TRIAL COURSE OR NEW COURSE PROPOSAL

**SUBMITTED BY:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Museum / Bio Wildlife</th>
<th>College/School</th>
<th>CNSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by</td>
<td>Derek Sikes</td>
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<td>474-6278</td>
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<td>Faculty Contact</td>
<td>Derek Sikes</td>
</tr>
</tbody>
</table>

1. **ACTION DESIRED**

   (CHECK ONE):
   - [ ] Trial Course
   - [X] New Course

2. **COURSE IDENTIFICATION**:

   Dept | Bio | Course # | F | X | No. of Credits | 1
   ---- | ---- | -------- | ---|---|----------------|-----
   lower division, weekend summer course (19 hours: 1 credits; 10h lecture, 9h lab)

3. **PROPOSED COURSE TITLE**:

   An Introduction to Field Entomology

4. **To be CROSS LISTED?**

   YES/NO

   If yes, Dept: ____________

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

5. **To be STACKED?**

   YES/NO

   If yes, Dept: ____________

   Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi—undergraduate and graduate versions—will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online – see URL at top of this page.

6. **FREQUENCY OF OFFERING**:

   Summer (every)

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

7. **SEMESTER & YEAR OF FIRST OFFERING**

   (AY2013-14 if approved by 3/1/2013; otherwise AY2014-15)

   Summer 2013 x 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 all that apply)

   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - [ ] 5
   - [X] 6 weeks to full semester

   OTHER FORMAT

   (specify)

   Mode of delivery:

   lab, lecture, field trips
9. CONTACT HOURS PER WEEK:

<table>
<thead>
<tr>
<th>LECTURE</th>
<th>LAB</th>
<th>PRACTICUM</th>
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<tbody>
<tr>
<td>hours/week</td>
<td>hours/week</td>
<td>hours/week</td>
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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.ua.edu/ugov/faculty-senate/curriculum/course-degree-procedures/guidelines-for-computing/ for more information on number of credits.

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

Example of a complete description:

FISH 487 W, O  Fishery Management
3 Credits  Offered Spring
Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. Prerequisites: COMM F131X or COMM F141X, ENGL F111X, ENGL F211X or ENGL F213X, ENGL F414, FISH F425; or permission of instructor. Cross-listed with MRM F487. (3+0)

NEW NUMBER TO BE ASSIGNED.

Bio 195  An Introduction to Field Entomology
1 credit  Offered Summer
(note: This course cannot be used as a biology elective by biological science majors)
An introduction to field entomological techniques. Emphasized will be professional procedures to collect and process (sort, mount, & label) non-marine arthropods. The skills necessary to identify most groups to Order will be taught. Students will create a collection from which specimens will be chosen for the University of Alaska Museum Insect Collection and the Teaching Collection. (.75+.75)

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: [X]

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

O = Oral Intensive, Format 6  W = Writing Intensive, Format 7  Natural Science, ("X" for Core), Format 8

11.A Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog, and flagged in Banner.

YES [X]  NO [ ]

12. COURSE REPEATABILITY:

Is this course repeatable for credit?

YES [ ]  NO [X]

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

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?

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

LETTER:  
PASS/FAIL: X

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

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

15. SPECIAL RESTRICTIONS, CONDITIONS

none (but must be able to travel on foot in “the field”)

16. PROPOSED COURSE FEES

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

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

Summer sessions F195, July 24-26, 2009; July 30, 31-Aug 1, 2010; July 8-10 2011, July 6-8 2012

18. ESTIMATED IMPACT

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

Lab/classroom Murie 302 will be used for from 6pm Friday to 6pm Sunday during late June or early July each summer. A sufficient number of dissecting microscopes for the students will be required during this time period.

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  no  Yes  

Library is not needed for this course.

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)

Biology and Wildlife.

21. POSITIVE AND NEGATIVE IMPACTS

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

I teach Entomology (Bio 406) but there is inadequate time to spend in the field during the school year. This summer sessions course allows for field time with students. The 9-15 students enrolled each time this course was offered from 2008-2012 demonstrates an interest/demand for the course. Another benefit is
the production of high-quality specimens to augment the Entomology teaching collection (benefiting Biology & Wildlife) and the University of Alaska Museum. I am unaware of any negative impacts (other than minor wear & tear on microscopes and lab equipment such as forceps).

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.

There is a demand in the Fairbanks community for a summer sessions Entomology Course (as reported by requests submitted to summer sessions from the public). I took Dr. Gary Laursen's summer sessions 'Introduction to Macro & micro mushroom identification' course and modeled this course on his format. It is an excellent way to introduce students to Field Entomology. I teach Entomology (Bio 406) but there is inadequate time to spend in the field during the school year. This summer sessions course allows for field time with students.

APPROVALS: Add additional signature lines as needed.

Signature, Chair, Program/Department of: Biology and Wildlife

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

Signature, Dean, College/School of: 

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

Signature of Provost (if above level of approved programs)

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

Signature, Chair
Faculty Senate Review Committee: __Curriculum Review __GAAC __Core Review __SADAC

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

Date
AN INTRODUCTION TO FIELD ENTOMOLOGY
BIOL F195, One Credit  New number to be assigned.
UAF Campus, Summer

COURSE INFORMATION
Title: An Introduction to Field Entomology
Number: Biology F195
Credits: 1 with P/F grading
Prerequisites: none
Location: University of Alaska Fairbanks Campus and Vicinity, Murie 302
Meeting Times 6-9 p.m. Fri, & 9a.m.-6 p.m. Sat. & Sun.
Meeting Dates: 28, 29, 30 June 2013
Lecture / Lab: 10h lecture, 9h lab

INSTRUCTOR: Dr. Derek S. Sikes, Curator of Insects, Associate Professor of
Entomology
University of Alaska Museum, 907 Yukon Dr., UAF
Tel. (907) 474-6278  email: dssikes@alaska.edu
Office hours available by appointment

Watershed Forum.


Hudson, J., Kathy Hocker & Robert Armstrong. 2012. Aquatic Insects in Alaska. 144 pages, 8.5" x 11", 294
color photographs, glossary, bibliography, index. Published by Nature Alaska.
ISBN 978-0-939431-38-0

COURSE DESCRIPTION: An introduction to field entomological techniques. Emphasized will be
professional procedures to collect and process (sort, mount, georeference & label) non-marine arthropods. The
skills necessary to identify most groups to Order will be taught. Students will create a collection from which
specimens will be chosen for the University of Alaska Museum Insect Collection and the Teaching Collection.

COURSE GOALS & STUDENT LEARNING OUTCOMES:
1. To learn basic collection and specimen preparation techniques
   - net types and uses
   - aspirators and vials / killing jars
   - trapping methods, e.g. pitfall traps, Malaise traps, Berlese / Winkler funnels
   - pin, point, paper, pen, glass vial types, sources, preservation dry vs wet
2. To understand the roles insects play in Alaskan ecosystems
- trophic levels
- ecological relationships (predators, herbivores, parasites, pollinators, decomposers, anthropophilic, etc.)
- habitat preferences (terrestrial, aquatic, soil, etc.)

3. To contribute to Alaskan Entomological research endeavors
   - provide professionally mounted & georeferenced specimens to the UA Museum Insect Collection

**INSTRUCTIONAL METHODS:** An introductory lecture covering insect diversity will be combined with hands-on, instructor-lead, field work to learn methods of sampling insects in the wild. Field captured insects will be brought back to the lab and processed (mounted and identified). The instructor will be constantly available to answer questions during the course.

**COURSE CALENDAR:**

**Friday**
- Introductions and enrollment
  - Lecture (3 hours)
  - Insect Evolutionary Diversity
    - introduction to major insect groups
    - Non insect arthropods – Arachnida, Myriapoda
    - Apterygota
    - Pterygota
      - Paleaoptera
      - Neoptera
        - Polyneoptera
        - Paraneoptera
        - Endopterygota
  - Insect Ecological Diversity, Aquatic Insects, Herbivores, Predators, Fungivores, Parasites, Parasitoids, Detritivores

**HOMEWORK:** read Collet & be prepared to ask questions discuss

**Saturday**
- UAF LAB 9AM - 10AM – lecture on label data & geocoordinates
- MUSEUM 10-11AM tour of Insect Collection
- FIELD TRIP: noon – 3PM, Creamer’s Field
  - field gear – tools of the trade lecture
  - ***BRING packed lunch***
  - leaf litter sifting & Berlese extraction
  - Malaise trap & pitfall trap
- UAF LAB: 3:15-6:15, Lecture on mounting and identification of specimens caught
  - field labeling vs. final labeling
  - collection care and maintenance

**Sunday**
- UAF LAB: 9AM – 10AM- lecture on aquatic insects
- FIELD TRIP 10:30AM-3PM,
  - "Peat Ponds" Goldstream x Murphy Dome Rd
  - aquatic insects lecture
  - ***BRING packed lunch***
- UAF LAB: 3:15-6:15, mounting and identification of specimens caught
**COURSE POLICIES:** Preferably students will attend 100% of the 15 hours of instruction. To receive a pass for this course students must attend at least 60% of the 15 hours of instruction and produce high-quality prepared insect specimens that will be donated to the UA Museum. Knowingly falsifying data (on specimen labels) will result in an automatic “F” for the class.

**EVALUATION:** Evaluation will be based on attendance and participation in laboratory and field settings in addition to the completion of a small insect collection that will demonstrate ability to prepare, identify, and describe the basic ecology at least 20 Insect orders and/or families.

**SUPPORT SERVICES:** The instructor and course assistants will be available outside of class to help any students seeking additional time with the material.

**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 (203 Whit., 474-7043) to provide reasonable accommodation to students with disabilities. Realize, however, that this is a “field” course and all students must be prepared to meet those challenges.