

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	Fish Division	College/School	SFOS
Prepared by	Trent Sutton	Phone	907-474-7285
Email Contact	<u>tmsutton@alaska.edu</u>	Faculty Contact	Trent Sutton

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

2. COURSE IDENTIFICATION: Dept **FISH** Course # **103** No. of Credits **2**

Justify upper/lower division status & number of credits:

This course will be a lower-level course for first-year students in the fisheries program. The course will meet two hours per week (2 credits) and will focus on class discussion critical thinking skills by focusing on the peer-reviewed and popular literature associated with the exploitation of marine fisheries resources.

3. PROPOSED COURSE TITLE: **The Harvest of the Sea**

4. To be CROSS LISTED? **No** If yes, Dept: Course #

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

5. To be STACKED? **No** If yes, Dept. Course #

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: **Spring Semester, Every Year**
Fall, Spring, Summer (Every, or Even-numbered Years, or Odd-numbered Years) – or As Demand Warrants

7. SEMESTER & YEAR OF FIRST OFFERING
(AY2013-14 if approved by 3/1/2013; otherwise AY2014-15) **Spring Semester 2015**

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 Class Discussions**

9. CONTACT HOURS PER WEEK:

2

LECTURE
hours/weeks

LAB

hours /week

PRACTICUM

hours /week

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

FISH F487 W, O Fisheries 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 NRM F487. (3+0)

FISH F103 The Harvest of the Sea
2 Credits Offered Spring

This course will explore the scientific and popular literature related to the exploitation of global marine fisheries resources. Specific topics of the course will be based on three core themes: (1) early exploitation of marine resources, leading to the need for fisheries management; (2) overexploitation of fish and marine mammal stocks driven largely by technological advancements culminating from the Industrial Revolution; and (3) the current status and future sustainability of marine fisheries resources. This course is largely discussion based; as a result, weekly attendance and preparation is a critical component of the course. Prerequisites: FISH 101 and FISH 102, or permission of instructor. 2 credits (2 + 0).

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 6W = Writing Intensive,
Format 7Natural 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

NO

X

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:

X

PASS/FAIL:

RESTRICTIONS ON ENROLLMENT (if any)

14. PREREQUISITES

FISH 101 and FISH 102, or permission of instructor

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?

No

Yes/No

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

18. ESTIMATED IMPACT

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

There is no anticipated impact of this course on budgets, facilities, space, and faculty. FISH F103 The Harvest of the Sea (2 credits) is a course that is to be taught every spring semester by Fisheries faculty members Trent Sutton as part of his annual workload.

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

X

Anne Christie, 21 June 2013; necessary resources are available

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)

The inclusion of FISH F103 in the B.S. in Fisheries Science and the B.A. in Fisheries degree programs will have no impact on any other programs at UAF.

21. POSITIVE AND NEGATIVE IMPACTS

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

The primary positive impact of FISH F103 is that student retention in the two Fisheries degree programs (B.S. and B.A.) will be improved by increasing student contact with faculty and by helping to develop a sense of cohort/learning community (see justification below). This course will serve as part 2 of a two-course sequence (part 1 - FISH F102 Fact of Fishin': Case Studies in Fisheries) and will be offered starting during the spring 2015 semester. There are no negative impacts of FISH F103 on other courses, programs, or departments.

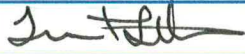
JUSTIFICATION FOR ACTION REQUESTED

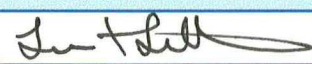
The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory.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

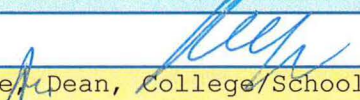
FISH F103 has been added as a requirement to the B.S. in Fisheries Science and the B.A. in Fisheries degree programs to improve student retention, specifically during the first two years. Current first-year retention rates for new freshman and transfer students combined in this degree program are 50%. We have identified that this is in part due to the lack of classes after the first fall semester that a student is enrolled in the degree program (FISH F101 Introduction to Fisheries) until spring semester of their sophomore year (FISH F261 Introduction to Fisheries Utilization and F288 Fish and Fisheries of Alaska). Based on the retention literature, having frequent contact between students and faculty during the first two years, especially the first year, is critical for creating a learning culture that improves student retention. By adding two 100-level courses during the first year (FISH F102 - Fall semester; FISH F103 - Spring

semester) and moving FISH 261 to the Fall semester of their second year, students will come into more frequent contact with Fisheries Division faculty. Further, we anticipate that increasing the number of lower-level courses will help us to develop a learning community/culture for our students and may also serve as a recruitment tool for students into this degree program.

APPROVALS: Add additional signature lines as needed.

	Date	02/21/13
Signature, Chair, Program/Department of:		Fisheries Division

	Date	02/21/13
Signature, Chair, College/School Curriculum Council for:		SFOS Curric. Committee

	Date	Aug 21, 2013
Signature, Dean, College/School of:		SFOS

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

	Date	
Signature of Provost (if above level of approved programs)		

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

	Date	
Signature, Chair		
Faculty Senate Review Committee: <input type="checkbox"/> Curriculum Review <input type="checkbox"/> GAAC		
<input type="checkbox"/> Core Review <input type="checkbox"/> SADAC		

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

	Date	
Signature, Chair, Program/Department of:		

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

	Date	
Signature, Dean, College/School of:		

ATTACH COMPLETE SYLLABUS (as part of this application). The guidelines are online:

<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-uaf-syllabus-requirements/>

The Faculty Senate 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 (or changes to it) may be denied.

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. Instructor (and if applicable, Teaching Assistant) information:

☐ Name, ☐ office location, ☐ office hours, ☐ telephone, ☐ email address.

3. Course readings/materials:

☐ 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 *strongly* 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. 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.).

8. Course calendar:

☐ A schedule of class topics and assignments must be included. Be specific 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.) ☐ Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but may be a convenient way to publicize this.) Faculty Senate Meeting #171:

<http://www.uaf.edu/uafgov/faculty-senate/meetings/2010-2011-meetings/#171>

11. Support Services:

☐ Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

12. Disabilities Services: Note that the phone# and location have been **updated**.

The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.

☐ State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

FISH 103 THE HARVEST OF THE SEA SPRING 2015

Instructors

Dr. Trent M. Sutton, Professor
1W02 AHRB; Phone: 474-7285
E-mail: tmsutton@alaska.edu

Office Hours

Tu, Th: 9:30 a.m. – 11:30 a.m., or by appt

Meeting Times

3:30 – 5:30 p.m., W, 201 O'Neill Building

Course Description

This course will explore the scientific and popular literature related to the exploitation of global marine fisheries resources. Specific topics of the course will be based on three core themes: (1) early exploitation of marine resources, leading to the need for fisheries management; (2) overexploitation of fish and marine mammal stocks driven largely by technological advancements culminating from the Industrial Revolution; and (3) the current status and future sustainability of marine fisheries resources. This course is largely discussion based; as a result, weekly attendance and preparation is a critical component of the course. Prerequisites: FISH 101 and FISH 102, or permission of instructor. 2 credits (2 + 0).

Course Objectives

1. To sharpen critical thinking, written and oral communication, and professional skills, using harvest of marine fisheries resources as the theme of the course.
2. To develop knowledge of the basic principles associated with the management of global marine fisheries resources, the development of the field of fisheries science, and whether fish stocks can be managed in a sustainable fashion.

Learning Outcomes

By the end of the semester, students that have enrolled in this class will have the following:

1. Familiarity with historical and contemporary conservation and management issues in marine fisheries at a global perspective.
2. Understand the anthropogenic impacts on marine fish and mammal stocks within the context of current and future sustainability of these stocks.
3. Knowledge of the biological, ecological, political, cultural, and socioeconomic dimensions and stakeholder perspectives that shape fisheries management decisions within the context of exploitation of marine fish and mammal stocks.
4. Appreciation for the popular and technical literature as related to the exploitation of global marine resources.
5. Fluency to communicate the results of problem-solving efforts in language that is understandable to a range of technical and lay audiences.

Support and Disability Services

At UAF, the Office of Disability Services (203 WHIT; 474-5655; TTY 474-1827; fydso@uaf.edu) ensures that students with physical or learning disabilities have equal access to campus and course materials. If you have specialized needs, please contact this office or the instructors to make arrangements as soon as possible.

Reading Assignments

The required course text is The Unnatural History of the Sea by Callum Roberts (2007). Additional readings and handouts will be provided for this course and will be required readings for class discussions. With the exception of the course text, all additional materials will be provided in class or on Blackboard.

Class Attendance, Participation, and Attitude

This course is dependent on weekly class discussions that will require critical thinking and active engagement during each meeting period. Because class participation is essential for these activities, class attendance is mandatory and each student enrolled for this course will need to prepare for each meeting period by completing all necessary readings and assignments before the scheduled periods. To provide incentive for preparation and participation, students will be evaluated on both attendance and preparation, with attendance and participation worth 5 and 20 points, respectively, for each session (70 and 280 points total, respectively). Points will be awarded based on degree of participation in each activity at the discretion of the instructor. An additional 50 points is also available for general attitude during the class meeting periods. To receive the full allotment of points for each meeting period, students are expected to be at class on time, prepared for the class activity for that day (e.g., all readings and assignments completed), and actively participate in the discussion/activity for that class period. Students that are late for class will be docked points in proportion to their lateness (e.g., 10 minutes late = $1/6^{\text{th}}$ of the class [16.67% of the class period] = -0.85 points); failure to attend the class without an excused absence will result in a zero for both attendance and participation points that meeting period. Similarly, students that are only engaged in half of the class activity will receive only half of the available participation points on a given day (e.g., 10 out of 20 points). **Students not willing to be prepared for and participate in class discussions should not enroll for this course.** An additional 70 points (5 points per day) are also available for general attitude during the class meeting periods. These points will be assigned on an all or none basis; to receive all 5 points for a given meeting period, students are expected to be respectful of their instructors and fellow students. Failure to be respectful of the class learning environment (e.g., cell phone ringing, texting in class, making personal attacks during class discussions, etc.) will result in a 0 out of 5 points for that meeting period.

Written Assignments

Four short writing exercises (essays) will be assigned to help you develop and sharpen your critical thinking and writing skills. For each written assignment, you can receive up to 50 points (200 total points). These assignments may take one of several forms: answer a question, take a position on an issue, or support/refute a thesis statement. As stated above, these written assignments will be short: each essay will be limited to between 750 and 1,000 words, requiring you to address the statement, question, or position in a clear and concise manner using language that a reader unfamiliar with the subject topic could understand. Each written assignment will be evaluated following the stipulated criteria and returned to students within one week of submission with appropriate content- and writing-based feedback.

Grading

Students will be evaluated primarily on attendance, participation, and attitude; however, there will also be four short written assignments for this class that will be completed for a grade as well. Grades will be based on a 90-80-70-60 scale. If the class average falls below 75%, this scale will be adjusted accordingly. Missed class discussion periods will be assigned a zero score. If you cannot attend a class discussion period for a legitimate reason, it is your responsibility to contact the instructor prior to the date in question in order not to receive a penalty. With the exception of emergencies, missed class discussion requests will only be honored if a legitimate reason is provided in writing at least one week prior to that date. Point and percentage values for each evaluation component are as follows:

Component	Points Available	Percentage of Total
Attendance	70	25%
Class Participation	280	50%
Attitude	50	10%
Written Assignments	200	20%
TOTAL	600	100%

Honor System

All assignments submitted are to be entirely your own work, unless you receive specific instructions to the contrary. All aspects of your course work are covered by the Honor system. Any suspected violations (e.g. cheating, plagiarism) will be promptly reported and appropriate action(s) will be taken. Additionally, you will receive a zero for that assignment or exam; two such violations and you will automatically fail this course. Honesty in your academic work will develop into professional integrity. The faculty and students of the University of Alaska Fairbanks will not tolerate any form of academic dishonesty.

WEEKLY DISCUSSION/READING OUTLINE

<u>Discussion Topic</u>	<u>Week</u>	<u>Readings</u>
Course Overview	1	No Readings
The Need for Fisheries Management	2	UHS – Ch 1 & 2; Hardin 1968
Belief in Inexhaustability	3	UHS – Ch 3 & 4; Larkin 1977
Overexploitation of Fish Stocks	4	UHS – Ch 5 & 6; Hilborn et al. 2006
Overharvest of Marine Mammals	5	UHS – Ch 7 & 8; Worm et al. 2007
Impacts of the Industrial Revolution	6	UHS – Ch 9, 10, & 11; Pauly 1990
The Sea is Exhaustible	7	UHS – Ch 12 & 13; Hutchings and Reynolds 2004
Collapse of Major Fisheries – Europe/Atlantic Ocean	8	UHS – Ch 14 & 15; Hutchings and Myers 1994; Hutchings 1996
Collapse of Major Fisheries – U.S./Tropical Waters	9	UHS – Ch 16 & 17; Hilborn and Stokes 2010
Shifting Baselines and Empty Seas	10	UHS – Ch 18 & 19; Pauly 1995; Pinnegar and Engelhard 2007
Decimation of Marine Resources	11	UHS – Ch 20 & 21; Smith and Link 2005
The Demand for Marine Resources	12	UHS – Ch 22 & 23; Hall and Mainprize 2004
Rehabilitation of Marine Fish Stocks	13	UHS – 24 & 25; Worm et al. 2009
The Future of Marine Resources	14	UHS – Ch 26; Worm and Branch 2012; Pauly et al. 2003
The Unnatural History of the Sea	15	Hilborn 2007; Polacheck 2006 Myers and Worm 2003

Peer-Reviewed Literature Reading List

- Hall, S. J., and B. Mainprize. 2004. Towards ecosystem-based fisheries management. *Fish and Fisheries* 5:1-20.
- Hardin, G. 1968. The tragedy of the commons. *Science* 162:1243-1248.
- Hilborn, R. 2007. Moving to sustainability by learning from successful fisheries. *Ambio* 36:296-303.
- Hilborn, R., J. Annala, and D. S. Holland. 2006. The cost of overfishing and management strategies for new fisheries on slow-growing fish: orange roughy (*Hoplostethus atlanticus*) in New Zealand. *Canadian Journal of Fisheries and Aquatic Sciences* 63:2149-2153.
- Hilborn, R., and K. Stokes. 2010. Defining overfished stocks: have we lost the plot? *Fisheries* 35:113-120.
- Hutchings, J. A. 1996. Spatial and temporal variation in the density of northern cod and a review of hypotheses for the stock's collapse. *Canadian Journal of Fisheries and Aquatic Sciences* 53:943-962.
- Hutchings, J. A., and R. A. Myers. 1994. What can be learned from the collapse of a renewable resource? Atlantic cod, *Gadus morhua*, of Newfoundland and Labrador. *Canadian Journal of Fisheries and Aquatic Sciences* 51:2126-2146.
- Hutchings, J. A., and J. D. Reynolds. 2004. Marine fish population collapses: consequences for recovery and extinction risk. *BioScience* 54:297-309.
- Larkin, P.A. 1977. An epitaph for the concept of maximum sustained yield. *Transactions of the American Fisheries Society* 106:1-11.
- Myers, R. A., and B. Worm. 2003. Rapid worldwide depletion of predatory fish communities. *Nature* 423:280-283.
- Pauly, D. On Malthusian overfishing. 1990. *Naga, the ICLARM Quarterly* 13:3-4.
- Pauly, D. 1995. Anecdotes and shifting baseline syndrome of fisheries. *Trends in Ecology and Evolution* 10:430.
- Pauly, D., J. Alder, E. Bennett, V. Christensen, P. Tyedmers, and R. Watson. The future for fisheries. *Science* 302:1359-1361.
- Pinnegar, J. K., and G. H. Engelhard. 2008. The 'shifting baseline' phenomenon: a global perspective. *Reviews in Fisheries Biology and Fisheries* 18:1-16.
- Polacheck, T. Tuna longline catch rates in the Indian Ocean: did industrial fishing result in a 90% decline in the abundance of large predatory species? *Marine Policy* 30:470-482.
- Smith, T. D., and J. S. Link. 2005. Autopsy your dead...and living: a proposal for fisheries science, fisheries management and fisheries. *Fish and Fisheries* 6:73-87.
- Worm, B., and T. A. Branch. 2012. The future of fish. *Trends in Ecology and Evolution* 27:594-599.

Worm, B., H. K. Lotze, and R. A. Myers. 2007. Ecosystem effects of fishing and whaling in the North Pacific and Atlantic Oceans. Pages 333-341 in: Estes, J. A., et al., editors. Whales, whaling, and ocean ecosystems. University of California Press, Berkely.

Worm, B., R. Hilborn, J. K. Baum, T. A. Branch, J. S. Collie, C. Costello, M. J. Fogarty, E. A. Fulton, J. A. Hutchings, S. Jennings, O. P. Jensen, H. K. Lotze, P. M. Mace, T. R. McClanahan, C. Minto, S. R. Palumbi, A. M. Parma, D. Ricard, A. A. Rosenberg, R. Watson, and D. Zeller. 2009. Rebuilding global fisheries. *Science* 325:578-585.