Submit originals and one copy and electronic copy to Governance/Faculty Senate Office See http://www.uaf.edu/uafgov/faculty/cd for a complete description of the rules governing curriculum & course changes.

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Department	Fisheries	1907		College/School	-	***	SFO
Prepared by	Andrew Sei	tz		Phone			474-525
Email Contact	acseitz@ala clneumann@	and the second second	en a constant	Faculty Contact		Andrew S	
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6. CURRENT CATALOG DESCRIPTION AS IT APPEARS IN THE CATALOG: including dept., number, title and credits FISH 426/626 Behavioral and Physiological Ecology of Fishes Description: This course will provide upper-level undergraduate and graduate students with an advanced understanding of behavioral and physiological responses and adaptations of fishes to natural and anthropogenic environmental variables. It should provide students another option to fulfill upper-level undergraduate and graduate level elective coursework. Before enrolling, students should have a sound understanding of both ecological and biological concepts relating to fish. 7. COMPLETE CATALOG DESCRIPTION AS IT WILL APPEAR WITH THESE CHANGES: (Underline new wording strike through old wording and use complete catalog format including dept., number, title, credits and cross-listed and stacked.) PLEASE SUBMIT NEW COURSE SYLLABUS. For stacked courses the syllabus must clearly indicate differences in required work and evaluation for students at different levels. FISH 426/626 Behavioral and Physiological Ecology of Fishes Description: This course will provide upper-level undergraduate and graduate students with an advanced understanding of behavioral and physiological responses and adaptations of fishes to natural and anthropogenic environmental variables. It should provide students another option to fulfill upper-level undergraduate and graduate level elective coursework. Before enrolling, students should have a sound understanding of both ecological and biological concepts relating to fish. 8. IS THIS COURSE CURRENTLY CROSS-LISTED? NUMBER YES/NO No If Yes, DEPT (Requires written notification of each department and dean involved. Attach a copy of written notification.) 9. GRADING SYSTEM: Specify only one LETTER: X PASS/FAIL: 10. ESTIMATED IMPACT WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC. I am requesting to split the existing FISH 426/626 Behavioral and Physiological Ecology of Fishes into two courses (FISH 426/626 Behavioral Ecology of Fishes and FISH 428/628 Physiological Ecology of Fishes). Because these courses will be taught alternate spring semesters, this change should not have an impact on budget, facilities, space etc. because my teaching load, budget, and space requirements will not change for each semester. 11. 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. Yes, I contacted Anne Christie and the library collection development officer, Karen Jensen, on 4 Sept. 2009 when I filed the initial paperwork for this class. The Biosciences library had the materials and resources that I needed for the initial course offering. The material for the course is not changing, it is only getting more detailed. Therefore, the library should still have adequate materials and resources for this course. 12. 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) The proposed action should not have any impacts on other programs/departments. In 2009 when I filed the initial paperwork for this course, I spoke with several professors, including Mike Harris, Lara Dehn, Sasha Kitaysky, Amanda Rosenberger, Andres Lopez, and Trent Suttion, who instruct courses with

the initial paperwork for this course, I spoke with several professors, including Mike Harris, Lara Dehn Sasha Kitaysky, Amanda Rosenberger, Andres Lopez, and Trent Suttion, who instruct courses with potential overlap. None indicated any significant overlap of material in their courses and furthermore were very supportive of the development of FISH 426/626. I am not proposing to significantly change the course material covered in FISH 426/626, but rather to add more detail to it, so like in 2009, I foresee to impacts on other programs/departments.

01.55.8

13. POSITIVE AND NEGATIVE IMPACTS

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

This course may appeal to a variety of both undergraduate and graduate students from Fisheries, Biology and Wildlife, Natural Resources Management and Marine Sciences (GPMSL). The course will not be a requirement, but will give students another option to fulfill upper-level undergraduate and graduate level elective coursework. The course will be distance-delivered if requested. There should be no negative impacts as this course will not be a requirement and should not reduce enrollment in other courses.

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. If you ask for a change in # of credits, explain why; are you increasing the amount of material covered in the class? If you drop a prerequisite, is it because the material is covered elsewhere? If course is changing to stacked (400/600), explain higher level of effort and performance required on part of students earning graduate credit. Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the course is not compromised as a result.

I am requesting to change the course content of FISH 426/626 from a behavioral and physiological ecology class, to only behavioral ecology as part of splitting FISH 426/626 Behavioral and Physiological Ecology of Fishes into two courses (FISH 426/626 Behavioral Ecology of Fishes and FISH 428/628 Physiological Ecology of Fishes). I am requesting this change because after teaching FISH 426/626 for a semester, it was clear that I could not fully cover both behavioral ecology and physiological ecology of fishes. Rather than rush through both subjects and do neither academic justice, I am requesting to split the existing FISH 426/626 into two courses so I can thoroughly cover both behavioral ecology and physiological ecology of fishes during alternate spring semesters. I have spoken with my colleagues and they are all supportive of this requested change.

Additionally, I am requesting that the prerequisite of FISH 288 be dropped. I teach FISH 288 and it is not an appropriate pre-requisite for FISH 426/626.

Jun 1 g. W	Date	00/25/2010
Signature, Chair, Program/Department of:	Division	
Just Bell	Date	08/25/2010
Signature, Chair, College/School Curriculum Council for:	FOS	
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Signature, Dean, College/School of:		7 //-
	Date	
Signature of Provost (if applicable)		
Offerings above the level of approved programs must be appr	oved in advance by	the Provost.
LL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSI	ON TO THE GOV	ERNANCE OFFICE.

ATTACH COMPLETE SYLLABUS (as part of this application).

Note: The guidelines are online: http://www.uaf.edu/uafgov/faculty/cd/syllabus.html

The department and campus wide curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course change will be <u>denied</u>.

SYLLABUS CHECKLIST FOR ALL UAF COURSES

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. (Course information:
	□Title, □ number, □credits, □prerequisites, □ location, □ meeting time (make sure that contact hours are in line with credits).
2. 1	Instructor (and if applicable, Teaching Assistant) information: Name, Office location, Office hours, Office hours
3 (Course readings/materials:
J	☐ Course textbook title, ☐ author, ☐ edition/publisher.
	□ Supplementary readings (indicate whether □ required or □ recommended) and □ any supplies required.
4. (Course description:
	☐ Content of the course and how it fits into the broader curriculum;
	☐ Expected proficiencies required to undertake the course, if applicable.
	☐ Inclusion of catalog description is <i>strongly</i> recommended, and
	☐ Description in syllabus must be consistent with catalog course description.
5.	☐ Course Goals (general), and (see #6)
6.	☐ Student Learning Outcomes (more specific)
7. I	Instructional methods:
	Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).
	Course calendar:
	A schedule of class topics and assignments must be included. <u>Be specific</u> so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.
9.	Course policies:
	☐ Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.
10.	. Evaluation:
	□ Specify how students will be evaluated, □ what factors will be included, □ their relative value, and □ how they will be tabulated into grades (on a curve, absolute scores, etc.)
11.	. Support Services:
	☐ Describe the student support services such as tutoring (local and/or regional) appropriate for the course.
	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. ☐ State that you will work with the Office of Disabilities Services (208 WHIT, 474-5655) to provide reasonable accommodation to students with disabilities."

Behavioral ecology of fishes

FISH 426/626 Spring 2012

Course information:

Credits: 3

Pre-requisites: BIOL 115X and 116X, or permission of instructor

Recommended courses: FISH 425 or BIOL 271, FISH 427

Room: 201 O'Neill Building Time: TR 3:40 – 5:10 pm

Instructor:

Andy Seitz

Office: 204 Arctic Health Research Building Office hours: 12:00 to 2:00 pm Wednesday

OR come by my office OR make an appointment

Phone: 474-5254

E-mail: aseitz@sfos.uaf.edu

Course materials:

Mandatory reading:

Behavioral ecology of teleost fishes, by Jean-Guy Godin, published by Oxford University Press, USA.

In addition, there will be several additional book chapters and journal articles assigned as required reading which I will distribute electronically.

Recommended reading:

An introduction to behavioural ecology, 3rd edition, by J.R. Krebs & N.B. Davies, published by Blackwell Publishing

Behavioural ecology of fishes, by F.A. Huntingford & P. Torricelli, published by Harwood Academic Publishers.

Bond's Biology of Fishes, 3rd edition, by Michael Barton, published by Thomson Brooks/Cole

Course description:

This course will provide upper-level undergraduate and graduate students with an advanced understanding of behavioral responses and adaptations of fishes in both freshwater and marine systems to natural and anthropogenic environmental variables. It should provide students another option to fulfill upper-level undergraduate and graduate level elective coursework. Before enrolling, students should have a sound understanding of both ecological and biological concepts relating to fish.

Course goals:

A large component of modern fisheries research focuses on behavioral responses and adaptations of fishes to their environment. This research is especially important in today's age of human development and rapid environmental change. To understand the effects of these, ecological research is regularly undertaken by state and federal agencies, as well as universities and other non-governmental organizations. A sound understanding of the behavioral and physiological ecology of fishes should aid in predicting how fishes will respond to environmental change and aid in sound management decisions.

In this course, we will cover concepts and research that focus on the responses of fish to their environment in both freshwater and marine systems. Upon completion of the course, students should have an advanced understanding of the behavioral responses of fish to their environment and should be able to participate in research in these fields of study.

Student learning outcomes:

- 1. Understand behavioral responses of fishes to their biotic and abiotic environment
- Understand peer-reviewed journal articles describing behavioral ecological fish research
- 3. Conduct reviews of fish ecology research and synthesize concepts into concise written and oral presentations

Instructional methods:

This course will meet three hours per week (2 x 1.5 hours) and will be distance delivered if requested. During this time, I will lecture for approximately one hour and we will conduct an in-class discussion for the last thirty minutes. These discussions will be based on assigned readings which I anticipate should take 2–3 hours for each lecture. Coverage of freshwater and marine fish ecology will be approximately equal.

Each student is expected to attend every lecture AND participate in class discussion. It is absolutely imperative that each student read the assigned readings *before* the corresponding lecture period which will enable him or her to better understand the lectures and participate in class discussion. Assigned readings will come from the required text or will be electronically distributed via Blackboard before lecture.

Graduate students enrolled in the graduate level FISH 626 option will be expected to lead 30 minute class discussions of his/her choice on a rotating basis throughout the semester. If needed, I will assist each student in the preparation and execution of his/her class discussion.

Course policies:

Attendance and in-class contribution are VERY important in learning the course material. If you are not able to attend class, you must inform me BEFORE your planned absence. Unexcused absences will result in deductions from your participation grade.

All assignments are due at the beginning of the indicated class period. Late assignments will be docked 10% of the total exercise point value for each day late (including weekends) and missed exams will be assigned a zero score.

If you cannot take an exam, turn in an assignment, or attend class for a legitimate reason, it is your responsibility to contact me prior to the date in question in order not to receive a penalty. With the exception of emergencies, make-up exams or late assignment requests will only be honored if a legitimate reason is provided to me in writing at least one week prior to that date.

Please familiarize yourself with the UAF Student Code of Conduct: (http://www.uaf.edu/catalog/current/academics/regs3.html). The following are guidelines regarding academic integrity in FISH/BIOL 427:

- Students will not collaborate on any quizzes, in-class exams, or take-home exams
 that contribute to their grade in a course, unless the course instructor grants
 permission. Only those materials permitted by the instructor may be used to assist
 in quizzes and examinations.
- 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.

Any violations will result in automatic failure of the course.

Evaluation:

Students will be evaluated on their participation, writing assignments and take-home exams, each worth the listed amount of points.

Participation:	15
Paper I:	20
Paper II:	20
Midterm:	20
Final:	25
	100

Participation counts as 15% of your grade. In this class, participation is defined as: 1. attendance and 2. contribution to the class during lectures and discussion section by asking questions and providing comments and input. I take participation very seriously (both attendance and in-class contribution) because active engagement in the learning process leads to a better education.

Papers I and II will be synoptic research papers on behavioral ecology topics (8 to 12 pages).

The midterm and final exams will be open book, take-home written exams.

Graduate students enrolled in the FISH 626 option will write longer papers than undergraduates enrolled on the FISH 426 option, give oral presentations of his/her papers in class (in addition to leading the in-class discussion sections) and conduct reviews of others' papers. Undergraduate students may undertake these graduate level activities as extra credit assignments.

Your grade will be determined using the following scale:

A: 93.0-100%

A-: 90.0-92.9%

B+: 87.0-89.9%

B: 83.0-86.9%

B-: 80.0-82.9%

C+: 77.0-79.9%

C: 73.0-76.9%

C-: 70.0-72.9%

D+: 67.0-69.9%

D: 63.0-66.9%

D-: 60.0-62.9%

F: <60%

If for any reason, you disagree with your grades, please talk to me.

Support services:

This is an upper-level course which requires intensive learning, both in and out of the classroom. If you find yourself struggling, please talk to me before you are completely overwhelmed. I am happy to provide as much support as needed to assist a student's success.

Disabilities Services:

During this course, the instructor will work closely with the Office of Disabilities Services to provide reasonable accommodations to students with disabilities. For questions or concerns, please contact the instructor or the UAF Office of Disabilities Services (phone: (907) 474-7043).

Course calendar (subject to modification):

Lecture	Week	Date	Day	Lecture Topics
1	1.1	19 Jan	Thur	Course introduction
2	2.1	24 Jan	Tues	Introductory concepts
3	2.2	26 Jan	Thur	Bases of behavior
4	3.1	31 Jan	Tues	Habitat selection and IFD (Paper topics 426/626)
5	3.2	2 Feb	Thur	Foraging: tactics
6	4.1	7 Feb	Tues	Foraging: tactics
7	4.2	9 Feb	Thur	Foraging: diet selection
8	5.1	14 Feb	Tues	Foraging: diet selection
9	5.2	16 Feb	Thur	Foraging: metabolism and nutrition (Draft 626)
10	6.1	21 Feb	Tues	Predators: detection, avoidance and determent
11	6.2	23 Feb	Thur	Predators: evasion (Reviews 626)
12	7.1	28 Feb	Tues	Predators: evasion
13	7.2	1 Mar	Thur	Predation risk, repercussions, models (Paper I due)
14	8.1	6 Mar	Tues	Paper I presentations
15	8.2	8 Mar	Thur	Paper I presentations and Midterm due
	9.1	13 Mar	Tues	Spring Break
	9.2	15 Mar	Thur	
16	10.1	20 Mar	Tues	Sex: displays, conflict and selection
17	10.2	22 Mar	Thur	Sex: mating systems
18	11.1	27 Mar	Tues	Sex: alternative strategies (Paper topics 426/626)
19	11.2	29 Mar	Thur	Sex: parental care
20	12.1	3 April	Tues	Peace: schooling and other cooperation
21	12.2	5 April	Thur	Peace: schooling and other cooperation
22	13.1	10 April	Tues	War: territoriality and fighting
23	13.2	12 April	Thur	War: territoriality, fighting parasites (Draft 626)
24	14.1	17 April	Tues	Ideal free distribution revisited
25	14.2	19 April	Thur	Migration (Reviews 626)
26	15.1	24 April	Tues	Decisions and trade-offs
27	15.2	26 April	Thur	Paper II presentations (Paper II due, final out)
28	16.1	1 May	Tues	Paper II presentations
29	16.2	3 May	Thur	Review, questions, evaluations
		9 May	Wed	Final examination due 12:00

MINOR

Curriculum Committee SFOS

Members:

Trent Sutton (Chair)

Katrin Iken Jeremy Mathis

19 August 2010

Trial Course

Course Number: FISH 426/626

Course Title: Behavioral Ecology of Fishes

Instructor: Andrew Seitz **First Time of Offering:** No

General Recommendations:

No general comments.

Faculty Senate Form:

Clarify and Address the following:

- Please fill out the top part of the form (department, college/school, prepared by, phone, email contact, faculty contact).
- Please add Christina Neumann's email address (clneumann@alaska.edu) to the email contact line in addition to your email address

Syllabus:

 In the section on evaluation, please distinguish how the assignments and grading will differ between undergraduate and graduate students. For example, are graduate students required to write longer papers, complete more thorough literature reviews, etc.?

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CHANGE COURSE (MINOR)

MINOR CHANGES INCLUDE ONLY THE FOLLOWING:

1. Frequency in offering.

2. Minor editorial changes in title and/or course description.

3. Jointly approved proposals for cross-listing current courses. (Requires approval of both departments and deans involved. Add lines at end of form for such signatures.) (Stacked 400/600 level course requests are not considered as Minor changes.)

4. Change in course number that does not involve a change in lower/upper division status.

5. Internal departmental changes in course prerequisites not affecting courses (or degree programs) offered by other departments.

If changes cannot be considered "Minor" (as defined above), use FORMAT 2 - CHANGE COURSE (MAJOR) and DROP COURSE.

Catalog change deadlines established by the Faculty Senate are to be observed and the proper forms are to be used. Send Minor Change requests directly to the Registrar's Office after Dean approval. (Please send informational copy to the Governance Office.

SUBMITTED BY:	The state of the s		
Department	Fisheries	College/School	School of Fisheries and Ocean Sciences
Prepared by	Amanda Rosenberger	Phone	907 474 7458
Email Contact	Rosenberger@sfos.uaf.edu	Faculty Contact	C
See			

FISH F101 Introduction to Fisheries 3 Credits Offered Fall

stacked.)

A survey of the values, habitats, biology, ecology, and management of fishes, with particular reference to Alaska fisheries and issues. This course surveys principles and fields of study that fisheries resource professionals use as a guide in their careers, including basic concepts associated with fish biology and fisheries management

and the application of these concepts to solve comple	x fisheries problems	s. The course explores
and the application of these concepts to solve comple contemporary fisheries resource issues within and beyond with fish management and conservation, and the imp	d Alaska's borders, n	ources for the world's
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The present description in the catalog is terse, incomplete, and the course subject remains the same; however, added detail is	I rather vague. In the provided regarding to	edited description above, pics covered in the class.
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PPROVALS:	provided regarding w	pres covered in the class.
PPROVALS:	Date	8/19/2010
PPROVALS: Signature, Chair, Program/Department of: Figures	Date Date	pres covered in the class.
PPROVALS:	Date	8/19/2010
Signature, Chair, Program/Department of: Signature, Chair, College/School Curriculum Council for:	Date Date	8/19/2010
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Signature, Chair, College/School Curriculum Council for: Signature, Dean, College/School of:	Date Division Date Date	8/19/2010 8/19/2010
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