

NorMER short course on Fisheries Management, 30. September – 3. October 2013

Instructors: Pamela Woods, Florian Diekert, Andries Richter

Course objectives:

This course is designed to familiarize students with basic concepts and methods in fisheries management. By the end of the course, students should have a more full understanding of how the economic theory regarding how management systems are designed, a broader exposure to industry stakeholders, and a basic understanding of how fisheries resources are assessed and how advice is given to managers.

Course materials:

Haddon, Malcolm. 2001. Modelling and quantitative methods in fisheries. Chapman & Hall.

Course Schedule:

Monday, September 30, afternoon (PW): Course Introduction and ICES projects

13:30 – 14:00: ICES general discussion

14:00 – 16:30: break into small groups to research topic not well understood (handout to be given ahead of time with suggested topics)

16:30 – 17:30: presentations of small group research

Tuesday, October 1, morning (FD & AR): Basic concepts in fisheries science: economics

08:30 – 10:00: *Economic modeling of fisheries* (Florian Diekert). Reading: Econ lecture note, section 1-4.

10:30 – 11:30: *Different ways of implementing fisheries management* (Andries Richter). Reading: Eikeset et al 2011, Smith 2012, Wilen 2006.

11:30 – 12:30: *The effect of trade and the socio-economic background on management options* (Florian Diekert). Reading: Copeland and Taylor 2009, Econ lecture note, section 5.

Tuesday, October 1, afternoon (PW): Field excursion to Grindavík (major fishing hub)

Wednesday, October 2, morning (PW): Basic concepts in fisheries science: biology

Assigned Reading before class:

Haddon Chs. 1 & 2

Haddon Ch. 3

Haddon Ch. 10

08:30 – 10:00: Surplus production models and risk assessment

10:30 – 12:30: Computer exercise: fitting a surplus production model to data and performing a risk assessment

Wednesday, October 2, afternoon (PW): Basic concepts in fisheries science: biology

Assigned Reading before class:

Haddon Ch. 11

13:30 – 15:00: Stock-recruitment relationships, age-structured methods: Yield-per-recruit Analysis, Catch-curve analysis

15:30 – 17:00: Computer exercise: demonstrate components needed for an statistical catch-at-age model.

Thursday, October 3, morning (PW): Basic concepts in fisheries science: biology

Assigned Reading before class:

Haddon Ch. 9

08:30 – 10:00: Stock-recruitment relationships

10:30 – 12:30: Computer exercise: fit a stock-recruitment relationship to data

Friday, October 4:

Take-home exam will be sent, due 1. December

Grading Criteria:

In-class project & presentation: 20%

Class participation: 15%

Computer assignments: 15%

Take-home exam: 50%