

2011-10-27

## WELCOME TO

### **BIOR35, EVOLUTIONARY ANIMAL ECOLOGY – autumn 2011**

(27 Oct 2011 - 13 Jan 2012)

The course is held in English.

Main room for the course: **Ängen**, Ecology Building, Sölvegatan 37

**Introduction: Thursday 27 October 09.00 in Ängen**

**Course literature:** Freeman, S. & Herron, J. C. 2007. Evolutionary Analysis. 4<sup>th</sup> edition. London: Prentice Hall. ISBN0-13-239789-7.

The course book should be available at Akademibokhandeln, Bokus.com and Adlibris.se. Other material (e.g. scientific papers) are handed out during the course

**Compulsory subjects** (“obligatoriska moment”) during the course:

1. All exercises, experiments, seminars, projects and excursion
2. The literature project
3. The written exam
4. The conference

**Course organizers:**

Dennis Hasselquist

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Dennis room (C256) is located at the first floor in the middle-west end of the Ecology Building (Department of Animal Ecology).

**Course co-organizer:**

Lars Råberg

Email: [lars.raberg@biol.lu.se](mailto:lars.raberg@biol.lu.se)

Very welcome to this course!

Dennis Hasselquist, Susanne Åkesson, Lars Råberg

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Teachers:

AH Anders Hedenström  
AN Andreas Nord  
BH Bengt Hansson  
CL Christer Löfstedt  
DH Dennis Hasselquist  
ES Erik Svensson  
GS Glenn Svensson  
HS Henrik Smith  
HW Helena Westerdahl  
JA Jep Agrell  
JÅN Jan-Åke Nilsson  
LR Lars Råberg  
OA Olle Anderbrant  
RM Rachel Muheim  
SC Sandra Chiriac  
SB Staffan Bensch  
SÅ Susanne Åkesson  
TA Thomas Alerstam  
ÅL Åke Lindström



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**Course program:**

**Rooms:** 1=Ängen; 2=Blåsippan; 3=Gulsippan; 4=Vitsippan; 5=Kärret 6=Hjortronet; 7=Kråkbäret; 8=Lingonet; 9=Ripbäret; 10=Mossen east; 11=Mossen west; 12=Renlaven; 13=Heden;

Ste=Stensoffa Ecological Station

**Activity:** L=Lecture; S=Book disc. seminar; Sa=Article disc. seminar; X=Exercise, E=Excursion

Day	Month	Date	Time	Loc*	Subject		Teacher
<b>EVOLUTIONARY ECOLOGY</b>							
Thur	Oct	27	9-10	1	Introduction		DH, SÅ, LR
			10-10.45	1	Start Literature project		LR, SÅ
			11-12	1	Darwin	L	TA
			13-		OWN READING (book chapter)		
Fri	28	28	9-10.45	1,6-9	Ch 1-2 (p 1-60, not Box 1:1)	S	DH
			10.45-11.15	1	Choice Literature project	X	DH, LR
			11.15 -		OWN WORK (Lit.project,read book)		
Mon	Oct	31	08-13	Ste	Excursion Stensoffa – collect data	E	JAN,AN,LR,SC,ES
			13-16	Ste	Excursion S. – prepare and present	E	LR, ES
Tue	Nov	1	9-12		OWN WORK (Lit.project,read book)		
			13-14.45	1,2,3,4	Ch. 3 (p.73-97) + 6.3 (194-207, not box 6:7, 6:8)	S	LR
			15-16.15	1	Linkage disequilibrium	L	ES
Wed		2	9-16		OWN WORK (Lit.project,read book)		
Thur		3	9-10.30	1,2,3,4	Ch. 4 (p. 111-133)	S	ES
			10.45-12	1	Ecology of speciation	L	ES
Fri		4	9-16		OWN WORK (Read articles)		
Mon	Nov	7	9-10.30	1	Genetics of speciation	L	SB
			10.45-12	1,2,3,4	Discuss articles: Speciation	Sa	SB, DH
			12 -		OWN WORK (Lit.project,read book)		
Tue	8	8	9-10.45	1,2,3,4	Ch. 8 + 9 (not 9:2)	S	ES
			11-12	1	<b>ECOPHYSIOLOGY &amp; MIGRATION</b> Introduction to Ecophysiol. Projects	X	SÅ, AN, RM, GS
			13-15.15	1	Optima for animals	L	AH
			15.15 -		OWN WORK (Lit.project,read book)		
Wed	Nov	9	9-17	2-5,10	Ecophysiol. Projects	X	SÅ,GS, AN, RM,
Thur		10	9-12	1	Ecophysiol.Projects – oral reports	X	SÅ
Fri		11	9-12	1	Ecophysiology	L	ÅL
			13-14	1	Biological compasses	L	SÅ

			14 -		OWN WORK (Lit.project,read book)		
Mon	Nov	14	9-12	1	Evolution and scaling of body size	L	TA
			13.15-15	1,2,3,4	Ch. 16 + 10.5	S	ES
Tue		15	9-12	1	Navigation	L	SÅ
			12 -		OWN WORK (Reading, Lit. project)		
Wed		16	9-11.30	1	Locomotion	L	AH
			13-14.30	1	Optimal migration	L	TA
			14.30 -		OWN WORK (Reading, Lit. project)		
					<b>LIFE HISTORY</b>		
Thur		17	9-12	1,6,7,12	Ch. 13 + 10.6 + 12.3	S	JÅN
Fri		18	9-11.30	1	Cost of reproduction	L/X	JÅN
			13-14.30	1	Maternal effects	L	DH
			14.30-		OWN READING/OWN WORK		
Mon	Nov	21	9-10.30	1	Virulence and host-parasite coevolution	L	LR
			10.45-12.30	1,2,3,4,10	Ch. 14, but not 14.4, 14.7	S	LR
			14 -		OWN READING/OWN WORK		
Tue		22	9-16		OWN READING/OWN WORK		
Wed		23	9-12	2-4,11	Discuss articles – Life History	Sa	JÅN, DH
Thur		24	9-12		OWN WORK (Lit. project)		
Fri		25	9-16		OWN WORK (Lit. project)		
Mon	Nov	28	9-16		OWN WORK (Lit. project)		
			16-		<u>Deadline submit literature project at course website!</u>		(LR)
					<b>SIGNALS &amp; COEVOLUTION</b>		
Tue		29	9-10	1	Co-evolution processes	L	OA
			10.30-12	1	Signals and communication	L	OA
			12 -		OWN READING (articles)		
Wed		30	9-16		OWN READING + Ch.12:1-2, 4		
Thur	Dec	1	9-10.30	2-4,13	Discuss articles – Evolution of sex pheromones	Sa	OA, GS
			11-12.30	13	Population variation in sex pheromones	L	CL
					<b>MATING SYSTEMS &amp; SEXUAL SELECTION</b>		

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Fri	Dec	2	9-11.45 13-14.15 14.15 -	1 1	Models of sexual selection Inbreeding OWN WORK	L L	HS BH
Mon	Dec	5	9-12 13-15.30	1 1	Social mating systems Evolutionary conflicts	L L	DH HS
Tue		6	9-12 13 -	1-4,10	Experimental design (not for students that have taken MASB11) (read: Ch. 10.1-10.4, 10.8) OWN WORK - Prepare lit project presentation and opposition	L/X	JA
Wed		7	9-16		OWN WORK/Preparation for exam		
Thur		8	9-10.30 10.45-12.15	1 1	Genetic mating systems Mate choice	L L	DH HW
Fri		9	9-11.30 11.30-12 13-	1,2,3,4 1	Ch. 11 (not 11:5) Sexual selection Information: Conference and oral presentation Literature project Preparation for exam	S	HW, DH DH, SÅ
Mon	Dec	12			Preparation for exam		
Tue		13			Preparation for exam		
Wed		14	9-16	1	Written exam		SÅ, DH
Thur		15	9-17	1	Report of literature projects, gr 1	S	LR, TA
Fri		16	9-17	1	Report of literature projects, gr 2	S	SÅ, DH
Mon	Dec	19			OWN WORK/Revise literature projects		
Tue		20			Preparation for Conference		
Wed		21			Preparation for Conference		
Thur		22			<b>Winter break!</b>		
					<b>Winter break! 22 Dec to 8 Jan</b>		
Mon	Jan	9			Preparation for Conference		
Tue		10	9-16 16-17 9-17	1 1	Conference, gr 1 Course evaluation, gr 1 – fill out (Preparation for Conference, gr 2)	X	SÅ, DH
Wed		11	9-16 16-17	1 1	Conference, gr 2 Course evaluation, gr 2 – fill out	X	DH, SÅ
Thur		12	9-13	BiolHus	Evolutionary Biology & Society	X	ES

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Fri		13		D205	Revision literature project: <u>Last day to submit revised literature project!!</u>		(LR)
			9-16		<b>Reexam</b>		