AMBROSE UNIVERSITY

BIO 133 Fall 2016

Introduction to Plant and Organismal Biology 3 credits

Class Information		Instructor Information			
Dates	Tuesday / Thursdays	**Instructor:**	Dr. Carol Gibbons Kroeker	**First day of classes:**	Wed., Sept 7, 2016
Time	9:45-11:00 A2133	**Email:**	ckroeker@ambrose.edu	**Last day to add/drop, or change to audit:**	Sun, Sept. 18, 2016
Final Exam day		**Phone:**	403-410-2000, ext 5910	**Last day to request revised exam:**	Mon, Oct 24, 2016
Friday, Dec. 16th, 1:00 A 2133		**Office:**	A 2156	**Last day to withdraw from course:**	Mon, Nov 14, 2016
		Office Hrs:	Tues / Thurs. 12-1 or by appointment	**Last day to apply for time extension for coursework:**	Mon, Nov 21, 2016
				Last day of classes:	Mon, Dec 12, 2016

Textbook: Campbell Biology, Tenth Edition
Reece, Urry, Cain, Wasserman, Minorsky, and Jackson)
Pearson Publishing, 2014

An earlier edition will also suffice:
Biology, by Campbell and Reece (edition 8 or 9)

You may also choose to use another Biology text (Please check with me first……but chapters may differ)

Hand-outs will be provided in lieu of a lab manual.

Course Description:

This course will cover the fundamental principles of cellular biology including organelle structure and function, metabolism, genetics, cell division, protein synthesis, and molecular biology of eukaryotic cells

Additional Information:

This course will comparatively survey the diversity of the major lineages of eukaryotic organisms - including vertebrate and invertebrate animals, plants, protists, and fungi. It will also discuss the ecological principles of organismal survival and interactions.

This course consists of 3 hours of lectures per week, plus a 3-hour lab.

Note : Credit for both BIO 133 and 105 will not be allowed.

Expected Learning Outcomes:

1. Students will gain a greater understanding of fundamental biological principles
2. Students will be able to discuss the anatomy and physiology of many animal systems including circulation, digestion, reproduction, and the nervous system, as well as understanding the anatomy and physiology of plants , fungi, and protists. The topics will be inter-related with an ecological focus.
3. Students will learn laboratory techniques essential to research in biology-related fields.
4. Students will collaborate with peers to design and carry out a research project and be able to present this in written and oral formats.

Course Schedule:

Week of	Topic	Text Chapter
Sept. 7	Intro to Bio 133 / phylogeny	22
Sept 12	Algae / Plant diversity / non vasculars Non-seed plants, gymnosperms, angiosperms	28, 29 30
Sept. 19	Plant Stucture and growth, Hormonal Control of growth	35-39
Sept. 26	Transport of water and nutrients, transpiration Ecological principles	35-39 52-56
Oct. 3	Ecology of organisms and communities	52-56
Oct. 10	Protists / Fungi	28, 31
Oct 17	Invertebrates / Exam I	32-33
Oct. 24	Vertebrates / Locomotion and Support	34, 40
Oct. 31	Nervous System / Sensory System	48, 49
Nov. 7	Homeostasis / Endocrine System	44, 45
Nov. 14	Exam II / Cardiovascular system	42
Nov. 21	Cardiovascular system/Respiratory System	42

Nov. 28	Digestive System / Urinary	41, 47,
Dec. 5	Reproductive system / Review	46

Laboratory Schedule

Lab topics will include: Anatomy and Physiology of specific body systems, comparative classification of animals, comparative function, and botany.
Labs begin the second week of term

Labs 1-3 – Botany
- Diversity and Identification
- Germination
- Vascular systems and plant physiology

Labs 4-6 - Phylogeny
- Protists and fungi
- Invertebrates
- Vertebrates

Lab 7 - Ecology
- Population studies

Labs 8 –11 Comparative physiology of body systems
- Nervous and sensory systems
- Cardiovascular and Respiratory systems
- Metabolism, Digestive and urinary systems
- Reproduction and Development

Attendance at the laboratory sessions is COMPULSORY. Any lab missed without a valid excuse cannot be made up. Lab coats are not required.

Requirements:

The lecture portion of the course will be evaluated with 2 midterm exams (20% each) plus a final exam (worth 40%). The lab portion of this course will consist of 3 lab assignments and 2 lab reports worth 4% each. Case studies and inquiry-based learning will be used in the class - Student participation is expected in the form of discussion and presentation.

Mark Distribution:	2 Midterm Exams	40%
	Laboratory Reports	20%
	Final Exam	40%

The midterm and final exam will be a combination of multiple choice questions, as well as short and long answer questions. While most questions will be based on lecture material, the textbook reading will absolutely

help in the understanding of this material.
Lab assignments will be based on the exercises completed during the lab periods. There will be a 10% deduction in grade per day that an assignment or lab report is handed in late. No assignments will be accepted past one week late. If there are extenuating circumstances resulting in the lateness, please contact the instructor.

Attendance:

Attendance at all labs is mandatory – lab reports will not be accepted unless the lab has been attended or exceptions have been made with the instructor. Attendance at all lectures and tutorials are strongly recommended. This will help ensure success on lab assignments and exams.

Grade Summary:

The available letters for course grades are as follows:

Grade	Percent	Grade Point Value	Description
A+	96-100	4.00	Outstanding
A	92-95	4.00	Excellent - superior performance, showing comprehensive understanding of subject matter.
A-	88-91	3.70	
B+	83-87	3.30	
B	78-82	3.00	Good-clearly above average performance with knowledge of subject matter generally complete.
B-	73-77	2.70	
C+	68-72	2.30	
C	64-67	2.00	Satisfactory – basic understanding of the subject matter. Grade point average below 2.00 is not sufficient for promotion.
C-	60-63	1.70	Minimum grade required if needed as a prerequisite course
D+	55-59	1.30	
D	51-54	1.00	Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject.
F	<50	0	Fail – unsatisfactory performance or failure to meet course requirements.

Because of the nature of the Alpha 4.00 system, there can be no uniform College-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.
Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Other

Classroom Etiquette:

It is expected that students will take an active role in the learning process. This includes: (a) regular class attendance, (b) reading course material in advance of class, and (c) engaging in discussions during class.
In respect to the professor and to your fellow students, we ask that you:

a) Turn your phone off during class and that you don't use it for texting during lecture or lab

b) Not have conversations with the people beside your during lecture – it is very distracting to the people around you
c) Use your laptops for lecture material and assignments only – that you are not using the internet or facebook during class time.
d) Arrive to lecture and lab on time
e) Don't come to class or lab with your ipod or equivalent.

These will help to maximize the learning experience for you and your fellow students (and will keep your professor in a good mood).

Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline;** please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devises in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the

Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of $50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.