FORMAT 1

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	**Kevin Winker**	**Phone**	**474-7027**
Email Contact	**kevin.winker@alaska.edu**	**Faculty Contact**	**Kevin Winker**

1. ACTION DESIRED (CHECK ONE):	Trial Course	√	New Course		
2. COURSE IDENTIFICATION:	Course Code	**MRAP**	Course #	**288**	No. of Credits **1-4**

Justify upper/lower division status & number of credits:	This course offers opportunities for student research in advanced topics beyond typical undergraduate course offerings. Discipline-specific knowledge or experience equivalent to Freshman or Sophomore standing is assumed. These expectations justify this course as lower division. Enrolled students are required to actively participate in research and scholarship with a faculty mentor and in some cases with professional staff as well. In addition to performing object- and data-specific exercises, they will turn in a final report that summarizes their work. Research and scholarship areas range across an array of museum-based disciplines. Credits (1 or 2) are assigned at the beginning of the semester when students enroll. The number of credits taken in a semester are directly related to the number of hours the student commits to the course. Eight credits of 288 could be acquired by students who enroll in the course in multiple semesters, and instructors would ensure that each experience was unique. Each credit corresponds to an average weekly minimum of 3 hours working productively in the collection or laboratory plus 1-2 hours of additional work on the project (e.g., planning, interpretation, notebook and report writing, background reading).

3. PROPOSED COURSE TITLE:	Museum Research Apprentice I				
4. To be CROSS LISTED? *YES/NO*	No	If yes, Dept:		Course #	
5. To be STACKED? *YES/NO*	No	If yes, Dept.		Course #	

(Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

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 2012

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)	Small group and one-on-one mentorship											

***9. CONTACT HOURS PER WEEK*:**	0-1	LECTURE hours/weeks		LAB hours /week	**3-6**	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):

MRAP 288 (1 or 2 credits, Pass/Fail). Museum Research Apprentice I. Provides opportunities for undergraduate student research or scholarship in museum-based subjects not available in typical undergraduate courses. Students are required to perform research tasks associated with specimens or objects and their associated data and to turn in a final report. Opportunities range across several museum-based disciplines (archaeology, botany, earth science, entomology, ethnology & history, film, fine art, ichthyology, mammalogy, informal science education, and ornithology). Course may be repeated.

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).	MRAP 288 can be repeated by students engaging in a new project in the same or a different discipline or extend their engagement in a previous project pursuing new themes or experiences.

How many times may the course be repeated for credit?	4	**TIMES**
If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?	4	**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?	4	**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	Instructor permission (students must contact a potential mentor before enrolling to determine whether matching opportunities exist).

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**	Yes
If yes, give semester, year, course #, etc.:	Spring 2012

18. ESTIMATED IMPACT

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

This course will be coordinated by multiple faculty members, each of whom will meet with the respective discipline-based subgroup of students at the start of the semester to ensure their readiness for research and initiate their semester's program. Any research costs (e.g., supplies) will be borne by the faculty mentor's funds (e.g., grants, contracts, collections support) or through scholarships (some of which may be available through URSA). We do not anticipate a negative budget impact. The course will be offered on the Fairbanks campus, where students can perform work in the University of Alaska Museum of the North itself.

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.

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 increase active participation by undergraduates in research and scholarship at UAF in an active research museum, a rare opportunity nationally. It will do so by bringing together undergraduate students, faculty mentors, and in some cases museum discipline professionals, ensuring that students have the necessary qualifications and training to participate in discipline-specific projects, and relieving faculty mentors of the burden of organizing multiple individual study courses. Moreover, it opens up museum-based opportunities for students much more broadly than has occurred in the past, further enhancing the UAF undergraduate experience. 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 and 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 this course will represent an important recruiting platform for prospective undergraduate researchers and will have a positive effect on enrollment at UAF. It truly is a rare opportunity. We have anticipated the only possible negative impact we could think of – competition for undergraduate students among museum departments – by including all of the museum departments in this course offering in a manner that allows the students to choose their areas of interest when applying for instructor approval.

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 for successful recruiting and for student retention. It was through recognition of this that the UAF Chancellor and Provost created URSA. The mission of URSA is to support, develop, and institutionalize a broad-based, robust program of undergraduate research and creative scholarship. The Museum Research Apprenticeship program (MRAP) encompasses one potential rib of this umbrella mission within a unique interdisciplinary unit on campus, offering students the opportunity to improve skills in research-related activities and communication, engendering a culture of life-long learning among all students, and enhancing the education and training of students who will fill the needs of Alaska's 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. MRAP extends this into the university's research museum, increasing opportunities for student training in areas relatively few students have had access to before. Building on existing efforts and capacities, MRAP 288 enables UAF students to pursue varying aspects and levels of museum-based research, from a single credit of first-year enrollment to four credits across up to four semesters, enabling exploration of breadth or depth in multiple disciplines. These opportunities will have a preparatory benefit and they will help develop and improve critical thinking, processing, and data-associated 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. See next page for signatures.

	Date	
Signature, Chair, Program/Department of:		
	Date	
Signature, Chair, College/School Curriculum Council for:		
	Date	
Signature, Dean, College/School of:		
	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

___Core Review ___SADAC

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APPROVALS: Add additional signature lines as needed.

	Date	11/3/11	
Signature, Chair, Program/Department of:			
N/A	Date		
Signature, Chair, College/School Curriculum Council for:			
	Date	11/3/11	
Signature, Dean, College/School of:			
	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

___Core Review ___SADAC

Trial COURSE or New Course - FORMAT 1

PRELIMINARY SYLLABUS

MRAP 288 Museum Research Apprenticeship I **Spring 2012**
1 or 2 credits (3 or 6 hrs/week, Pass/Fail)

Prerequisites: Permission of instructor (see areas of current opportunities below). Some apprenticeship opportunities may include preferred prior experience. Students must contact one or more of the faculty members listed below and apply for consideration to be included; opportunities and space are both limited. Areas presently offering opportunities and contact information to request instructor permission:

Birds (Kevin Winker, kevin.winker@alaska.edu)
Mammals (Link Olson, leolson@alaska.edu)
Plants (Stefanie Ickert-Bond, smickertbond@alaska.edu)
Insects (Derek Sikes, dssikes@alaska.edu)
Earth Science (Patrick Druckenmiller, psdruckenmiller@alaska.edu)
Fishes (Andres Lopez, jalopez2@alaska.edu)
Archaeology (Jeff Rasic, Jeff_Rasic@nps.gov)
Ethnology/History (Angela Linn, ajlinn@alaska.edu)
Fine Art (Mareca Guthrie, mrguthrie@alaska.edu)

Location: University of Alaska Museum of the North, specific rooms to be determined.

Meeting times: Flexible, depending on apprenticeship opportunities.

Instructors: Co-taught by UAM faculty curators, who may include Kevin Winker (kevin.winker@alaska.edu), Link Olson (leolson@alaska.edu), Stefanie Ickert-Bond (smickertbond@alaska.edu), Derek Sikes (dssikes@alaska.edu), Patrick Druckenmiller (psdruckenmiller@alaska.edu), Andres Lopez (jalopez2@alaska.edu), and/or Mareca Guthrie (mrguthrie@alaska.edu).

Readings/materials: None required overall, but some apprenticeship opportunities will require lab safety training and/or opportunity-specific readings (e.g., preparation or protocol literature). Read and sign appropriate safety and museum security documents, which will be provided to the student.

Course description: This is a once- or twice-weekly laboratory/collections-based course for undergraduate students eager to obtain hands-on training and experience in museum science. The University of Alaska Museum of the North is the State's *de facto* repository of natural history specimens and cultural objects, and we house multiple world-class research collections. Processing incoming specimens or objects and their associated data is a critical ongoing set of highly specialized tasks. Some of these tasks, for example, turn organisms into scientific specimens that are useful for a broad array of questions in areas as diverse as evolution, ecology, genetics, conservation, and the changing environment. Others process objects of historic or contemporary culture or art for preservation and study of myriad questions about humans, past and present. Careful documentation and preservation are key parts of these processes, and this course involves hands-on training and working experience with specimens and objects and their associated data. For example, some students will prepare museum-quality skins, skeletons, and sometimes fluid specimens, or dry mounts following standard procedures. During some of these preparations, students will perform a dissection/necropsy and record observational data in a catalog. They will take measurements, tissue samples, and other parts to preserve as specimens. Students will be encouraged to explore questions about species'

morphology, distributional patterns, diets, parasite loads, molting patterns, and other potential research questions. Other students will learn preventive conservation methods to prepare cultural objects for curation. Students will analyze objects and record data such as measurements, materials, function, typology, and design elements. Students will have the opportunity to research questions about human culture such as prehistoric trade and technology, human environmental interaction, and cultural meanings as reflected in art and artifact. Students will also participate in discovery science and in practical aspects of research resource infrastructure.

A various array of apprenticeship opportunities will be available each semester. Students may repeat the course to improve or expand their knowledge and skills and gain new experiences, and students with these skills are preferred when advanced opportunities such as paid positions and field work arise. Students will gain an understanding of a critical aspect of museum science (e.g., preparing skins or skeletons, fluid-preserved specimens, botanical specimens, tissue samples, studying or documenting and cataloguing archaeological, ethnological, and art objects, etc.). They will also learn the importance of accurately recording detailed data associated with museum specimens and objects. Such detailed focus on organisms and objects serves as an important complement to the social and natural sciences or to art at multiple levels.

Catalogue description: MRAP 288 (1 or 2 credits, Pass-Fail). Museum Research Apprentice I. Provides opportunities for undergraduate student research or scholarship in museum-based subjects not available in typical undergraduate courses. Students are required to perform research tasks associated with specimens or objects and their associated data and to turn in a final report. Opportunities range across several museum-based disciplines. Opportunities range across several museum-based disciplines (archaeology, botany, earth science, entomology, ethnology & history, film, fine art, ichthyology, mammalogy, informal science education, and ornithology). This course may be repeated.

Course goals: Students will attain proficiency in aspects of museum science associated with specimens, objects, and data.

Student Learning Outcomes: Students will learn, through direct research experience, how discipline-specific specimens, samples, and objects are processed and preserved and how associated knowledge is created, archived, and disseminated. Associated activities may include, but are not limited to: specimen preparation, subsampling, comparative age- and sex-related anatomy, species identification, georeferencing, databasing, labeling/barcoding, DNA/tissue archiving, automontage specimen photography, preventive conservation, and other procedures. The tools, skills, and techniques associated with these activities, which are unique to each discipline, will become familiar, as will the critical thinking skills necessary to effectively and safely use them. Writing skills will also be improved through recording data, weekly note-taking, and a final report.

Instructional methods: Will vary somewhat with instructor and discipline but will be mostly one-on-one or small group laboratory and/or collections practicum. Brief lectures may also be given in some disciplines.

Grading: This course is Pass/Fail. Grading will be based on attendance, laboratory and/or collection-based activities, keeping up a notebook (90% for these), and a final report (10%). The final report shall be no longer than 3 pages and will provide a restrospective of the laboratory and/or collection-based activities performed and include an assessment of concepts or skills covered and possible future directions.

Course policies: Students must attend each week for the full hours committed (1 credit = 3 hr/week; 2 credits = 6 hr/week). Missed time must be made up. Coordinate with your instructor. Safety training will be required if you are working in a laboratory. *Safety tips:* safety coordinators will review safety issues, and you will hopefully have some safety knowledge from previous courses. We suggest that any work be carried out

with appropriate caution. Wear safety gear as required. 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 shy about asking for assistance. BE SURE THAT YOUR WORKSPACE IS CLEAN UPON LEAVING. Per academic policy, plagiarism and cheating are serious offenses and may result in failure. The purpose of participation in this course 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. *Withdrawal:* Students are expected to formally withdraw from the course if they cannot complete it; 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".

Course calendar: This is an outline; discipline-specific activities may vary.

Course week	Course Topic	Course Assignment
1	Introduction to disciplines and activities; lab safety; initiate individual research	
2	Individual research	Begin weekly lab notebook
3	Individual research	Notebook entries
4	Individual research; discuss progress with supervisor, review lab notebook.	Notebook entries
5	Individual research	Notebook entries
6	Individual research	Notebook entries
7	Individual research; discuss progress with supervisor, review lab notebook.	Notebook entries
8	Individual research	Notebook entries
9	Individual research	Notebook entries
10	Individual research; discuss progress with supervisor, discuss mid-term progress, and lab notebook.	Notebook entries
11	Individual research	Notebook entries
12	Individual research	Notebook entries
13	Individual research; discuss progress with supervisor, review lab notebook, and project report.	Notebook entries
14	Individual research	Notebook entries
15	Complete semester's project	Complete lab notebook
Finals week		Project Report

UAF policies: As a UAF student, you are subject to the Student Code of Conduct (http://www.uaf.edu/ses/student-resources/conduct/#condu). In accordance with Board of Regents' Policy 09.02.01, UAF will maintain an academic environment in which the freedom to teach, conduct research, learn, and administer the university is protected. Students will enjoy maximum benefit from this environment by accepting responsibilities commensurate with their role in the academic community. The

principles of the Code are designed to facilitate communication, foster academic integrity, and defend freedoms of inquiry, discussion, and expression among members of the university community. You should become familiar with campus policies and regulations as published in the student handbook.

UAF requires students to conduct themselves honestly and responsibly, and to respect the rights of others. Conduct that unreasonably interferes with the learning environment or that violates the rights of others is prohibited. Students and student organizations will be responsible for ensuring that they and their guests comply with the Code while on property owned or controlled by the university or at activities authorized by the university.

Disciplinary action may be initiated by the university and disciplinary sanctions imposed against any student or student organization found responsible for committing, attempting to commit, or intentionally assisting in the commission of any of the following prohibited forms of conduct:
A. cheating, plagiarism, or other forms of academic dishonesty;
B. forgery, falsification, alteration, or misuse of documents, funds, or property;
C. damage or destruction of property;
D. theft of property or services;
E. harassment;
F. endangerment, assault, or infliction of physical harm;
G. disruptive or obstructive actions;
H. misuse of firearms, explosives, weapons, dangerous devices, or dangerous chemicals;
I. failure to comply with university directives;
J. misuse of alcohol or other intoxicants or drugs;
K. violation of published university policies, regulations, rules, or procedures; or
L. any other actions that result in unreasonable interference with the learning environment or the rights of others.

This list is not intended to define prohibited conduct in exhaustive terms, but rather to set forth examples to serve as guidelines for acceptable and unacceptable behavior.

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 or exams that will contribute to their grade in a course, unless permission is granted by the instructor of the course. Only those materials permitted by the instructor may be used to assist in quizzes and exams.
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 compositions, theses and other reports.
3. No work submitted for one course may be submitted for credit in another course without the explicit approval of both instructors.

Alleged violations of the Code of Conduct will be reviewed in accordance with procedures specified in regent's policy, university regulations and UAF rules and procedures. For additional information and details about the Student Code of Conduct, contact the Dean of Student Services or web www.alaska.edu/bor/ or refer to the student handbook that is printed in the back of the class schedule for each semester. Students are encouraged to review the entire code.

Trial COURSE or New Course - FORMAT 1

A Few Words on Plagiarism: In general, DO NOT present someone else's ideas or data as your own: you are expected and required to give credit where credit is due. Plagiarism is a violation of the law and may lead to serious repercussions! Please follow the following guidelines: for any written assignments, if you use someone else's ideas, data, or other information, write it in your own words and include the reference in parentheses directly following that information. Avoid copying someone else's text. If, however, you feel you have to include an exact copy of that text, put it in quotation marks followed by the reference in parentheses. Of course, include all cited references in the Literature Cited section. During oral presentations, please acknowledge the sources by mentioning their name(s) and year of publication or by printing them on overheads, slides, or handouts. Also be aware that you need to cite earlier work by yourself. Any substantial use of any written or other materials that was used for another course or that was generated in any other circumstances will not be accepted for credit in this course. Only minor contributions from earlier work with appropriate citation(s) will be accepted.

Disabilities Services: The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. We will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.