

## Kim J. Brown - Statement of Teaching Philosophy

### Teaching philosophy

I place an emphasis on teaching concepts and processes, rather than regurgitation of detail. In my courses, **students will be encouraged to listen, read, question, and participate**. The Natural world provides me with a sense of wonder that fuels my desire for research. I would consider myself successful if I could share that attitude with my students. No matter the course, I like presenting two ideas about science: (1) that researchers *experiment* to know what they know and (2) that “Science” does not encompass a fixed set of knowledge - there’s still much that we are yet to discover!

### Advising philosophy

A successful advisor is one that acknowledges the differences among students. It is critical to listen to students, to help them define what their goals are, and help them make academic and career choices that will help them meet their goals.

More specifically, it is critical to encourage students to seek a balance between strongly quantitative coursework (math, physics) and courses in the humanities which enhance creativity (writing, graphic arts). Although my bias is for the former, both areas of study provide students with essential life tools.

### Roles in and outside of the classroom

My role in the classroom is to present new information in a way that is interesting, clear and inspiring. As a student, I frequently found myself either bored or bewildered in lecture, asking “What’s the connection here? Why is this important?”. As an instructor, my goal is to minimize the number of students who ask themselves these questions!

I want to challenge students to synthesize concepts and extend them to create new questions, so I encourage students to bring their own experiences into class, and to take what they’ve learned in class and apply it to their own interactions with the Natural world. As an ecologist, I feel the best way to do this is through Active learning and inquiry in an outdoor setting.

### Teaching objectives

Provide students with tangible skills, in: critical thinking, hypothesis generation and testing, data collection, synthesis and interpretation, and presentation of information in both written and graphic formats.

Consistently assess students: Many students in biology/ecology courses have a diversity of student backgrounds and skills. A pre-course survey, to judge where students are in an academic continuum, provides a basis on which to build the scope of a course, and helps me gauge student knowledge of the course material (prior to and post-completion of the course). I will also incorporate “concept-quizzes” - end of lecture 5 min quizzes to see if the students grasped fundamental concepts from the day’s lecture.

Incorporate web technology: Email is an essential tool for communication and facilitation of discussion about course material. In addition, students will be encouraged to access the web for course materials as well as for their research topics.

### Courses of Interest:

- General Biology
- Plant Physiology
- Structure and Function of Trees (*see enclosed syllabus*)
- Advanced Topics Classes ( e.g., Global Change Biology, Invasive Species in Ecosystems)
- Plant Ecology
- Physiological Plant Ecology