Course Code & No. - Section:	BIOL 372
Course Title (Credits):	Current Topics in Biological Research (1)
Term & Year:	Spring / 2014
Course Ref. No. (CRN):	10148
Instructor:	Dr. Suzanne Gollery
Phone(s):	775-831-1314 ext7456 or 775-813-4215 (8 a.m. – 9 p.m.)
Email:	sgollery@sierranevada.edu
Office:	TCES, room 223
Office Hours:	M 2:30 – 3:45 p.m., F 11:30 a.m. – 12:45 p.m. or by appointment
Class Meeting Time:	Mondays, 5:30 – 6:45 p.m.
Location:	TCES 205
Prerequisites:	BIOL 101, 102, CORE 205 and 206 or permission of instructor
Corequisites:	None

Course Descriptions:
BIOL 372: Current Topics in Biological Research. Students and faculty present current journal articles in biological science or environmental science in order to obtain an appreciation of methods, results, and analyses associated with scientific research. Interests of class members dictate journal articles that are selected for presentation and discussion.

Student Outcomes for BIOL 372: Upon completion of Current Topics in Biological Research, students will

1. understand several scientific papers from peer-reviewed journals in detail;
2. be able to deliver a professional-quality presentation on a topic in the biological or environmental sciences (including psychology);
3. discuss issues concerning the merit of scientific research and its limitations.

Methods of Assessing Student Outcomes
Student outcomes will be assessed using the following:

1. Level of participation in discussions
2. Quality of presentations
3. One-minute essays at the conclusion of each class, in which students write a sentence or two about what they found confusing and any new insights gained from that session (this is formative assessment, not scored)

Instructional Strategies
The instructor and other science professors will model presentation of research articles, with attention to clarifying where to find information about background, methods, approach, data, and conclusions, robustness of experimental approach and data analysis, and inferences made by investigators about what results mean. Then students will take turns presenting articles of their choosing to the class, explaining why the research is important, what the researchers did, how robust the results are, and what they propose that it means.

Required Texts and Materials

1. There is no text.
2. Students need to be able to access a course Moodle site to download posted articles and read them prior to class.

Attendance
Students will achieve outcomes by participating in the class discussions. Thus, attendance is important. Each student may miss up to two class periods, but letter grades will be reduced by one grade for each absence greater than two. There are no excused absences, so don't use your two absences lightly, lest you need one later.

Course policies:

1) **Electronic devices:**
Students are not permitted to use MP3 players in class at any time. Unless the instructor grants permission to use a phone calculator or access on-line resources, cell phones will not be needed in class and must be stored out of sight. Phones will be confiscated from students caught texting, calling, or accessing stored materials, such as games or photos, and returned at the end of the class period. Laptops will be confiscated until the end of class if students use them for non-class-related activities. Anyone who significantly abuses class time by inappropriate use of electronic devices may be asked by the class to provide dinner for the entire group at the next class meeting.

2) **Modifications to the BIOL 372 course syllabus:**
This syllabus is intended to provide students with a clear and accurate outline of course content, student outcomes, and class topics. Students should keep and refer to the syllabus regularly, and learn how to access it on the course Moodle page. The instructor reserves the right to make announced changes to the syllabus and class schedule at her discretion if it is in the best interest of the students to do so.

Prim Library Resources
Using the library's resources effectively (not just Internet resources) contributes to developing each of SNC's core themes by exposing students to high quality academic resources, diverse opinions, new ideas, and a future that includes building on a liberal arts education. In this course, you will be expected to utilize the library's resources (either on-site or remotely) as you complete your assignments.

Prim Library Resources for BIOL 372: Current Topics in Biological Research include, but are not limited to:

1. Books (can be checked out): You may not present an article from a book in class, but you may find background information in books that help you to understand your article.
    a. In general, books related to biology have Library of Congress Classification numbers ranging from QH through RC. Books about biotechnology have LCC numbers beginning with TP. However, you will find books related to our course with other LCC numbers, so search the Prim Library Catalog using key words related to the topic that you are researching.
    b. Goldbort, R. (2006) *Writing for Science.* New Haven: Yale University Press. LCC number: T11.G626 2006. A detailed resource for writing about science that includes a discussion of what kinds of information is presented in sections of research articles, as well as style elements like voice, tense, and other nuances appropriate to scientific writing.
    c. Lipson, C. (2006) *Cite Right: a Quick Guide to Citation Styles*. Chicago: University of Chicago Press. LCC number PN171.F56L55 2006. Includes a section on CSE style.

2. Electronic databases (for peer-reviewed research articles, reviews, newspaper and magazine articles): Electronic databases most likely to include peer-reviewed research articles on topics appropriate for BIOL 372 are EBSCO: Academic Search Premier, Environment Complete, General Science Collection, GreenFILE, and PsycInfo.

3. Hardcopy periodicals: Prim Library has current subscriptions for Science, New Scientist, Science News, and National Geographic Magazine. Any of these are likely to have articles about biology topics written for educated people who are not necessarily scientists. These are not research articles that you may present, but they may have useful background information to help you understand your article and they may cite original research articles that you can present.

4. Lib Guides: http://Libguides.sierranevada.edu These web pages contain instructions about how to use resources available at Prim Library, how to evaluation the appropriateness of information from the Internet for a research paper, how to cite sources, and other topics related to finding and using information.

Sanctions for Cheating and/or Plagiarism

The Honor Code

The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills, talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity, responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand.

Consequences of Violating the Student Honor Code

SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student's academic record.

1st Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

2nd Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.

3rd Offense: Student is expelled.

The SNC Email System

The SNC email system is the official communication vehicle among students, faculty members and administrative staff and is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

ADA Accommodations

In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu, office in Prim Library: PL-304.

The Sierra Nevada College Mission Statement:

Sierra Nevada College graduates will be educated to be scholars of and contributors to a sustainable world. Sierra Nevada College combines the liberal arts and professional preparedness through an interdisciplinary curriculum that emphasizes entrepreneurial thinking and environmental, social, economic and educational sustainability.

The Core Themes:

Liberal Arts	Professional Preparedness
Entrepreneurial Thinking	Sustainability

Grading Policy

Once grades are calculated based on the grading rubric, any adjustments for excessive unexcused absences will be made (see "Attendance" on page 2 of this syllabus).

Grading rubric:

Students who participate in class discussion and present a peer-reviewed research article in class will all receive a grade of C or better. The quality of work for A, B, and C grades follows:

A grade: student presents an article, clearly understands it and can explain it, and also can defend the robustness of the experimental approach and analysis

B grade: student presents an article, clearly understands the study, and can explain it, but can't really defend robustness of the study

C grade: student tries to present an article, but does a poor job of explaining it – seems not to really understand what the research was about

Students who participate in class, but do not present a research article will receive a D grade.

Students who do not participate in class and do not present a research article will receive an F grade.

Class preparation: Presenters will have submitted primary research articles for Suzanne to post at least one week before their presentations. The articles will be posted on Moodle. Students should read the article before class, but you do not have to understand everything when class starts – the presenter should be able to help your understanding. Reading ahead will allow you to better formulate questions and comments for our discussion.

Midterm grades: Midterm grades will be estimated based on participation in class discussions and the instructor's impression of students' aptitude with respect to course outcomes.

Final exam: We will reflect on what we have learned about reading and discussing the primary literature over a potluck dinner on Monday, May 12, 6:30 – 9:30 p.m.

Schedule for Current Topics in Biological Research – Spring 2014

Week and dates	Class preparation	Class topics	Snack assignment
1: January 20		*Martin Luther King Holiday*	
2: January 27	Read posted article before class	Instructor presentation:	
3: February 3	Read posted article before class	Instructor presentation:	
4: February 10		*Veteran's Day Holiday*	
4: February 17	Read posted article before class	Instructor presentation	
5: February 24	Read posted article before class	Instructor or student presentation	
6: March 3	Read posted article before class	Instructor or student presentation	
7: March 10	Read posted article before class	Student presentation	
8: March 17		*Spring Break*	
9: March 24	Read posted article before class	Student presentation	
10: March 31	Read posted article before class	Student presentation	
11: April 7	Read posted article before class	Student presentation	
12: April 14	Read posted article before class	Student presentation	
13: April 21	Read posted article before class	Student presentation	
14: April 28	Read posted article before class	Student presentation	
15: May 5	Read posted article before class	Student presentation	
Final Exam Week Monday, May 12	Prepare potluck dish	6:30 p.m. start Final exam and potluck dinner	