There are two 1-hour graduate seminars Biology 8210) for the Fall, 2018 Semester.

Seminar - 33978 - BIOL 8210 - 002
This graduate seminar covers a diversity of topics in the broad area of biodiversity research, emphasizing the latest methods and discoveries and global perspectives. Potential topics for discussion include patterns and controversies in studies of the genetic, phylogenetic, temporal, functional, and spatial dimensions of biodiversity, as well as studies that integrate multiple dimensions. Related topics for consideration may include phylogenomics, DNA barcoding, imaging of biodiversity, conservation, taxonomy, protected areas, extinction, and biodiversity hot spots, among others.

**Credit Hours: 1.000**  
Scheduled Meeting Times Type | Time | Days | Where | Date Range | Schedule Type | Instructors
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Seminar | TBA | TBA | | Aug 27, 2018 - Dec 19, 2018 | Base Lecture | Stephen Blair Hedges

Seminar - 39037 - BIOL 8210 - 003
The Biology of Memory (1 Credit) This seminar will focus on the cellular and molecular mechanisms that underlie our capacity to learn and remember. Each week we will critically read and discuss original research papers or reviews highlighting recent advances in both clinical and experimental neuroscience. We will examine basic memory processes and how they change over the lifespan, in healthy individuals and as a result of disease and injury. Specific topics will be chosen to reflect student interests, but may include such things as how systems for memory can be affected by environment, stress, diet, immune and endocrine status, microbiome composition, and drugs of abuse. The use of new and improving technologies and tools (ex. optogenetics, brainbow, functional MRI, advanced imaging, big data and omics, neural implants, deep brain stimulation, etc) in brain research and treatment will also be discussed.

**Credit Hours: 1.000**  
Scheduled Meeting Times Type | Time | Days | Where | Date Range | Schedule Type | Instructors
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Class | TBA | TBA | | Aug 27, 2018 - Dec 19, 2018 | Base Lecture | Susan Patterson