**SIntroduction to Neuroscience Research**

**PSB 4003; 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**: Overall, the goal of this class is to introduce incoming FAU Max Planck Honors Program (MPHP) participants to the MPHP Program. The three major components of this are to introduce students to a variety of neuroscience faculty members, to create an intellectual community among the students, and to emphasize specific (research and related) responsibilities that undergraduates typically will not encounter. It will also emphasize analysis, synthesis and evaluation of information which are fundamental to eventual successful completion of the research requirements associated with the MPHP. It is expected that program participants will enroll in this course during their first semester as participants within the MPHP.

**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**: In this course, students will:

* Engage with a variety of faculty members who visit class and outline their research interests (students will prepare for visits by reading assigned papers).
* Produce a short (5 page maximum) review paper on a neuroscience topic of the student’s own choice (on research which interests them which may or may not be their own current research topic).
* Engage with peers through in-class discussion and short (10 minute) oral presentations of a research topic.
* Research and discuss ethical conduct of research, including adherence to regulations, integrity of data, authorship, animal and human subjects of research, co-worker relations.
* Assemble a shared set of written guidelines for oral presentations (things to copy and things to avoid) learned from presentations from faculty who visit the course.

**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 Spring 2019** | | |
| **Schedule** | **Topics** | **Assignment/Readings** |
| **Week1** | Introduction and expectations  MPHP Flight Plans | Syllabus and Handout |
| **Week2** | The Max Planck Society  History of the field of neuroscience | Handouts and selected articles |
| **Week3** | How to read a scientific paper  Evaluating sources | Handouts and selected articles |
| **Week4** | Electronic resources (pubmed, flybase, etc.)  Graphics for oral presentations | Handouts and selected articles |
| **Week5** | Sponsored Research  Student Organizations and student travel | Handouts and selected articles |
| **Week6** | Environmental Health and Safety | Handouts and selected articles |
| **Week7** | Ethics in Research – human subjects, animal care | Handouts and selected articles |
| **Week8** | Ethics in Research – conflicts of interest, case studies | Handouts and selected articles |
| **Week9** | Getting the most out of a scientific meeting | Handouts and selected articles |
| **Week10** | Specialized meetings and short courses (e.g. Cold Spring Harbor, Janelia, etc.) | Handouts and selected articles |
| **Week11** | Career paths inside and outside of academia | Handouts and selected articles |
| **Week12** | Resume building | Handouts and selected articles |
| **Week13** | Oral presentations | Guidelines for presentations |
| **Week14** | Oral presentations | Guidelines for presentations |
| **Week15** | Oral presentations | Guidelines for presentations |
| **Week 16** | Discussion | Papers 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 | 40 |
| Paper | 20 |
| Presentation | 20 |

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.