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

Meeting Times
3:00 – 5:00 p.m, W, 214 O'Neill Building

Course Description
This course will explore the scientific and popular literature 11(e)11(11(T8 0.205)-11(e)o)-11(e)11(t)-ee n/((11(1(r)7o

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 (2009; Reed Elsevier Inc.; ISBN 10: 1597265772) 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 provided in class or on Blackboard.

Attendance

Class attendance is mandatory for this course. A total of 70 points (5 points per day, weeks 2-15) are available for attendance during the class meeting periods, which will be assigned on an all or none basis. To receive the full allotment of 5 attendance points for each meeting period, students are expected to be present at the start of the class. Failure to attend the class without an excused absence will result in a zero for attendance for that particular meeting period.

Assignments and Class Participation

This course is dependent on weekly class discussions that will require critical thinking and active engagement during each meeting period. Because active class participation by all students is essential for these activities, each student enrolled for this course will need to prepare for each meeting period by completing all necessary readings and corresponding assignments before each scheduled period. Assignments will be given out at the end of each class period and will be due at the start of the following class period. Failure to attend the class without an excused absence will result in a zero for assignment for that meeting period. These assignments may include answering thought questions related to the readings, conducting literature or Internet searches related to the discussion topic, analyses of topic-related data, or some combination. In all cases, the assignments will form the basis for each class discussion and will provide the mechanism by which students preparation for the class discussion is evaluated. As a rcla822(a)-11(r(1(p)-5[(c)11(la)-1)-11(822(a)-11(r(la)-11(s) in15oi1(h 1s.11-i give1)11(

WEEKLY DISCUSSION/READING OUTLINE

Discussion Topic	Week	Readings
Course Overview		

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 63:2-14.

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. 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.