

11-09-19

BIOR41 Ecotoxicology 1 – Fundamentals of Ecotoxicology ht 11

Course coordinator: Olof Berglund, 046-2223750, Olof.Berglund@biol.lu.se

Course literature:

Course books:

- “Principles of ecotoxicology” 3rd edition by Walker, C.H., Hopkin, S.P., Sibly, R.M. & Peakall, D.B. Taylor & Francis, NY. Chapters: 1-12, 13-16 (7 and 10 read only) (2nd edition Chapters: 1-15)
- “Organic pollutants: An ecotoxicological perspective” C. Walker. pp 89-232. Available on-line!
- Other materials (articles, book chapters and reports) will be distributed during the course

Welcome to the ecotoxicology course! This is a preliminary schedule. You will receive detailed schedules for the modules “Toxicity testing EC50”, and “Pollutant effects on trophic interactions lab” (these modules do not require compulsory 9 to 5 work every single day!). You will be divided into two larger groups and several, smaller lab and seminar units during parts of the course. All lectures (including Introduction 27/10 09.15) will be held in the Ecology Building unless otherwise stated. Group seminars will be conducted in “Group rooms” according to the list provided at the course introduction.

Attendance is compulsory during: introduction 26/10, seminars, lab and modeling exercises, and presentations (*marked in italics in the schedule*).

Materials and information regarding the course can be found at the course web (you will receive passwords at the beginning of the course)

Olof

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Schedule (subject to changes):

Date	Day	Time	Place	Activity	Teacher
27-oct	Thur	9:15-12:00		Introduction	L OB
28-oct	Fri	13:15-16:00		Toxic effects and endpoints	L OB
31-oct	Mon	9:15-12:00		Metals I	L OR
1-nov	Tue	9:15-12:00		Physicochemical properties of pollutants	L OB
2-nov	Wed	9:15-12:00		Organic chemicals	L OB
3-nov	Thur	9:15-12:00		Genetics and pollutants	L MH
		13:15-16:00		<i>Reading and writing scientific articles</i>	E OB
4-nov	Fri	9:15-12:00		<i>Metals II, Group 1</i>	S OR
		13:15-16:00		<i>Metals II, Group 2</i>	S OR
7-nov	Mon	9:15-12:00		<i>Toxicity testing – EC₅₀ Introduction</i>	LE PH, ME, EB, SR
8-nov	Tue	9:15-12:00		<i>Toxicity testing – EC₅₀</i>	LE PH, ME, EB, SR
9-nov	Wed	9:15-12:00		<i>Toxicity testing – EC₅₀</i>	LE PH, ME, EB, SR
		13:15-17:00		<i>Toxicity testing – EC₅₀</i>	LE PH, ME, EB, SR
10-nov	Thur	9:15-12:00		<i>Toxicity testing – EC₅₀</i>	LE PH, ME, EB, SR
		13:15-17:00		<i>Toxicity testing – EC₅₀ Reading and writing scientific articles – feedback (OB) (see group schedules)</i>	LE PH, ME, EB, SR
11-nov	Fri	9:15-12:00		<i>Book seminar, Principles of Ecotoxicology, Chapters 1-4</i>	S
		13:15-17:00		<i>Toxicity testing – EC₅₀ Reading and writing scientific articles – feedback (OB) (see group schedules)</i>	LE PH, ME, EB, SR
14-nov	Mon	9:15-12:00		<i>Toxicity testing – EC₅₀ Hand in article and lab report 12:00</i>	LE PH, ME, EB, SR
		13:15-17:00		<i>Toxicity testing – EC₅₀ Prepare presentations</i>	

15-nov	Tue	9:15-12:00		<i>Toxicity testing – EC₅₀ Presentation, Group 2</i>	S	PH, ME, EB, SR
		13:15-16:00		<i>Toxicity testing – EC₅₀ Presentation, Group 1</i>	S	PH, ME, EB, SR
16-nov	Wed	9:15-12:00	Group rooms	<i>Toxicity seminar</i>	S	
17-nov	Thur	9:15-12:00		Risk assessments	L	OB
18-nov	Fri	9:15-12:00	Group rooms	<i>Book seminar, Principles of Ecotoxicology, Chapters 5-6</i>	S	
21-nov	Mon	9:15-9:45		<i>Persistent Organic Pollutants Introduction</i>	L	OB
		10:00-12:00		Bioaccumulation and biomagnifications of organic chemicals	L	OB
		13:15-17:00		Persistent Organic Pollutants Article analysis		
22-nov	Tue	9:15-17:00		Persistent Organic Pollutants Article analysis		
23-nov	Wed	9:15-12:00		Persistent Organic Pollutants Write report		
		13:15-17:00		Persistent Organic Pollutants Write report Hand in 16:00		
24-nov	Thur	9:15-12:00		<i>Persistent Organic Pollutants Trophic transfer modeling</i>	ME	OB
		13:15-16:00		<i>Persistent Organic Pollutants Trophic transfer modeling</i>	ME	OB
25-nov	Fri	9:15-12:00	Group Rooms	<i>Book seminar, Principles of Ecotoxicology, Chapters 8-9</i>	S	
28-nov	Mon	9:15-12:00		<i>Persistent Organic Pollutants Feedback on report (see group schedules)</i>	S	OB
		13:15-17:00		<i>Persistent Organic Pollutants Feedback on report (see group schedules)</i>	S	OB
29-nov	Tue	9:15-17:00		Persistent Organic Pollutants Edit report & prepare for seminar		
30-nov	Wed	9:15-12:00	Group rooms	<i>Persistent Organic Pollutants seminar</i>	S	
1-dec	Thur	9:15-12:00		Persistent Organic Pollutants Hand in final version of report 16:00		
2-dec	Fri	9:15-12:00	Group Rooms	<i>Book seminar, Principles of Ecotoxicology, Chapters 11-13</i>	S	
5-dec	Mon	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	L	PH

		13:15-17:00		<i>Pollutant effects on trophic interactions, lab introduction</i>	LE	PH, ME, MH, EB, SR
6-dec	Tue	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
7-dec	Wed	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
8-dec	Thur	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
9-dec	Fri	9:15-12:00	Group Rooms	<i>Book seminar, Principles of Ecotoxicology, Chapters 14-15</i>	S	
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
12-dec	Mon	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
13-dec	Tue	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
14-dec	Wed	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR

15-dec	Thu	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
16-dec	Fri	9:15-12:00	Group rooms	<i>Book seminar, Organic pollutants: an ecotoxicological perspective</i>	S	
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
19-dec	Mon	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
20-dec	Tue	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
21-dec	Wed	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
22-dec	Thu	9:15-12:00		<i>Pollutant effects on trophic interactions</i>	LE	PH, ME, MH, EB, SR
23-dec	Fri	9:15-12:00		<i>Pollutant effects on trophic interactions</i> <i>Hand in report 12:00</i>	LE	PH, ME, MH, EB, SR
9-jan	Mon	9:15-12:00		<i>Pollutant effects on trophic interactions</i> <i>Feedback on lab report</i> <i>(see group schedules)</i> Prepare presentation/opposition	LE	PH, ME, MH, EB, SR
		13:15-17:00		<i>Pollutant effects on trophic interactions</i> <i>Feedback on lab report</i> <i>(see group schedules)</i> Prepare presentation/opposition	LE	PH, ME, MH, EB, SR
10-jan	Tue	9:15-12:00		<i>Pollutant effects on trophic interactions</i> <i>Presentations</i>	S	PH, ME, MH, EB, SR

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		13:15-16:00	<i>Pollutant effects on trophic interactions</i> Presentations	S	PH, ME, MH, EB, SR
11-jan	Wed	9:15-12:00	Q & As		OB
		13:15-17:00	Ecosystem effects of pollutants Edit lab reports		
12-jan	Thur	9:15-14:00	Written examination		
13-jan	Fri	9:15-16:00	Ecosystem effects of pollutants Edit lab reports Hand in final version of report 16:00 Course evaluation		

L = Lecture
S = Seminar
LE = Laboratory exercise
ME = Modeling exercise

Teachers:

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