



A SHORT Teaching and Learning Guide for All EOS Teaching Faculty

Since 2007, the department of Earth & Ocean Sciences (EOS) has participated in the Carl Wieman Science Education Initiative, with the goal to improve teaching and learning in EOS. We have adopted various evidence-based teaching practices that we all are expected to use, as appropriate for particular courses. This list of key resources will help you get started.

Real humans are also available to help! Feel free to contact us*.

The basics:

1. Courses in EOS are expected to have **articulated learning goals** (what the *students* are expected to be able to do after completing the course) for the whole course and for each module or lesson. A list of well-articulated learning goals makes everything easier for you! For resources on creating learning goals, talk to the humans (below) and see: http://www.cwsei.ubc.ca/resources/learn_goals.htm
2. In an ideal course, all components of the course will be **aligned with one another, and linked to the learning goals**. “Components” include: assignments, exams, other assessments, activities, teaching techniques, anything the students and instructor do as part of the course. When creating new (or reviewing old) course materials, ask yourself if they address the stated learning goals. For example, write exams starting with the learning goals (it works).

Key written resources:

1. <http://www.eos.ubc.ca/research/cwsei/resources.html>
Here you'll find the “TOP THREE GUIDELINES”. These are all SHORT and quick to read. You'll also find many more written resources. Just read the top 3 first.
2. http://www.cwsei.ubc.ca/resources/instructor_guidance.htm
This is a page within the main Carl Wieman Science Education Initiative site. Here you'll find excellent information about learning goals, assessment, student engagement, pedagogical techniques (e.g. clickers), guides for writing multiple choice tests, and many other useful resources.

*Humans:

1. EOS has full-time “Science Teaching and Learning Fellows”, who should be around through approximately December 2012. They are very knowledgeable about teaching and learning issues, and they each have research and/or working backgrounds in Earth or Ocean Sciences. They are available to help YOU. As of July 2010, their office is EOS-South 361 and they are:
 - a. Josh Caulkins: jcaulkins@eos.ubc.ca
 - b. Brett Gilley: bgilley@eos.ubc.ca
 - c. Francis Jones: fjones@eos.ubc.ca
 - d. Erin Lane: elane@eos.ubc.ca
2. Many faculty members have been involved in course transformation with EOS-SEI. If you are a sessional, or a new instructor teaching an existing course, the usual/former instructor may have many course-specific resources for you, including learning goals and aligned teaching materials. The list of courses that have been officially “transformed” and the people who worked on them is at <http://www.eos.ubc.ca/research/cwsei/courses.html>
3. The faculty director of EOS-SEI as of July 2010 is Sara Harris: sharris@eos.ubc.ca, EOS-South 353.
4. Specific contact people may change, so check with the Head's office for any updates.