

BIOR65 Marine Ecology

110829-110927

Most welcome to the course in Marine Ecology!

The majority of the teaching will be in A182 in the Biology Building

Participating teachers (all from Aquatic Ecology, Lund University)

PC: Per Carlsson, Associate Professor, course director

JH: Johan Hollander, PhD

PL: Peter Ljungberg, PhD-student

Abbreviations

L = lecture

E = exercise

F = field excursion

S = seminar

OW = own work, time for reading course literature, projects and preparation for presentations

Mandatory parts

All parts on the course are mandatory except for lectures and the time for own reading/preparations.

Excursions

We will do a one week field trip where we compare the marine ecosystems in the Baltic Sea and northern Öresund/Kattegat. During this week we will travel with mini-buses and be accommodated in hostels.

We will also do a field trip on Öresund in order to collect benthic fauna at different localities and compare these with regards to the fauna composition and abiotic variables.

Be aware of that the starting time for the excursions may be earlier than normal starting time for lectures. Sometimes it is also difficult to exact state a time when you are ready for the day with an excursion or in the lab. Be aware that these days, the time you spend in the field or in the laboratory can be longer than normal.

Feed-back

After oral presentations you will get feed-back on your performance: what was good, and what can be improved. After written presentations you will get a written feed-back on your performance.

Assessment/Grading

The written exam on the course will be equivalent to 50% of the final grade. The rest of the grade is obtained by your performance during seminars, group work and individual projects.

Literature

Kaiser, MJ et al. (2005) Marine Ecology: Processes, Systems, and Impact, Oxford University Press. ISBN 0-19-924975-X. About 300 SKR.

NB: There is a brand new edition of this book (July 2011). ISBN 978-0-19-922702-0. If you prefer to use this one, I will make sure that the questions on the written exam can be answered using information from either of the editions (the questions can of course also be based on information during lectures, field trips etc.)

Literature handed out during the course:

Macroalgae handout

Excursion guides and lab manuals

Literature available at the department:

Taxonomic literature

Per

You can reach me at per.carlsson@biol.lu.se or 046-2228435 if you have any questions concerning the course.

Schedule Marine Ecology – (BIOR65), Autumn 2011
Version 110817

Week 35, 29 August – 2 September

Time	Monday 29/8	Tuesday 30/8	Wednesday 31/8	Thursday 1/9	Friday 2/9
9:00	Introductory meeting PC A182	The pelagic system (L) PC A182	Primary production (L) PC Heden	Microbial production and climate change (L) PC A182	Macroalgae (L) PC A182
10:00					
10:30	Marine ecology – an introduction (L) PC A182	The diversity of plankton (L) PC A182	Nutrient cycles and eutrophication (L) PC Heden	Microbial production and climate change (L) PC A182	Macroalgae (L) PC A182
12:00					
13:00	The abiotic frame – oceanography (L) PC A182	Plankton species identification (E) PC (Group 1 and 2). Group 3 and 4 (OW) A182		Plankton species identification (E) PC (Group 1 and 2). Group 3 and 4 (OW) A182	Intro. to individual project (PC) How to search for literature (Kristina Arnebrandt, Library) A182
15:00					
15:20	Own studies	Own studies	Own studies	Own studies	How to search for literature (Kristina Arnebrandt, Library) A182
16:00					

Week 36, 5 September – 9 September

Time	Monday 5/9	Tuesday 6/9	Wednesday 7/9	Thursday 8/9	Friday 9/9
9:00	Macroalgae species identification (Group 1 and 2). PC, Group 3 and 4 (OW) A182	Benthic communities (L) PC D205	Estuaries, sandy and rocky shores (L) PC A182	Preparations for GFT PC, JH, PL A182	Preparations for GFT PC, JH, PL D215b
10:00					
10:30	Macroalgae species identification (Group 1 and 2). PC, Group 3 and 4 (OW) A182	Benthic communities (L) PC D205	Estuaries, sandy and rocky shores (L) PC A182	Preparations for GFT PC, JH, PL A182	Preparations for GFT PC, JH, PL D215b
12:00					
13:00	Macroalgae species identification (Group 3 and 4). PC, Group 1 and 2 (OW) A182	Marine fishes (L) PL D205	Preparations for GFT: sampling strategies and statistical treatment of data JH A182	Preparations for GFT PC, JH, PL A182	Preparations for GFT PC, JH, PL D215b
15:00					
15:20	Macroalgae species identification (Group 3 and 4). PC, Group 1 and 2 (OW) A182	The Baltic-west coast gradient (L) PC, Introduction to the Gradient Field Trip (GFT) PC D205	Preparations for GFT PC, JH, PL A182	Preparations for GFT PC, JH, PL A182	Preparations for GFT PC, JH, PL D215b
16:00					

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Week 37, 12 September – 16 September

Time	Monday 12/9	Tuesday 13/9	Wednesday 14/9	Thursday 15/9	Friday 16/9
early	GFT (F) PC, JH, PL (See separate schedule!)	GFT (F) PC, JH, PL	GFT (F) PC, JH, PL	GFT (F) PC, JH, PL	GFT (F) PC, JH, PL
late					

Week 38, 19 September – 23 September

Time	Monday 19/9	Tuesday 20/9	Wednesday 21/9	Thursday 22/9	Friday 23/9
9:00	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT: report writing A182
10:00					
10:30	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT: report writing A182
12:00					
13:00	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	GFT analyses (Lab) PC, JH A182	Own studies Deadline: presenting title for individual project	GFT: report writing A182
16:00					

Week 39, 26 September – 30 September

Time	Monday 26/9	Tuesday 27/9	Wednesday 28/9	Thursday 29/9	Friday 30/9
9:00	GFT: report writing A182	GFT: report writing A182	Preparations for presentations of GFT A182	Presentations of GFT A182	Presentations of GFT A182
10:00					
10:30	GFT: report writing A182	GFT: report writing A182	Preparations for presentations of GFT A182	Presentations of GFT A182	Presentations of GFT A182
12:00					
13:00	GFT: report writing A182	GFT: report writing A182	Preparations for presentations of GFT A182	Information about exchange studies (for the interested!)	Presentations of GFT A182
15:00					
15.20	GFT: report writing A182	Deadline: Delivery of GFT report	Preparations for presentations of GFT A182	Own studies	
16:00					

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Week 40, 3 October – 7 October

Time	Monday 3/10	Tuesday 4/10	Wednesday 5/10	Thursday 6/10	Friday 7/10
9:00	Own reading	Own reading	Review for exam (if you have questions) 9:00- 12:00)	Own reading	Written exam 9:00-14:00 A182
10:16			PC A182		

Week 41, 10 October – 14 October

Time	Monday 10/10	Tuesday 11/10	Wednesday 12/10	Thursday 13/10	Friday 14/10
9:00	Excursion: Benthic communities in the Öresund (F) Gr 1 and 2 PC Gr 3 and 4 (Ow)	Lab work with excursion material Gr 1 and 2 PC Gr 3 and 4 (Ow) A182	Own studies	Excursion: Benthic communities in the Öresund (F) Gr 3 and 4 PC Gr 1 and 2 (Ow)	Lab work with excursion material Gr 3 and 4 PC Gr 1 and 2 (Ow) A182
16:00					

Week 42, 17 October – 21 October

Time	Monday 17/10	Tuesday 18/10	Wednesday 19/10	Thursday 20/10	Friday 21/10
9:00	Group work: Lectures on Deep- Sea, Coral reefs, Mangrove, Seagrass, Polar regions etc. Introduction PC Ången	Group work: lectures	Group work: lectures	Presentations: Group work lectures A182	Presentations: Group work lectures A182
10:30					
12:00	Group work: lectures	Group work: lectures	Group work: lectures	Presentations: Group work lectures A182	Presentations: Group work lectures A182
13:00	Group work: lectures	Group work: lectures	Group work: lectures	Presentations: Group work lectures A182	Presentations: Group work lectures A182
15:00					
15.20 16:00	Group work: lectures	Group work: lectures	Group work: Lectures Deadline: send in PowerPoint Lecture		

Week 43, 24 October – 27 October

Time	Monday 24/10	Tuesday 25/10	Wednesday 26/10	Thursday 27/10	Friday 31/10
9:00	Meeting with your opponent on your individual proj. Preparation for presentation of individual projects A182	Presentation of individual projects (S) PC A182	Presentation of individual projects (S) PC Course evaluation (computer based) A182		
16:00					