

Introduction to Research 16:160:603

Instructor: Leslie Jimenez

Time: Wednesday, 11:00-12:20am

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Location: SEC, Room 205, Busch Campus

Office hours: T 10:00 am to 12:00 pm Webex (<https://rutgers.webex.com/meet/ljimenez>)
please use "603" in the e-mail subject line for email messages

Introduction to Research is a one-credit course for first-year graduate students in the Rutgers Department of Chemistry and Chemical Biology. The first part of the semester will consist of presentations by graduate faculty members of the department who are considering accepting graduate students into their research groups.

Faculty presentations will be 20-25 minutes, and are an excellent opportunity for students to learn about the exciting research that is occurring in many active research groups in the department, and to consider potential graduate advisors.

The second part of the semester will address issues of what it means to become educated and participate in the scientific enterprise, with a special focus on (i) ethics and integrity in the world of science, and (ii) safety in the research setting and general chemistry laboratory workplaces. Readings will be assigned in several books and online sources, and a variety of presentation topics will be suggested. Students will be required to make presentations in group formats about specific issues relating to scientific ethics of historical and/or current interest, as well as topics addressing graduate education including mentorship, writing (papers and proposals), reviewing, conducting research, intellectual property, fraud, and collaboration. Presentation time per student will be about 15 minutes each, longer if there is more time available.

Grades will be determined based on presentations (40%), class participation (30%), and attendance (30%). Class attendance is mandatory.

Digital chapters from the following books will be used:

[Scientific Integrity](#) – Francis Macrina, ASM Press, 2005

Scientific Integrity: The Rules of Academic Research, C.J.M. Schuyt, author; Kristen Gehrman, translator (open access) 2019

[On Being a Scientist: A Guide to Responsible Conduct of Research](#), Third Edition, 2009, National Academy of Sciences (you can download the pdf online for free)

[Research Ethics for Scientists: A Companion for Students](#); C. Neal Stewart, Jr., 2011, Wiley-Blackwell

Other sources of information, some of which will be posted on the Canvas site for the course:

<http://vpr.rutgers.edu/pro/>

<http://www.nsf.gov/bfa/dias/policy/rcr.jsp>

<http://ori.hhs.gov/>

<http://onlineethics.org/>

Class Schedule:

Sept. 1: intro to Chem 603

Sept. 15 to Oct. 13 – faculty presentations

Oct. 20 – library & data management (Presenter: Laura Palumbo)

Student presentations: Oct. 27, Nov. 3, 10, 17, 29, Dec. 1, 8