

Submit original with signatures + 1 copy + electronic copy to UAF Governance.
See <http://www.uaf.edu/uafgov/faculty/cd> for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	BIOL	College/School	CNSM
Prepared by	Laura Conner	Phone	(907) 474-6950
Email Contact	ldconner@alaska.edu	Faculty Contact	Laura Conner

1. ACTION DESIRED (CHECK ONE): Trial Course ☐ New Course ☒

2. COURSE IDENTIFICATION: Dept **STO** Course # **602** No. of Credits **2**

Justify upper/lower division status & number of credits: The course will meet for 1600 minutes of lecture, equaling 2 credits. It is part of the proposed Graduate Certificate in Science Teaching and Outreach.

3. PROPOSED COURSE TITLE: Mentoring in the Sciences

4. CROSS LISTED? YES/NO **NO** If yes, Dept: Course #
(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. STACKED? YES/NO **NO** If yes, Dept: Course #

6. FREQUENCY OF OFFERING: Every fall.
(Every or Alternate) Fall, Spring, Summer — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (if approved) Fall 2014

8. COURSE FORMAT:

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

COURSE FORMAT: (check one) ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☒ 5 ☐ 6 weeks to full semester
OTHER FORMAT (specify)
Mode of delivery (specify lecture, field trips, labs, etc) **Lecture**

9. CONTACT HOURS PER WEEK: **2** LECTURE hours/weeks ☐ LAB hours/week ☐ PRACTICUM hours/week ☐

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See <http://www.uaf.edu/uafgov/faculty/cd/credits.html> for more information on number of credits.

OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

STO 602 Mentoring in the Sciences 2 credits

Course overview

This course provides a forum for graduate students to develop their mentoring philosophy and build effective mentoring skills. Effective mentoring can be learned, but not taught. Good mentors are normally produced through years of practice, successes and failures, and no two mentoring situations are alike. This course seeks to provide a discussion and learning environment for accelerating the process of learning to be a mentor. Through discussion of

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College of Natural Science & Mathematics

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case studies, activities and readings provided in course materials, students will consider mentoring philosophy, articulate it, anticipate challenges and practice effective solutions to a variety of mentoring issues.

11. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities ☐ N = Natural Science ☐ S = Social Sciences ☐

Will this course be used to fulfill a requirement for the baccalaureate core? ☐ YES ☒ NO

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6 ☐ W = Writing Intensive, Format 7 ☐ Natural Science, Format 8 ☐

12. COURSE REPEATABILITY:

Is this course repeatable for credit? ☐ YES ☒ NO

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit? ☐ TIMES

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course? ☐ CREDITS

13. GRADING SYSTEM:

LETTER: ☐ PASS/FAIL: ☒

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

Graduate standing

These will be required before the student is allowed to enroll in the course.

RECOMMENDED

Classes, etc. that student is strongly encouraged to complete prior to this course.

15. SPECIAL RESTRICTIONS, CONDITIONS

16. PROPOSED COURSE FEES

S

Has a memo been submitted through your dean to the Provost & VCAS for fee approval? Yes/No

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously? Yes/No

Yes

If yes, give semester, year, course #, etc.:

Although the course was not previously offered as a 693 or 694, it has previously been offered as a seminar course, BIOL 692, in Spring of 2008 and 2010.

18. ESTIMATED IMPACT

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

No budget impact is anticipated; the costs are limited to faculty salaries and minimal administrative costs (copying, etc.). Dr. Mary Beth Leigh, Associate Professor of Biology and Wildlife, will teach the course as part of her regular workload. No impacts on facilities and/or space is anticipated.

19. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (ffklj@uaf.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No

Yes

X

Karen Jensen, the Library Collection Development Officer, was contacted on August 27th, 2012 about the Graduate Certificate in Science Education and Outreach. We determined that the collections contain sufficient journal subscriptions in science education to support these efforts. In addition, many of the

required course books (National Research Council) for the certificate are freely available as pdf files.

20. IMPACTS ON PROGRAMS/DEPTS

What programs/departments will be affected by this proposed action?

Include information on the Programs/Departments contacted (e.g., email, memo)

This course will be open to all science and engineering graduate students, and is envisioned as a required course for the proposed Scientific Teaching and Outreach Program. Any science or engineering graduate student can take the course, regardless of whether or not they are enrolled in the certificate program.

21. POSITIVE AND NEGATIVE IMPACTS

*Please specify **positive and negative** impacts on other courses, programs and departments resulting from the proposed action.*



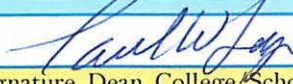
This course is envisioned as part of a package of courses in the proposed Graduate Certificate in Science Teaching and Outreach. Completion of this certificate will better prepare science graduate students for the responsibilities of faculty and other professional positions, and is expected to make them more competitive in the job market.

JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

Mentoring is a skill that is critical for faculty positions and other professional positions in the sciences, yet no permanent course currently exists that addresses strategies for mentoring science undergraduates. This course is a critical part of the proposed Graduate Certificate in Science Teaching and Outreach. The certificate will make graduate students better teacher and communicators of their science. These skills will help raise the quality of undergraduate instruction at UAF by arming Teaching Assistants with teaching training. The graduate students themselves will benefit by becoming increasingly competitive on the job market after graduation, and will become better science ambassadors to the public.

APPROVALS:

	Date	Sept 14, 2012
Signature, Chair, Program/Department of:	Biology and Wildlife	
	Date	9/25/2012
Signature, Chair, College/School Curriculum Council for:	CNSM	
	Date	9/25/12
Signature, Dean, College/School of:	CNSM	
 	Date	
Signature of Provost (if applicable)		

Offerings above the level of approved programs must be approved in advance by the Provost.

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

	Date	
Signature, Chair, UAF Faculty Senate Curriculum Review Committee		

ADDITIONAL SIGNATURES: *(If required)*

	Date	
Signature, Chair, Program/Department of:		

	Date	
Signature, Chair, College/School Curriculum Council for:		

	Date	
Signature, Dean, College/School of:		

SYLLABUS
Mentoring in the Sciences
STO 602
2 credits

Instructor: Dr. Mary Beth Leigh

Office: 228 West Ridge Research Building (WRRB)

Phone: 474-6656

Email: mbleigh@alaska.edu

Office hours: TBA

Class time and locations

MW 10:30-11:30

Course overview

This course provides a forum for graduate students to develop their mentoring philosophy and build effective mentoring skills. Effective mentoring can be learned, but not taught. Good mentors are normally produced through years of practice, successes and failures, and no two mentoring situations are alike. This course seeks to provide a discussion and learning environment for accelerating the process of learning to be a mentor. Through discussion of case studies, activities and readings provided in course materials, students will consider mentoring philosophy, articulate it, anticipate challenges and practice effective solutions to a variety of mentoring issues.

Prerequisites

The course is geared toward graduate students in the Scientific Teaching graduate certificate program and other grad students in a wide range of scientific fields. Other early career participants (e.g. postdocs, new faculty) are welcome, space permitting. No prior experience in mentoring is required.

Course materials

- Textbook - Entering Mentoring: A Seminar to Train a New Generation of Scientists. J Handelsman, SM Lauuffer, CM Pribbenow, C Pfund. Howard Hughes Medical Institute. Itchy Cat Press. 2008.
- Other readings from texts, primary literature, and the press will be assigned on an ad hoc basis for background and discussion

Course goals and Student Learning Objectives

- Develop a mentoring philosophy and articulate it in written form
- Build a personal step-by-step guide for initiating and maintaining a healthy mentoring relationship.
- Develop a proposed project for a mentee.
- Prepare to resolve an array of mentoring issues through case studies, discussion, role playing and/or written proposals.

Course format: Assigned readings and case studies will be the springboard for discussions. A variety of scientifically supported active learning teaching techniques will be incorporated into the class to engage students with a diversity of learning styles and to promote active engagement. Writing skills will be developed through peers and instructor feedback to written work, with opportunities for revision in major assignments.

Assessment:

Students will be given a pass/fail grade based on evaluation by the instructor on their attendance, participation and leadership in discussion, completion of assignments, and comprehension of the material. Students are expected to attend all meetings. Absences may be excused with permission in advance or afterward for valid reasons (e.g. family medical).

Students with disabilities

UAF is committed to equal opportunity for all students. Students with even minor disabilities, students who are the first in their families to attempt a four-year college degree, or students whose incomes are low, have opportunities for tutorial and other forms of support from the office of Disability Services or the office of Student Support Services. If you need classroom accommodations or other support, please meet with me during office hours as soon as possible to let me know; and please make an appointment with the Office of Disability Services and Student Support Services, to enlist the appropriate support. I will collaborate to provide the appropriate accommodations and supports or services to assist you in meeting the goals of the course.