

# IDS2935: COMMUNITIES AND CLIMATE CHANGE

## COURSE DETAILS

Course Number: IDS2935

Credit Hours: 3

Semester: **fall 2024**

Class meeting time and location: This course is delivered asynchronously and entirely facilitated 100% online. An optional synchronous component for office hours will be delivered once each week beginning the second week at times determined by student availability.

## INSTRUCTOR

Stephen Mulkey, Ph.D.

Office Location: 621 Carr Hall

Email: Please use the Canvas Inbox Tool; Personal issues related to the course use [smulkey@ufl.edu](mailto:smulkey@ufl.edu)

Phone: 208.596.3234 – please use respectfully and protect my privacy

## OFFICE HOURS

Included during live synchronous evening meetings, and by appointment. Please contact me to schedule an individual online Zoom conference.

## COURSE WEBSITE

<http://elearning.ufl.edu/>

## COURSE COMMUNICATIONS

All e-mail correspondence to the course instructor should originate from Canvas, but e-mails of a personal nature may originate from your ufl.edu account. ***Put your full name in the body of the e-mail, and your course number in the subject line.***

When you have a question, check the following sources first to see if it is already answered, before e-mailing your instructor:

- Course Syllabus
- e-Learning announcements
- e-Learning Discussion Posts

If you still cannot find the answer to your questions:

- If it is a question specific to you (e.g., account or grade specific), send an e-mail to your instructor following the instructions above. Barring unusual circumstances, expect a reply within 24 hours (Monday through Friday). E-mails and e-Learning Discussion posts are checked at least once per day, but sometimes not more than that.

### **OPTIONAL RECOMMENDED TEXT**

*There are no textbooks required for this course.* The lectures and assigned readings are the primary sources of content. *The Climate Book (2023. Thunberg, ed.) is recommended, but optional.* There will be no assigned readings, but students are encouraged to use this book extensively as we progress through the course.

*The Climate Book 2023, Thunberg (ed.) Penguin as e-book or audio book.*

### **COURSE DESCRIPTION**

*This is a Quest 2 course that meets Gen Ed track B (Biological and Physical Sciences) undergraduate requirements. A grade of C or higher is required to receive Gen Ed B credit.*

Communities are the collection of citizens, neighbors, governing bodies, institutions, *and social media* where most people live their daily lives. The community is where the impacts of climate and ecosystem disruption are experienced, and it will be the front line of adaptation to these impacts. Forward looking community leaders seek to develop decision-making processes to use local and regional knowledge to respond to the impacts of climate change. Our global economic system and political divisions have left many people disconnected from their communities and living in relative isolation among

their neighbors. Re-establishing these human connections and developing alternative economies are prerequisites for mounting effective community responses to climate change.

This course provides an overview of anthropogenic climate change and helps students develop an understanding of local and regional resilience and adaptive responses to specific impacts of climate change. Impacts to be reviewed include extreme temperature, extreme precipitation, sea level rise, population migrations, food and water security, public health, disruption of ecosystem services, and disruptions of economy. Climate change will be presented from a holistic perspective that includes understanding of fossil emissions, anthropogenic disruption of ecosystems and the biosphere, and community-based adaptation. Students will review critical timelines for global efforts at mitigation and options for how communities can adapt and build resilience with respect to specific future scenarios. Those communities that have been dealing with climate variability and have a wealth of knowledge about how to adapt will be used for case studies. Case studies of adaptive responses by local and regional communities in Florida will provide the basis of group student projects. Students will choose from a variety of local and regional organizations to explore how these groups are responding to climate change.

### **COURSE GOALS AND/OR OBJECTIVES**

*By the end of this course, students will be able to:*

1. Describe the causes and processes of anthropogenic climate change.
2. Apply knowledge of how climate change affects critical human systems.
3. Analyze how community-based groups and non-governmental organizations are responding to climate change.
4. Describe how climate change affects your life now and is likely to affect your life over the coming decades.
5. Describe critical tools for mitigation and adaptation.

### **EXPECTATIONS**

This course has high standards for student creativity and scholarship. The schedule of graded assignments intensive and will require students to keep up. The outside readings

should be used to develop group projects and to clarify the lectures. The main points from required readings and media will be covered in the lectures, in reflection exercises, or as questions for classroom discussions. Each student is solely responsible for reading and following the instructions, guidelines, and schedules in this syllabus, on the course webpage, or announced in class. Independent research by students will be a significant portion of assessment. Not having read or followed the instructions will not constitute an excuse for missing an assignment, exam, or other assessment. Please set your preferences in Canvas so that you receive timely notifications of course announcements and other information. Check Announcements in Canvas regularly as e-mail notifications from Canvas do not always go through. The amount of effort including class time is estimated to be 12 hours per week.

### **A PROMISE TO YOU**

If you regularly review the recorded lectures, turn in the assignments on time, and interact with me and your classmates, you will do very well in this course. The amount of material can be daunting. I will help you as you work your way through the modules. Please keep me informed of your individual progress and alert me if you need help. Evening office house will be held synchronously for one hour on an evening to be determined by a survey of the class to find the best times. I will start office hours at the scheduled time, and I may review a selected topic from the lecture or news. If no one shows up, I will terminate the session after 10 minutes.

### **ASSIGNED READINGS, MEDIA, AND WEBPAGES**

Materials will be assigned as indicated as posted to the course website by modules through provided links. Your use of external media will be assessed through a few short-answer quiz questions. Module comprehension quizzes will be drawn mainly from lectures and will include some materials from posted readings, media, and webpages. The main points from the assigned readings and media will be included in the lectures or as questions for classroom discussions. You will be guided to use these materials for group projects and clarification of lectures.

### **ADDITIONAL RESOURCES**

Additional readings are included through the Canvas pages for each week through the [UF Library](#), as pdf downloads directly from your course pages, or available directly from

the publisher website. If alternative versions of these resources are needed for any reason, please contact your instructor and accommodations will be provided.

*IMPORTANT: Use [UF VPN](#) to connect via the UF net if you are not on campus and avoid the cumbersome library proxy service.*

## TYPES OF READINGS

- (1) **External required readings and media.** These are papers credible science sources that you are required to review. These will be provided in two forms – a direct link to the publisher website or a pdf download. A short-answer quiz will assess your use of these readings and media. ***IMPORTANT:** Access to the publisher website will usually require the use of [UF VPN](#). This registers your computer with the publisher as part of the subscription package purchased by the University of Florida.*
- (2) **Discussion readings.** These are papers from credible science sources that form the basis of your discussion assignments. These will be provided in two forms – a direct link to the publisher website and a pdf. You will required to provide a narrative response to the posted reading and narrative content-meaningful response to two of your peers.
- (3) **Literature.** These are papers from the peer-reviewed literature that form the basis of lectures. **They are made available as links to the published journal articles and official reports strictly for your collection. They are not required readings.** You will not be directly tested over these papers. Materials from the lectures and required readings will form the basis of your essay exams.

## COURSE POLICIES

### ASSIGNMENT/QUIZ/EXAM DATES/POLICIES

As part of IDS2935 you are required to complete online assignments. If at any time you have questions about these assignments, please contact me. A schedule will be posted on e-Learning with the due dates for each assignment. All assignments must be completed by the stated due date and time for credit. Extensions will not be given because of technical or personal issues that occur within 24 hours of the assignment

deadline. Many assignments will also have a set time limit, so make sure you have time to devote to that assignment before you begin. You are expected to work by yourself on the assignments and cheating will not be tolerated. No course that I teach will *ever* use *Honorlock* or similar software to monitor exams. These tools are invasive and foster distrust.

## **MAKE-UP POLICY**

Requirements for class attendance, make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the [Undergraduate Catalog's Academic Regulations](#).

## **DUE DATES**

**All assignments are due by 11:59 P.M. (ET) on the date specified in Canvas.**

**Assignments and due dates will be available within each module.** No assignments will be accepted after the due date without my explicit approval. You are advised to make back-up copies of all work and submit your work early to avoid technical problems.

## **REQUIRED STUDENT TECHNOLOGY**

This course will involve video conferencing and online engagement. To participate in the course, you must have:

- (1) a stable internet connection capable of supporting video and audio
- (2) laptop or another computer with internet capability. *Chromebooks will not work for some aspects of the course*
- (3) camera and microphone capability on your computer or as add-ons

## **ZOOM CONFERENCING**

Zoom is a video conferencing tool that allows for screen sharing and real-time communication at a distance. It also allows for synchronous communication to be recorded for later viewing. View the [Zoom Privacy Policy here](#).

I will use Zoom for conferences to meet with you and discuss your plans for your project and report. Further instructions will be provided in Canvas.

Peer presentations for your Project will be recorded and shared using Zoom conferencing. You may also use Google Groups, so long as the final product is available

for all in the class to view. For guidelines on using Zoom, please view the project assignment guidelines.

### **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 semesters, but you will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

### **COMMERICAL SALE OF COURSE LECTURES**

The content presented in the class is the property of UF and may not be duplicated in any format without permission from UF and may not be used for any commercial purposes. Students violating this policy may be subject to disciplinary action under the UF Conduct Code.

### **USE OF COURSE IMAGERY AND MULTIMEDIA**

No part of the PowerPoints or other instructional content posted on Canvas may be reproduced, shared, or posted in any form outside of the class without permission in writing from Stephen Mulkey.

### **USE OF AI IN DISCUSSION POSTS AND ESSAY EXAMS**

Note that AI has certain limitations that will not allow you to pass a long-format essay exam in this course. These limitations will also fail when applied to Discussion boards and Reflection assignments. For example, recent research in the literature is not correctly represented in AI generated answers. AI is unlikely to give appropriate responses that reflect your personal experience. The following guidelines will help you decide how and when to use AI. Please do not use AI as a means of cheating. I think you will find that it is more effort than it is worth.

If I find that you have used generative AI on any key assignments in the course, you will get no points for that assignment. If I find that you violate this policy more than once, I will report you as in violation of the UF Honor Code and appropriate consequences will ensue.

**The use of AI tools (e.g. ChatGPT, Dall-e, etc.) is permitted for:**

- Brainstorming and refining your ideas

- Fine tuning your research questions
- Drafting an outline to organize your thoughts
- Checking grammar and style.

**The use of AI is *not* permitted for:**

- Impersonating you on Discussion boards
- Impersonating you on Reflection assignments
- Impersonating you on long-format essay exams
- Writing sentences, paragraphs, or papers to complete assignments

## UF POLICIES:

### UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc](http://www.dso.ufl.edu/drc)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### UNIVERSITY POLICY ON ACADEMIC CONDUCT

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 honesty 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 (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies several 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 consult with the instructor in this class.

### CLASS DEMEANOR OR NETIQUETTE

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions, and chats. [See the UF Netiquette Guide.](#)



Although the scientific consensus is essentially 100% on its basic features, climate change remains a politically charged topic. ***Regardless of politics or background, we will assiduously adhere to the most validated peer-reviewed science.*** Base your interactions on this science and the direct conclusions that are logically indicated by the science. The authorities that are entrusted to make these conclusions are the IPCC and other UN agencies, the USGCRP and its partner US agencies, and the major government-sponsored research groups throughout the developed world. ***Please avoid using the gray literature and reports in popular media except where it is defensibly based on validated peer-reviewed science and recognized authority.***

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html>

## GETTING HELP

For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

- <http://helpdesk.ufl.edu>
- (352) 392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups due to technical issues must be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

- *U Matter, We Care*: If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit U Matter, We Care website 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.
- *University Police Department*: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).
- *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.

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

## GRADING POLICIES

### METHODS BY WHICH STUDENTS WILL BE EVALUATED AND THEIR GRADE DETERMINED:

**EXAMS (25%):** You will have two Midterm Exams in this course. Both will be long-format essay based, wherein you will select from a list of topics and respond according to the prompts provided. You will be allowed 200 minutes to answer four long-format essay questions. A list of eight possible essay questions will be distributed at least two weeks in advance of the exam date. The four exam questions will be chosen from these questions. Preparation for the exams should be based on review of the possible questions and an outline of your answer for each. You may have access to your outlines during the timed exam. Exams are open book. The internet and provided course resources may be used to develop your answers. If you find that you are finished well before the time is up, I suggest that you consider that you may have not developed adequate essays for each of your answers.

Your answers must be in your own words and must reflect scholarship as well as comprehension and synthesis. When you can, cite a reference in the text of your answer (as author and date only), but complete citation is not necessary. You will not be assessed on use of language or grammar, but clarity and proper use of scientific terminology are important. The grading rubric is included in Canvas. You should be aware that answers to these questions should be fully developed with sufficient detail to demonstrate your understanding of literature and the lectures. *Answers to the exam questions are not brief essays that you may have been asked to provide in other courses.*

**TERM PROJECT (30%):** Groups will be assigned to a theme for development. Each member of the group will select a community organization or NGO relevant to that theme for development of an individual report and individual presentation via zoom or other class-accessible multimedia platform. All scholarship and reporting will be conducted by an individual student.

**The purpose of the group is to divide the class into themes and for the group leader to ensure that no two students select the same organization or activity.**

- Part 1: Submission topic by each student within a theme group.
- Part 2: Submission of topic description of your chosen topic.
- Part 3: A draft annotated bibliography (a minimum of 5 references)
- Part 4: A final annotated bibliography (a minimum of 10 references)
- Part 5: Presentation (recorded via Zoom) given by each of you on your chosen aspect of your group theme.
- Part 6: Submit final project report written by each of you in their own words drawing when appropriate on the collective literature from the group for your topic.

**QUIZZES (20%):** Module Quizzes provide you with an opportunity to apply what you have learned in a group of modules in the course. You are encouraged to seek out correct answers from the module content and activities. The module quizzes should be used to gauge and assess your comprehension of course materials and concepts and prepare for your Midterm and Final Examinations.

- Quizzes have 10 multiple choice questions and two short answer questions.

- The time limit is 60 minutes, and you will have only two attempts for each quiz. You may use your notes.
- After you have submitted the quiz, your graded responses along with the correct answer will be available for the multiple-choice part of the quiz.

Please submit the quiz by the due date. Specific due dates are listed in Canvas, and all quizzes are due by **11:59 PM (ET) on the specified due date.**

Please allow five business days from the due date for quiz feedback on free-response questions. Instructor comments will appear on the right side. Contact the instructor via the Canvas Inbox Tool to clarify any questions or quiz responses.

**DISCUSSIONS (15%):** There are several modules with discussion forums. These are opportunities to extend what you have learned in the same module. Students are expected to adhere to professional etiquette/netiquette standards as outlined above (see UF Policies) in all posts and to engage in constructive dialogue. Posts are expected to be thoughtful, detailed responses (i.e., "yes," "no," "I agree," or "I disagree" answer is not sufficient).

You are expected to contribute your thoughts about one of the topics available in each module as indicated in the Assignments portion of Canvas. Each discussion is worth 10 points. You will receive 6 points for your original and thoughtful contribution, and 4 points for responding to at least two of your peers posts. See the rubric attached to each discussion for additional grading criteria.

In most cases, discussions require some research or reading before initial post. Follow-up posts are typically required. For discussion forum assignments, **timeliness is critical**, and due dates should be strongly adhered to. Please check the course schedule for the specific due dates.

**REFLECTIONS (10%):** Periodically you will be asked to provide a reflection based on your experiences and research of relevant credible sources. These are long-format essay questions.

**READINGS AND MEDIA (5%):** Each module has five external readings and/or media. You will be asked to complete a short quiz on these materials. Each question on the quiz will request a short-answer essay format.

## **COURSE GRADING**

Item	Percentage Weight
Exams (Midterm and Final)	18
Term Project	25
Module Quizzes	15
Discussions	15
Reflections	15
Readings and Media Quizzes	12

#### **GRADING SCHEME**

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%

E < 61.0 % to 0.0%

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

**LETTERS OF RECOMMENDATION:** Please do not request a letter of recommendation unless you have cultivated a professional relationship with me. Getting an A in my course is not sufficient. I need to know much more about your professional development before I can write a meaningful letter. If you are a beginning college student I strongly recommend that you begin cultivating your possible referees as soon as possible.

## COURSE SCHEDULE

Module	Topic	Activity	Due Dates
	Orientation and syllabus	Orientation video and quiz	ASAP for access to course
1	Climate change causes and processes	Survey for live office hour time	25 August
		Discussion 1 Readings & media quiz Quiz 1	1 September
2	Climate change impacts	Discussion 2 Readings & media quiz Quiz 2  Project part 1 – topic submission  Midterm study guide available	8 September

3	Models, emissions, carbon cycle	Discussion 3 Readings & media quiz Quiz 3 Project part 2 Description of topic Reflection 1	15 September
4	Climate change and public health	Discussion 4 Readings & media quiz	22 September
5	Risks and risk management	Discussion 5 Readings & media quiz Reflection 2 Project part 3 – draft annotated bibliography	29 September
6	Food	Discussion 6 Readings & media quiz Quiz 4	6 October

7	Energy systems	Discussion 7 Readings & media quiz Reflection 3	13 October
8	Community-based adaptation	Midterm exam 1	17-21 October
		Discussion 8 Readings & media quiz Quiz 5	20 October
9	Community case studies	Discussion 9 Readings & media quiz  Midterm II study guide available	27 October
10	Geoengineering	Discussion 10 Readings & media quiz Quiz 6  Project part 4 – final annotated bibliography (submit and post for Theme Group)	3 November



11	Climate justice	Discussion 11 Readings & media quiz Reflection 4	10 November
12	Climate activism and mobilization	Discussion 12 Readings & media quiz Project part 5 – presentation recording submitted	17 November
13	Economics Rules of engagement	Discussion 13 Readings and media quiz	24 November
		Second midterm exam	1-4 December
Final report		Project part 6	10 December

**Disclaimer:** This syllabus represents my current plans and objectives as of 23 August 2023. As the semester progresses those plans may need to change to enhance the class learning opportunities and meet logistics. Such changes, communicated clearly, are not unusual and should be expected.

## ABOUT STEPHEN MULKEY

“Stephen Mulkey is an environmental scientist dedicated to developing undergraduate and graduate programming to build society’s capacity for environmental mitigation, adaptation, and resilience.

Mulkey was the president of Unity College in Unity, Maine from 2011 through 2015. His leadership and forward-looking vision resulted in Unity College being the first college in the U.S. to divest its endowment from the top 200 fossil fuel companies, and the first college in the U.S. to adopt sustainability science as the framework for all academic programming. Mulkey believes that higher education has an ethical duty to prepare generations of graduates for the extreme sustainability and climate change challenges of this century. During and after earning his PhD at the University of Pennsylvania, he spent over twenty years as a tropical forest ecologist affiliated with the Smithsonian. Mulkey has served as tenured faculty at three doctoral granting universities, as science advisor to the state of Florida, and as a program officer at the National Science Foundation.”

You can see more of Dr. Mulkey’s writings at [environmentalcentury.net](http://environmentalcentury.net)

## SOURCES OF INFORMATION

### *Journals\**

[Proceedings of the National Academy of Sciences US](#)

[Nature](#)

[Nature Communications](#)

[Science Advances](#)

[Scientific Reports](#)

[Earth’s Future](#)

[Nature Climate Change](#)

[Sustainability Science](#)

[Ecology and Society](#)

[Global Environmental Change](#)

[Climatic Change](#)

[Climate Risk Management](#)

\*All are freely available if accessed from UFL.EDU or through UF Library as proxy. Use UF VPN to avoid UF Library

### *Sources of Literature Reviews and Assessment*

US Climate Resilience Toolkit. <https://toolkit.climate.gov/tools>

US Global Change Research Program overview of resources <https://www.globalchange.gov/browse>

US Global Change Research Program report on human health <https://www.globalchange.gov/browse/reports/impacts-climate-change-human-health-united-states-scientific-assessment>

UN Intergovernmental Panel on Climate Change (IPCC) <https://www.ipcc.ch/> and specifically <https://www.ipcc.ch/working-group/wg2/>

UN Development Program for Climate Change Adaptation. <https://www.adaptation-undp.org/resources/featured>

ICLEI (International Council for Local Environmental Initiatives) USA. Local Governments for Sustainability. <http://icleiusa.org/>