Course Profile

**PSYC 479: Special Research Experience in Psychology**

**Course Description**
Students have the opportunity to help conduct cutting-edge affective and translational neuroscience research as an undergraduate research assistant in Dr. Shackman’s laboratory. Students majoring in or planning to major in psychology, biology, or neurobiology/neuroscience are strongly encouraged to apply. Pre-med students who are willing and able to make the requisite commitment to the lab are also highly desirable. The lab provides an excellent opportunity for receiving top-notch mentorship in affective/translational neuroscience, with some students going on to complete senior theses or present research at scientific meetings, and many lab alumni securing positions at top research universities and medical schools.

**Learning Outcomes**
Students who successfully complete this course will:
- Be prepared to understand and critically discuss articles drawn from the affective and clinical neuroscience research literatures
- Safely conduct research at the Maryland Neuroimaging Center
- Understand the basics of ecological momentary assessment (EMA) research
- Understand basic principles of functional MRI
- Understand the range of multi-method research conducted by trainees and staff in the lab

**Syllabus**
The Syllabus can be downloaded [here](#).

**Course Format**
- 1 x 60-minute meeting per week
- Approximately one-dozen students per semester

**Course Resources**
- Recent empirical reports and reviews written by leading scientists
- Beginner guides, laptop preparation handouts, and SPM12 manual materials for the SPM workshop
- All readings are hyperlinked in the Syllabus

**Class Meetings**
Each meeting begins with a general overview of the topics and activities planned for the duration of the 60-minute meeting. Meetings in the beginning of the semester are composed of journal club discussions in which students complete relevant background readings and present on them in small groups. Later, several meetings are focused on “fMRI for Newbies,” which allows students to learn about fMRI signal acquisition, processing, and analysis through a series of lectures, background readings, and hands-on demos using SPM12. The final meetings of the semester are dedicated to student ‘flash talks.’

**Learning Assessments**
Grading is based on active participation

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*a Student course evaluations are not available for PSYC 479*