

**\*Basic Course Syllabus and Description  
FYOS 1001 (Version 1.11, 20 August, 2019)**

*\*subject to change at any time*

**Title:**

*The “War on Science” - An Odyssey for both Non-Science and Science Majors Alike*

**Description:**

From opposition to genetically modified crops and childhood vaccinations to climate change denial, current challenges to scientifically accepted findings are formidable. Some of these represent simple protests of specific issues, whereas others constitute highly organized offensives to cast doubt and slow legislative action. Whether these truly constitute an actual war on science, undoubtedly scientific findings are increasingly undermined by misinformation, denial and ideology. In this Odyssey, using recent literature and commentary, book excerpts and documentary movies, students will examine the threats to knowledge and reason, their origins and their consequences for our society. Case studies will afford a deeper understanding of particular examples, for instance former Canadian Prime Minister Harper’s autocratic dismantling of science and his government’s rejection of expert opinion. The role of the internet in propagating misinformation will be examined. Importantly, students will examine measures that we, as citizens, can take to stay informed, confront falsehoods and respond positively.

**Class Time/Place:**

Tuesdays, 2:00 - 3:15 pm, Room 508, Chemistry Building

**Instructor:**

Professor Jeffrey L. Urbauer

Office: Room 671 (labs, rooms 674, 675), Chemistry Building

Phone: 542-7922

Email: [urbauer@uga.edu](mailto:urbauer@uga.edu)

Office Hours: any time (by appointment)

Course Website: <https://urbauerlab.uga.edu/fyo>

Dr. Urbauer's research interests are in structural biology, protein biophysics and NMR spectroscopy. His other professional interests include misinformation and public policy. Previously he held appointments at the State University of New York at Buffalo, the University of Pennsylvania and the University of Kansas. At the University of Kansas he was awarded the Outstanding Educator award by the Mortar Board National College Senior Honor Society.

***The goal of the course is to explore issues related to a rejection of scientific findings, rational and logical thought, and expert opinion, by groups and governments, and a greater acceptance of misinformation, ignorance, and irrationality. The origins and consequences will be examined.***

## **The University of Georgia Academic Honesty Policy**

All students in this and all courses at UGA must abide by the UGA policies on academic honesty:

"The University of Georgia seeks to promote and ensure academic honesty and personal integrity among students and other members of the university community. *A Culture of Honesty*, UGA's academic honesty policy and procedures, was developed to serve these goals. All members of the academic community are responsible for knowing the policy and procedures on academic honesty".

The entire policy can be found in the following pdf file:

[https://honesty.uga.edu/resources/documents/academic\\_honesty\\_policy\\_2017.pdf](https://honesty.uga.edu/resources/documents/academic_honesty_policy_2017.pdf)

Briefly, according to the policies, academic honesty means "performing all academic work without plagiarism, cheating, lying, tampering, stealing, giving or receiving unauthorized assistance from any other person, or using any source of information that is not common knowledge without properly acknowledging the source".

Suspected violations of the policies will be reported by the course instructor to the Office of the Vice President for Instruction, in accordance with the stated procedures for resolving matters of alleged academic dishonesty.

## **Electronic Devices**

No laptop computers, tablet computers, cell phones, iPhones/iPods/iPads, PDAs or other electronic devices are allowed to be in operation in the classroom. All such, or related, devices must be turned off before entering the classroom, and must be off of the desktop during class (in a bookbag or on the floor). There may be exceptions for in-class presentations.

## **Course Attendance Policy**

The University of Georgia guidelines for attendance can be found at the following link: (<http://bulletin.uga.edu/bulletin/ind/attendance.html>).

Attendance policies are at the discretion of the instructor. Attendance in this course will be monitored.

Class begins at 2:00 pm. Students who arrive between 2:00 pm and 2:10 pm will be considered late, and will be assessed 1/2 of an absence. Two (2) such instances of arriving late will constitute one (1) absence. Students who arrive after 2:10 pm will be considered absent. Likewise, leaving class ten (10) or less minutes before the end of the class period will be equivalent to a late arrival (1/2 of an absence). Leaving class more than ten (10) minutes before the end of the class period will count as an absence. Leaving the classroom for any inordinate amount of time during class will also count as an absence.

More than one (1) absence will result in a decrease in the final course grade by one +/- increment of a letter grade for each 1/2 (0.5) of an absence. For instance, if, at the end of the course, a student has earned a letter grade of 'A' (4.00 grade points) overall, but has 1.5 absences, then the final grade will be 'A-' (3.70 grade points). If a student has 2 absences but otherwise a grade of 'A', the final grade will be decreased to 'B+' (3.30 grade points). If a student

has 2.5 absences but otherwise a grade of 'A', the final grade will be reduced to 'B' (3.00 grade points), and so forth. No more than 4.5 absences will be allowed. If a student accrues more than 4.5 absences, this will result in automatic withdrawal from the course. If the withdrawal is before the midpoint deadline, the grade will be "WP". After the deadline, the grade will be "WP" if the student is passing, or "WF" if the student is failing. Absences include those that may prove to be excused.

## **Course Assignments**

Event Assignments - Each student in a FYO course is required to attend 3 "events". A calendar of these events, and a description of each, can be found under the 'EVENTS' tab on the First Year Odyssey web site:

<https://fyo.uga.edu/BrowseEvents.aspx>

***For our FYO, one required event is the screening of the film of "Merchants of Doubt". A date and time for this screening will be scheduled.***

For our FYO, students will then choose any two other events, in addition to the film screening event. There will be one writing assignment for each of these three events (see below).

Reading Assignments - There will be regular reading assignments. Sometimes, these will be specified, but, most times, not. It will be up to each student to find appropriate material to read and study to be prepared for class discussions

Writing Assignments - There will be six (6) writing assignments. There will be a writing assignment for each of the three 'events' (see above). Each will be approximately 1/2 of a page (using a standard format as described below), which is 28 lines (not including header information). These are to be reflective, and evaluative, in content. This will be discussed in detail in class, but mere *synopses of the material are not acceptable*. Likewise, there will be three writing assignments for topics discussed in class. The topics will be chosen by the students. The writing will be reflective, evaluative and analytical. *Summaries or synopses of topics are not acceptable*. Like the event assignments, these will 1/2 of a page using the standard format.

Event writing assignments will be due one (1) week after the event. The writing assignments for topics discussed in class will be due one (1) week after the discussion. Assignments not turned in by the deadline will result in a grade of zero (0) for those assignments. If you are interested in attending an event on a date that conflicts with this policy, you need to explain that to me by October 23.

No hand-written writing assignments will be accepted. **The text of all writing assignments will conform to a standard format: 1 inch margins all around (top, bottom, left, right), 11 point Arial font, single spaced.**

In Class Discussions – Each week, students will read either assigned material or material appropriate for the topic chosen by the student. Typically, students will report back to the class, often as parts of groups, in a manner appropriate for a discussion of the

topic/material. The goal is to have meaningful discussions that lead to a better understanding of the topic, in a supportive and friendly environment.

### **Course Materials**

There is no assigned text for this course. Materials will be available via the internet or handed out by the instructor.

### **Grading**

Grading will be A-F, based on event assignments, reading assignments, writing assignments, in class discussions and in class participation, and attendance.

Writing assignments 50%

In class participation 50%

Attendance - More than one (1) absence from class will result in a decrease in the overall course grade as detailed in the 'Course Attendance Policy' section above.

All writing assignments will be included in the calculation of the grade. As stated above, simple summaries or synopses of the events or reading assignments are not acceptable, and will result in a failing grade for those assignments.

Class participation rubric (from Denise C. Mewborn):

- **A Outstanding Contribution**: Insightful and thoughtful comments, questions, and or reflections, demonstrating a careful analysis of the material. (not just a “reading” or synopsis of the material, but an analysis)
- 
- **B Adequate Contribution**: Comments are accurate but not particularly insightful or thoughtful. Demonstrates an understanding of the material but not necessarily a very deep or careful analysis.
- 
- **C Marginal Contribution**: Makes little contribution to the class discussion or does a poor job of summarizing/analyzing material. Has read the material, but made no attempt to think about or analyze it.
- 
- **D Unacceptable Contribution**: Minimal contribution to discussion, comments are perhaps not clearly related to the topic at hand, or comes to class having not completed all of the readings.

## Course Outline

The rough course outline is below. In the spirit of a true odyssey, this outline may change during the semester, depending on the will and interests of the students and instructor. Bolded items represent topics of discussion. ***For each of these there will be reading, and for some of them writing, assignments.***

1. Tue., Aug. 20     -Organization
2. Tue., Aug. 27     -**What is Science?**
3. Tue., Sep. 3     -**Anti-vaccine controversies**
4. Tue., Sep. 10     Education Abroad (Study Away) presentation (Office of International Education, Alyssa Johnson)  
                             -**Discussion of “Merchants of Doubt”**
5. Tue., Sep. 17     -Research Resources Training (Ian Thomas, Science Library)
6. Tue., Sep. 24     -**“Not a Scientist”: Misrepresenting Science**
7. Tue., Oct. 1       -Jami Gilstrap, Associate Director of CURO/Honors Program  
                             -**Stephen Harper’s Canada: The Harper Administration War on Science**
8. Tue., Oct. 8       -**The War on Science in the USA**
9. Tue., Oct. 15      -**No Class**
10. Tue., Oct. 22     -Dan Felts, Senior Career Consultant, UGA Career Center  
                             -**The War on Science in the USA**
11. Tue., Oct. 29     -**The War on Science in the USA**
12. Tue., Nov. 5      -**“Why are you here”: Universities and a liberal arts education**