

IDS 4911: Civic Scholars

Introduction to Interdisciplinary Research for Undergraduates

SPRING 2023

Instructor: Audrey Culver Smith (she/her)

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Class Meeting: T Periods 8-9 (3:00pm – 4:55pm), R Period 9 (4:05pm – 4:55pm)

Classroom: LIT 0121

Office Hours: T 9:30am – 11:00am & R 12:00pm – 1:30pm (or by appointment)

Office: Pugh 236

COURSE DESCRIPTION

The Spring 2023 Civic Scholars course will introduce students to Artificial Intelligence (AI) concepts and applications, examining the ubiquity of AI in society and across academic disciplines. We will examine the ubiquity of AI in modern society, its impacts in everyday life, and applications of AI across disciplines. With instructor guidance, students will design a research project related to the increasingly pervasive role of AI in society and its applications in various sectors of public sphere and within academic disciplines and research objectives. Potential areas of focus may include, but are not limited to, how AI may be used to accelerate the development of solutions to society's most pressing challenges (including critical issues impacting the state of Florida), an evaluation of ethical concerns related to AI, and the potential or realized biases that may be inherent in the use of AI technology/algorithms.

The course will introduce students the research process, including research design and methods, and throughout the semester students will learn how to conduct original research. Students will learn to critically analyze the strengths and weaknesses of methodological approaches used in research. Overall, this course is designed to instruct students on the appropriate way to conduct interdisciplinary and social science research. To meet the objectives of this course, we will explore (1) the logic of social science research and the interdisciplinary research perspective, (2) the elements of the empirical research process, and (3) research design. Students will develop an original research project related to the topic of Artificial Intelligence (AI) in society, present their research

at the Graham Center Research Symposium on April 15th, and publish their research on Barometer Florida.

To succeed in this course, you are expected to attend class regularly and participate in group discussions and activities. To meet the requirements of the Civic Scholars program, you complete a research project and present your research at the Graham Center Research Symposium.

COURSE OBJECTIVES

Students will:

1. Gain a general literacy and understanding of AI concepts and applications
2. Assess the role of AI in society and across different disciplines
3. Evaluate considerations and concerns of AI
4. Describe the interdisciplinary research perspective
5. Understand central concepts related to the research process
6. Develop appropriate and meaningful research questions
7. Design a research approach to meet objectives of the research
8. Produce an original research project (individual & collaborative components)
9. Present their research at the Graham Center Research Symposium on 4/15/23
10. Publish research on Barometer Florida/Bob Graham Center Website

Larger Course Outcome Potential:

In addition to completing original research projects and publishing research results on the Bob Graham Center website, there is the potential for those who are interested and motivated to share their work more widely. Students- individually or collaboratively- may continue to work with the instructor to produce, for example, a policy statement related to the topic of AI in society or an article on ethics and AI, and publish their work online or in an academic journal.

COURSE OVERVIEW

The nature of the class activities, written assignments, and research project will be discussed in class. The research project design is the principal task toward which we will be building right from the start. Students may want to try to select an AI topic related to their major field of interest, since this assignment can (in principle) be used as the

foundation for future work. We will brainstorm and discuss more focused research topics related to the AI in Society theme in class, and all individual research plans should be approved by the instructor before you begin on your project.

Regular attendance is expected, as is active participation in class discussion and workshop activities. Although I will lecture on one subject or another (especially early in the semester) and there will be scheduled faculty guest lecturers, students are expected to be regular contributors. It is therefore critical for you to complete your assigned readings prior to class, and to be prepared to intelligently discuss them. Failure to attend class regularly, actively engage in discussions and workshop activities, and consistent lack of preparation will be reflected in your class participation grade.

Students are bound by the University of Florida's Student Code of Conduct. Anyone who commits an act of academic dishonesty, such as cheating on the exams or committing plagiarism on a written essay, will suffer appropriate sanctions and be referred to university authorities for further action.

CLASS MATERIALS

THERE ARE NO REQUIRED TEXTBOOKS FOR THIS COURSE. REQUIRED READINGS WILL BE POSTED IN CANVAS OR AVAILABLE THROUGH THE UNIVERSITY OF FLORIDA LIBRARY SYSTEM. ADDITIONALLY, READINGS WILL BE ASSIGNED IN ADVANCE OF GUEST LECTURERS BY FACULTY MEMBERS.

BASIC COURSE COMMUNICATION INFORMATION

Communication: The best way to communicate with the instructor is through Canvas messages or by email. For questions regarding graded work or course assignments, communication through Canvas inbox is preferable as all communication will be on record.

Office Hours: I am available for students to inquire about their grades, discuss weekly assignments, or chat about research methods or public opinion. I am available Tuesdays from 9:30 am - 11:00 am and Thursdays from 11:30 am - 1:00 pm, and by appointment. If the planned office hours do not fit your schedule, please email me to schedule an in-person or virtual meeting.

Email Response: If I do not respond to your email inquiry within 48 hours, please email me again. You are not "bugging" me with a follow-up email. I should respond to ALL emails within 48 hours.

Attendance: Class attendance is required and expected. You will need to fulfill your commitment and obligation to be in class and on time every day that class is held. Excused

absences are subject to my discretion and are based on university criteria of excused absences. Participation: Consistent, informed, thoughtful, and considerate class participation is expected. Participation grades are based on your overall contribution to the class. The participation portion of your grade for this class will be calculated based on your attendance and your participation during scheduled course times/activities. You will satisfy this requirement through in-class attendance and class discussion assignments. If you cannot attend class and participate, please inform me immediately and before the scheduled class meeting. I will work with you to come up with a solution.

Required Technology: To complete coursework this semester, you will need access to Canvas, a UF email address, Zoom, Adobe Reader, Microsoft PowerPoint, Microsoft Word, Microsoft Excel, and a high-speed internet connection. Other software programs that may be used in the class are accessible via UF Apps.

Note: You are NOT required to have any prior experience with or knowledge of GIS, data visualization, or artificial intelligence (AI).

COURSE REQUIREMENTS & GRADING STRUCTURE

1. PARTICIPATION/WORKSHOPS: 20%
2. MODULE BENCHMARK ASSIGNMENTS: 30%
3. RESEARCH PROPOSAL COMPONENTS: 25%
4. FINAL PROJECT PRESENTATION: 10%
5. FINAL REPORT: 15%

GRADED WORK DESCRIPTION

1. **Participation/Workshops: 20%.** Students are expected to attend class and participate in class discussions and workshops. Students are required to read and come to class prepared to discuss assigned materials during “workshop” sessions. During class workshop days, there will be group activities and hands-on work on research project components.

Tuesday: Lecture day. Lecturers will be given by myself and faculty guest lecturers. (This is dependent on faculty guest lecturers’ schedules. Some Tuesdays may include class activities and workshopping.)

Thursday: Discussion/Group Work/Workshop day. Students are expected to come to class ready to participate in the workshops/group work. Workshops include research topic brainstorming, drafting research questions, research design and data exploration, survey design, interview design, data visualization and analysis, etc.

You will be graded on the following:

- Attendance/participation
- Group discussion participation
- Workshops/Group work

The participation portion of your grade for this class will be calculated based on your attendance and your participation during scheduled course times/activities. You will satisfy this requirement through your in-class participation.

- 2. Module Benchmark Assignments (30%):** These assignments will consist of both individual and group activities based on module topics. They are intended to help explore the topic of AI in society and learn the research process. There will be a total of 5-7 of these assignments the majority of which may be completed in class workshops.

1. Research interests related to AI topic(s)
2. Identifying AI across disciplines/within own discipline
3. Research questions/avenues of inquiry activity
4. AI in society & ethical concerns reflection
5. Analyzing a research article
6. Identifying "good" vs bad "data" activity
7. Data analysis and visualization activity
8. Peer reviews (in-class project presentations)

- 3. Research Proposal Components (25%):** There are 5 research proposal assignments. The assignments are designed to guide you through writing a research paper proposal. Each assignment tackles a core component of conducting original research: research topic and question, literature review, theory development and hypothesis formation, data, methods and research design, results, and discussion and conclusions. You will submit each component (separately), and I will provide feedback. You are expected to apply my critique (from the individual assignments) to your final research proposal assignment—i.e., Final Projects.

1. Research Questions & Objectives
2. Research Proposal (Problem Statement, Theory, Hypothesis)
3. Annotated Bibliography
4. Literature Review
5. Research Design, Methods, & Data

- 4. Final Project Presentation: 10%.** Students will present their research projects at a Research Symposium hosted by the Bob Graham Center on April 15th.

5. **Final Project Report: 15%.** Students will submit their research project written report. Students will also prepare their projects for publication on Barometer Florida.

GRADING POLICIES AND GRADING SCALE

Grading in this class is consistent with UF policies available at [Grades and Grading Policies](#).

Policy on Late and Make-up Work: Please contact the instructor if you need an extension on an assignment. Acceptance of late work will be assessed on an individual basis. You are expected to communicate with the instructor regarding any issues completing work on time and reach out for assistance if you are having trouble with an assignment.

Grade Return Timing: Your graded work will be returned back to you within 2 weeks of submission, depending on the nature of the assignment (barring natural disasters, illness, travel, or internet issues).

Point Range for this Class:

Letter Grade	Range:	
A	100 %	to 94.0%
A-	< 94.0 %	to 90.0%
B+	< 90.0 %	to 87.0%
B	< 87.0 %	to 84.0%
B-	< 84.0 %	to 80.0%
C+	< 80.0 %	to 77.0%
C	< 77.0 %	to 74.0%
C-	< 74.0 %	to 70.0%
D+	< 70.0 %	to 67.0%
D	< 67.0 %	to 64.0%
D-	< 64.0 %	to 61.0%
F	< 61.0 %	to 0.0%

UF POLICIES SHAPING THIS COURSE

Contact Hours: "Contact Hours" refers to the hours per week in which students are in contact with the instructor, excluding office hours or other voluntary contact. The number of contact hours in this course equals the number of credits the course offers.

Accommodation for Students with Disabilities: *Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the [Disability Resource Center](#). This class supports the needs of different learners; it is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.*

Disability Resource Center (DRCAccessUF@ufsa.ufl.edu | 352-392-8565) helps to provide an accessible learning environment for all by providing support services and facilitating accommodations, which may vary from course to course. Once registered with DRC, students will receive an accommodation letter that must be presented to the instructor when requesting accommodations. Students should follow this procedure as early as possible in the semester.

Statement Regarding Evaluations: *Evaluations are part of our course. To ensure the highest quality of education, students are expected to provide professional feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Students will be notified when the evaluation period opens. Students can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at [GatorEvals Public Data](#).*

ADDITIONAL COURSE POLICIES AND INFORMATION

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please contact me.

UNIVERSITY POLICE

[UF Police](#) (352- 392-111 or 9-1-1 for emergencies)

CAREER CONNECTIONS CENTER

[Career Connections Center](#) (352-392-1601 | CareerCenterMarketing@ufsa.ufl.edu) connects job seekers with employers and offers guidance to enrich your collegiate experience and prepare you for life after graduation.

COUNSELING, HEALTH, AND WELLNESS

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352- 392-1575, or visit [U Matter, We Care](#) to refer or report a concern, and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the [Counseling and Wellness Center](#) website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need or visit the [Student Health Care Center](#) website.

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call: 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the [UF Health Emergency Room and Trauma Center](#) website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell](#) website or call 352-273-4450.

DEAN OF STUDENTS OFFICE

Dean of Students Office (352-392-1261) provides a variety of services to students and families, including Field and Fork (UF's food pantry) and New Student and Family programs

MULTICULTURAL AND DIVERSITY AFFAIRS

Multicultural and Diversity Affairs (352-294-7850) celebrates and empowers diverse communities and advocates for an inclusive campus.

OFFICE OF STUDENT VETERAN SERVICES

Office of Student Veteran Services (352-294-2948 | vacounselor@ufl.edu) assists student military veterans with access to benefits.

ONE.UF

ONE.UF is the home of all the student self-service applications, including access to:

- Advising
- Bursar (352-392-0181)
- Financial Aid (352-392-1275)
- Registrar (352-392-1374)

OFFICIAL SOURCES OF RULES AND REGULATIONS

The official source of rules and regulations for UF students is in the Undergraduate Catalog and Graduate Catalog. Quick links to other information have also been provided below.

- [Student Handbook](#)
- [Student Responsibilities](#), including academic honesty and student conduct code
- [e-Learning Supported Services Policies](#) includes links to relevant policies including *Acceptable Use*, *Privacy*, and many more
- [Accessibility](#), including the Electronic Information Technology Accessibility Policy and ADA Compliance
- [Student Computing Requirements](#), including minimum and recommended technology requirements and competencies

COURSE SCHEDULE

Week	Date	Topic	Readings	Assignments	Activities/Workshops
Week 1	Jan. 10	Civic Scholars Orientation Dr. Jacobs, BGC Director Course Introduction	Syllabus	NA	General Class Discussion & Introductions
	Jan. 12	Course Overview & Syllabus Review	See posted articles	Introduce Yourself Discussion (Canvas)	Course Questions & Research Interests Discussion
Week 2	Jan. 17	Intro to AI: What is AI?	See posted articles		AI in Society & Across Disciplines Discussion
	Jan. 19	AI in Society: Brainstorming Research Topics & Results of Class Poll	Articles posted under Module 1	Submit Group Topics of Interest- Part I	Research Interest Group Organization & Discussion
Week 3	Jan. 24	AI @ UF/AI & Society Interactions Dr. Jane Southworth AI in Society: Brainstorming Research Topics	Developing a model for <i>AI Across the Curriculum</i> (Southworth et al., 2021)		Research Interest Group Organization & Discussion
	Jan. 26	Intro to Interdisciplinary Research - Beginning the Research Process	TBD	Submit Group Topics of Interest- Part II	Research Topics Groups Organization & Discussion
Week 4	Jan. 31	Building Blocks of Scientific Research AI in the Public Sphere	TBD		
	Feb. 2	Intro to Research Design	TBD	Parsing a Research Article	Research Questions & Objectives Group Work
	Feb. 7	Intro to AI & Ethics	AI and the expert; a blueprint for the ethical use	Individual Topics of Interest	Ethics, Biases, & DEI (and AI) Activity

Week 5		Formulating Research Questions	of opaque AI (Ross, 2021)		
	Feb. 9	Ethical Concerns & Biases Related to AI Dr. Jasmine McNealy	Before the Algorithm, What's in the Imagination? (McNealy, 2022)	Research Questions & Objectives- Part I	Research Questions & Objectives Workshop
Week 6	Feb. 14	Intro to Research Design Quantitate & Qualitative Research	TBD		Research Questions & Objectives Workshop
	Feb. 16	Conducting Library Research & Writing a Literature Review	TBD	Research Questions & Objectives- Part II	Research Questions & Objectives Part II/Library Research Workshop
Week 7	Feb. 21	What Makes "Good" Data? Requirements & Sources	TBD		
	Feb. 23	Identifying Data Requirements & Sources	TBD	Research Proposal	Data Sources & Collection Activity
Week 8	Feb. 28	Methods in Data Analysis & Visualization	TBD		
	Mar. 2	Data Analysis & Visualization Cont'd	TBD	Annotated Bibliography	Data Analysis Workshop
Week 9	Mar. 7	Interpreting Results	TBD		
	Mar. 9	Research Implementation	TBD	Literature Review	Research Methods Workshop
Week 10	Mar. 14	Spring Break- No Classes!			

	Mar. 16				
Week 11	Mar. 21	Research Implementation	TBD		TBD
	Mar. 23	<p style="text-align: center;">No Class- Audrey at AAG conference in Denver</p> <p style="text-align: center;">*Individual work on research project</p>			
Week 12	Mar. 28	Research Implementation	TBD		TBD
	Mar. 30	Research Implementation	TBD		TBD
Week 13	Apr. 4	TBD	TBD		TBD
	Apr. 6	TBD	TBD		TBD
Week 14	Apr. 11	Research Project Work	TBD		
	Apr. 13	In-Class Project Presentations & Peer Reviews	NA	Peer Reviews	Project Presentations Peer Reviews
	Apr. 15	Graham Center Research Symposium	NA		

Week 15	Apr. 18	Writing a Publishable Research Article	NA	Apr. 18: Submit Final Project Presentation	
	Apr. 20				
Week 16	Apr. 25	Course Wrap-up & Next Steps			
	Apr. 27	No Class- Reading Day		Apr. 30: Deadline to Submit Final Project Report	