

IDH3931 — Interdisciplinary Junior Honors — Spring 2019

Credits: 3; Prereq: none.

This course examines the Impact of Chemistry on Society through examination and discussion of topics presented in two popular science novels “The Disappearing Spoon” and “Napoleon’s Buttons”. Each week’s module will combine chemistry concepts with a social lesson. Guest lecturers from various non-STEM departments will give in-class presentations and help lead/develop in-class activities that emphasize the merging of chemistry and society. The scientific topics span areas of agriculture, materials, energy, medicine, human health, nature and the environment. Connections will be made between the past, present and future impacts of chemistry on these aspects of our social lives. It is not required that you have any college level science course as a prerequisite for this course as the chemistry and scientific concepts within Disappearing Spoon and Napoleon’s Buttons will be addressed. High-school level understanding of chemistry/physics is expected.

Instructors	Section	
Fanucci	34B2	Tel.: 392-2345 (office, LEI 311F) email: fanucci@chem.ufl.edu O.H.: tba

Class Meeting Times	MFW-4 period, 10:40am–11:30am in Little Hall 0117 (lectures) Locations of demonstrations and tours to be posted in Canvas or announced in class
Holidays	01/21 (MLK Day), 03/04 – 08 (Spring Break), 03/25–26 (Reading Days, no classes).
Class Texts	The Disappearing Spoon Napoleon’s Buttons
On-Line Quizzes	Each week there will be an on-line quiz that covers the reading and lecture materials. Please check on Canvas for due dates and times.
On-Line Discussion Posts	Each week there will be a topic/assignment related to a current day societal impact of chemistry that you are required to comment on. Please check on Canvas for due dates and times.
In-Class Activity	Each week there will be an in-class activity (some maybe group activities) that you will do during that period that will be assessed. Please check on Canvas for due dates and times.
In-Class Exams	There will be two in-class exams that assess your knowledge and understanding of course materials.
Video Case Project	In efforts to engage with the public on Chemistry Issues that impact society, a short 3-7 minute video case project (PodCast, Utube etc) on a current day topic will be developed.
Points Earnable	On-line Quizzes/Question Sets @ 20% of total grade. On-line Discussions @ 20% of total grade. In-Class Activity @ 20% of total grade. Two Exams @ 30% of total grade (15% each). Video Cast Project @ 10% of total grade. Total earnable points are 100%.
Grading Scheme ¹	A: $\geq 93.0\%$ 93.0% > A- $\geq 88.0\%$ 88.0% > B+ $\geq 83.0\%$ 83.0% > B $\geq 78.0\%$ 78.0% > B- $\geq 73.0\%$ 73.0% > C $\geq 68.0\%$ 68.0% > C- $\geq 65.0\%$ 65.0% > D $\geq 60.0\%$

¹see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for more info on UF grade policies.

60.0% > 5 E.

Course Schedule (tentative):

Date	Week	Topic	Activity
01/07–11	1	Fertilizers, Weapons and Food Sustainability	
	1	<i>Gail Fanucci, Gabriel Mathias-Landry (Soil and Water Science)</i>	Organic Farming Analysis
01/14–18	2	Lead and Political Regulations	
	2	<i>Gail Fanucci, Suzanne Robbins (Political Science)</i>	Lobby Case Study
01/21–25	3	Explosions, Gases and the Built Environment	
	3	<i>Gail Fanucci, Chris Brewer (Chemistry)</i>	¥Explosion Demonstration
01/28–02/01	4	Radioactivity and the Ethics of Nuclear Power	
	4	<i>Gail Fanucci, Duncan Purves (Philosophy), Katy Poole (EH&S)</i>	Safety Evaluation
02/04–08	5	Early Medicine and Indigenous Medicine	
	5	<i>Gail Fanucci, Rick Stepp (Anthropology)</i>	Ethnoecology Gardens Tour
02/11–15	6	Sugars and Social Inequities	
	6	<i>Gail Fanucci, Alyssa Zucker (Women's Studies)</i>	Valentine's Day Treat Analysis
02/18–22	7	Dyes, Energy and Social Uses of Color	
	7	<i>Gail Fanucci, Melissa Hyde (Art History), Daniel Talham (Chemistry)</i>	¥Prussian Blue Demonstration
02/25–03/01	8	Review and Exam Week	
	8	<i>Gail Fanucci, TBD</i>	Seminar ??
03/04-08	9	SPRING BREAK	
	9		
03/11–15	10	Germes and Public Health	
	10	<i>Gail Fanucci, Pamela Gilbert (English)</i>	Timeline Exercise
03/18–22	11	Natural Products and Drug Discovery	
	11	<i>Gail Fanucci, Jeffrey Rudolf (Chemistry)</i>	¥Research Seminar
03/25–29	12	Drugs, Poisons and Addiction	
	12	<i>Gail Fanucci, Trysh Travis (Women's Studies)</i>	Reflection Exercise
04/01–05	13	Salt and Sustainable Environments	
	13	<i>Gail Fanucci, Mike Volk (Landscape Architecture), Chris Brewer (Chemistry)</i>	¥Corrosion Experiment
04/08–12	14	Steroids and the Brain	
	14	<i>Gail Fanucci, Julia Graber (Psychology),</i>	¥AMRIS Tour
04/15–19	15	Olive Oils, Soaps and Cleanliness	
	15	<i>Gail Fanucci, Pamela Gilbert (English), Chris Brewer (Chemistry)</i>	¥Making Soap Demonstration
04/22-24	16	Exam Week/Project Due	

¥ Graded assessments for demonstrations and tours center on reflections and analysis questions. More details will be given in Canvas for each week's activity.

1. **Class Meeting Times:** The class meets in JHH221 W-3 period. Class discussion will start on time. Please be there a couple of minutes early. There are two lab meeting times for the different sections, M6-10 and T6-10 periods in LEI 200 (see page 1 of this syllabus for details). These lab periods will

be used for the various experimental activities in this course. Note that some activities may take place in the PIs' labs. Please also note that there may be lab activities necessary outside these specified class meeting times and you are expected to make reasonable arrangements with the PI and his/her graduate students to get your work done. Make sure to pay attention to relevant announcements.

2. **On-Line Quizzes/Question Sets:** To be announced on Canvas
3. **On-Line Discussions:** To be announced on Canvas
4. **In-Class Activity:** each Friday period will be either an in-class activity, demonstration or tour. The activities will have question sets/assignments that need to be completed within the class period and turned in for grade. The demonstrations, tours and seminars will have a posted question set to be answered within 48 hours of the activity.
5. **Exams:** There will be two exams. Material is cumulative. Topics will cover both the chemistry and social lessons.
6. **Video Report:** A final project is due that utilizes digital media to present a scientific topic to the public. Details will be provided on Canvas.
7. **Canvas:** Access your Canvas e-learning account by clicking on the 'Log-In to E-Learning' link on the web site, <http://lss.at.ufl.edu/> where you will have to supply your Gatorlink credentials to log in. Please, do this at your earliest convenience and make yourself familiar. Canvas will be the primary means for the distribution and communication of course materials and schedule. If you experience technical problems when using Canvas, please contact the UFIT helpdesk (<http://helpdesk.ufl.edu/>, 352-392-4357 M-F from 8:00am till 5:00pm, email helpdesk@ufl.edu, or go to: <http://helpdesk.ufl.edu/e-learning-support/>).
8. **Class Attendance:** Regular attendance is essential for your success in this class. However, we will not do roll-calls. Repeated absence in class and labs will make it very difficult to succeed in this course. For further information on UF's attendance policies which are in effect for this course, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.
9. **Study Habits:** The course expects on average 4-5 hours/week of work outside of class. It is expected that you read the assigned reading materials before coming to class and perform any on-line activities (Quizzes, Discussions etc) by the posted due dates. The instructor will build on this material and you are expected to be able to follow in-class discussion and activities.
10. **Office Hours:** The instructors and graduate student TAs offer several office hours spread over the whole week. The detailed times and locations are listed on the first page of this syllabus. This is time we set aside for you. Take advantage of it. Please note that the instructor and all TAs are available to help students in any of the CURE class sections. You are not limited to only the TA assigned to your section. However, your assigned TA will most likely be the most familiar with the protein you are working with.
11. **Online Course Evaluation:** Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester. Announcements will be made to students about the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.
12. **Students with Disabilities:** Students requiring special accommodations should register with the Dean of Students Office (<http://www.dso.ufl.edu/>, 352-392-1261) and the Disability Resource Center (DRC, <https://www.dso.ufl.edu/drc>, 352-392-8565, email: accessUF@dso.ufl.edu), and present documentation from that office to the instructor.
13. **Counseling Services:** The University of Florida provides counseling services for students, staff, and faculty. See <http://www.counseling.ufl.edu/cwc/>. If you or a friend are in distress, call (352) 392-1575 (available 24/7), email umatter@ufl.edu, or walk in for an emergency consultation during regular service hours (8:00am – 5:00pm) at the Radio Road Site, 3190 Radio Rd., or the Peabody Hall Site, on the 4th floor of Peabody Hall, adjacent to Criser Hall. For other hours or weekends, call the Alachua County Crisis Center, (352) 264-6789. For sexual assault recovery services call the Student Health Care Center at (352) 392-1161. For life-threatening emergencies always call 911.
14. **Emergency Numbers and Web Sites:**
 - UFPD (UF Police Department): In case of emergency dial 911. The UF campus police non-emergency number is (352) 392-1111. Their web site: <http://www.police.ufl.edu/>,
 - UF Emergency management: (352) 273-2100. <https://emergency.ufl.edu/>,
 - Infirmary (student health center): (352) 392-1161, <http://shcc.ufl.edu/>.
 - EH&S (Environmental Health & Safety): (352) 392-1591, <http://www.ehs.ufl.edu/>.
15. **Other Academic Resources:** UF provides several other resources for students, such as
 - Library Support can be obtained here: <http://cms.uflib.ufl.edu/ask>, where you can find various ways to receive assistance with respect to using the libraries or finding resources.
 - The Career Resource Center is located on level One in the Reitz Union, (352) 392-1601, and provides career assistance and counseling. Refer to <http://www.crc.ufl.edu/> for further info.
 - The Teaching Center is located in Broward Hall, main phone (352) 392-2010 or appointment phone (352) 392-6420, and provides students with tutoring services and counseling regarding

general study skills. Refer to <http://teachingcenter.ufl.edu/> for further info. It may also provide employment opportunities as tutors for well qualified students.

- The Writing Studio is located at 302, Tigert Hall, (352) 846-1138, and provides help with brainstorming, formatting, and writing papers, see: <https://writing.ufl.edu/writing-studio/>.
- The Ombuds Office is located at 31 Tigert Hall, (352) 392-1308, and provides students assistance in resolving problems and conflicts that arise in the course of interacting with the University of Florida. By considering problems in an unbiased way, the Ombuds works to achieve a fair resolution and works to protect the rights of all parties involved. For further information go to <http://www.ombuds.ufl.edu/> or refer to the official complaints policy here: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.

16. **Cell Phone Etiquette:** Please put all cell phones or other electronic devices on “**silent mode**” during all class and lab periods. Please do not leave the classroom during lecture to make a phone call. Thank you!
17. **Honor Code:** This class will operate under the policies of the student honor code which can be found at: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>. The students, instructor, and TAs are honor-bound to comply with the Honors Pledge: **We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.** You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."* It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks. Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>.
18. **Disclaimer:** This syllabus represents our current plans and objectives. If those need to change as the semester progresses, then the changes will be communicated to the class clearly.