## CHEM/BIOL 2801-Scientific Resources for Chemists, Biochemists, and Biologists

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Course summary: Chemistry, biochemistry, biology majors participate in a series of seminars related to responsible conduct of research (RCR), scientific reading/writing, and career/professional development training. Students may earn 1 credit (letter-grade basis) and RCR certification upon successful completion of the course. Lectures are held Tuesdays, 12:00-1:00 pm in Molecular Science and Engineering Building Room 1224. Undergraduate research students, particularly those supported by NSF and NIH funds, are encouraged to participate in the course during their first semester of research.

Grading: The course will be graded on a basis of 100 points:

90 or higher = A 80-89 = B 70-79 = C 60-69 = D 59 or lower = F

30% Assignments 30% Student case study presentation 10% Attendance and participation

You must attend a minimum of 80% of the seminars to pass the course. Lateness (i.e., >5min) will count as absence.

\*Users should visit <a href="www.citiprogram.org">www.citiprogram.org</a> to register for a user name and password. Students should complete all the required modules and check the grade book. A minimum score of 70% is required. Users should complete the confirmation form and submit. Be sure to print a copy of the certificate and provide to the instructor.

Schedule: Reverse side

## Text:

Online: National Academies Press, "On Being a Scientist," (Third edition, 2009), http://www.nap.edu/openbook.php?record\_id=12192&page=1

Other texts may be assigned later in the course.

# **Important websites:**

www.compliance.gatech.edu (GT RCR policy and modules)
http://www.uab.edu/graduate/publications/plagiarism.pdf (plagiarism)
http://homepage.uab.edu/svan/Plagiarism-Spring03version.html (plagiarism)

Please see www.honor.gatech.edu for Georgia Tech's Academic Honor Code, which you are required to uphold.

Schedule for CHEM/BIOL 2801-1 credit (letter-grade)

Location: MoSE 1224 Tuesdays, 12:00-1:00pm

#### Lecture

RCR: Introduction of Responsible Conduct of Research (RCR); Professional Organization's Ethics Guidelines; Societal Impacts

RCR: Misconduct in research, conflict of interest, mentorship, lab safety (Right to Know)

RCR: Human/animal subjects research, export control, "dual use"

RCR: Data acquisition; management, proper record keeping, sharing and ownership of data and collaborative research

RCR- Case Study-Student Presentations

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Scientific Literature: Dissecting a scientific paper

Scientific Literature: Databases (PubMed, SciFinder Scholar)

Scientific Literature: Writing (Overview, Introductions; RCR:, authorship, peer review, plagiarism)

Scientific Literature: Writing (Experimental, Figures, Tables)

Scientific Literature: Writing (Results, Discussion)

Careers: Graduate school

Careers: Education-K-12 teaching

Careers: Entrepeneurship and Industry

### **Grading:**

30% Assignments

30% Student case study presentation

10% Attendance and participation

30 % RCR final exam\*

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