey MH, Godley BJ (2007) Investigating the potential impacts of climate change on a marine turtle population. *Global Change Biology* 13:923-932.
2. Santidrián Tomillo P, Saba VS, Lombard CD, Valiulis JM and others (2015b) Global analysis of the effect of local climate on the hatchling output of leatherback turtles. *Scientific Reports* 5:16789

- Weekly Schedule of Topics**
1. Introduction to class; Basic biology and conservation of sea turtles
  2. Basic biology and conservation of sea turtles
  3. Shifting baseline syndrome and challenges to sea turtle conservation and management; Introduction of Group Research Projects
  4. Ontogenetic shifts in sea turtle life cycles with corresponding changes in diet, habitat and allometry; How to make a great poster presentation
  5. Sea turtle behavior: studies at large and small scales; Costs and benefits of mating systems
  6. Predation and anti-predator adaptations; Population regulation: top-down or bottom-up?
  7. Nutritional ecology of sea turtles: hierarchical model at the individual, population, and ecosystem level
  8. Roles of sea turtles in marine ecosystems: how do structure and function of marine ecosystems change as abundance of sea turtle populations change?
  9. Diseases and health issues of sea turtles; Dissection of sea turtle carcasses
  10. Major threats of marine debris and incidental capture in commercial fisheries: current status and what has and should be done; Saturday field trip to UF Whitney Laboratory for Marine Bioscience (St. Augustine) to tour sea turtle rehabilitation center and view sea turtle nesting habitat and threats to sea turtles from beach development
  11. Historic and current importance of sea turtles to humans: consumptive and non-consumptive use and culture importance
  12. Assessing population status and setting recovery targets; Progress reports (powerpoint presentations) by students on the progress of their Group Research Projects
  13. Effects of climate change on sea turtles: biology, conservation implications, management options
  14. Importance of research for the conservation and management of sea turtles
  15. Final presentation of research posters with judging by students and faculty judges

**Links and Policies** Syllabus not required.

**Grading Scheme** Class participation: Grade is based on quality of participation in class. Quality of participation corresponds to mastery of Course Objectives 1, 2, and 4. There is a total of 35 class periods during which students have the opportunity to participate in a substantive manner in class. Participation in each of these 35 class periods is worth 1% of their grade. Each student is ranked either high or low for their contributions in each class period. Grade for participation is assigned by the following:

- Participation high for 30-35 meetings = 100%
- Participation high for 25-29 meetings = 90%
- Participation high for 20-24 meetings = 80%
- Participation high for 15-19 meetings = 70%
- Participation high for 10-14 meetings = 60%
- Participation high for fewer than 10 meetings = 50%

**Group Research Project:** Instructor assigns 4 students to each of 5 research groups and students select one of five research projects created by the instructor. Grade is based on quality of research results, oral presentation of results, and written presentation of results in a poster. In addition to my assessment, each student gives me anonymously a ranking of Excellent, Good, Average, Poor, Very poor with an explanation of why the rank as assigned for the other students in his/her Research Group. Also, each student ranks the posters of the other research groups.

**Presentation for discussion session:** Instructor assigns two to three students to each of eight presentation groups; each group selects a topic with two to three readings designated by the instructor; each group creates a 5-10 minute Powerpoint introduction to the assigned topic and then leads the class discussion for a class period. Grade is based on quality of the Powerpoint presentation, the oral presentation, and ability to maintain high level of discussion. In addition to my assessment, each student gives me anonymously a ranking of Excellent, Good, Average, Poor, Very poor with an explanation of why the rank was assigned for the other students in his/her Discussion group.

Written discussion questions: Each student not leading the discussion session writes two substantive questions based on the readings and submits them before each discussion session. Grade is based on both content and written communication.

**Instructor(s)** Karen A. Bjorndal

22 November 2017

CLAS Curriculum Committee  
University of Florida

Dear Colleagues:

Thank you for your comments on the UCC1NEW form for Sea Turtle Biology and Conservation. Our responses to your comments are given below.

**1. Course objectives**

Students who successfully complete this course will be able to

1. Communicate the basic biology of sea turtles and the critical needs for sea turtle conservation.
2. Communicate well in written and oral presentations.
3. Work well as a member of a team.
4. Think critically, as exemplified by discussing results and implications of classic and recent research papers.
5. Exhibit research skills as exemplified by taking a project from a dataset on some aspect of sea turtle biology through analyses, interpretation, and presentation of a polished poster. These projects are usually based on datasets collected over previous years by the instructor and never analyzed. The fact that the students are the first to analyze the data really stimulates the students' interest and involvement in the project.

**2. We have removed "& CLAS or CALS" from the prerequisites**

**3. The 35% participation grade will be earned as follows:**

For class participation (35% of the grade), the grade is based on quality of participation in class. Quality of participation corresponds to mastery of Course Objectives 1, 2, and 4. There is a total of 35 class periods during which students have the opportunity to participate in a substantive manner in class. Participation in each of these 35 class periods is worth 1% of their grade. Each student is ranked either high or low for their contributions in each class period. Grade for participation is assigned by the following:

Participation high for 30-35 meetings = 100%  
Participation high for 25-29 meetings = 90%  
Participation high for 20-24 meetings = 80%  
Participation high for 15-19 meetings = 70%  
Participation high for 10-14 meetings = 60%  
Participation high for fewer than 10 meetings = 50%

Please let us know if you have additional questions.

Best wishes,



Nicole M. Gerlach  
Lecturer & Undergraduate Coordinator



Karen A. Bjorndal  
Distinguished Professor



College of Liberal Arts and Sciences  
Department of Biology

220 Bartram Hall  
PO Box 118525  
Gainesville, FL 32611-8525  
352-392-1175  
352-392-3704 Fax

August 1, 2017

Dear Curriculum Committee,

Attached please find a proposal for a new 3-credit course taught by Karen Bjorndal, ZOO4XXX *Sea Turtle Biology and Conservation*.

This course focuses on the biology of sea turtles and their roles in marine ecosystems, current major issues in sea turtle biology, and challenges in their conservation and management. It is already extremely popular as a Special Topics in Zoology course (ZOO4926), and was offered in both Spring 2016 and Spring 2017 semesters. Due to the discussion format of the course and its focus on critical analysis of current research, Dr. Bjorndal caps enrollment at 20 students. However, in both Spring 2016 and Spring 2017, the course filled rapidly and created a waiting list. We anticipate this course will continue to be a popular and valuable choice for upper-division students in the IDS-Marine Sciences and Zoology major in CLAS. In particular, the Marine Science program has very few elective courses available in the biological sciences, or that focus on critical analysis of research, so this class is an important offering for upper level students in that degree program. The department does not expect any conflicts with other courses or departments.

Please contact me, Tangelyn Mitchell, or the incoming Undergraduate Coordinator, Nicole Gerlach, if you have further questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Christine Davis'.

Christine Davis  
Senior Lecturer and Undergraduate Coordinator  
christine.davis@ufl.edu



**Recommended SCNS Course Identification**

1. Prefix: ZOO      2. Level: 4      3. Number: 4XXX      4. Lab Code: None

5. Course Title: Sea Turtle Biology and Conservation

6. Transcript Title (21 character max.): Sea Turtle Biology

7. Effective Term: Spring      8. Effective Year: Earliest      9. Rotating Topic: No

10. Amount of Credit: 3      11. If variable, # min. and # max. credits per semester.

12. Repeatable Credit: No      13. If yes, # total repeatable credit allowed.

14. S/U Only: No      15. Contact Type: Regularly Scheduled [base hr]

16. Degree Type: Baccalaureate      17. If other, specify: Click here to enter text.

18. Weekly Contact Hours: 3      19. Category of Instruction: Advanced

20. Delivery Method(s):    On-campus     Off-campus     Online

**21. Course Description (50 words maximum)**

Biology of sea turtles and their roles in marine ecosystems, current major issues in sea turtle biology, and challenges in their conservation and management.

**22. Prerequisites**

BSC2010(C) & BSC2011(C) & CLAS or CALS

**23. Co-requisites**

None

**24. Rationale and Placement in Curriculum**

This class was offered as a Special Topics in Zoology course (ZOO4926) in Spring 2016 and Spring 2017. The course has a cap of 20 students, is very popular, and fills quickly. In both Spring 2016 and Spring 2017, I capped the waiting list at 10 students although more students were interested. The Marine Sciences major in CLAS has very few courses available in the biological sciences; this class would be a valuable addition. I do not expect any conflicts with other courses/departments.

**25. Course Objectives**

Convey basic biology of sea turtles and critical needs in marine conservation.  
 Develop skills in written and oral presentations.  
 Develop experience in working in a team.  
 Develop critical thinking by discussing results and implications of classic and recent research papers.  
 Develop research skills by taking a project from a dataset on some aspect of sea turtle biology through analyses, interpretation, and presentation of a polished poster. These projects are usually based on datasets collected over previous years by the instructor and never analyzed. The fact that the students are the first to analyze the data really stimulates the students' interest and involvement in the project.

**26. Course Textbook(s) and/or Other Assigned Reading**

There is no assigned textbook. Readings are classic papers and recent literature.  
 For example, for Climate Change:  
 1. Hawkes LA, Broderick AC, Godfrey MH, Godley BJ (2007) Investigating the potential impacts of climate change on a marine turtle population. *Global Change Biology* 13:923–932.  
 2. Santidrián Tomillo P, Saba VS, Lombard CD, Valiulis JM and others (2015b) Global analysis of the effect of local climate on the hatchling output of leatherback turtles. *Scientific Reports* 5:16789

## 27. Weekly Schedule of Topics

1. Introduction to class; Basic biology and conservation of sea turtles
2. Basic biology and conservation of sea turtles
3. Shifting baseline syndrome and challenges to sea turtle conservation and management; Introduction of Group Research Projects
4. Ontogenetic shifts in sea turtle life cycles with corresponding changes in diet, habitat and allometry; How to make a great poster presentation
5. Sea turtle behavior: studies at large and small scales; Costs and benefits of mating systems
6. Predation and anti-predator adaptations; Population regulation: top-down or bottom-up?
7. Nutritional ecology of sea turtles: hierarchical model at the individual, population, and ecosystem level
8. Roles of sea turtles in marine ecosystems: how do structure and function of marine ecosystems change as abundance of sea turtle populations change?
9. Diseases and health issues of sea turtles; Dissection of sea turtle carcasses
10. Major threats of marine debris and incidental capture in commercial fisheries: current status and what has and should be done; Saturday field trip to UF Whitney Laboratory for Marine Bioscience (St. Augustine) to tour sea turtle rehabilitation center and view sea turtle nesting habitat and threats to sea turtles from beach development
11. Historic and current importance of sea turtles to humans: consumptive and non-consumptive use and culture importance
12. Assessing population status and setting recovery targets; Progress reports (powerpoint presentations) by students on the progress of their Group Research Projects
13. Effects of climate change on sea turtles: biology, conservation implications, management options
14. Importance of research for the conservation and management of sea turtles
15. Final presentation of research posters with judging by students and faculty judges

## 28. Grading Scheme

| Type of Assessment, Activity or Other Assignment  | Percent of Grade |
|---|------------------|
| Class participation: Grade is based on quality of participation in Class and Group Research Projects and number and quality of comments/questions provided during class presentations and discussions   | 35               |
| Group Research Project: Instructor assigns 4 students to each of 5 research groups and students select one of five research projects created by the instructor. Grade is based on quality of research results, oral presentation of results, and written presentation of results in a poster. In addition to my assessment, each student gives me anonymously a ranking of Excellent, Good, Average, Poor, Very poor with an explanation of why the rank as assigned for the other students in his/her Research Group. Also, each student ranks the posters of the other research groups.   | 30               |
| Presentation for discussion session: Instructor assigns two to three students to each of eight presentation groups; each group selects a topic with two to three readings designated by the instructor; each group creates a 5-10 minute Powerpoint introduction to the assigned topic and then leads the class discussion for a class period. Grade is based on quality of the Powerpoint presentation, the oral presentation, and ability to maintain high level of discussion. In addition to my assessment, each student gives me anonymously a ranking of Excellent, Good, Average, Poor, Very poor with an explanation of why the rank was assigned for the other students in his/her Discussion group. | 15               |
| Written discussion questions: Each student not leading the discussion session writes two substantive questions based on the readings and submits them before each discussion session. Grade is based on both content and written communication.   | 20               |

## 29. Instructor(s)

Karen A. Bjorndal

### Itemized Instructions

1. **Prefix.** Enter the three letter code indicating placement of course within the discipline (e.g., POS, ATR, ENC). Note that for new course proposals, in rare cases SCNS will assign a different prefix.
2. **Level.** Select the one digit code preceding the course number that indicates the course level at which the course is taught (e.g., 1=freshman, 2=sophomore, etc.).
3. **Number.** Enter the three digit code indicating the specific content of the course based on the SCNS taxonomy and course equivalency profiles. For new course requests, this may be XXX until SCNS assigns an appropriate number.
4. **Lab Code.** Enter the lab code to indicate whether the course is lecture only (blank), lab only (L), or a combined lecture and lab (C).
5. **Course Title.** Enter the title of the course as it should appear in the Academic Catalog.
6. **Transcript Title.** Enter the title that will appear in the transcript and the schedule of courses. Note that the transcript must be limited to 21 characters (including spaces and punctuation). Titles longer than 21 characters will either be abbreviated as needed or cause the approval request to be recycled.
7. **Effective Term.** Select the requested term that the course will first be offered. Selecting "Earliest" will allow the course to be active in the earliest term after SCNS approval. If a specific term and year are selected, this should reflect the department's best projection. Courses cannot be implemented retroactively, and therefore the actual effective term cannot be prior to SCNS approval, which must be obtained prior to the first day of classes for the effective term. SCNS approval typically requires 2 to 6 weeks after approval of the course at UF.
8. **Effective Year.** Select the requested year that the course will first be offered. See preceding item for further information.
9. **Rotating Topic.** Select "Yes" if the course will have rotating (varying) topics in different terms. For rotating topics courses, the course title in the Schedule of Courses and the transcript can vary with the topic.
10. **Amount of Credit.** Select the number of credits awarded to the student upon successful completion, or select "Variable" if the course will be offered with variable credit and then indicate the minimum and maximum credits per section. Note that credit hours are regulated by Rule 6A-10.033, FAC.
11. If you selected "Variable" for the amount of credit, indicate the minimum and maximum number of total credits.
12. **Repeatable Credit.** Select "Yes" if the course may be repeated for credit. Some courses, such as independent study courses, will have rotating (variable) topics. Students may be allowed to repeat these courses provided the content is different.
13. If you checked "Yes" for repeatable credit, indicate the maximum number of total repeatable credits allowed per student.
14. **S/U Only.** Check this option if students should be graded as S-U in the course. Note that each course must be entered into the UF curriculum inventory as letter-graded or S-U. A course may not have both options.
15. **Contact Type.** Select the best option to describe course contact type. This selection determines whether base hours or headcount hours will be used to determine the total contact hours per credit hour. Note that the headcount hour options are for courses that involve contact between the student and the professor on an individual basis. The following options are available:
  - a. Regularly Scheduled [base hr]
  - b. Thesis/Dissertation Supervision [1.0 headcount hr]
  - c. Directed Individual Studies [0.5 headcount hr]
  - d. Supervision of Student Interns [0.8 headcount hr]
  - e. Supervision of Teaching/Research [0.5 headcount hr]
  - f. Supervision of Cooperative Education [0.8 headcount hr]Contact the Office of Institutional Planning and Research (352-392-0456) with questions regarding contact type.
16. **Degree Type.** Select Baccalaureate, Graduate, Professional or Other.
17. If you selected "Other" for degree type, specify the type.
18. **Total Contact Hours.** Indicate the number of hours faculty will have contact with students each week on average throughout the duration of the course.

19. **Category of Instruction.** Indicate whether the course is introductory, intermediate or advanced. Introductory courses are those that require no prerequisites and are general in nature. Intermediate courses require some prior preparation in a related area. Advanced courses require specific competencies or knowledge relevant to the topic prior to enrollment.
- 1000 and 2000 level = Introductory undergraduate
  - 3000 level = Intermediate undergraduate
  - 4000 level = Advanced undergraduate
  - 5000 level = Introductory graduate
  - 6000 level = Intermediate graduate
  - 7000 level = Advanced graduate
  - 4000/5000 and 4000/6000 levels = Joint undergraduate/graduate (these must be approved by the UCC and the Graduate Council)
20. **Delivery Method(s).** Indicate all platforms through which the course is *currently planned* to be delivered.
21. **Course Description.** Provide a brief narrative description of the course content. This description will be published in the Academic Catalog and is limited to 50 words or less. See course description guidelines.
22. **Prerequisites.** Indicate all requirements that must be satisfied prior to enrollment in the course. Prerequisites will be automatically checked for each student attempting to register for the course. The prerequisite will be published in the Academic Catalog and must be formulated so that it can be enforced in the registration system. Please note that upper division courses (i.e., intermediate or advanced level of instruction) must have proper prerequisites to target the appropriate audience for the course.
- Completing Prerequisites on UCC forms:
    - Use “&” and “or” to conjoin multiple requirements; do not use commas, semicolons, etc.
    - Use parentheses to specify groupings in multiple requirements.
    - Specifying a course prerequisite (without specifying a grade) assumes the required passing grade is D-. In order to specify a different grade, include the grade in parentheses immediately after the course number. For example, "MAC 2311(B)" indicates that students are required to obtain a grade of B in Calculus I. MAC2311 by itself would only require a grade of D-.
    - Specify all majors or minors included (if all majors in a college are acceptable the college code is sufficient).
    - “Permission of department” is always an option so it should not be included in any prerequisite or co-requisite.
  - Example: A grade of C in HSC 3502, passing grades in HSC 3057 or HSC 4558, and major/minor in PPHP should be written as follows:  
HSC 3502(C) & (HSC 3057 or HSC 4558) & (HP college or (HS or CMS or DSC or HP or RS minor))
23. **Co-requisites.** Indicate all requirements that must be taken concurrently with the course. Co-requisites are not checked by the registration system.
24. **Rationale and Placement in Curriculum.** Explain the reason for adding the course to the curriculum and how the course will fit into the curriculum.
25. **Course Objectives.** Describe the core knowledge and skills that student should derive from the course. The objectives should be both observable and measurable.
26. **Course Textbook(s) and/or Other Assigned Reading.** Enter the title, author(s) and publication date of textbooks and/or readings that will be assigned, or a representative list of readings.
27. **Weekly Schedule of Topics.** Provide a projected weekly schedule of topics. This should have sufficient detail to evaluate how the course would meet current curricular needs and the extent to which it overlaps with existing courses at UF.
28. **Grading Scheme.** List the types of assessments, assignments and other activities that will be used to determine the course grade, and the percentage contribution from each. This list should have sufficient detail to evaluate the course rigor and grade integrity.
29. **Instructor(s).** Enter the name of the planned instructor or instructors, or “to be determined” if instructors are not yet identified.