STO 603
Instructional Design
Spring 2018

This syllabus and schedule are subject to change. Any changes will be announced in class.

Instructor(s):

<table>
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<tr>
<th>Name: Laura Conner</th>
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<tbody>
<tr>
<td>Email: <a href="mailto:ldconner@alaska.edu">ldconner@alaska.edu</a></td>
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<tr>
<td>Office: 108E WRRB</td>
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<tr>
<td>Office phone: 474-6950</td>
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<td>Office hours: TBA</td>
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Credits: 1

Meeting time and place: TBA

Course Materials:


- You will be expected to prepare and share materials for a real or hypothetical course throughout the course of the semester.

Course Description:
This graduate seminar course will address important components of course planning and instructional design that reflect best practices in science teaching. This course focuses on the overall design of courses, the integration of the various components of a course, the development of learning goals, teaching activities, assessment procedures, and syllabus construction. The course format will consist of reading and discussion, as well as peer review and feedback on assignments brought to class.

More about the course:
This seminar explores methods for course design at the university level. Many of the techniques addressed can be applied to the design of other educational settings. Emphasis is placed on design methods that align with best practices as demonstrated by research. This course is intended for graduate students in STEM fields who have an interest in learning how to design and implement courses. This course is a component of the Graduate Certificate in Science Teaching and Outreach, but is open to graduate students in a science degree program whether or not they are participating in the certificate program. The focus is on the structure of an entire course, syllabus writing, and appropriate selection of course components. This is a complement to Scientific Teaching (STO 666), which focuses on the design and implementation of individual learning activities within a course and the development of a teaching philosophy statement, but does not address overall course design. If the course is over-enrolled, priority will be given to graduate students taking this course as part of the certificate program.
Course Purpose:
Our goal is to prepare you to design your own quality courses and strengthen your professional resume. Well-designed courses, although they take time and effort to plan, ultimately make the learning experience better for students and help things run more smoothly for the instructor. This course aims to help graduate students improve their skills in course design, learn what is expected for university level courses, and prepare them for careers that may have a strong teaching component to them. Although this course will emphasize the design of university-level courses, the techniques addressed can be applied to the design of courses at other levels and for other audiences.

Course Goals
By the end of the semester, you will be able to:

1. Construct a course syllabus. This is a document that has a specific format and must include certain items. Although specific format and requirements vary from school to school, there are some elements that are fairly universal. We will look at how a syllabus sets the tone for a course and how it can promote student learning and engagement. As part of this, students will have to consider how the various components of a course (e.g. lecture, lab, discussion, homework) fit together and how course goals and outcomes can be best addressed by each component.

2. Write course goals and student learning outcomes that address both content and skills and that would be appropriate for a course syllabus. Students should be able to explain how course goals and outcomes should be influenced by goals and learning outcomes at the department and university level.

3. Thoughtfully select various types of learning opportunities (e.g. lecture, labs, case studies, field trips, other active learning, etc.) and integrate them into a complete and effective course that provide students with opportunities to learn and practice what they need to know and be able to do in order to meet the course goals and learning outcomes.

Specific Student Learning Outcomes
- construct a syllabus for a course or other learning venue that is based in best practices as established by research (e.g. “backward design”).
- write well-constructed course goals and testable student learning outcomes that address essential understandings and skills for inclusion in a course syllabus.
- integrate a variety of learning opportunities, such as lecture, labs, case studies, field trips, other active learning, etc., into a complete course that provides students multiple opportunities to meet key goals and learning outcomes.
- identify strengths of various types of learning opportunities and describe how to implement each effectively in the context of a whole course.

Course Policies:
Attendance: Active participation in each class is expected. Reading should be completed prior to attending class. Students are allowed 2 excused absences per semester with no impact on their final grade. Additional absences (three or more) will decrease the final grade by 5 percentage points.
Late assignments: You need to make your drafts available on the day they are assigned in order to get peer review. Failure to have a draft prepared on the assigned date will result in a zero for the draft portion of that assignment. Final copies will receive a 10% deduction for every day they are late. If you have extenuating circumstances, please discuss these with me in advance of the due date when at all possible.

Academic Honesty: Students are required to follow UAF’s policies on academic honesty. These are readily available through UAF’s website (www.uaf.edu). Unfamiliarity with the policies is not considered an acceptable reason for violating them. In particular, plagiarism of any type will not be tolerated. Any instances of academic dishonesty will be acted on by the instructors, and will result in a grade of zero on that work. It may also result in the student receiving an F in the course and forwarding of the incident to the appropriate university personnel for further action.

Student Support: Students with special needs, disabilities, or concerns should contact Student Support Services (474-6844). Please let us know at the beginning of the semester if you will require accommodations due to a documented disability, and we will work with you in conjunction with the Office of Disability Services (203 WHIT, 474-7043).

Grading Scheme:

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<th>Item</th>
<th>Portion of Final Grade</th>
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<tr>
<td>Active participation in and preparation for weekly discussions</td>
<td>25%</td>
</tr>
<tr>
<td>Drafts of all course design assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Final copies of all course design assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Drafts and final copies of syllabus</td>
<td>25%</td>
</tr>
</tbody>
</table>

Grades will be calculated on the following scale:

- 90-100% = A
- 80-89% = B
- 60-69% = D
- Below 60 = F
- 70-79% = C
**Schedule for Spring 2017, STO 603: Instructional Design**

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<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Reading/assignment</th>
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| Jan 29  | Introduction to class  
            Creating significant learning experiences (discussion of reading) | Chapter 1 |
| Feb 5   | NO CLASS | Chapter 2 |
| Feb 12  | Discuss: Taxonomy of sig. learning and situational factors | Chapter 3: pages 67-82 |
| Feb 19  | Discuss: Identify learning goals  
            Peer review: Situational factors | Chapter 3: pages 82-92  
            Bring draft situational factors |
| Feb 26  | Discuss: Feedback and assessment procedures  
            Peer review: Learning Goals | Chapter 3: pages 92-112  
            Bring draft learning goals  
            Final situational factors due |
| Mar 5   | Peer review: Feedback and assessment | Bring draft feedback and assessment procedures  
            Final learning goals due |
| Mar 12  | SPRING BREAK | |
| Mar 19  | Discuss: Teaching and learning activities | Chapter 4: pages 113-138  
            Final feedback and assessment procedures due |
| Mar 26  | Peer review: Teaching and Learning activities | Bring draft teaching and learning activities |
| Apr 2   | Discuss: Structure, Strategy, and integration | Chapter 4: pages 138-156  
            Final teaching and learning activities due |
| Apr 9   | Peer review: structure and strategy | Bring draft structure and strategy |
| Apr 16  | Discuss: Syllabus | Chapter 4: pages 156-172  
            Final structure and strategy due |
| Apr 23  | Peer review: syllabus | Bring draft of syllabus |
| Apr 30  | Discuss: Changing the way we teach, better support for faculty | Chapter 5, Chapter 6  
            Final syllabus due |