



LUND
UNIVERSITY

Evolutionary Animal Ecology (Bior81) 5 Nov., 2018 - 18 Jan., 2019

Department of Biology, Lund University

Information: Introduction: Monday 5 Nov 10:00 in Kärret. The course book should be available (paperback cheapest) at Akademibokhandeln, Bokus.com and Adlibris.se. Buy the course book well ahead of the course start date - you need to start reading the book from the first day of the course! Other material (e.g. scientific papers) are handed out during the course.

Literature: Freeman S & Herron JC 2015. Evolutionary Analysis. 5th ed. Pearson. ISBN:9781292061276

Course leaders: Dennis Hasselquist, Phone: 046-2223708 (work), mobile phone: 0730514552, Email: dennis.hasselquist@biol.lu.se. Susanne Åkesson, Phone: 046-2223705 (work), mobile phone: 0702-450423, Email: susanne.akesson@biol.lu.se; Course co-organizer: Lars Råberg; Email: lars.raberg@biol.lu.se

Teachers: (AH) Anders Hedenström, (BH) Bengt Hansson, (CL) Christer Löfstedt, (CC) Charlie Cornwallis, (DH) Dennis Hasselquist, (ES) Erik Svensson, (FA) Fredrik Andreasson, (GS) Glenn Svensson, (HS) Henrik Smith, (HSi) Hanna Sigeman, (HW) Helena Westerdahl, (JA) Jep Agrell, (JAb) Jessica Abbott, (JÅN) Jan-Åke Nilsson, (LH) Linus Hedh, (LR) Lars Råberg, (MF) Magne Friberg, (NW) Niklas Wahlberg, (OA) Olle Anderbrant, (RM) Rachel Muheim, (SÅ) Susanne Åkesson, (TA) Thomas Alerstam, (TU) Tobias Uller, (ÅL) Åke Lindström

Location: Main room for course: 1=Kärret (B131) (Ecology Building, Sölvegatan 37). Other rooms: 2=Backsippan (A141), 3=Blåsippan (A142), 4=Gulsippan (A143); 5=Lingonet (T105); 6=Masklaven (T105a); 7=Maskrosen (E121); 8=Raggmossan (T109); 9=Red room (see also web schedule at L@L)

Learning platform: [L@L](#)

Teaching activities: Teaching activities: L = (lecture), S = (book seminar), Sa = (article seminars), GEx = (group exercise), OwnP = (Own Project), SteEx = (Stensoffa excursion), Ind (Independent studies)

Compulsory activities are (marked with C in schedule below): 1. All exercises and seminars, 2. Stensoffa excursion, 3. Literature project (own project); 4. Written exam; 5. Conference. (If you are absent from a compulsory activity without a valid reason you are not guaranteed to complete this part until next time the course is offered. A valid reason is e.g. illness, 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](#)

Date	Time	Activity	Co mpu	Description	Teacher	Locality
Mo. 5 Nov.	10:00-11.30		C	Introduction (compulsory)	DH,SÅ	1
	11.30-12:15	OwnP		Start of Own Literature Project	LR,DH,MF	1
				EVOLUTION		
	13.00 -	Ind		OWN READING (articles, start on book ch1,2)		
Tu. 6 Nov.	08.30-13	SteEx	C	Excursion to Stensoffa – collect data	LR,HSi,RM,JÅN	Stensoffa
	13-16 (17)	SteEx	C	Excursion Stensoffa – prepare & present	LR, DH, SÅ	Stensoffa



We. 7 Nov.	9.00-11.15	L		Evolution - how does it work?	TU	1
	11.15 -	Ind		OWN WORK (read book, Own Lit. project)		
Th. 8 Nov.	9.00-11.15	S	C	Ch 1 + Ch 2 (not 2.5)	DH,SÅ	1,2,3,4
	11.15-12.00	OwnP		Choice of subject for Own Literature project	LR, MF	1
	13.00 -	Ind		OWN READING (book chapter)		
	13.00-17.00			No classes		
Fr. 9 Nov.	9.00-12.00	S	C	Ch 3 (p.87-110) + Ch 4 (p.123-153 1st 7 lines)		
				+ Ch 6.3 (215-228, not box 6:6, 6:7)	LR	1,2,3,4
	13.00 -	L		OWN READING (book chapter)		
				SPECIATION		
Mo. 12 Nov.	9.00-10.15	L		Ecology of speciation	ES	1
	10.45-12.00	L		Systematics of speciation	NW	1
	13.00 -	Ind		OWN READING (book chapter)		
Tu. 13 Nov.	9.00-10.30	S	C	Ch. 16 (+ Ch. 10.5 p401-403)	ES	1,2,3,4
	10.45-12	L		Linkage disequilibrium	ES	1
	13-15.15	L		Optima for animals	AH	1
We. 14 Nov		Ind		OWN WORK (Lit. project); OWN READ (book ch)		
Th. 15 Nov.	9.00-10.30	S	C	Ch. 8 + 9 (not 9:2 & Box 9:1)	ES	1,2,3,4
	10.30 -	Ind		OWN READING (articles)		
	13.00-17.00			No classes		
Fr. 16 Nov.	9.00-10.15	L		Genetics of speciation	BH	1
	10.30-12.00	Sa	C	Discuss articles: Speciation	BH, DH	1,2,3,4
	13.00 -	Ind		OWN WORK (Lit. project)		
				ECOPHYSIOLOGY & MIGRATION		
Mo. 19 Nov.	9.00-12.00	X	C	Introduction to Ecophysiol. Projects	SÅ,FA,RM,GS,LH	1
	13.00-17.00	X	C	Ecophysiology projects	SÅ,FA,RM,GS,LH	1,2,3,4,6
Tu. 20 Nov.	9.00-12.00	X	C	Ecophysiology projects, (cont'd)	SÅ,FA,RM,GS,LH	1,2,3,4,6
	13.00-16.00	X	C	Ecophysiol.Projects – oral reports	SÅ(FA,RM,GS,LH)	1
We. 21 Nov.	9.00-12.00	Ind		OWN WORK (Lit. project)		
	13.00-14.30	L		Optimal migration	TA	9 Red room
	14.45-15.45	L		Biological compasses	SÅ	9 Red room
Th. 22 Nov.	9.00-12.00	L		Ecophysiology	ÅL	1
	13.00-17.00			No classes		
Fr. 23 Nov.	9.00-12.00	L		Locomotion	AH	1
	13.00-16.00	L		Navigation	SÅ	1
				LIFE HISTORY		
Mo. 26 Nov.	9.00-10.30	L		Cost of reproduction	JÅN	1
	11.00-12.00	L		Cost of immune responses and disease	DH	1
	13.00 -	Ind		OWN READING (Book ch)		
Tu. 27 Nov.	9.00-12.00	S	C	Ch13 + Ch10.6 +Ch12.4 (p. 491-494)	JÅN	1,2,3,4
	13.00-14.30	L		Maternal effects	DH	1
	14.30 -	Ind		OWN READING (articles)		
We. 28 Nov.	9.00-12.00	Sa	C	Discuss articles: Life history	JÅN, DH	1,2,3,4
	13.00-16.00	L/X		Experimental design	JA	1
				MATING SYSTEMS & SEXUAL SELECTION		
Th. 29 Nov.	9.00-12.00	L		Social mating systems	DH	1
	13.00-17.00			No classes		
Fr. 30 Nov.	9.00-16.30	Ind		OWN READING/WORK (Book ch, Lit. project)		



LUND
UNIVERSITY

Mo. 3 Dec.	8.45-12.00	L		Models sexual selection & Evolutionary conflicts	JAb	1
	13.00-16.30	Ind		OWN READING/WORK (Book ch, Lit. project)		
Tu. 4 Dec.	9.00-10.30	L		Genetic mating systems	DH	1
	10.45-12.15	L		Mate choice	HW	1
	13.15-16.00	S	C	Ch.11 (not 11.5 & page 444) Sexual selection	DH, HW	1,2,3,4
We. 5 Dec.	9.00-16.30	Ind		OWN WORK (Lit. Project)		
Th. 6 Dec.	9.00-16.30	Ind		OWN WORK (Lit. Project)		
	13.00-17.00			Resit many courses period 2		
Fr. 7 Dec.	9.00-16.30	Ind		OWN WORK (Lit. Project)		
Mo. 10 Dec.	9.00-16.30	Ind		OWN WORK (Lit. Project)		
Tu. 11 Dec.	9.00-10.30	Ind		OWN WORK (Lit. Project)		
	10.30	Ind		Deadline: submit Lit project on course web site		
				SIGNALS & COEVOLUTION		
	11.00-12.00	L		Co-evolution processes	OA	1
	13.00-14.00	L		Signals and communication	OA	1
	14.00-14.15			Information: Conference & oral pres of Lit. project	DH, SÅ	1
	14.15 -	Ind		OWN READING/WORK (Book ch, articles)		
We. 12 Dec.	9.00-10.30	L		Population variation in sex pheromones	CL	1
	10.45-12.15	L		Virulence and host-parasite co-evolution	LR	1
	13.15 -	Ind		OWN READING/WORK (Book ch, articles)		
Th. 13 Dec.	09.00-10.30	S	C	Ch. 14, but not 14.4 & 14.7	LR	1,2,3,4
	10.30 -	Ind		OWN READ (articles + Ch12:1-2,5)		
	13.00-17.00			No classes		
Fr. 14 Dec.	9.00-10.30	Sa	C	Discuss articles - Evolution of sex pheromones	OA, GS	1,2,3,4
	10.45-12.15	L		Cooperation & kin selection	CC	1
	13.15-14.15	L		Why zebras have stripes	SÅ	1
	14.30-15.30	L		Animal - plant interactions	MF	1
Mo. 17 Dec.				Preparation for exam		
Tu. 18 Dec.				Preparation for exam		
We. 19 Dec.	9.00-16.15		C	Written exam	DH, SÅ	1
Th. 20 Dec.				Preparation for Conference & oral pres Lit. Project		
	13.00-17.00			No classes		
fr. 21 Dec.				Preparation for Conference & oral pres Lit. Project		
Sa. 22 Dec				Winter break		
Su. 6 Jan				Winter break		
Mo. 7 Jan.		Ind		READ ARTICLES for Ev Biol Soc		
Tu. 8 Jan.	9.00-13.00	GEx	C	Evolutionary Biology & Society	ES	1
	13.00 -	Ind		Prepare for oral report Lit. Projects		
We. 9 Jan.	9.00-16.30	OwnP	C	Oral report Lit. projects - groups 1 & 2	JAb,MF,CC,LR	1,8
Th. 10 Jan.		Ind		Prepare for Conference		
Fr. 11 Jan.		Ind		Prepare for Conference		
Mo. 14 Jan.		Ind		OWN WORK: Preparation for Conference		
Tu. 15 Jan.	9.00-16.00	GEx	C	Conference: presentations group 1	DH, SÅ	1
	16.00-16.30			Course evaluation gr. 1 - fill out		1
We. 16 Jan.	9.00-16.00	GEx	C	Conference: presentations group 2	DH, SÅ	1
	16.00-16.30			Course evaluation gr. 2 - fill out		1
Th. 17 Jan.				Preparation for reexam		
	13.00-17.00			No classes		
Fr. 18 Jan.	9.00-16.30			Reexam & (Last day submit revised Lit. Project)	SÅ	4,5