

# FISH 670: Quantitative Analysis for Marine Policy Decisions (3 credits)

**Instructor:** Dr. Keith R. Criddle  
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**Office hours:** TR 10-12 or by appointment  
**Time/Location:** TR 3:40-5:10 Juneau (LP 103) and by video conference as demand warrants.

**Course Description:** An introduction to the practical application of mathematical programming, operations research, simulation, cost-benefit analysis, cost effectiveness analysis, regional impact assessment, economic valuation, risk analysis, adaptive management, and other decision theoretic tools in preparation of regulatory



## **COURSE OUTLINE & READING ASSIGNMENTS**

**Supplementary Readings:**

Criddle KR. 2008. The legal context of US fisheries management and the evolution of rights-based management in Alaska. Pages 369-382 in R Townsend, R Shotton, & H Uchida (editors).



Henderson MM, KR Criddle and ST Lee. 2000. The economic value of Alaska's Copper River personal-use and subsistence fisheries. 6: 63-69.

Layman CS, JR Boyce, KR Criddle. 1996. The economic value of the recreational king salmon fisheries on the Gulkana and Klutina Rivers, Alaska. 72: 113-128.

Lipton DW, K Wellman, IC Sheifer, RF Weiher. 1995. Economic valuation of natural resources—a handbook for coastal resource policymakers, NOAA Coastal Ocean Program Decision Analysis Series No. 5, NOAA Coastal Ocean Office, Silver Spring, MD.