



Course Title: World of Bugs
Department of Entomology
Course Number: ENTM 1000

Academic Session: Winter 2021

Credit Hours: 3

Meeting Days and Class Hours:

Monday/Wednesday/Friday 9:30 – 10:20 AM

Delivery Method/Location: UMLearn, Cisco Webex live lectures (recorded), Mostly Synchronous Delivery, unless otherwise notified by instructor. Students must be available to write in that time slot for scheduled mid-term exams and in the time slot allocated by the registrar for the final exam.

Calendar Description

A survey of insect biology and life styles with emphasis on insect diversity and human-insect interactions.

Instructor Information

***Dr. Rob Currie**, 214a Animal Science/Entomology Building (Phone 204 798-9020)

Office hours: Any time except: T 10:00-13:00/TH 10:00-13:00; Email for appointment

***Contact for general inquiries about the course. Please include "ENTM 1000" in email subject.**

Mr. Jordan Bannerman, 206 Animal Science/Entomology Building (Phone 204 480-1021)

E-mail: Jordan.Bannerman@umanitoba.ca

Office hours: 10:30-12:30 Monday and Wednesday Email for appointment or book on Webex

Dr. Kyle Bobiwash, 212A Animal Science/Entomology Building (Phone 204 474-6423)

E-mail: Kyle.Bobiwash@umanitoba.ca

Office hours: Any time except: T 10:00-13:00/TH 10:00-13:00 Email for appointment

Dr. Kateryn Rochon, 215A Animal Science/Entomology Building

E-mail: Kateryn.Rochon@umanitoba.ca

Office hours: any time except M/W/F 8:30-9:30, T/Th 10:00-13:00 Email for appointment

Dr. Alejandro Costamagna, 217A Animal Science/Entomology Building (Phone 204 474-9007)

E-mail: Ale.Costamagna@umanitoba.ca

Office hours: Any time except: T/TH 10:00-12:45; T/Th 1:00-2:15 Email for appointment

Dr. Terry Galloway, 207 Animal Science/Entomology Building

E-mail: Terry.Galloway@umanitoba.ca.

Office hours: Email for appointment

Dr. Pat MacKay, 207 Animal Science/Entomology Building

E-mail: Patricia.Mackay@umanitoba.ca

Office hours: Email for appointment

Suggested Resource Material

[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. Available at the following [link](#) 

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.

Examinations and Grades

Your grade in this course is determined by the following three tests. All tests will be written online in UMLearn using respondus lockdown browser and respondus monitor. Students are responsible for having or arranging for appropriate compatible computer equipment necessary to take the exam, well in advance of examination dates.

Examination	Date	Percentage
Midterm Exam 1	Friday,  Feb, 2021	25%
Midterm Exam 2	Wednesday,  March, 2021	25%
Final Exam*	Scheduled by University	50%

***All exams will be an online format in the time slot allocated for it during class or in the case of the final in a time slot assigned by the registrar's office.**

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 assigned to the final exam. The final exam is cumulative.

Letter Grade Equivalency

A+ = >90%; A=80-89%; B+ =75-79%; B=70-74%; C+=65-69%; C=60-64%; D=50-59%; F=<50%.

Important Dates

First day of course.....January 18, 2021
 Voluntary withdrawal date..... March 31, 2021
 Final day of course.....April 16, 2021
 Exam period.....April 19- May 1, 2021

Academic Integrity

Academic dishonesty is a serious offense. Students should consult of the University Calendar (sections 7.1 & 7.2) or Website (http://umanitoba.ca/student/resource/student_advocacy/cheating_plagiarism_fraud.html) for policies and penalties for plagiarism, cheating and impersonation at examinations. Students can visit the course website on UM Learn for additional information on available student supports and relevant policies related to undergraduate courses.

Schedule: Lecture topics may be subject to change.

LECTURE OUTLINE

Schedule for ENTM1000 2021					
Lecture#	Week	Date	Day	Lecturer	Topic
INSECTS THE HOW, WHY, WHAT and WHO					
1	1	18-Jan	Mon	RWC / All	Outline, introductions, overview
2	1	20-Jan	Wed	RWC	What makes an insect an insect (external anatomy)
3	1	22-Jan	Fri	RWC	What's in a bug? (internal anatomy)
4	2	25-Jan	Mon	JB	Why insects drive the world - part I
5	2	27-Jan	Wed	JB	Why insects drive the world - part II
6	2	29-Jan	Fri	TDG	New species: Origins and discovery
7	3	01-Feb	Mon	RWC	How insects survive adverse conditions
8	3	03-Feb	Wed	KR	Six-legged sex
9	3	05-Feb	Fri	AC	They really get around
10	4	08-Feb	Mon	KB	Chinks in the Chitin: Preserving insects and the web of life.
MEDICAL AND VETERINARY					
11	4	10-Feb	Wed	TDG	For the love of lice
12	4	12-Feb	Fri		Midterm Exam 1
		15-Feb	Mon	No Lecture	Mid Term Break- Louis Riel Day
		17-Feb	Wed	No Lecture	Mid Term Break
		19-Feb	Fri	No Lecture	Mid Term Break
13	5	22-Feb	Mon	KR	The Middlemen: vector ecology
14	5	24-Feb	Wed	TDG	The blue tailed fly
15	5	26-Feb	Fri	KR	Tick... tick... ticks!
Social Insects and Pollinators					
16	6	01-Mar	Mon	RWC	Bees gone bad: Killer bees in the Americas
17	6	03-Mar	Wed	RWC	Dark side of Slavery and social parasitism in insects
18	6	05-Mar	Fri	RWC	Fact and fiction of social wasps
19	7	08-Mar	Mon	AC	Ants as farmers
20	7	10-Mar	Wed	KB	"World of pollination"
INSECT ECOLOGY and BEHAVIOUR: SURVIVAL OF THE FITTEST					
21	7	12-Mar	Fri	KB	Insect Plant interactions/Insect herbivore co-evolution
22	8	15-Mar	Mon	AC	Insects that threaten our food supply
23	8	17-Mar	Wed		Midterm Exam 2
24	8	19-Mar	Fri	AC	Where are they coming from? (landscape ecology)
25	9	22-Mar	Mon	PAM	Aphid life histories: complicated, short, brutal
26	9	24-Mar	Wed	AC	Insect Invaders
27	9	26-Mar	Fri	JB	Insect threats to our shady city
28	10	29-Mar	Mon	AC	The name's Beetle. Lady Beetle.
29	10	31-Mar	Wed	JB	Aliens on Earth (Parasitoids)
	10	02-Apr	Fri		Good Friday
30	11	05-Apr	Mon	JB	What's in the water?
31	11	07-Apr	Wed	KB	Is it getting hot in here? (Insects and Climate Change)
Insects and Society					
32	11	09-Apr	Fri	TDG	Insects in the courtroom
33	12	12-Apr	Mon	KR	Exoskeletons in your closet
34	12	14-Apr	Wed	KR	Insects in art and culture
34	12	16-Apr	Fri	JB	Insects for fun and profit; overview of program