

The Natural History of Whales and Whaling **FW 499/599**

Credit hours: 3

Term offered: Fall

Instructor: Scott Baker

Course objectives: During the last 200 years, whaling expanded into a global industry, systematically driving most populations of baleen whales (suborder: Mysticeti) and some larger toothed whales (suborder: Odonotoceti) to near extinction. This virtually eliminated an entire trophic level of the marine ecosystem, particularly in the Southern Hemisphere. Although viewed by some as a relic of the past, whaling remains a strong imperative for some national interests. The objectives of this course are to understand the natural history of whales as a unique example of adaptation in an evolutionary lineage, and the history of whaling as a general example of the failings of international resource management.

Course content: Topics may include: Evolutionary origins and adaptation; Taxonomy and diversity; Biogeography and population structure; Life history parameters; The history of whaling; Population dynamic models and recovery; Trophic ecology; Migration and habitat use; and The IWC and current management issues

Prerequisites: None, but some background in marine biology, vertebrate ecology or genetics is recommended.

Text: No required text. Recommended general reading:

Berta, A., Sumich, J. L. & Kovacs, K. M. 2006 Marine mammals: evolutionary biology, 2nd edn. San Diego, CA: Academic Press.

Estes, J. A., D. P. DeMaster, R. L. Brownell Jr., D. F. Doak, and T. M. Williams. 2006. Whales, whaling, and ocean ecosystem. University of California Press, Berkeley.

Perrin, W. F., B. Würsig, and J. G. M. Thewissen. 2002. Encyclopedia of marine mammals. Academic Press, San Diego.

Grading: Final grades will be based on class attendance and participation, lab write-ups, an essay on a topic dealing with conservation or management, and panel evaluation of an organized debate on the 'value' of whales and whaling. Graduate students (FW 599) will be held to a higher standard on the essay, lab write-ups and leadership role in the debate.

Attendance and participation	10%
Essay (5-10 pages)	20%
Formal debate	20% (panel evaluation)
Field trip	10%
Lab write-ups (4 x 10%)	40%

Students for whom the course is intended: Intended for seniors and graduate students in Fisheries and Wildlife, Zoology and Marine Resource Management, who are interested in the natural history of cetaceans and the international management of marine species.