

**Independent Research Project II**

3 credits

Prerequisite(s): Bio 495

Class Information		Instructor Information		First day of classes:	Wed., Jan. 6, 2016
Days:	Meetings as needed	Instructor :	Dr. Carol Gibbons Kroeker	Last day to add/ drop/change to audit:	Sun., Jan. 17, 2016
Time:	N/A	Email:	ckroeker@ambrose.edu	Last day to request revised exam:	Mon., Feb. 29, 2016
Room:	N/A	Phone:	403-410-2000, ext 5910	Last day to withdraw from course:	Fri., Mar 18, 2016
Lab/Tut:	N/A	Office:	A 2156	Last day to apply for time extension for coursework:	Mon., Mar. 28, 2016
Final Exam:	N/A	Office Hrs:	TBA	Last day of classes:	Wed., April 13, 2016

**Textbook:** Journal papers will be critical to the research projects – but no text is required

**Course Description:**

This course is the second course of a 2 semester research project (fall and winter) and will be worth 3 credits. Successful completion of Zoology 495 is required.

Using their research proposal (identifying a new research question and describing an experimental protocol) from Zoology 495, experiments will be completed by the student along with a full data analysis and statistical summary. This will then be written up in the form of a research paper that will ultimately be submitted to a recognized biology journal for publication.

**Expected Learning Outcomes:**

1. Students will gain a greater understanding of fundamental biological principles
2. Student will learn the process of developing and experimental protocol and carrying out the experimental process
3. Students will learn the laboratory techniques essential to research in biology.
4. Students will design and carry out a research project and be able to present this in written and oral formats

**Course Schedule:**

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This will be a self-directed Research Project. Regular meetings will be set with the supervising instructor to check on progress and to answer any questions or to discuss specific aspects of the project.

## **TENTATIVE TIMELINE**

January 15<sup>th</sup>

- A full review of the research proposal should be completed and procedural changes adopted
- A full schedule of the research project established

January 30<sup>th</sup>

- The project should be well underway
- Statistics should be completed on a pilot study if applicable

February 14<sup>th</sup>

- Abstract due for Ambrose Research Day

February 28<sup>th</sup>

- All experimental work should be completed

March

- Data analysis
- Statistical Analysis

March 31

- Project for Research day should be complete
- You should review your presentation with your supervisor

April 4

- Ambrose Research Day – Oral Presentation

April 30<sup>th</sup>

- Final research paper is due
- Work on Journal paper should be already begun

If you are graduating, your final research paper is due by April 18<sup>th</sup>.

<b>Requirements:</b>
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This course will culminate in an oral presentation at Ambrose Research Day. You will also be required to complete a full journal-style paper. The format should be APA or similar – with statistical analysis where applicable.

<b>Attendance:</b>
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No attendance is required but regular meetings with the supervisor are important to make sure that your progress does not lag in the course.

Labs will involve the use of body fluids so proper lab techniques and safety precautions must be taken. Lab coats and gloves should be worn for this type of research.

## Grade Summary:

<b>Mark Distribution</b>	:	Experimental Work	30%
		Data Analysis	20%
		Oral Presentation	15%
		Final Research Paper	35%

The available letters for course grades are as follows:

Grad	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.

## Other

### 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.

### **Exam Scheduling**

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.

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 devices 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](mailto: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.