BSC3932 Junior Seminar II for Biology Majors

Tentative Schedule – Fall 2013

Date	Activity	Due dates
Aug. 25th	**Introduction:** Discuss possible venues for research and internships. Sign-up for presentation dates.	
Holiday	**Holiday**	
Sept. 8th	**Research Proposal.** What is a research proposal and how to identify a topic? ***Assignment*:** Indentify topic for RP w/2-3 papers.	
Sept. 15th	**Present research topic.** Briefly discuss your topic, significance, and question for research proposal.	
Sept. 22rd	Basic Stats: Descriptive Stats	
Sept. 29th	More Stats: t-tests and One-way ANOVA	
Oct. 6th	More Stats: Graphing	
Oct. 13th	Writing your stats	
Oct. 20st	**Outline of RP due**	
Oct. 27th		
Nov 3th	Present proposed research question, hypothesis, predictions and study design.	
Nov 10th	Revise first draft of RP for final version;	
Nov 17th	Last minute questions and problems on RP	
Nov 24th	More Revision	
Dec 1nd	RP Presentations	
Dec 8th	**RP Presentations: Final paper due!**	Final RP

PROFESSOR: Dr. Steven Hammer
OFFICE: N-213 [Main campus]
PHONE: 772-462-7181
E-MAIL/ WEBSITE: shammer@irsc.edu / http://shammer-irsc.weebly.com/
Office Hours: Check Blackboard for office hours, or make an appointment.

Grading: Grades will be tabulated as percentages out of 100 points as outlined below.

Attendance and participation will count 20% [up to 20 points].

1) Participation will include actively working on any reading assignments, preparing and asking questions, and contributing significantly to discussions.
2) Attendance is required for all class periods. An unexcused absence will reduce your total by 5 points each missed Day.

Written Assignments will count 60% of the total grade [up to 60 points]. There will be four written assignments, including first draft, and revised final draft in the point totals. All written assignments must follow appropriate standard formats outlined in McMillan (2012) and any handouts. All written assignments must be submitted to the appropriate dropbox in the Angel course shell in MS Word *.doc format. Points will be subtracted for missing due dates (5 points/day).

1) ***Research proposal*** (RP): This formal proposal will follow the format outlined in the instructor's handout and McMillan (2012), pp. 210-217; and requires a minimum of eight primary literature sources. (60 pts)

Presentations will count 20% of the total grade [up to 20 points].

1) ***Presentation of Research Topic***: Informal oral description of research topic. (5 pts)
2) ***Presentation of Research Proposal***: PowerPoint presentation (~15 min) of proposed research question, hypothesis/predictions, study design and statistical analysis. The presentation must be submitted to the dropbox in the Blackboard course shell in MS PowerPoint *.ppt format. See McMillan (2012), pp. 191-201. (15 pts)

Grading scale:

A - 90% - 100% C - 70% - 79% F - below 60%
B - 80% - 89% D - 60% - 69%
W = withdraw by published college deadline (Thursday, November 6th)
I = an incomplete may be given to passing students in EXTREME cases

Required Support Materials:

McMillan, V.E. 2012. Writing papers in the biological sciences. 5th ed. New York: Bedford/St. Martins. [ISBN: 978-0-312-64971]. The 4th edition is also acceptable. This text is required of all Biology majors.

Cheating: Cheating, including plagiarism, of ANY kind will not be tolerated by this instructor or the college. Any student caught cheating or plagiarizing will receive an immediate F for the assignment and possibly in the course (no withdrawal allowed.) Plagiarism is defined by the use of five or more identical, consecutive words of another author(s) that is inappropriately used or cited. See the IRSC Website for the college's definition of plagiarism and examples. (http://www.irsc.edu/pdf/libraries/plagiarism.pdf)

Course Objectives

Students will review principals of the scientific method and the practice of science.
Students will examine scientific literature and analyze it as to adherence to the "rules of science."
Students will write and edit a formal research proposal in the appropriate scientific format.
Students will write and edit a cover letter, résumé and curriculum vitae to prepare them for applying for internships and jobs in the future.

Student Learning Outcomes: Upon completion of BSC3932, Junior Seminar II, students will be able to:

- Apply problem solving, analytical, and communication skills based on the scientific method.
- Make use of technology to organize, acquire, and convey information relevant to the biological sciences.