

Class Information		Instructor Information		First day of classes:	Wed., Sept. 9, 2015
Days:	WF	Instructor:	Megan Hallam, PhD	Last day to add/drop, or change to audit:	Sun., Sept 20, 2015
Time:	8:15-9:30	Email:	mhallam@ambrose.edu	Last day to request revised exam:	Mon., Oct. 26, 2015
Room:	A2210	Phone:		Last day to withdraw from course:	Thu., Nov. 12, 2015
Lab/Tutorial:		Office:	A2160	Last day to apply for time extension for coursework:	Mon., Nov 23, 2015
FINAL EXAM: Tuesday December 22, 9:00 – 11 AM, A2210		Office Hrs:	By appointment	Last day of classes:	Mon., Dec 14, 2015

Textbook: None

Course Description:

An introduction to research in Biology with an emphasis on understanding the research process, including literature searches, experimental design, data collection, basic statistical knowledge, and its relationship to critical thinking.

Expected Learning Outcomes:

It is the aim of the course that students acquire the following skills:

1. Understand scientific method.
2. Conduct a basic scientific literature search and synthesize a review of the literature for a chosen topic.
3. Critically appraise published literature, considering all aspects of research design.
4. Evaluate and understand ethical considerations in scientific research.
5. Understand and apply basic statistical concepts to data sets.

Course Schedule:

Guideline to class topics by week (Wednesday class date), subject to change.

Week 1 (Sept 9) Scientific thought.

Reporting research.

Literature searches.

Week 2 (Sept 16) Research question and variables.

Types of data.

Structured abstracts.

Week 3 (Sept 23) Error.

Study design.

Sampling.

Week 4 (Sept 30) SEPT 30 – NO CLASS

OCT 2 – Bias, confounding, effect modification & causality

Week 5 (Oct 7) Media & Research Presentations

Week 6 (Oct 14) Review.

OCT 16 - MIDTERM

Week 7 (Oct 21) Article critique.

Week 8 (Oct 28) Ethics.

Week 9 (Nov 4) Measures of central tendency.

Measuring variance.

Week 10 (Nov 13) Literature reviews.

Week 11 (Nov 18) Z-scores.

Parametric statistics.

Week 12 (Nov 25) Non-parametric statistics.

Week 13 (Dec 2) Literature Review presentations.

Week 14 (Dec 9) Review.

Requirements:

Written portions of assignments should be completed using a word processor and be double spaced using Times New Roman, Arial or similar, in a 12-point font. For assignments which require a hard copy to be handed in the student may choose whether to print the assignment single- or double-sided; assignments consisting of two or more pages must be **stapled** in the top left hand corner. Please include a cover page which includes the name of the assignment, student name, class, professor's name and date; an example will be provided. Unless stated otherwise, all assignments are to be done using full sentences and proper spelling and grammar. Any spelling and/or grammatical errors will result in a 0.5 point deduction per unique error on the assignment.

All assignments must be handed in electronically using Moodle in .doc or .docx format. Moodle cannot accept Pages files from Mac computers. Certain assignments will also require that a paper copy be submitted in class, these include: Structured Abstract (Sept 25), Full Article Critique (Nov 13), Literature Review (Dec 2). Turnitin will be used for the Full Article Critique and Literature Review Assignments. This web-based tool will compare your work with numerous sources, including your fellow students, to check for plagiarism. Please ensure you are handing in your own original work and properly citing appropriate sources. A report will be provided to you on Moodle on the due date of the assignment. Late assignments: Excepting the literature review, all assignments are due on a Friday, late assignments will be accepted until the beginning of class the following Wednesday. Late literature reviews will only be accepted until the beginning of class on Friday December 4 as the written review must be handed in prior to the oral presentation. For each day an assignment is late 10% will be deducted from the grade earned on the assignment. Late assignments should be uploaded

to Moodle and an e-mail should be sent to the professor to indicate the assignment has been uploaded.

Evaluation

Structured Abstract Article, Sept 18 - 5%

Structured Abstract, Sept 25 - 5%

Media & Research, Oct 2 - 10%

Midterm Exam (in class), Oct 16 - 17%

Full Article Critique, Oct 31 - 15%

Literature Review, Dec 2 - 19%

Literature Review Presentation, Dec 2 - 10%

Final Exam, Dec 22 - 19%

Attendance:

As this course does not have a required text, attendance at lectures is **STRONGLY** recommended and will help ensure success on course exams and assignments. Attendance during peer presentations is mandatory.

Grade Summary:

The available letters for course grades are as follows:

<u>Letter Grade</u>	<u>Percentage</u>	<u>Description</u>
A+	97-100%	Excellent
A	93-96%	
A-	89-93%	Good
B+	83-89%	
B	77-82%	
B-	70-76%	
C+	67-69%	Satisfactory
C	63-66%	
C-	60-62%	
D+	54-59%	Minimal Pass
D	50-53%	
F	Below 50%	

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.

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.

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.