Seaweed Ecology and Physiology - literature course, 10 ETC

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<th>Course period: Jan 26 to May 10 2016</th>
<th>Last day for application: 2016-01-24</th>
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Course leader /Address for applications:
Gunilla Toth /gunilla.toth@marine.gu.se

Course description (Advertisement for Ph.D. students):

This is a literature course where we read the book "Seaweed ecology and physiology" by Hurd, Harrison, Bischof and Lobban and discuss its content in 6 literature seminars. We will meet physically in the videoconference room at the department of Marine Sciences - Tjärnö on the Swedish west coast (near Strömstad), starting Tuesday Jan 26. Participants that cannot travel to Tjärnö will have the opportunity to join the seminars at distance through computer/videoconference.

The seminar time is always between 10-12, and the dates and reading assignments for the seminars are:
Jan 26, Chapter 1 and 2
Feb 23, Chapter 3 and 4
March 15, Chapter 5
March 30, Chapter 6
April 26, Chapter 7 and 8
May 10, Chapter 9 and 10

The course is recommended to correspond to 10 ECTS (10 HP) in total.


Application and contact: Send a mail including a short (maximum 0.5 A4) description of your research and time left to PhD-defense to Gunilla Toth (gunilla.toth@marine.gu.se). Deadline January 24, 2016

Responsible department and other participation departments/organizations:
Dept of Marine Sciences, University of Gothenburg

Teachers:
Assoc. Prof. Gunilla Toth (course leader and main contact)

Examiner: Prof. Per Jonsson
1. **Confirmation**
The syllabus was confirmed by the Head of the Department of Marine Sciences, xxxx-xx-xx.

Disciplinary domain: Science  
Department in charge: Departments of Marine Sciences  
Main field of study: Marine Biology, Marine Botany

2. **Position in the educational system**
Elective course; third-cycle education.

3. **Entry requirements**
Admitted to third cycle education.

4. **Course content**
The course is a literature course where the content in the book "Seaweed Ecology and Physiology" by Hurd, Harrison, Bischof and Lobban is discussed. The book includes chapters on the structure of seaweed thalli and cells (Ch 1), the life histories, reproduction and morphogenesis of seaweeds (Ch 2), seaweed communities (Ch 3), biotic interactions (Ch 4), light and photosynthesis (Ch 5), nutrients (Ch 6), physico-chemical factors as environmental stressors in seaweed biology (Ch 7), water motion (Ch 8), pollution (Ch 9), and seaweed mariculture (Ch 10).

Citation from the back cover of the book: "In coastal seas, from the tropics to the poles, seaweed supply the energy required to support diverse coastal marine life and provide habitat for invertebrates and fish... In addition to exploring the processes by which seaweeds, as individuals and communities, interact with their biotic and abiotic environment, the book presents exciting new research on how seaweeds respond to local and global environmental change."
5. Outcomes
After completion of the course the Ph.D. student is expected to be able to:

1. Knowledge and understanding
- State the current knowledge and understanding in different areas of seaweed ecology and physiology according to the course literature

2. Skills and abilities
- Summarize, discuss and interpret different areas of seaweed ecology and physiology and present them orally in front of a group

3. Judgment and approach
- Evaluate and assess the content of the course literature

6. Required reading

7. Assessment
Students must actively participate in the seminars. Examination will be in the form of individual oral presentations and group discussions.

A Ph.D. student who has failed a test twice has the right to change examiners, if it is possible. A written application should be sent to the Department.

The number of examinations is to be limited to five occasions and the number of placements is to be limited to two occasions.

In cases where a course has been discontinued or major changes have been made a Ph.D. should be guaranteed at least three examination occasions (including the ordinary examination occasion) during a time of at least one year from the last time the course was given.

8. Grading scale
The grading scale comprises Fail, (U), Pass (G)

9. Course Evaluation
The course evaluation is carried out together with the Ph.D. students at the end of the course, and is followed by an individual, anonymous survey. The results and possible
changes in the course will be shared with the students who participated in the evaluation and to those who are beginning the course.

10. Language of instruction
The language of instruction is English.