

Submit original with signatures + 1 copy + electronic copy to Faculty Senate (Box 7500).
See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

TRIAL COURSE OR NEW COURSE PROPOSAL

SUBMITTED BY:

Department	URSA (Undergraduate Research and Scholarly Activity)	College/School	Division of General Studies
Prepared by	Barbara Taylor	Phone	474-2487
Email Contact	betaylor@alaska.edu	Faculty Contact	Barbara Taylor

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

2. COURSE IDENTIFICATION:
 Dept: **URSA** Course #: **488** No. of Credits: **2-4**

Justify upper/lower division status & number of credits:

This course offers opportunities for student research or creative scholarship in advanced topics beyond typical undergraduate course offerings. Discipline-specific knowledge equivalent to Junior standing is assumed and students are expected to have prior research or creative scholarship experience. These expectations justify this course as upper division/senior level. Enrolled student are required actively participate in research or creative scholarship with a faculty mentor, publicly present their work and turn in a final report. Research and creative scholarship areas range across all disciplines. A substantial level of background in the specific discipline, a level commensurate with having achieved junior or senior standing, is assumed. Credits are assigned at the beginning of the semester when students enroll, but may be subject to change as the result of consultation between the student and professor. Two-credit URSA 488 is reserved generally for literature or archival research or small projects. In general, 3 credits provides an absolute minimum amount of time to accomplish a novel project; 4 credits may be appropriate if the student has a large ongoing project with plenty of available time. Six credits of 488 are acquired by students who enroll in 488 in multiple semesters. Each credit of 488 corresponds to an average weekly minimum of 3 hours working productively in the archive/field/ laboratory/studio, plus 1-2 hours additional work on the project (planning, interpretation, notebook writing and background reading).

3. PROPOSED COURSE TITLE: Undergraduate Research and Creative Scholarship II

4. To be CROSS LISTED? YES/NO
 Please disregard at this time

Yes	If yes, Dept:	Chem ATM, EE, ESK, FREN, GEOS, GER, JPN, PHYS, RUSS SPAN	Course #	488
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(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. To be STACKED? YES/NO
 No If yes, Dept. Course #

6. FREQUENCY OF OFFERING: Fall and Spring semesters

Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) — or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING (AY2011-12 if approved by 3/1/2012; otherwise AY2012-13)

Fall 2011

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 all that apply) 1 2 3 4 5 6 weeks to full semester

OTHER FORMAT (specify)

Mode of delivery (specify lecture, field trips, labs, etc) Lecture and faculty mentorship

9. CONTACT HOURS PER WEEK:

0-1 LECTURE hours/weeks 4-10 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-senate/curriculum/course-degree-procedures-/guidelines-for-computing-/> for more information on number of credits.

OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

Provides undergraduate opportunities for student research or creative scholarship in advanced topics beyond typical undergraduate laboratory or studio course offerings. Students are required to publicly present their work and turn in a final report suitable for submission to a discipline-specific journal. Research and creative scholarship areas range across all disciplines. A substantial level of background in the specific discipline, a level commensurate with having achieved junior or senior standing, is assumed.

11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

H = Humanities

S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form.

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).

URSA 488 can be repeated by students engaging in a new project in the same or a different discipline or extending a previous project to a next logical step.

How many times may the course be repeated for credit?

2 TIMES

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

6 CREDITS

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

6 CREDITS

13. GRADING SYSTEM: Specify only one. Note: Later changing the grading system for a course constitutes a Major Course Change.

LETTER: PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES None; URSA 388 recommended

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

15. SPECIAL RESTRICTIONS, CONDITIONS none

16. PROPOSED COURSE FEES \$0

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

17. PREVIOUS HISTORY

Has the course been offered as special topics or trial course previously?

Yes/No

No

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

Chem 488, ATM 488, EE 488, ESK 488, FREN 488, GEOS 488, GER 488, JPN 488, PHYS 488, RUSS 488 and SPAN 488 have been offered for many years and a biology version was offered as a special topics course in spring 2011 with Barbara Taylor instructing but future offerings in biology are uncertain.

18. ESTIMATED IMPACT

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

Undergraduate Research and Creative Scholarship II course will be coordinated by a faculty member who will meet with the students at the start of the semester to insure their readiness for research and help them identify a faculty research mentor. Any research costs (supplies etc) will be borne by the faculty mentor (on their grant) or scholarships (some of which may be available through URSA). We do not anticipate a negative budget impact. The course will be offered on campus at Fairbanks and in the future we may offer the course on selected rural campuses.

19. LIBRARY COLLECTIONS

Have you contacted the library collection development officer (kljensen@alaska.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

Current library resources are satisfactory; no additional resources will be required.

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 class will increase active participation by undergraduates in research and creative scholarship at UAF by bringing potential student research and faculty mentor together, insuring that students have all necessary certifications required for participation the discipline-specific project and relieving faculty mentors of the burden of organizing multiple individual study courses. In so doing, this course will contribute significantly to the mission of making UAF one of the nation's premier student-focused research universities. Having a vibrant and dynamic culture of undergraduate research, being one of the nation's premier student-focused research universities, is certain to have a positive effect on student recruitment, retention and engagement.

21. POSITIVE AND NEGATIVE IMPACTS

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

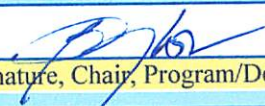
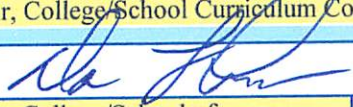
We anticipate that the course will represent an important recruiting platform for prospective undergraduate researchers and will have a positive effect on enrollment at UAF. The only potential for negative impact is if any student research seminars are already being offered within departments and schools; there could be competition for student enrollment. Chemistry and Biochemistry has such a course (Chem 488) and Biology and Wildlife offered such a course once as a special topics course. If such courses exist, cross-listing with URSA could be beneficial by expanding their scope or spreading the workload effort of instruction/coordination.

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.

Providing opportunities for undergraduate research is a high impact educational practice. In the current economic climate and in the face of rising tuition costs, such high impact practices are essential to successful recruiting and retention of students at post-secondary learning institutions. In recognition of this, the UAF Chancellor and Provost have created URSA. The mission of URSA is to support, develop and institutionalize a broad-based and robust program of undergraduate research and creative scholarship. At all levels, URSA aims to improve skills in critical thinking and communication and to engender a culture of life-long learning among all students, as well as enhance preparation and education of students who will fill the needs of Alaska's 21st century workforce and society. URSA is UAF's resource for the development and promotion of experiential learning activities that engage undergraduate students to support UAF's goal to become a leading student-focused research university. Building on existing efforts and capacities, the program enables UAF students to pursue varying levels of research engagement from a single credit of first-year seminar to independent scholarly investigations or a senior thesis including BFA exhibit or performance. URSA 488 will afford students an opportunity to actively participate in research. These opportunities will have a preparatory benefit; they will help develop and improve critical thinking skills, which are essential for success in any field. For those students who aspire to post-graduate research positions, the opportunity to develop research skills will be particularly beneficial.

APPROVALS: Add additional signature lines as needed.

	Date	8-10-2011
Signature, Chair, Program/Department of:	UNDERGRADUATE RESEARCH AND SCHOLARLY ACTIVITY	
<i>none</i>	Date	
Signature, Chair, College/School Curriculum Council for:		
	Date	8/9/2011
Signature, Dean, College/School of:	DIVISION OF GENERAL STUDIES	
	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		
Faculty Senate Review Committee:	___Curriculum Review ___GAAC	

Preliminary Syllabus:

URSA 488 Undergraduate Research and Creative Scholarship II

Fall 2011

Course Information:

Title: Undergraduate Research and Creative Scholarship II

CRN Number: TBD

Instructor: Barbara Taylor, PhD

Contact Information: betaylor@alaska.edu; 474-2487

Office Location: URSA Office 301 Bunnell

Office Hours for Students: weekdays 9AM – 5PM

Course Readings/Materials:

How to Mentor Undergraduate Researchers Council on Undergraduate Research (CUR)

<http://www.cur.org>

Course Description:

Undergraduate research refers to a collaboration in original research and/or creative activity between an undergraduate student and a faculty member, leading to work which is presentable to scholars in the field. Research projects may be an element of the faculty member's work or could be initiated by the student. Undergraduate Research offers opportunities for student research in advanced topics beyond typical undergraduate course offerings. Enrolled students are required to make a presentation and turn in a final report. Research areas range across all disciplines. A substantial level of discipline-specific background, a level commensurate with having achieved junior or senior standing, is assumed.

Course Goals:

Involvement in research can be an important ingredient in a successful and satisfying undergraduate program in biology. Undergraduate Research gives students a chance to discuss research projects with faculty members, participate in ongoing projects in research laboratories, write a research report and present a research poster. As a research university, UAF strives to communicate to undergraduate students how research and scholarly activity is conducted. Accordingly, the course goals of URSA 488 are that students learn, through direct research experience, how discipline-specific knowledge is created and how to communicate research results in oral, written and performance formats.

Student Learning Outcomes:

The intended outcomes of URSA 488 are that students learn, through direct research experience, how discipline-specific knowledge is created and how to communicate research results in oral, written and performance formats. Specifically students will learn:

1. tools, skills and techniques specific to the discipline that encompasses their project

2. critical thinking skills leading to ability to engage in research, to interpret results and to formulate future questions and directions
3. to communicate research motivations, results and conclusions in oral, written, poster and performance formats.

Instructional Methods & Course Activities:

Course Meetings Classes will be held during the first 2 weeks of the semester. The purpose of these classes is to assist students in identifying research mentors and insure each student completes any training required for research participation in their chosen discipline. Attendance is mandatory even if the student has a research project and has completed all necessary training.

Course Projects The research project should be envisioned as a component of a publication in a peer-reviewed journal or a public performance. It should be well-defined, stand a reasonable chance of completion in the available time, apply and develop an understanding of in-depth concepts and be grounded in the primary scholarly literature.

Finding a project First-time 488 students, or returning students planning to work with a different professor, must meet with at least three faculty members to discuss possible projects. The signatures of the three faculty members must be obtained on the attached form. After these meetings the student will select a research project and mentor, as well as write a half-page description outlining the proposed project, including one reference, on the attached form. The project description must be submitted by 5 PM of the 3rd Friday of the semester (please also send a copy to the research mentor). The project description should be written in consultation with the research mentor. For information about faculty and their research areas, visit the faculty web pages at <http://www.uaf.edu/>. Continuing students must submit a project description outlining each semester's proposed research.

Number of credits Credits are assigned at the beginning of the semester when students enroll, but may be subject to change as the result of consultation between the student and professor. Two credits of URSA 488 is reserved generally for literature research or small computational projects. In general, 3 credits provides an absolute minimum amount of time to accomplish a studio-, laboratory- or field-based project; 4 credits may be appropriate if the student has a large ongoing project with plenty of available time. Six credits of URSA 488 are acquired by students who enroll in 488 for multiple semesters. Each credit of 488 corresponds to an average weekly minimum of 3 hours working productively in the laboratory/field/studio, plus 1-2 hours additional work on the project (planning, interpretation, notebook writing and background reading).

Project report Each semester a final report, written according to the format of a manuscript to be submitted to a research journal or the discipline-specific equivalent, is required. Early in the semester the student and mentor should decide on an appropriate format. Midway through the semester the student should begin writing the report. Copies of the report are to be submitted to

both the research mentor and the instructor no later than 5 PM on the last day of final exams for the semester. Reports must be well-written, comprehensive and contain appropriate citations. Although oral presentations, poster presentations, and journal article co-authorship are valuable, they do not substitute for the student writing a comprehensive report.

Public Presentation (poster or talk) Each semester, students must present a poster or talk at the URSA Symposium, which will be held _____. Continuing students present a poster describing their most recent results. The usual size is 36" x 48", but other sizes may be appropriate if the student will be presenting a poster at a regional or national conference. The cost of poster printing will be paid by URSA.

Course Symposium The URSA Symposium will be a 2-hour symposium with student presence required. We will try to make this a potluck symposium so that refreshments can be provided for the student participants and to attract participation from a wider campus audience.

Course Calendar:

Course week	Course Topic	Course Assignment
1	Research at UAF: opportunities and requirements for participation	
2	How to prepare a Project Report and Poster	
3	Individual research	Project Proposal
4	Individual research	
5	Individual research	
6	Individual research	
7	Individual research	
8	Individual research	
9	Individual research	
10	Individual research	
11	Individual research	
12	Individual research	
13	Individual research	
14	Individual research, poster preparation	
15	Poster Symposium	Project Poster or Talk
Finals week		Project Report

Course Policies:

Safety All research students must complete safety training. This may involve several online training presentations (with quizzes that you must pass). Contact your department's Safety Coordinator to arrange for training before beginning your project.

Safety Tips While Safety Coordinators will provide a thorough review of safety issues, and you will hopefully have gained safety knowledge in previous courses, here we emphasize several important points. Project work must be carried out with all due caution. Do not work alone. Wear safety gear as suggested. Do not rush. Do not attempt a procedure without the necessary training. Familiarize yourself with the potential hazards of materials you are using. Use common sense. This is a learning experience, so do not be bashful about asking for assistance.

Attendance In consultation with your mentor, establish a regular schedule of attendance in the mentor's work area (studio, laboratory, etc.). You may also be asked to attend a regular research meetings with your mentor and other students held weekly or periodically during the semester. Regular attendance is required. You are expected to attend all classes. Classes will be held during the first two weeks of the semester. The purpose of these classes is to assist students in identifying research mentors and insure each student completes any training required for research participation in their chosen discipline.

If you are required to participate in: military; UAF-sponsored activities; or documented, necessary participation in cultural activities that will cause you to miss a class, you must notify me as soon as possible. You must notify me of all scheduled UAF-required absences for the semester (e.g. athletic events) during the first week of classes.

Research Hours The total number of hours spent working on the project (both time in and away from your mentor's workplace, doing background reading, data production and analysis, creation, practice, performance or poster and report preparation will vary between students and projects. Spend all the time necessary to complete the proposed project and facilitate the poster and report presentation required at the end of the semester. The number of credits assigned for each student's URSA 488 course is determined by the project. As a rough guide, students should spend an average minimum of 3 hours per week per credit.

Plagiarism/Academic Integrity Plagiarism and cheating are serious offenses and may result in failure on exams, papers, projects, or courses. The entire purpose of participation in this class is to acquire useful skills through learning. To submit another person's work as your own is to lose the opportunity to learn these skills.

Honesty is a primary responsibility of you and every other UAF student. The following are common guidelines regarding academic integrity:

1. Students will not collaborate on any quizzes, in-class exams, or take-home exams that contribute to their grade in a course, unless specific permission has been granted. No materials may be used to assist in quizzes and examinations without specific permission.

2. Students will not represent the work of others as their own. A student will attribute the source of information not original with himself or herself (direct quotes or paraphrases) in all assigned work.
3. No work submitted for one course may be submitted for credit in another course without the explicit approval of both instructors.

Withdrawal Students are expected to formally withdraw from the class if they cannot complete the course; they will not be automatically withdrawn by the instructor or their research mentor if they do not attend or fall behind. Students who do not successfully complete the class and do not withdraw will receive a grade of "F".

Student Responsibility As students, you must accept the responsibility of ensuring your own success. It is your responsibility to know what you need to do and when you need to do it. This requires a great deal of initiative on your part. Always ask if you don't know what is expected of you. Never wait for someone to tell you. "I didn't know," and "no one told me," are not acceptable reasons for failure to fulfill your student obligations. I am here to help and support students who take the initiative to help themselves.

Evaluation:

Students will receive a letter grade based on their performance on course assignments.

Assignment	Percentage Contribution to Final Grade
Class Participation	10
Project Proposal	10
Poster or Talk Presentation	40
Project Report	40

Students will be graded on a straight percentage basis: 90-100% is an A, 80-89.9% is a B, 70-79.9% is a C, 60-69.9% is a D, and < 60% is an F. Students will not be graded on a curve. This means that, in principle, it will be possible for everyone to get an A in this course.

Support Services:

Students in need of support are encouraged to contact me via telephone. I have posted office hours and am available for group and private face to face meetings during the specified times. All college classes require strong reading and communication skills. There may be a student support program in your area. If you feel that you may be falling behind, contact me immediately. I want you to be successful. Never be afraid to ask for help.

Disabilities Services:

The Office of Disability Services (208 WHIT, 474-5655) implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course

materials. I will work with the Office of Disabilities Services to provide reasonable accommodation to rural students with disabilities. Please contact me or The Office of Disability Services if you require special assistance.

University of Alaska Fairbanks, Division of General Studies
URSA 488 Undergraduate Research and Creative Scholarship II

Student name:

UAF email address (must be your UAF address):

Return this page with three or more signatures to Dr Taylor's mailbox in the URSA Office Room 301 by the 3rd Friday of the semester. Include a half-page description of the proposed research project.

Faculty researcher consulted	Signature	Date

I agree to serve as research mentor for the above student. A description of the proposed research, along with a statement of possible laboratory hazards associated with the project, is attached.

Mentor Name (print):

Date:

Mentor Signature:

Number of Credit hours:

The above student has completed his or her safety training and is approved for working on this project.

Safety Coordinator:

Date:

If IACUC or IRB training is required for the project, attached an email that confirms completion of training.

Trial COURSE or New Course - FORMAT 1

University of Alaska Fairbanks, Division of General Studies
URSA 488 Undergraduate Research and Creative Scholarship II

Name:

Mentor:

Semester:

Description of proposed research (Including overview of planned laboratory procedures and materials, including descriptions of potentially hazardous procedures or materials):

Lead-in literature reference: