

Chemistry 1905 — Freshman Seminar (Sec 3, 2 Cr)

Scientific Progress: Dynamics and Impacts on Practitioners, Popular Culture, and Policy

Fall 2009

- Instructor:** Christopher J. Cramer
215 Smith Hall, 624-0859
cramer@umn.edu
- Teaching Assistants:** None
- Meets:** Wednesday, 3:35 pm - 5:15 pm. 223 Appleby Hall
- Texts:** *The Billion Dollar Molecule*, by Barry Werth (ISBN 0671510576)
Lise Meitner: A Life in Physics, by Ruth Lewin Sime (ISBN 0520208609)
- Office Hours:** By appointment or whenever
- Prerequisite:** None
- Coursework:** We will spend roughly the first half of each class discussing the reading for that week. In addition, for the remaining half, each class participant is responsible for identifying one topic in the week's news that involves science/technology interacting with broader society in one way or another. Students should be prepared to summarize the story/issue and initiate a class discussion centered upon it. We will spend the second half of each class hearing and discussing student presentations. As we are likely to cover several topics each class, summaries need not be extensive—oral presentation alone is perfectly acceptable—but they should be sufficiently comprehensive to permit informed discussion. All students should be ready to present for each class.
- Exams:** None.
- Grading:** The final grade in the course will be based on participation in classtime discussions and presentations. "A" work will involve showing creativity and initiative in presentations and classroom discussions, which, of course, includes being completely caught up with the reading at

all times. "B" work will show less creativity but still be timely and complete. "C" work and below frankly requires more lack of effort than it is worth. I would have no objection to awarding all A grades if circumstances warrant.

I am happy to discuss my impression of your grade so far at any point.

Reading:

Below is a tentative reading schedule by class. By classtime, your reading should be complete through the indicated page number. The last 2 weeks are left unassigned just in case we need to miss a class or some relevant opportunity comes up to have a guest visitor or event.

09/09	Sime pp. 1–75
09/16	Sime pp. 76–133
09/23	Sime pp. 134–209
09/30	Sime pp. 210–278
10/07	Sime pp. 279–346
10/14	Sime pp. 347–380
10/21	Werth pp. 1–58
10/28	Werth pp. 59–137
11/04	Werth pp. 138–190
11/11	Werth pp. 191–252
11/18	Werth pp. 253–317
11/25	No class (Thanksgiving next day)
12/02	Werth pp. 318–370
12/09	Werth pp. 371–429
12/16	Overflow/open