Fisheries ecology BIOR67, 5 Nov., 2018 - 18 Jan., 2019

Department of Biology, Lund University

Welcome to Fisheries ecology!
During this course you will learn how to produce advice for the sustainable management of aquatic communities with special emphasis on fish populations and their role in the ecosystem. We start by getting hands-on experience in how to sample fish in different environments ranging from trawling in the open sea, to coastal gill nets and electro fishing in small streams. We analyse our samples with respect species composition, age distribution, diet etc. We then proceed by calculating the size of a fish stock and producing recommendations for sustainable harvesting, taking the North sea cod stock as an example. Finally we use modelling to address contemporary fisheries issues of your own choice, e.g. effects of climate change, marine protected areas, alternative stable states etc. I am sure we will have a great time both in the field and in the lab. Make sure to be appropriately dressed and bring a lot of food during the field work, as weather conditions this time of year could be rather harsh.

Again, welcome! /Anders


Course leader: Anders Persson, anders.persson@biol.lu.se, 0730-491964
Other Teachers: Per Carlsson, Jerker Vinterstare

Location: see web schedule at L@L

Teaching activities: L (lecture), Sem (seminar), G (group exercise), Lab, Proj (Project), Ind (Independent studies)

Compulsory activities are marked with C. If you are absent from a compulsory activity without a valid reason you are not guaranteed to complete this part until the next time the course is offered. A valid reason is e.g. that you are ill, but not that you are travelling!

Before the start of the course you must read the documents "general information" and Plagiarism and Cheating

General information
Plagiarism and Cheating

Additional information for students can be found at
Current student at LU
Current student at Dept. of Biol.

Students rights and guidelines
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Course</th>
<th>Description</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mo. 12 Nov.</td>
<td>9.00-17.00</td>
<td>Proj</td>
<td>Field sampling, Electrofishing</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 13 Nov.</td>
<td>8.00-18.00</td>
<td>Proj</td>
<td>Field sampling, Trawling</td>
<td>AP, PC</td>
</tr>
<tr>
<td>We. 14 Nov.</td>
<td>8.00-18.00</td>
<td>Proj</td>
<td>Field sampling, Gill net fishing</td>
<td>AP, PC</td>
</tr>
<tr>
<td>Th. 15 Nov.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Diet and age analysis</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>No classes</td>
<td></td>
</tr>
<tr>
<td>Fr. 16 Nov.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Diet and age analysis</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mo. 19 Nov.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Writing report</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 20 Nov.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Writing report</td>
<td>AP</td>
</tr>
<tr>
<td>We. 21 Nov.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Writing report</td>
<td>AP</td>
</tr>
<tr>
<td>Th. 22 Nov.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Handing in report 12.00</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>No classes</td>
<td></td>
</tr>
<tr>
<td>Fr. 23 Nov.</td>
<td>9.15-12.00</td>
<td>S</td>
<td>Seminar Field studies</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.15-16.00</td>
<td>Ind</td>
<td>Preparing for Literature seminar 1</td>
<td></td>
</tr>
<tr>
<td>Mo. 26 Nov.</td>
<td>9.15-12.00</td>
<td>S</td>
<td>Literature seminar 1</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.15-16.00</td>
<td>Ind</td>
<td>Preparing for literature seminar 2</td>
<td></td>
</tr>
<tr>
<td>Tu. 27 Nov.</td>
<td>9.15-12.00</td>
<td>L</td>
<td>Tuning of VPA</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.15-16.00</td>
<td>Ind</td>
<td>Calculations 4, Terminal F</td>
<td></td>
</tr>
<tr>
<td>We. 28 Nov.</td>
<td>9.15-12.00</td>
<td>L</td>
<td>Prognosis, Yield per recruit</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.15-16.00</td>
<td>Ind</td>
<td>Calculations 5, short-term prognosis</td>
<td></td>
</tr>
<tr>
<td>Th. 29 Nov.</td>
<td>9.15-12.00</td>
<td>S</td>
<td>Literature seminar 2</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>No classes</td>
<td></td>
</tr>
<tr>
<td>Fr. 30 Nov.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td>Mo. 3 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 4 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td>We. 5 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td>Th. 6 Dec.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>Resit many courses period 2</td>
<td></td>
</tr>
<tr>
<td>Fr. 7 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td>Mo. 10 Dec.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Handing in report 12.00</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 11 Dec.</td>
<td>9.15-12.00</td>
<td>S</td>
<td>Seminar stock assessment</td>
<td>AP</td>
</tr>
<tr>
<td>We. 12 Dec.</td>
<td>9.15-12.00</td>
<td>L</td>
<td>Fish as predators and prey</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.15-16.00</td>
<td>Ind</td>
<td>Preparing for literature seminar 3</td>
<td></td>
</tr>
<tr>
<td>Th. 13 Dec.</td>
<td>9.15-12.00</td>
<td>L</td>
<td>Biomanipulation</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>No classes</td>
<td></td>
</tr>
<tr>
<td>Fr. 14 Dec.</td>
<td>9.15-12.00</td>
<td>S</td>
<td>Literature seminar 3</td>
<td>AP</td>
</tr>
<tr>
<td>Mo. 17 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 18 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>We. 19 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Th. 20 Dec.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>No classes</td>
<td></td>
</tr>
<tr>
<td>Fr. 21 Dec.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Sa. 22 Dec</td>
<td></td>
<td>Winter break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Su. 6 Jan</td>
<td></td>
<td>Winter break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Type</td>
<td>Event/Activity</td>
<td>Instructor</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
<td>------</td>
<td>----------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Mo. 7 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 8 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>We. 9 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Th. 10 Jan.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-14.30</td>
<td></td>
<td>Information: Exchange studies (in English)</td>
<td>Tina Ledje</td>
</tr>
<tr>
<td>Fr. 11 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Mo. 14 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Tu. 15 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>We. 16 Jan.</td>
<td>9.15-16.00</td>
<td>Proj</td>
<td>Modelling project</td>
<td>AP</td>
</tr>
<tr>
<td>Th. 17 Jan.</td>
<td>9.15-12.00</td>
<td>Proj</td>
<td>Handing in report 12.00</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>13.00-17.00</td>
<td></td>
<td>No classes</td>
<td></td>
</tr>
<tr>
<td>Fr. 18 Jan.</td>
<td>9.15-13.00</td>
<td>S</td>
<td>Seminar Modelling project</td>
<td>AP</td>
</tr>
</tbody>
</table>