

Course Transformation Project Agreement

Source: EOAS (formerly EOS) Science Education Initiative at UBC-CWSEI

PDF and editable Word version: <https://pressbooks.bccampus.ca/seihandbook/chapter/supplemental-documents/>

This document outlines an arrangement between the UBC Earth and Ocean Sciences (EOS) department and EOS faculty members regarding exchange of buyout and deliverables associated with the EOS-SEI project. This can serve as a model for other departments engaged in similar work. Note that the EOS-SEI project includes funding for faculty buyout to work on course transformation.

Faculty member(s) _____ commit(s) to work with (1) a Science Teaching and Learning Fellow (STLF), and (2) a working group that includes faculty members involved in related courses, to produce the materials on this checklist for course _____ that fall within the project scope defined for this course. The Teaching Initiatives Committee will conduct reviews and consult working groups as needed. Ongoing support is conditional upon satisfactory progress.

Checklist for course transformation and sustainability¹

Faculty should submit the following documentation at the end of each relevant term. Details on next pages.

| | By end of planning term | By end of first teaching term | By end of second teaching term |
|---|--|-------------------------------|------------------------------------|
| Short summary of course structure and rationale | Draft | Revised | In final documentation |
| Course transformation project scope | Draft | Revised | In final documentation |
| Course-level learning goals | Draft: involve stakeholders | Revised | Broadly accepted, in documentation |
| Assessment, feedback, and grading | Draft plan | Revised | Optimized |
| Pedagogy | Draft plan | Revised | Optimized |
| Course materials available | | Initial list | Completed |
| Data available | | Initial list | Final list |
| Plan for sustainability | | Initial | Final |
| Appendices (some required) | | Initial | Final |
| Share progress/problems | Participation at annual or semiannual mini-retreat | | |

Signature(s), Faculty Member(s)

Signature (Head)

Date

¹ See template on next pages for details.

Supporting documents provided (in addition to outline/template below):

1. “Advancement of Science Education in Earth and Ocean Sciences: A Proposal to the Carl Wieman Science Education Initiative”
http://www.eoas.ubc.ca/research/cwsei/Proposal_EOS_CWSEI_submit.pdf
2. “The University of British Columbia (“UBC”) Policy on Science Education Initiative at UBC”
<http://www.eoas.ubc.ca/research/cwsei/resources/CWSEI-Policy.pdf>
3. “Science Education Initiative (SEI) Suggested Indicators for Full Implementation”
http://www.cwsei.ubc.ca/resources/files/SEI_Suggested_Indicators_for_Full_Implementation.pdf

Template and notes for course transformation deliverables

Goals for these documents

- Provide documentation for new instructors to carry on and use what’s been learned.
- Document progress and results of EOS-SEI.

The following is an outline to use as a template. Not all details will be relevant to all courses.

Summary of course structure and rationale

- Brief description of the course, including general overview, enrollment, target students, context/place in curriculum, course history, starting point for transformation, typical known challenges, societal relevance...
- Starting after the first teaching term, include: brief description of revised course components, brief rationale for each component, brief indication of what worked/didn’t work, and brief future plans or revisions in progress.

Course transformation project scope

- Specific list of items that will be/have been produced and work undertaken as part of the course transformation (e.g. develop course and lecture-level learning goals, develop pre/post assessment, implement XXX pedagogy, etc.).
- Current status of each item and dates of completion (for final report, there should be an indication of whether these things were done, or how far they went).
- Stakeholders, working group members, and roles of involved people

Course-level learning goals

- Include the term for which these were used, the level of acceptance within the working group, and when agreement was reached.
- Include revisions in progress, if appropriate, with explanation.

Assessment, feedback, and grading

Assessment broadly includes any metric designed to provide evidence of the course’s effectiveness. Examples include diagnostics, pre/post tests, attitudinal surveys, plus the many types of assessment that go into student grades.

- Describe each component of assessment, including what students do to demonstrate new knowledge, skills or attitudes, how feedback is provided to students, and evidence for what worked/didn’t work (include relevant references, e.g. URLs. Include any needed further details of rationale).
- Summarize briefly how final grades are partitioned.
- Future plans and recommendations for assessment.

Pedagogy

Pedagogy broadly includes all the types of opportunities students will have to engage with course material. What will happen during class time? What will students do outside of class? What must instructors do to prepare? How do these pieces fit together?

- Describe each component of pedagogy and evidence for what worked/didn't work (include relevant references, e.g. URLs. Include any needed further details of rationale).
- Link to the assessment section, as appropriate.
- Future plans and recommendations for pedagogy.
- Ideas for things (experiments) to try or disseminate (at meetings, publications, etc.).

Course materials available

- List of course materials available and where they are archived. (e.g. syllabus, readings, lecture materials, activity materials and instructions for implementation, clicker questions and instructions for implementation, labs, quizzes, exams, etc.). Many materials need to be archived in the CWSEI archive.

Data available

Evidence documenting impact

- List of data available (with any needed explanations) and where they are archived. (e.g. interviews, focus group summaries, survey results, pre/post assessment results, clicker question histograms, exam results and analysis, etc.).

Plan for sustainability

What has been put in place or planned to ensure persistence of best practices?

- What will a new instructor need to do to run the course effectively? (e.g. documentation, mentoring, set up TAs, run labs, generate new/update assignments, set up and manage a VISTA site, etc.).
- Is there a plan to ensure consistent TA contributions from year to year?
- Are resources and strategies sustainable (costs, materials, space, etc.)?
- Will the course evolve appropriately from year to year?

Appendices

- **REQUIRED:** module- and/or lecture-level learning goals (as available).
 - Include the term for which these were used, the level of acceptance within the working group, and when agreement was reached.
 - Include revisions in progress, if appropriate, with explanation.
- **REQUIRED:** matrix aligning course-level learning goals and module- and/or lecture-level learning goals.
- **SUGGESTED:** possibilities for other informative documentation.
 - Matrices aligning class activities and learning goals (strongly suggested).
 - Matrices aligning course learning goals with department-level learning goals, if they exist. (e.g. department-level goals for service courses).
 - Potential future improvements/future directions, etc.
 - Possibilities for experiments, trials, publications, or other scholarly activity.
 - Instructor reflections
 - Evolution of pre/post assessments with description of development.
 - Select data documenting impacts (e.g. specific survey question results, clicker question results...).
 - Other (if deemed useful).

Share progress/problems

- Required participation at annual mini-retreat (not part of this written documentation).