**Advanced Scientific Grant Writing**

**PCB 4956; Section 001; CRN TBD**

**1 credit hour**

**Departments of Biological Sciences and Psychology, College of Science &**

**Harriet L. Wilkes Honors College**

**Florida Atlantic University**

**Semester:** Fall 2018

**Class meetings**: Tuesdays, 4:00 to 5:00 pm

**Location**: SR 283, Jupiter Campus

**Instructor**: Drs. Bolton and Dawson-Scully

Office: MC 19/RE, Room 109

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Phone: 516-799-8514

**Office Hours**: Tuesdays and Thursdays, 12:00 to 1:00 pm

**Course Description**: Students are introduced to content, techniques and software important in the preparation and submission of neuroscience grant proposals to the National Institutes of Health and the National Science Foundation. On completion of the course, students will: 1) know how to locate life science funding opportunities, 2) understand the fundamental components of a scientific grant proposal, 3) understand the overall grant submission and review processes, and 4) have developed the skills needed to produce competitive scientific grant proposals.

**Prerequisite:** Permission of instructor

**Required Textbook:** There is no required text for this course. Handouts and selected articles will be posted on Canvas, and students will be expected to read all handouts and articles before the class period.

**Course Objectives**: To provide students will the skills needed to develop competitive scientific grant proposals.

**Note of Honors Distinction**: This course is a Max Planck Honors Program (MPHP) course. Max Planck Honors Program courses have been designed as part of a unique collaborative effort between the Schmidt College of Science, the Wilkes Honors College, and the Max Planck Florida Institute for Neuroscience. They offer its students an exclusive and enriching opportunity to develop neuoroscientific knowledge, formulate questions, and communicate their research via oral and written deliveries while learning and engaging with a community of cutting-edge research scholars and Nobel laureates.

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| **FAU MPHP Scientific Communication - Schedule for Fall 2018** | | |
| **Schedule** | **Topics** | **Assignment/Readings** |
| **Week1** | Introduction and expectations,  Essential components of a grant proposal | Syllabus and Handout |
| **Week2** | CVs and Biosketches  Cover Letters | Handouts |
| **Week3** | NIH vs NSF  Finding funding  Understanding applications | CV & Biosketch due |
| **Week4** | Citations and Citation Software | Handouts |
| **Week5** | Abstracts  Background and Significance | Citation assignment due  Abstract due |
| **Week6** | Rationale, Hypotheses, Objectives and Specific Aims | Handouts and Selected Articles  Abstract editing  Proposal Writing |
| **Week7** | Methods  Ethical Considerations &  Protocols for Use of Human/Animal Subjects in Research  Principle and Co-investigators & Project Teams | Handouts and Selected Articles  Aims editing  Peer Review – Abstracts  Proposal Writing |
| **Week8** | Developing and Justifying a Budget | Handouts  Peer Review – Aims  Proposal Writing |
| **Week9** | Sustainability  Broader Impacts | Proposal Writing |
| **Week10** | Administrative Policies and Procedures for Submitting Proposals | Handouts  Peer Review – Current Drafts  Proposal Writing |
| **Week11** | How grants are reviewed | Handouts  Editing – Current Drafts |
| **Week12** | Critiquing grants | Handouts  Peer Review – Current Drafts |
| **Week13** | Interpreting Grant Critiques | Handouts  Editing – Current Drafts |
| **Week14** | Mock Review Panel Meeting | Proposal Writing |
| **Week15** | Mock Review Panel Meeting | Reviewing proposals |
| **Week 16** | Discussion | Proposals (Final Drafts) Due |

*\*This schedule is subject to change at any time by the instructor, depending on the needs of the class. Changes may be announced online via Canvas or verbally in class*.

**Course evaluation method:** Attendance, homework assignments, class participation, and final proposal paper will determine the final grade with the following weights:

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| Attendance & Participation | 20 |
| Assignments | 45 |
| Proposal | 20 |
| Proposal Review | 15 |

94-100%=A, 90-94%=A-, 86-90%=B+, 82-86%=B, 78-82%=B-, 74-78%=C+, 70-74%=C, 66-70%=C-, 62-66%=D+, 58-62%=D, 54-58%=D-, <54%=F; grades may be curved to adjust to 100%

**Incompletes**: As per University policy, grades of Incomplete (“I”) are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances. For this class, if a student is unable to complete the required coursework because of a serious illnesses, hospitalization, military service, or death of a family member, the student can request a grade of Incomplete. The awarding of an “I” (Incomplete) will be granted only in exceptional cases; the decision will be made either solely by the instructor or in consultation with the Associate Dean.

**Withdrawal from Class**: It is the responsibility of the student to withdraw from this class, should that status be desired.

**Attendance**: Students are expected to attend all classes and participate in discussions. If a student misses a class, the student is responsible for all material covered during that class and any changes to the course schedule. If a student must miss a class, it is suggested that the student arrange to obtain class notes and announcements from another student.

**FAU Attendance Policy**: 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 grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student’s responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student’s final course grade as a direct result of such absence.

**Electronic Devices**: University policy states that “In order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular telephones and pagers, are to be disabled in class sessions.” In this class, any use of cell phones or other communication devices is not allowed during active class times. (A ringing or vibrating device is included in the definition of “use of an electronic device”, as is checking email or accessing the web.) If a student uses a communication device during active class time, the student will be required to leave for the remainder for the class period.

**Code of Academic Integrity**: 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: <https://www.fau.edu/ctl/4.001_Code_of_Academic_Integrity.pdf>.

**Accommodations for Disabilities:** In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) — in Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); or in Jupiter, SR 111F (561-799-8585) — and follow all SAS procedures.

**Religious Accommodation:** In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs with regard to admissions, registration, class attendance, and the scheduling of examinations and work assignments.

Students who wish to be excused from course work, class activities, or examinations must notify the instructor in advance of their intention to participate in religious observation and request an excused absence. The instructor will provide a reasonable opportunity to make up such excused absences.