*Basic Course Syllabus and Description FYOS 1001 (Version 2.04, 23 Aug, 2021)

*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. Special emphasis will be placed on current events, for instance COVID-19.

Class Time/Place:

Mondays, 4:10 – 5:00 pm, Room 451 Chemistry Building

CRN: 47971

Instructor:

Professor Jeffrey L. Urbauer

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

Phone: 542-7922

Email: 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.

Goals of the First-Year Odyssey Seminar Program

Goal 1: Introduce first-year students to the importance of learning and academics so that we engage them in the academic culture of the University.

Goal 2: Give first-year students an opportunity for meaningful dialogue with a faculty member to encourage positive, sustained student-faculty interactions.

Goal 3: Introduce first-year students to the instruction, research, public service, and international missions of the University and how they relate to teaching and learning in and outside the classroom so that we increase student understanding of and participation in the full mission of the University.

Tentative Topics and Presentations

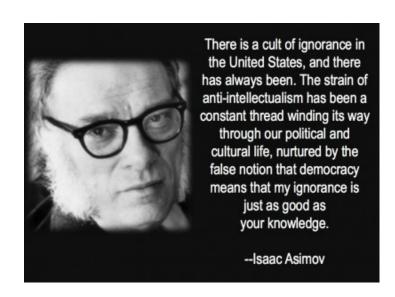
A tentative course outline is below. *In the spirit of a true odyssey, this outline may change during the semester, depending on the will and interests of the students and instructor.*

Topics

- -What is science
- -Anti-vaccine controversies
- -Viewing and discussion of the film "Merchants of Doubt"
- -Misrepresenting science
- -Stephen Harper's Canada: The Harper administration war on science
- -The war on science in the USA
- -Misinformation and propaganda
- -The BIG LIE
- -How societies and civilizations collapse

Presentations

- -UGA Study Away program
- -Research resources training
- -CURO/Honors program (tentative)
- -UGA Career Center (tentative)



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. Mon., Aug. 23	-Organization
2. Mon., Aug. 30	-What is Science?
3. Mon., Sep. 6	**************************************
3. Mon., Sep. 13	-Anti-vaccine controversies
4. Mon., Sep. 20	-Education Abroad (Study Away) presentation (Office of International Education, Alyssa Johnson) -Discussion of "Merchants of Doubt"
5. Mon., Sep. 27	-Stephen Harper's Canada: The Harper Administration War on Science
6. Mon., Oct. 4	-"Not a Scientist": Misrepresenting Science
7. Mon., Oct. 11	-Research Resources Training (Ian Thomas, Science Library)
8. Mon., Oct. 18	-The War on Science in the USA
9. Mon., Oct. 25	-The War on Science in the USA
11. Mon., Nov. 1	-The War on Science in the USA
12. Mon., Nov. 8	-COVID 1
13. Mon., Nov. 15	-COVID 2
14. Mon., Nov. 22	-The Big Lie
15. Mon., Nov. 29	-How Societies and Civilizations Collapse
16. Mon., Dec. 6	-"Why are you here": Universities and a liberal arts education

Course Assignments

<u>Event Assignments</u> - 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 Oddyssey web site:

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

For our FYO, one required event is the screening of the film of "Merchants of Doubt". You can view this documentary on the website 'Documentary Mania' (https://www.documentarymania.com).

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).

<u>Reading Assignments</u> - 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

<u>Writing Assignments</u> - 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 we will define as 25 lines of text (not including header information). These are to be reflective, and evaluative, in content. This will be discussed in detail in class, but mere <u>synopses of the material are not acceptable</u>. 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. <u>Summaries or synopses of topics are not acceptable</u>. 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. No writing assignments will be accepted after 5:00 pm on the last day of classes (December 7, 2021).

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

<u>In Class Discussions</u> – 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 assignments50%In class participation50%

<u>Attendance</u> - 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, <u>simple summaries or synopses of the events or reading assignments are not acceptable</u>, 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.
- <u>C Marginal Contribution</u>: 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.

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 4:10 pm. Students who arrive between 4:10 pm and 4:20 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 4:20 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 withdrawl from the course. If the withdrawl 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.

THE UNIVERSITY OF GEORGIA ACADEMIC HONESTY POLICIES

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

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.

ACCESSIBILITY STATEMENT:

If you anticipate issues related to the format or requirements of this course, please meet with Professor Urbauer, who will discuss with you ways to ensure your full participation in the course. If formal, disability-related accommodations are necessary, it is very important that you be registered with the Disability Resource Center (Voice: 706-542-8719 or TTY: 706-542-8778) and notify Professor Urbauer of your eligibility for reasonable accommodations. A plan to best coordinate your accommodations can then be developed. The website for the disability resource center can be found at: https://drc.uga.edu

FERPA NOTICE:

The Federal <u>Family Educational Rights and Privacy Act</u> (FERPA) grants students certain information privacy rights. See the registrar's explanation at: https://apps.reg.uga.edu/FERPA/

UGA NON-DISCRIMINATION AND ANTI-HARASSMENT POLICY:

The University of Georgia ("the University") is committed to maintaining a fair and respectful environment for living, work and study. To that end, and in accordance with federal and state law, University System of Georgia policy, and University policy, the University prohibits harassment of or discrimination against any person because of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity, ethnicity or national origin, religion, age, genetic information, disability, or veteran status by any member of the University Community (as defined below) on campus, in connection with a University program or activity, or in a manner that creates a hostile environment for any member of the University Community. Incidents of harassment and discrimination will be met with appropriate disciplinary action, up to and including dismissal or expulsion from the University. The full policy can be found at: https://eoo.uga.edu/policies/non-discrimination-anti-harassment-policy

CAMPUS CARRY (HOUSE BILL 280, "HB280"):

For information about House Bill 280, commonly known as the "campus carry" legislation, which became effective July 1, 2017, please refer to information and guidance provided by the University System of Georgia at: http://www.usg.edu/hb280. Students are free to contact the UGA Police Department concerning the enforcement of HB280.

MENTAL HEALTH AND WELLNESS RESOURCES:

- If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit https://sco.uga.edu. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.
- UGA has several resources for a student seeking mental health services (<u>https://www.uhs.uga.edu/bewelluga/bewelluga</u>) or crisis support (<u>https://www.uhs.uga.edu/info/emergencies</u>).
- If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (https://www.uhs.uga.edu/bewelluga/bewelluga) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.
- Additional resources can be accessed through the UGA App.

COURSE MATERIALS:

All course materials are the sole property of Dr. Urbauer. The course materials (lecture notes, handouts, videos, exams, any recordings, anything else) can be used by the students enrolled in the course, but not distributed in any way. They may not be given to any individuals not enrolled in the course, they may not be posted to any web sites or distributed to anyone not enrolled in this course or any other entity. Doing so will constitute a violation of the Academic Honesty policies. This includes any special materials and/or recordings made during class.

CORONAVIRUS INFORMATION FOR STUDENTS FOR FALL 2021 CLASSES

Face coverings:

<u>Following guidance from the University System of Georgia, face coverings are recommended for all individuals while inside campus facilities.</u>

How can I obtain the COVID-19 vaccine?

University Health Center is scheduling appointments for students through the UHC Patient Portal (https://patientportal.uhs.uga.edu/login_dualauthentication.aspx). Learn more here – https://www.uhs.uga.edu/healthtopics/covid-vaccine.

The Georgia Department of Health, pharmacy chains and local providers also offer the COVID-19 vaccine at no cost to you. To find a COVID-19 vaccination location near you, please go to: https://georgia.gov/covid-vaccine.

In addition, the University System of Georgia has made COVID-19 vaccines available at 15 campuses statewide and you can locate one here: https://www.usg.edu/vaccination

What do I do if I have COVID-19 symptoms?

Students showing COVID-19 symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see, https://www.uhs.uga.edu/info/emergencies.

What do I do if I test positive for COVID-19?

If you test positive for COVID-19 at any time, you are required to report it through the DawgCheck Test Reporting Survey (https://dawgcheck.uga.edu/). We encourage you to stay at home if you become ill or until you have excluded COVID-19 as the cause of your symptoms. UGA adheres to current Georgia Department of Public Health (DPH) quarantine and isolation guidance (https://dph.georgia.gov/covid-quarantine-calculator) and requires that it be followed. Follow the instructions provided to you when you report your positive test result in DawgCheck.

Guidelines for COVID-19 Quarantine Period (As of 8/1/21; follow DawgCheck or see DPH website for most up-to-date recommendations)

Students who are fully vaccinated **do not** need to quarantine upon exposure unless they have symptoms of COVID-19 themselves. All others should follow the Georgia Department of Public Health (DPH) recommendations:

Students who are not fully vaccinated and have been directly exposed to COVID-19 but are not showing symptoms **should self-quarantine for 10 days**. Those quarantining for 10 days must have been symptom-free throughout the monitoring period and continue self-monitoring for COVID-19 symptoms for a total of 14 days. You should report the need to quarantine on

DawgCheck (https://dawgcheck.uga.edu/) AND communicate directly with your course instructors to coordinate your coursework while in quarantine. If you need additional help, reach out to Student Care and Outreach (sco@uga.edu) for assistance.

Students, faculty and staff who have been in close contact with someone who has COVID-19 are no longer required to quarantine if they have been fully vaccinated against the disease and show no symptoms.

Well-being, Mental Health, and Student Support

If you or someone you know needs assistance, you are encouraged to contact Student Care & Outreach in the Division of Student Affairs at 706-542-7774 or visit https://sco.uga.edu/. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

UGA has several resources to support your well-being and mental health: https://well-being.uga.edu/

Counseling and Psychiatric Services (CAPS) is your go-to, on-campus resource for emotional, social and behavioral-health support: https://caps.uga.edu/, TAO Online Support (https://caps.uga.edu/tao/), 24/7 support at 706-542-2273. For crisis support: https://healthcenter.uga.edu/emergencies/.

The University Health Center offers FREE workshops, classes, mentoring and health coaching led by licensed clinicians or health educators: https://healthcenter.uga.edu/bewelluga/

Monitoring conditions:

Note that the guidance referenced in this syllabus is subject to change based on recommendations from the Georgia Department of Public Health, the University System of Georgia, or the Governor's Office or. For the latest on UGA policy, you can visit https://coronavirus.uga.edu.