

Hello UAF Faculty Members-

This document contains example syllabi that do 400/600 level stacking well and satisfy the guidelines in the [Academic Course & Degree Procedures Manual](#). Note that later Faculty Senate action clarified the language through the motion that passed at Faculty Senate meeting #259 on November 1, 2021: [Motion to clarify language on course stacking guidelines](#). These guidelines help ensure that 400 and 600-level courses align with Board of Regents Guidelines (see the end of the Motion for details) for those respective course numbers.

These courses should have:

- 1) Two different syllabi (one for each course).
- 2) Differentiated Student Learning Outcomes (SLOs).
- 3) Have weekly differentiation in course content to achieve SLOs.
- 4) Have grading that reflects the above differentiations.

There are many ways that differentiation of undergraduate and graduate syllabi can be accomplished. We asked for and were given permission to share within UAF a few examples of syllabi (in the [StackedSyllabi](#) folder) that fit with these guidelines.

Also, as a part of filling out the request for stacking (or revising a stacked course), the proposer is asked the following question: "How will the course levels differ from each other? How will each be taught at the appropriate level?".

There are many ways that differentiation of undergraduate and graduate syllabi can be accomplished. As examples, below are the answers given by these proposers.

==STO401/601==

The two courses will differ in the following ways:

- At the 400-level students will be expected to primarily read book chapters and popular articles, and at the 600-level students will be expected to read these materials as well as some peer-reviewed literature from the field of science communication
- At the 400-level students will select a science topic that they would like to communicate about for their class projects (as if they had a supervisor who directed them to communicate about a science/health topic) and at the 600-level students will be expected to communicate about the science they are conducting for their research-based degree in their class projects
- At the 400-level students will work on communication strategies using a predefined worksheet/template and at the 600-level students will be expected to develop strategies with the same pre-defined worksheet/template, but will also write an essay/complete essay questions that explain the evidence base and rationale for the decisions made in the strategy
- At the 400-level students will complete a final science communication strategy and "pitch" presentation, and at the 600-level students will complete a final science communication strategy and "pitch" presentation, as well as a mini-proposal. The mini-proposal will be representative of

existing calls for proposals to fund science communication activities, such as the American Geophysical Union's Sharing Science Mini-Grant program

- 600-level students will be expected to synthesize the readings, find additional materials, present a summary and lead a short discussion (~30 minutes) on a science communication topic of their choice one time during the semester

- In summary, the 400-level students will be focused on learning the basic tools and methods of science communication, and the 600-level students will do the same, with an additional focus on understanding the underlying psychology and relevant social processes and explaining how that informs their science communication efforts.

==MSL455/655==

The two syllabi outline different reading assignment schedules: undergraduate students will be expected to read ~1 article per week, typically a review and will be tested on comprehension of the topics of each week while graduate students will be expected to read ~2 articles per week with ~1 being primary literature. Grad students will be required to lead in-class paper discussions that undergraduate students will participate in.

Graduate students will have extended essay questions on problem sets and exams in addition to the multiple choice and short answer questions that undergraduate students will answer. The final writing assignment that will be largely a straightforward description of a taxon for undergrads, while grad students will be asked to review a current research problem and synthesize primary literature to propose next steps for addressing the problem.

==MSL476/676==

To be newly stacked as cross-listed as FISH F476, MSL F476, BIOL F470 and BIOL F670 (existing course is already cross-listed as FISH/MSL F676).

Course will be delivered live, with a single lecture for both 6xx and the new 4xx. During lecture discussions (one session per week) students enrolled in 6xx will be expected to lead paper discussions; students in 4xx will be expected to participate in these discussions but not lead them. During lab students in 6xx will be expected to learn how to solve the lab exercises using R; 4xx students will use Excel, which is more readily-known and has a much lower learning curve but is not as powerful. Lab exercises for 6xx and 4xx students are also differentiated in other ways. As a final project, students in 6xx will be expected to carry out more sophisticated analysis on a topic and dataset of their choosing, and to write a fuller prospectus and final paper that resembles a thesis chapter for eventual scientific publication. Students in 4xx will be able to choose a dataset used during one of the lab exercises to write a final paper that more closely resembles a lab report than a scientific publication.