

BEHAVIORAL AND BIOLOGICAL SCIENCES (BBS)

BBS 400 Cognitive Neuroscience Laboratory 2 Credit Hours

This laboratory course aims to familiarize students with non-invasive research methods used in cognitive neuroscience. Students will be introduced to and obtain hands-on experience with neuroimaging research methods such as electroencephalography (EEG) and magnetic resonance imaging (MRI) and simulation methods to study human brain anatomy (e.g., gray matter volume and white matter integrity) and functions (e.g., perception, attention, memory, language, etc.). (F, W, S).

Prerequisite(s): PSYC 400* or BIOL 350*

BBS 402 Physiology of Excitable Cells 4 Credit Hours

An in-depth analysis of the mechanisms underlying electrical communication within and between mammalian cells. The major emphasis is on excitable cells in the brain, heart, and skeletal muscle and their functional integration. Fulfills the Biology major capstone requirement. (W).

Prerequisite(s): BIOL 130 and BIOL 140 and (BIOL 303 or BIOL 305 or BIOL 350 or BIOL 357)

Corequisite(s): BBS 402L

Restriction(s):

Can enroll if Class is Junior or Senior

BBS 490 Behavioral and Biological Sciences Capstone 4 Credit Hours

This capstone provides an opportunity for students to combine knowledge and skills from their undergraduate courses to address an interdisciplinary topic in the field of Biological Psychology (Behavioral and Biological Sciences) through their own research projects. The course includes research, writing and extended discussion culminating in a final project. (YR).

Prerequisite(s): (BIOL 370 or CHEM 370 or BCHM 370 or BIOL 470 or CHEM 470 or BCHM 470 or BIOL 301 or BIOL 306 or BIOL 474) and (PSYC 370 or BIOL 357) and PSYC 465

BBS 498 Literature Research in Behavioral and Biological Sciences 1 to 4 Credit Hours

Directed research performed under the guidance of faculty member. Undergraduate students will work with faculty to conduct literature research on current topic. Student will undertake a literature search, create an annotated bibliography, and write a research summary or grant proposal. Must be approved by the BBS Director. 1-3 credits; Four to twelve hours per week. Permission of Instructor (F, S, W).

BBS 499 Guided Research in Behavioral and Biological Sciences 1 to 4 Credit Hours

Directed laboratory or clinical research performed under the guidance of faculty member. Undergraduate students will gain hands-on learning in the theory and techniques of research. Must be approved by the BBS Director. 1-4 credits; Four to twelve hours laboratory. Permission of Instructor (F, W, S).

Restriction(s):

Can enroll if Class is Sophomore or Junior or Senior

*An asterisk denotes that a course may be taken concurrently.

Frequency of Offering

The following abbreviations are used to denote the frequency of offering: (F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally