

## Broader Impacts of Science on Society

### Graduate Course Announcement BSC 6038 (sect. 082A) and GLY 6932 (sect. 4545), Fall 2020

Thursdays, Periods 6 & 7 (12:50 pm to 2:45 pm)  
2 credits; first class 3 September 2020; last class 3 December 2020  
To be taught on-line (via Zoom; course content in UF e-Learning)



#### Learning goal statement

Participants will learn about the history, essential elements, relevance, and best practices of NSF's Broader Impacts.

#### Intended participants

- Graduate students from any STEM (science, technology, engineering, and mathematics) discipline, including (but not limited to) anthropology, astronomy, botany, chemistry, educational technology, entomology, geology, physics, science education, wildlife, and zoology.
- Instructors and invited speakers.

#### Instructors

- Bruce J. MacFadden, UF Distinguished Professor & Curator, Florida Museum; Director, Thompson Earth Systems Institute (TESI), email [bmacfadd@ufl.edu](mailto:bmacfadd@ufl.edu)
- Mariela Pajuelo, Assistant Scientist, Florida Museum and TESI, email [mpajuelo@floridamuseum.ufl.edu](mailto:mpajuelo@floridamuseum.ufl.edu)

#### Course Synopsis

There is an increasing emphasis on the relevance of what a scientist does and how we impact society in general. This is manifested in many ways, for example, NSF now requires "Broader Impact" statements in grant proposals and explicit plans for how these kinds of activities will be accomplished. This course will explore ways in which scientists can increase our impact, particularly to society at large. During this seminar-format course, students will engage in active participation and discussion. The beginning of the course will feature presentations by the instructor and invited speakers and preparations for the class project(s). Students' interests and individual projects will primarily drive the remainder of the course.

#### Course prerequisites & Class size

Graduate student status (other with instructors' permission); limited to 16 registered students

#### Readings and assignments

**Text:** MacFadden, B. J. 2019. *Broader Impacts of Science on Society*. Cambridge  
<https://doi.org/10.1017/9781108377577>

**Weekly assignments** include readings from text and primary literature, web research, small projects, and preparation for class discussion/presentations. Syllabus with schedule is posted in e-Learning, or can be requested from the instructors.

#### Evaluation

The final course grade will be based on: (1) Attendance and active participation in class (50%); (2) class presentations and leading discussions (25%); and (3) semester project (25%).