

FSEM 100F2
Chemistry and War
CRN 14894 Spring 2014

Instructor: Dr. Janet A. Asper

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Student hours: Monday 10-11, 2-3, Wednesday 11-12, 3-4, Friday 10-11

Course information: 1:00-1:50 pm, MWF, duPont 324

Books and Supplies

Required: (ISBN and price refer to the list price of the current paperback edition)

- Le Couteur, P.L.; Burreson, J. Napoleon's Buttons, 17 Molecules That Changed History. 2003, Penguin Group. ISBN 1585423319. (\$16.95)
- Tucker, P. War of Nerves: Chemical Warfare from World War I to Al-Queda. 2006. Anchor Books. ISBN 1400032334 (\$18.95)
- Hager, T. The Alchemy of Air. 2008, Harmony Books. New York. ISBN 0307351793 (\$15.00)
- Zollner, T. Uranium: War, Energy and the Rock that Shaped the World. 2009. Viking Adult. ISBN 014311672X (17.00)
- On line readings as they are posted on Canvas
- A working printer, or \$20 for printing on your Eagle One card

Student Learning Outcomes

Students completing a course satisfying the FSEM requirement will:

- Utilize a variety of research techniques to retrieve information efficiently, evaluate retrieved information, and synthesize information effectively to support their messages or arguments;
- Improve development and organization of written arguments;
- Demonstrate the ability to edit and revise in the writing process;
- Apply the basic theories and principles of oral communication;
- Communicate effectively in a variety of settings, including public speaking and group discussion.

Students completing Chemistry and War will additionally

- Develop and encourage cross- and inter-disciplinary thinking between the natural sciences and humanities (chemistry and history)
- Obtain layperson level understanding of underlying science of political issues
- Gain historical knowledge necessary to place issues in historical context

Grading

| | |
|-----------------------------------|-----|
| Class participation | 15% |
| Assignments (in and out of class) | 30% |
| Exams | 30% |
| Book review/panel discussion | 25% |

Letter grades will be determined as follows

100-90% A-/A; 80-89% B-/B/B+;70-79% C-/C/C+60-69% D 0-59% F

Mid-semester grades will be calculated using the estimated grade formula above. Students with a grade of C or lower at that time will receive a grade of U.

Class participation

This class is not a history class, nor is it a science class. There will be few traditional "lectures" with me talking and writing on the board and you scribbling in a notebook. We will spend time discussing and thinking through how the chemical substances, principles and scientists impacted history and how history impacted them. We will develop our body of information together.

Towards this end, everyone must participate in class activities. Participation includes attending class, being prepared for the days' activities, contributing appropriately to classroom discussion, listening to classroom discussion, paying attention to videos and outside speakers.

Each student will begin the term with 50 class participation points, which have been allotted to you for attendance. Each unexcused absence will deduct 2 points. Students will be awarded 2 points for substantial, informed and appropriate contributions to discussion. Students will have 2 points deducted for inappropriate contributions. This includes violating discussion rules, impolite conduct towards another student, dominating discussion, sleeping during videos or outside speakers etc. At the end of the semester, total points will be divided by possible points (100) and scaled to 20% for the course. Weekly assignments in this class will vary, and can include in class activities, short presentations, written summaries or reactions to the readings, videos, and your digital timelines. Most assignments will be announced in class, so you must be in class and pay attention to what has been assigned and when it will be due. All assignments are due at the beginning of class on the due date. Late work will be penalized 20% per day.

Exams

Exams will be "traditional" exams covering the chemical principles, historical facts and interconnections that we've discovered during the course.

Book review/Panel discussion

In lieu of a final exam, groups of students will present a panel discussion on a book that is related to the material in this course, but was not read by the entire class. Panel discussions will held during our final exam time, Monday, April 28, 12:00 noon to 2:30 pm. You will work on this for the entire semester, with reading and writing assignments that will help you to prepare for the panel discussion. All of the preliminary work will be combined with the grade on your final presentation and count towards 25% of your final grade.

Academic Dishonesty: The honor system, as outlined in the UMW Academic Catalog, will be strictly enforced in this course. The honor pledge will be written on all graded work. Guidelines for use of outside sources, internet resources etc, will be stated on each assignment.

ADA: Students requiring accommodation for disabilities must discuss their needs with the Director of Disability Services (654-1266), and provide appropriate documentation. In order for me to best meet your need, I must receive documentation and discuss your needs by January 22, 2011. I will hold any information you share with me in the strictest confidence unless you give me permission to do otherwise. The University's disability policy is outlined in the UMW Academic Catalog.

Student hours: I set aside 5 hours per week where the only thing on my agenda is meeting with students to discuss their work. You don't need to make any appointments, just come in with your questions, problems, and things you are excited about. Student hours are usually held in my office, but if a lot of people show up, I'll move to a larger room. If your schedule conflicts with student hours, please feel free to make an appointment!!

Tentative Course Schedule

NOTE: The Great Lives Lecture on Thursday March 13 at 7:30 pm is MANDATORY for all students in this class.

| Week of | Reading | Notes |
|-------------|---|--|
| 1/13 | Napoleon's Buttons: Ch 1-4 | |
| 1/20 | Napoleon's Buttons: 6-10, 17 | Submit book preferences 1/24 |
| 1/27 | Napoleon's Buttons: Ch 5 Alchemy of Air: I Ends of the Earth | 1/27 Library orientation Simpson 225 |
| 2/3 | Alchemy of Air: II Philosophers Stone | |
| 2/10 | Alchemy of Air: III Syn | |
| 2/17 | Alchemy of Air: III -Finish Syn | |
| 2/24 | War of Nerves: Ch. 1-5 | Individual book review due 2/24 |
| 3/3 | Spring break: Keep reading | |
| 3/10 | War of Nerves: Ch 6-11 | 3/13 Great Lives 7:30 pm in Dodd Auditorium 3/14 NO CLASS |
| 3/17 | War of Nerves: 11-18 | |
| 3/24 | Uranium: 1-3 | |
| 4/7 | Uranium: 4-6 | |
| 4/14 | Uranium: 6-8 | |
| 4/21 | Review and wrap-up | |
| Finals week | Presentations | 4/27 Book discussion panel 12:00 noon to 2:30 pm |