### Undergraduate Course Syllabus

# Biological Research BSC3481 - 2 credits

Summer Semester- 2016

**Location: Sanson Science SC 119** 

Time: Fri 10:0am-11:50am

#### Instructors:

Dr. Evelyn Frazier (Sanson SC 212; 561-297- 4472; efrazier@fau.edu)

Office Hours: T-Th: 1pm to 3pm

#### Teaching Assistant:

Ms. Chelsea Bennice; cbennice@fau.edu Mr. Ramon Garcia-Areas; rgarci45@fau.edu

Office Hours: By appointment please with Chelsea Bennice and/or Ramon Garcia-Areas

Prerequisite: By Introduction to Biological Research

**Preamble:** This course is intended for undergraduates to experience lab research while working on their own independent project and then presenting this in the form of a graded proposal and public presentation. This is NOT an Honors level course, and we are working to change the name of the course.

Course Objectives: This is a foundation course that prepares the undergraduate student for working independently in a laboratory or field environment. There is a diverse set of disciplines across the Department of Biological Sciences, and therefore this course is designed to not only allow the student to build skill sets in a laboratory/field environment (with at least 10 hours of lab work per week), but to take their research to the next level and present it to the public in the format of a research proposal. Training for presenting their work in both a written and oral form will take place once a week during a 2 hour class. Basic handouts of lecture material covered will be provided in class or on the associated Blackboard site and should be used only as a guide for your reading. The course will follow a lecture format with in-class discussion of the topics presented, as well as material from selected readings. Questions and active discussion are actively encouraged.

University Attendance Policy: Attendance is REQUIRED and not optional. "Students are expected to attend all of their scheduled university classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grade is determined by the instructor." (University Catalogue). This is a small group and we will know when someone is absent. If you know in advance that you will be absent, or need accommodations for religious reasons, or university related travel to athletic events or conferences you need to contact coordinator to make

arrangements in ADVANCE. If you have a last minute emergency contact the faculty via email and let us know why you were absent. It is your responsibility to attend class, submit your work on time, and follow directions for the assignments. If you do all of these things, it will be reflected in your grade for this course. Points will be deducted for absences, tardiness, late work, and not following directions. Students who miss 3 or more meetings without justification will have a grade of "F".

#### Instructions to students:

Please turn in all your work as a Word document (.doc, not .docx) in safeassign through our Honors blackboard site. The file name should contain the following: your name, the title of the work, and the date of submission, i.e. Garcia-Areas Research Poster 01-13-2012. Files that are not saved with the proper name will not be corrected by the TA's. Once the teaching assistant has made suggestions, we expect them to be incorporated in your paper. If you disagree with the suggestions, please talk to T.A. and explain your reasoning for not incorporating the suggested changes. Only final versions should be submitted to Dr. Barbara Nambu and Dr. Frazier. We also expect our suggestions be incorporated on your final version. IF you disagree with the suggestions, explain in writing, why you have chosen not to incorporate them in your final version. All final versions of your documents should be turned in through safeassign via blackboard.

#### Required Books/Supplements: None

**Course Evaluation Method:** Letter grade. See point distribution below.

**Make-up Policy:** No make-up for in class assignments. But a student with an excused absence (documentation required) may turn in missed homework assignments the next class period to Dr. Frazier.

Grading: Letter grade. The course grade will be based on evaluation of the following:

- Attendance and Participation: 60pts (20%)
- Written Assignments: 120pts (40%)
  - Includes 20 pts for the binder with copies of all assignments; 100pts for written assignments.
- In-class Assignments: 30pts (10%)
- Oral Presentation: 90pts (30%)

# The grading scale is determined as:

<b>Total Points</b>	Percent	Final Grade
278-300	93-100	A
267-277	90-92	A-
260-268	87-89	B+
248-259	83-86	В
239-247	80-82	В-
230-238	77-79	C+

218-229	73-76	C
209-217	70-72	C-
200-208	67-69	D+
188-199	63-66	D
179-187	60-62	D-
000-178	00-59	$\mathbf{F}$

An incomplete grade (I) will only be assigned to students who have a passing grade of C and the appropriate documentation to justify absences from class and missed work. Work has to be completed within one 12 months to result in a grade change.

**Blackboard:** is an online educational program that ALL students enrolled in this class have FREE access to. All you need to do is go to <a href="http://blackboard.fau.edu">http://blackboard.fau.edu</a> and follow procedures to login.

**E-mail:** All students are required to check their FAU e-mails every day once a day. Your instructor as well as your TA will be communicating with you personally via e-mail. DO NOT have your FAU account forwarded to AOL or other e-mail sites because some messages will NOT make it through.

*E-mail Etiquette:* Wait 48 hours for a response to your e-mail. Do not expect anyone to reply during a weekend or holiday. When e-mailing your T.A.'s, faculty or staff at FAU please write e-mails in a professional format. WE ARE NOT YOUR BUDDIES! We have a PROFESSIONAL relationship and you should be trained to correspond in a professional manner. Here are some suggestions: Greetings: refer to the faculty as Dr. Last Name, T.A.'s and FAU staff as Mr. LAST NAME or Mrs./Ms. LAST NAME; Subject line of the e-mail should include: Course name or number: e.g. Biodiversity or BSC1011; and ALWAYS write you FULL NAME. INNAPROPRIATE E-mail example:" yo, what is my grade b4 the final?" NEVER USE abbreviations such as used in text messaging. No one should have to answer such an e-mail!

**Religious Accommodations**: Students who wish to be excused from coursework, class activities or examinations must notify the instructor in advance of their intention to participate in religious observation and request an excused absence.

#### Disability policy statement:

In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) -- in Boca Raton, SU 133 (561-297-3880); in Davie, LA 240 (954-236-1222); in Jupiter, SR 110 (561-799-8010); or at the Treasure Coast, CO 117 (772-873-3441) –and follow all OSD procedures.

<u>University Attendance Policy</u>: "Students are expected to attend all of their scheduled university classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grade is determined by the instructor" (University Catalogue).

<u>Missing classes</u> - Students who miss a class and turn in documentation to excuse their absences within one week of the day of the absence, will be allowed to make-up the homework for full points but will not receive in class participation points. Students who fail to provide documentation as described above, will NOT be allowed to make-up any work.

# **Disability policy statement**

In compliance with the Americans with Disabilities Act (ADA), students who require reasonable accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) -- in Boca Raton, SU 133 (561-297-3880); in Davie, LA 240 (954-236-1222); in Jupiter, SR 110 (561-799-8010); or at the Treasure Coast, CO 117 (772-873-3441) –and follow all OSD procedures.

# **Code of Academic Integrity Policy Statement**

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

http://www.fau.edu/ctl/4.001 Code of Academic Integrity.pdf

Academic dishonesty consists of, and is not restricted to, submitting work that is NOT your own, signing the attendance sheet for another student, producing false documentation to excuse absence, etc. Plagiarizing will result in a grade of "F" in the course and student's transcripts will be flagged.

Religious Accommodations: If you will be absent because of a holiday not observed by the University, you must notify me in advance to make arrangements to make up work immediately upon your return to school. Reasonable accommodation will also be made for students participating in a religious observance IF students contact me, one week before the holiday and provide the necessary documentation.

Biological Research Summer 2016 Schedule
Meeting: Friday 10:00 am to 11:50am in SC 119
Contact Info: Dr. Frazier: efrazier@fau.edu
Chelsea Bennice, cbennice@fau.edu; Ramon Garcia-Areas: rgarci45@fau.edu

Week	Date	Activity	Homework	<b>Due Date</b>
Week 1	05/15	<ul> <li>Discussion on last semester's work and expectations for this semester, research plans for this semester.</li> <li>How to read a scientific paper and locate more references</li> <li>Introduction to Thesis Proposal writing</li> </ul>	Create a timeline for your summer research semester     Write your tentative research question     Find 10 research papers that relate to your question	5/19
Week 2 Ramon out	05/22	-Guide to writing your introduction -J. William's Style: Lessons in Clarity and Grace - Finding references - Referencing software	1) Prepare outline for the <b>Introduction</b> , include references	5/26
Week 3	05/29	- Discussion on Introduction - Planning your experiments -Keeping an organized lab notebook -Ethics and Scientific Research	<ol> <li>Write first draft of the Introduction, submit a copy to Blackboard and make sure you send your advisor the draft as well</li> <li>Prepare outline for Research Strategy/Materials and Methods sections, work with your advisor</li> </ol>	6/2
Week 4 Chelsea is out	06/05	-Discussion of Research Strategy/ Materials and Methods - Excel Tutorial -Making figures	1) Revise Introduction after comments from TA and advisors and submit second draft 2) Write first draft for Research Strategy/Materials and Methods sections, work with your advisor	6/9
Week 5	06/12	In class critique of Introduction     Material and Methods	<ol> <li>Prepare outline for Results sections, work with your advisor</li> <li>Submit first draft of Research strategy/materials and methods to blackboard (Write a Summary for each of the assays you plan to use)</li> <li>Partner Revisions of introduction</li> </ol>	6/16
Week 6	06/19	-Intro to Powerpoint	1)Prepare Presentation/OUTLINE(due date varies among students) THURSDAY 2) Submit first draft of <b>Results</b> to blackboard (Write a <b>Summary</b> for each of the assays you plan to use)	6/23
Week 7	06/26	-I n class critique of Results -Expectations for Presentations	<ol> <li>Write second draft of your Research         Strategy/Materials and Methods Sections         THURSDAY     </li> <li>First Draft of PPT – DUE THURSDAY</li> <li>Write a summary of your Results and start making figures and tables</li> </ol>	6/30
Week 8	07/03	Discuss PPT Practice/Critique presentation	<ul><li>1)Second Draft of PPT</li><li>2) Write the first draft of results and submit via blackboard and run it by your advisor</li></ul>	07/7
Week 9 Evelyn and chealse a are out	07/10	Practice/Critique presentation	<ol> <li>Revise Materials and Methods         <ul> <li>after comments from TA and advisors and submit final draft</li> <li>Receive edits from TA's and submit second draft of results to blackboard</li> </ul> </li> <li>Submit comments/suggestions for the presenters BB</li> </ol>	07/14

Week 10	07/17	First Group of Presentations	1) Write the Introduction, Research Strategy and Results of your Research Proposal. Submit via blackboard.	Nothing Due
Week 11	07/24	Second Group of Presentations -Overview of Semester -Expectations for next fall		07/28
Week 12	07/31	Study for your finals	Enjoy the rest of your summer!!!	