# San José State University Biol. 202, Graduate Studies in Biology, Sect 1 & 2, Fall 2012 Updated August 22, 2012

**Instructor:** Dr. Elizabeth McGee

**Office Location:** DH 546

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Office Hours: TBA

**Class Days/Time:** M 6:30 – 8:20 p.m., W 6:30 – 9:20 p.m. and on-line

Classroom: Duncan Hall 352

**Prerequisites:** Graduate standing or by department/instructor permission.

## **Course Description**

From the SJSU Catalog: "A seminar on current research and theory in the life sciences, emphasizing scientific writing and formal oral presentations." This course is required for the Masters Degree in Biology, CSU system wide. The course is structured in a seminar format with considerable time for open class discussion.

### **Course Objectives**

- Improve science writing skill
- Improve oral presentation of scientific information
- Understand the concepts of scientific peer review, and critical examination of literature
- Learn computer techniques to prepare graphic displays and presentations
- Develop an understanding of how scientific investigation is funded in the United States
- Understand how to write a grant proposal
- Understand the role of professional societies
- Develop a better understanding of where professional biologists are employed and what they do
- Understand Science Ethics

### Required Texts/Readings

#### Textbook and other materials

A Short Guide to Writing about Biology (7th Edition) (Paperback) by Jan A. Pechenik, Pearson Education, Inc. 2010. (Note: the 8<sup>th</sup> edition is out, but does not differ significantly from the 7<sup>th</sup>; save money and get the 7<sup>th</sup> edition through amazon.com or Roberts).

### **Assignments and Grading Policy**

	Points
Oral Assignments	
Personal statement presentation	5
Professional society presentation	10
Oral platform presentation	30

Poster presentation Journal club presentation Communicating Science presentation	15 30 10
Written Assignments	
CV, letter to employer, mini-portfolio	10
Review paper	40
Grant proposal	20
Abstract	10
Participation (inc. IACUC/IRB training and advisor meeting)	20
TOTAL POINTS	200

Grades will be assigned by taking the total number of points earned for all exams and calculating the percentage earned. Letter grades (with +/-) will be determined using the following scale:

%	%	%
A = 92-100	B - = 80 - 81	D + = 65-67
A = 90-91	C + = 78 - 79	D = 60-64
B + = 88 - 89	C = 72-77	D- = 50-59
B = 82-87	C - = 68 - 71	F = < 50

## **Late and Missed Assignments**

Presentations may not be rescheduled under any circumstances without a verifiable excuse from a physician (MD) or a court officer. If you require a reschedule and you have appropriate documentation, you MUST contact me within two days of the missed presentation; I will reschedule you as time permits. Papers will lose 3% of the maximum credit possible for every day the paper is submitted late. Papers will not be accepted more than one week after the deadline.

#### "Extra Credit"

You may choose one of the following for 10 points extra credit (one only!):

- Visit a library at a major university (Carnegie Classification Research University-I, i.e., they grant large numbers of Ph.D.s, and are committed to research). Turn in a "Trip Report" (approx. 2 pages) summarizing your experience.
- During the current semester attend a major scientific meeting. Turn in a "Trip Report" (approx. 2 pages) summarizing your experience, and listing two or three new things that you learned from the presentations.
- Tour a major Research-I university, major government laboratory or a research facility in the private sector (other than where you have worked). Turn in a "Trip Report" (approx. 2 pages) summarizing your experience.
- Join a scientific professional society. Note many have student member dues categories. Provide documentation to show that you joined.

### **Incompletes**

Incompletes are permitted only if a student is in good standing, has completed and least two-thirds of the course, and has a serious and compelling reason to take an incomplete.

#### Classroom & Exam Protocol

You must arrive on time for class. Your class participation grade will be based on arriving on time and your active contribution to the course. All cell phones, etc. must be turned off and put away during class – absolutely no exceptions.

### **Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's <a href="Catalog Policies">Catalog Policies</a> section at <a href="http://info.sjsu.edu/static/catalog/policies.html">http://info.sjsu.edu/static/catalog/policies.html</a>. Add/drop deadlines can be found on the <a href="current academic calendar">current academic calendar</a> web page located at <a href="http://www.sjsu.edu/academic\_programs/calendars/academic\_calendar/">http://www.sjsu.edu/academic\_programs/calendars/academic\_calendar/</a>. The <a href="Late Drop Policy">Late Drop Policy</a> is available at <a href="http://www.sjsu.edu/aars/policies/latedrops/policy/">http://www.sjsu.edu/aars/policies/latedrops/policy/</a>. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

### **University Policies**

# **Academic integrity**

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The <u>University's Academic Integrity policy</u>, located at http://www.sjsu.edu/senate/S07-2.htm, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The <u>Student Conduct and Ethical Development website</u> is available at http://www.sa.sjsu.edu/judicial\_affairs/index.html.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy S07-2 requires approval of instructors.

You are responsible for knowing the University Policy on Academic Dishonesty outlined in the University Catalog. Any student found plagiarizing *any* essay or assignment in Biology 202 will receive an automatic failing grade (F) on the essay or assignment, may receive a failing grade in Biology 202 and will be referred to the Judicial Affairs office. Plagiarism includes copying phrases, sentences, key words, parts or all of another's writing, including papers or articles published on the Internet, newspapers, magazines, books, journals, or any other medium, including the writing of your fellow students from <u>current and/or previous classes</u>. All phrases, key words, sentences, or larger sections of writings taken from an outside source and used in a student's paper should be appropriately reworded by the student AND cited. Drawing as few as five consecutive words from another's writings will be considered plagiarism, as can improper paraphrasing. All ideas or concepts drawn from another's work should be properly cited. NOTE: A student who shows or lends to their classmates their own work is at risk of being an accessory to plagiarism and, if their work is copied, will suffer the same consequences as the student who plagiarizes (see section 1.1.6 of the Definition of Academic Dishonesty). **This policy also applies to students in previous courses who show or lend their work to current students**.

## **Campus Policy in Compliance with the American Disabilities Act**

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the <u>Disability Resource Center</u> (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

### SISU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. It is staffed by professional instructors and upperdivision or graduate-level writing specialists from each of the seven SJSU colleges. Our writing specialists have met a rigorous GPA requirement, and they are well trained to assist all students at all levels within all disciplines to become better writers. The Writing Center website is located at <a href="http://www.sjsu.edu/writingcenter/about/staff/">http://www.sjsu.edu/writingcenter/about/staff/</a>.

# Biology 202, Fall 2012, Course Schedule

	202, Fall 2012	
Week	Date	Topics
1	Weds Aug 22	Introduction to Biology 202 (what this course is about, how grad courses differ from undergrad, expectations and requirements, etc.)  Tour of the facilities in Duncan Hall (Stan Vaughn)  Personal statement (1-2 pp)- impromptu writing assignment to be done in class:  Who am I, how did I get here, where am I going  Sign up for personal statement presentation time slot
		Assignments and/or Due Dates
		<ul> <li>Prepare oral presentation of personal statement for 8/27 or 8/29.</li> </ul>
2	Mon Aug 27	Guest: Dr. Michael Sneary, Chair, Biological Sciences at SJSU Oral presentations of personal statements Professional societies
		Oral presentations of personal statements – continued
		The Curriculum Vitae (CV): purpose, styles
		SJSU Career Center: Job & Internship Guide
		Sign up for professional society presentation time slot
	Weds Aug 29	<ul> <li>Assignments and/or Due Dates</li> <li>Research a professional society and prepare an oral presentation for 9/10 or 9/12; bring name of professional society to class on Weds Sept 5 for approval.</li> <li>Research your professional society's annual meeting and be prepared to talk about it in class on Weds Sept 5.</li> <li>Prepare formal CV to bring to class on Weds Sept. 5 (in digital and paper form).</li> </ul>
3	Mon Sept 3	Labor Day – no class
	Weds Sept 5	The Scientific Meeting (posters, platform talks, symposia, exhibits, society business, etc.) CV Peer Review and Revision Writing a Review Paper  Assignments and/or Due Dates  Turn in revised CV before leaving class tonight.  Set up an appointment to see your thesis or MA advisor.
4	Mon Sept 10	Student presentations on Professional Societies
	Weds Sept 12	Student presentations on Professional Societies – continued  Assignments: and/or Due Dates  • Find an instance of plagiarism in science and be prepared to discuss in class on Sept. 17.
		Guest: Dr. Julio Soto, Dept. of Biological Sciences, SJSU: Plagiarism & Science
5	Mon Sept 17	<ul> <li>Assignments and/or Due Dates</li> <li>Identify three possible topics for literature review assignment/research proposal.</li> </ul>

	Weds Sept 19	Guest: Ms. Emily Chan, MLK Library: Searching for Information in the Scientific Literature Using On-line Databases and Electronic Resources
		Meet at MLK Room 217 at 6:30 p.m. sharp!
6	Mon Sept 24	Guest: Dr. Luis Bonachea: Writing about statistical results The Art of Writing the Abstract
	Weds Sept 26	Visual Design for Posters & Platform Presentations Poster fieldtrip (to Duncan Hall)
		Citations and Bibliographies
		Using Bibliographic Software
7	Mon Oct 1	Sign up for Oral Platform Presentation time slot.
		Assignments and/or Due Dates
		Abstracts for Scientific Meeting Oral Presentation due.
	Weds Oct 3	Scientific Meeting Oral Presentation <i>Workshop</i>
		What is Peer Review? (journal articles, book chapters, grant proposals, etc.)
8	Mon Oct 8	Scientific Meeting Oral Presentations
		Scientific Meeting Oral Presentations – continued What is Impact Factor?
	Weds Oct 10	What is impact 1 actor.
		Assignments and/or Due Dates
	N. 0 . 45	Review paper topic due.
9	Mon Oct 15	No class.
	Weds Oct 17	Guest: Jeanne Dittman & Bill Yabumoto, SJSU Research Foundation: Who Funds Scientific Investigation in the U.S.?
		Sign up for journal club presentation time slot.
		Using illustration software
		Poster workshop
10	Mon Oct 22	Assignments and/or Due Dates
		<ul> <li>Submit electronic copy (PDF) of your journal article at least one week in</li> </ul>
		advance of your scheduled journal club presentation.
	Weds Oct 24	Journal Club presentations
11	Mon Oct 29	Journal Club presentations - continued
	Weds Oct 31	No class – schedule a meeting with your advisor for this week (if you have not
		done so yet).  Journal Club presentations – continued
12	Mon Nov 5	, stab processions
12	MOII INOV 5	Assignments and/or Due Dates
	YAZ. J. N	Deadline for getting poster to COS for printing!    Continue
	Weds Nov 7	Journal Club presentations – continued
13	Mon Nov 12	Guest: Dr. Bill Murray, Dept. of Biological Sciences, SJSU: Animal and Human Welfare in Science
	Weds Nov 14	Poster presentations

		No class.
14	Mon Nov 19	<ul> <li>Assignments and/or Due Dates</li> <li>Read Monday Nov. 26 "On Being a Scientist: Responsible Conduct in Research;" find an example of scientific fraud in your research field and be prepared to discuss it on Nov. 26.</li> <li>Do IACUC/IRB Cite Training (on-line; due Dec. 10)</li> </ul>
	Weds Nov 21	No class – Thanksgiving Break
		Guest: Dr. Dan Holley, Dept. Biological Sciences, SJSU: Science & Ethics
		Sign up for Communicating Science with the Community presentation
15	Mon Nov 26	<ul> <li>Assignments and/or Due Dates</li> <li>Scientific Review Paper is due.</li> <li>Grant proposal topic due.</li> <li>Check with the professional society you presented on earlier to see what job search services they offer; be prepared to discuss on Weds. Nov. 28</li> <li>Bring to class on Weds Nov. 28: SJSU Job Internship Guide; your CV (in Word); your most recent transcripts (in pdf form).</li> </ul>
	Weds Nov 28	Finding a job in science Writing letters to employers (workshop) Assembling the mini-portfolio for references (workshop)  Assignments and/or Due Dates  • Letters to employers due (and end of class)  • Mini-portfolio (and end of class)
16	Mon Dec 3	Communicating Science with the Community presentations
	Weds Dec 5	Communicating Science with the Community presentations – continued
17	Mon Dec 10	Assignments and/or Due Dates Grant proposals due!