ENTM 1000 -- World of Bugs -- 2017 9:30-10:20 Room 219 Animal Science

Calendar Description:

ENTM 1000 World of bugs 3 credits. A survey of insect biology and life styles with emphasis on insect diversity and human-insect interactions.

Lectures: Three per week (M, W, F 9:30-10:20)

Instructors:

* **Dr. Rob Currie,** 214 Animal Science/Entomology Building (Phone 474-6020) Email: Rob.Currie@umanitoba.ca **Office hours:** Any time except T/TH 10:00-1:30

*Contact for general inquiries about the course. Please include "ENTM1000" in email subject.

Dr. Kateryn Rochon, 215A Animal Science/Entomology Building (Phone 474-8640)
E-mail: Kateryn.Rochon@umanitoba.ca
Office hours: Any time except: M/W/F 8:30-9:30 and T/TH 10:00-13:30.
Mr. Jordan Bannerman, 206 Animal Science/Entomology Building (Phone 480-1021)
E-mail: Jordan.Bannerman@umanitoba.ca
Office hours: Any time except: T/TH 10:00-11:30
Dr. Alejandro Costamagna, 217A Animal Science/Entomology Building (Phone 474-9007)
E-mail: Ale.Costamagna@umanitoba.ca
Office hours: Any time except: T/TH 10:00-12:45
Dr. Jason Gibbs, 213A Animal Science/Entomology Building (Phone 204-474-7485)
E-mail:Jason.Gibbs@umanitoba.ca
Office hours: M-F 10:00-11:30 and 13:00-16:00
Dr. Terry Galloway, 212A Animal Science/Entomology Building (Phone 474-6024)
E-mail: Terry.Galloway@umanitoba.ca.
Office hours: Any time in the morning
Dr. Neil Holiday, 216A Animal Science/Entomology Building (Phone 474-8365)
Email: Neil.Holliday@umanitoba.ca
Office hours: Email for appointment
Dr. Pat MacKay, 209 Animal Science/Entomology Building
E-mail: Pat_Mackay@umanitoba.ca
Office hours: Tuesday and Thursday morning except T/TH 10:00 - 11:30

<u>Suggested Resource Material</u>: [all available at U of M Science and Technology Library, 5th Floor]

- **Gullen, P.J. and Cranston, P.S.** 2014. The Insects: an Outline in Entomology. 5th ed. Blackwell Science. Oxford. 595 pp.
- Whitfield, J.B. and Purcell, A.H. 2013. Daly and Doyen's Introduction to Insect Biology and Biodiversity 3rd ed. Oxford University Press. New York. 734 pp.
- Marshall, S.A. 2006. Insects: Their Natural History and Diversity. Firefly Books. Richmond Hill, ON. 718 pp.
- Berenbaum, M.R. 1995. Bugs in the System: Insects and their Impact on Human Affairs. Addison Wesley. Reading (MA).
- Borror, D.J. and White, R.E. 1970. A Field Guide to Insects America North of Mexico. Peterson Field Guide Series. Houghton Mifflin, NY.

Exam Schedule:

Examination	Date	Percentage
Midterm Exam #1:	Friday, 15 February, 2017	25%
Midterm Exam #2:	Monday, 22 March, 2017	25%
Final Exam:	Scheduled by University (22-29 April, 2017)	50%

*Voluntary withdrawal date: 31 March, 2017

Academic Dishonesty:

Note: Academic dishonesty is a serious offense. Students should consult of the University Calendar (section 7.1) or Website for policies and penalties for plagiarism and cheating and section 7.2 Impersonation at Examinations. Students are directed to the course website on UMLearn for additional information on available student supports and relevant policies related to undergraduate courses.

Students are required to write all exams on dates as scheduled. If a mid-term exam is missed for a verifiable and accepted reason (eg. Medical emergency), with prior written approval from the course coordinator the marks allocated for the mid-term exam will be added to the total for the final examination (which is cumulative).

Schedule: Lecture topics may be subject to change.

Week	Date	Day	Lecturer	Торіс	
				INSECTS THE HOW, WHY AND WHAT	
1	18-Jan	Wed	RWC /	Outline, introductions, overview	
1	20-Jan	Fri	RWC	What makes an insect an insect (external anatomy)	
2	23-Jan	Mon	RWC	What's in a bug? (internal anatomy)	
2	25-Jan	Wed	JB	Why insects drive the world - part I	
2	27-Jan	Fri	JB	Why insects drive the world - part II	
3	30-Jan	Mon	RWC	How insects survive adverse conditions	
3	01-Feb	Wed	NJH	Why do they call them ground beetles anyway?	
Social Insects					
3	03-Feb	Fri	RWC	Fact and fiction of social wasps	
4	06-Feb	Mon	RWC	Bees gone bad: Killer bees in the Americas	
4	08-Feb	Wed	RWC	Dark side of Slavery and social parasitism in insects	
INSECT DIVERSITY					
4	10-Feb	Fri	AC	The name's Beetle. Lady Beetle.	
5	13-Feb	Mon	JG	New species – origins and discovery	
5	15-Feb	Wed		Midterm Exam 1	
5	17-Feb	Fri	JG	Back to the future: Using molecular data to study evolutionary relationships	
6	20-Feb	MWF		Midterm Break (no lectures)	
6	27-Feb	Mon	JB	What's in the water	
MEDICAL AND VETERINARY					
6	01-Mar	Wed	TDG	For the love of lice	
7	03-Mar	Fri	KR	Tick ticks!	
7	06-Mar	Mon	TDG	The fauna that lives upon us	
7	08-Mar	Wed	KR	The Middlemen: vector ecology	
8	10-Mar	Fri	TDG	Mosquito wars	
8	13-Mar	Mon	TDG	Insects in the courtroom	
INSECT ECOLOGY and BEHAVIOUR: SURVIVAL OF THE FITTEST					
8	15-Mar	Wed	KR	Six-legged sex	
9	17-Mar	Fri	JG	"World of pollination"	
9	20-Mar	Mon	AC	They really get around	
9	22-Mar	Wed		Midterm Exam 2	
10	24-Mar	Fri	AC	Where are they coming from? (landscape ecology)	
10	27-Mar	Mon	NJH	Chemical weaponry in beetles	
10	29-Mar	Wed	JB	Alien on Earth (Parasitoid strategies and behaviour)	
10	31-Mar	Fri	JB	Insect Plant interactions	
11	03-Apr	Mon	PAM	Aphid life histories: complicated, short, brutal	
			1	VE INSECTS, INSECT PESTS & BENEFICIAL INSECTS	
11	05-Apr	Wed	KR	Insects in art and culture	
11	07-Apr	Fri	NJH	Nightmare on Elm Street	
12	10-Apr	Mon	KR	Insects sharing your home - if you are not careful	
12	12-Apr	Wed	AC	Ant farming	
12	14-Apr	Fri		Good Friday. University closed	
13	17-Apr	Mon	AC	Insects that threaten our food supply	
13	19-Apr	Wed	JB	Is it getting hot in here (Insects and Climate Change)	
13	21-Apr	Fri	JB	Insects for fun and profit; overview of program	