

# ENV 506 – Sustainability Science

## SYLLABUS – Spring 2023

*Last updated March 28, 2023*

**Professor: Dr. Jess Vogt** (*she/her*) – you can call me “Jess” or “Dr. Vogt,” whichever you prefer  
**Email:** [jess.vogt@depaul.edu](mailto:jess.vogt@depaul.edu) or [jessica.m.vogt@gmail.com](mailto:jessica.m.vogt@gmail.com)  
**Call/Text:** (920) 850-2016

**Class:** Wednesday evenings, 5:45-8:45 pm, McGowan South 401

**Office Hours:** None specifically scheduled but I am happy to meet with students one-on-one or in groups via Zoom on Monday, Thursday, or Friday; please email me to schedule a time.

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### ABOUT THE PROFESSOR

Dr. Jess Vogt is an Associate Professor in the Department of Environmental Science & Studies at DePaul University. She teaches courses in sustainability science, urban forestry, and mixed methods research. She has a Ph.D. in Environmental Science, a Master’s of Public Affairs in Sustainability, and a M.S. in Environmental Science, all from the School of Public and Environmental Affairs at Indiana University (Bloomington, Indiana). She earned her Bachelor of Arts degree with majors in Biology and Environmental Studies from Lawrence University (Appleton, Wisconsin). Jess is active in the urban forestry professional community, serving as Chair of the Science & Research Committee of the International Society of Arboriculture from 2016-2021, and was an Associate Editor for the journal *Urban Forestry & Urban Greening* from 2015-2020. In 2018, she was awarded the Early-Career Scientist Award from the International Society of Arboriculture. She also serves on the Urban Forestry Advisory Board for the City of Chicago. At DePaul, Jess runs LUFA, the Lab for Urban Forestry in the Anthropocene. LUFA does research at the intersection of urban forestry and sustainability science, examining how trees and urban greening activities can make cities more environmentally sustainable as well as livable for people. You can find more information about LUFA research as well as opportunities for students on our website: [www.lufa-depaul.org](http://www.lufa-depaul.org). Jess, her husband Paul, and their two children live in West Ridge, Chicago. In her spare time, Jess enjoys reading, baking sourdough bread, and singing with the C21 women’s ensemble.

### Communication Philosophy:

In order to make this a successful a learning experience for all of us, I am available to communicate with students via the following methods:

- **Q&A Discussion Forum on D2L:** If you have a question that might be of interest or relevant to the entire class (about a particular assignment, a term in a reading you don’t understand, or anything else related to the topic or content of this class), please post to the Q&A Discussion Forum on D2L and I will answer (or your classmates’ are welcome to answer).

- **Email me** ([jess.vogt@depaul.edu](mailto:jess.vogt@depaul.edu) or [jessica.m.vogt@gmail.com](mailto:jessica.m.vogt@gmail.com)) whatever question you have (if you cannot answer your own question using the Syllabus or through poking around D2L, particularly the Q&A Discussion Forum), and I will do my best to respond to your email within 48 hours. Feel free to email me again after 24 hours to prompt me to reply and bump your question to the top of my inbox.
- **To schedule an appointment to talk one-on-one** over the phone or Zoom, email me suggesting 3 times you are available and I'll do my best to reply promptly so we can get something on our calendars. (Mondays, Thursdays, and Fridays are best for meeting this quarter, as my Tuesdays and Wednesdays on-campus are full with obligations) and I am working remotely all three days.

## COURSE INFORMATION

This course aims to orient students to the problems of the 'Anthropocene' – a new geologic epoch characterized by climate change, increasing human population, pollution of air, water and soil, overuse of natural resources, and underserving of human needs. This course will help students think about these challenges through the discipline of 'sustainability science,' and build 'systems thinking' skills we can use to advocate for solutions that contribute to a positive future.

### Learning Outcomes:

By the end of this course, students will: (*Key words italicized.*)

1. Be able to explain how human activities have caused the planet to enter the *Anthropocene*, an era of unprecedented *climate crisis*, in which Earth's *planetary boundaries* are being exceeded, human needs or *social foundations* are not being met.
2. Utilize *systems thinking skills* (*a la* Meadows 2008) to:
  - a. Recognize *systems archetypes* in a variety of everyday contexts and with respect to current environmental problems;
  - b. Assess how knowledge of systems archetypes can be used to solve the biggest sustainability challenges and create *systems transformation*; and,
  - c. Apply systems archetypes to generate solutions to an environmental problem you are passionate about.
3. Be able to explain the systems thinking logic behind the "*five turnarounds*" (*a la* Dixon-Declève et al. 2022) necessary for generating a sustainable future where humans thrive within Earth's planetary limits.
4. Embrace the full range of *emotions* you may have about the climate including *eco-anxiety* and *eco grief*, and find a way to use these feelings to contribute to a flourishing future for yourself, your communities, adjacent communities, and the planet.

## COURSE MATERIALS

**Required Books:** E-books and used versions of all of these books are widely available.

- Wray, Britt. (2022). *Generation Dread: Finding Purpose in an Age of Climate Crisis*. Alfred A. Knopf Canada/Penguin Random House: Toronto, ON, Canada. 288 pp. ([Bookshop link](#))
- Dixon-Declève, Sandrine; Gaffney, Owen; Ghosh, Jayati; Randers, Jorgen; Rockström, Johan; Stoknes, Per Espen. (2022). *Earth For All: A Survival Guide for Humanity. A Report to The Club of Rome*. New Society Publishers: Gabriola Island, BC, Canada. 196 pp. ([Bookshop link](#))
- Meadows, Donella H., Wright, Diana (ed.). (2008). *Thinking in Systems: A Primer*. Chelsea Green Publishing: White River Junction, VT. 218 pp. ([Bookshop link](#))

### Additional Required Content:

In addition to chapters from the books above, we will consult additional content, including but not limited to selections from the primary and secondary scientific literature, popular science articles, selections from other books, relevant news items, etc. **All additional required content will be posted in PDF form or hyperlinked from the Weekly Modules inside D2L.**

**A note about assigned scientific articles:** We will be reading a lot of scientific literature in this class. **If you develop a method to become comfortable reading and annotating scientific papers as soon as you can, the reading for the quarter will be much easier.** You might print the articles and heavily annotate (underline + notes in the margins or on post-its) the paper copies, or read electronically and take notes in a Word document, or use a PDF annotating software to read and take notes electronically on a computer or tablet, or any other method of closely reading and taking notes on each article so that you have these notes to consult in engaging with the class Discussion forum and on assignments.

### Course Technology – D2L:

The [D2L site](#) for ENV 506 will be our virtual home for this class. May I direct your attention to the following components:

- **Content:** Inside Content, you will find the following major Modules: Syllabus & Assignment Guidelines.; Weekly Modules (where most of the action will be – see “Weekly Modules” below); Writing, Reading, Citing, Speaking Tips; and Online Student Success resources.
- **Submissions:** where major assignments will be submitted.
- **Discussions:** where a lot of class interaction will take place; see Discussion Forums below for more details, as well as the individual guidelines for each type of discussion post found in Syllabus & Assignment Guidelines.

**IMPORTANT:** I will send class-related announcements via D2L’s News feature. These messages will appear on your [D2L homepage](#) but also, if you set the settings properly, D2L will send a copy to your email address. **Please make sure your preferred email address is in the D2L system.**

D2L will default to sending things to your DePaul email. Click on your name/picture in the upper left of D2L and go to Notifications to determine how and when you get notifications from D2L.

### **Weekly Modules:**

Each week of the quarter, **the content and agenda for the week will all be described and linked inside the Weekly Modules in Content on D2L.** Prepare for each week of class by clicking on “Weekly Modules” and then on the name for that module (for example, “Week 1 – Course overview, Climate anxiety”) from the Table of Contents along the left in D2L. Usually, there will be the following components in each module:

1. **A read/watch list**, including textbook chapters, posted PDFs of scientific literature or white papers, the occasional video, or other assigned content;
2. **A PowerPoint presentation** (to be used during the class meeting; this may not be posted until immediately before class time but will be available after);
3. A link to the **Reading Response Discussion**, in which you are required to post your own 300-500-word integrative response to the week’s materials for 8 of the 10 weeks of the quarter;
4. *Any additional assignments due or optional material for the week.*

Each week, the specific tasks/to-dos will be clearly listed in the main Weekly Module information, with the materials in the module posted in the suggested order in which you should encounter them. Thus, you can use the forward and backwards arrows within D2L to proceed through the course each week.

**You should complete the readings/videos and post your Reading Response post for each week before class time on Wednesday evening (5:45 pm) each week.**

## **COURSE EVALUATION & ASSIGNMENTS**

### **Final Grade:**

Your final grade in the course will be based on a combination of the following:

- **25% – Written Reading Responses** (completed for at least 8 of 10 weeks, your choice, i.e., your 2 lowest scores dropped; posted to Discussions before class time)
- **20% – In-Class Participation** (each class is worth 2% of your grade and there is a rubric available for how participation will be graded – if you are unable to participate in a class for any reason, please contact Jess for an alternative assignment to make-up the points)
- **20% – Paired Planetary Boundaries Presentations** (in pairs as assigned; to be presented Week 4 in class)
- **35% – Final Paper** (topic of your choice; due end of Finals Week)

### **Point Scale:**

The following point scale will be used to assign letter grades: A (92%-100%), A- (90%-91.9%), B+ (88%-89.9%), B (82%-87.9%), B- (80%-81.9%), C+ (78%-79.9%), C (72%-77.9%), C- (70%-71.9%), D (60%-69.9%), and F (0%-59.9%).

## **In-Class Participation & Reading Responses:**

The heart of our class will be in-class discussions of (and activities related to) the assigned readings and/or videos for each week. This is when where we will interact as a class and discuss the ideas, concepts, and controversies of sustainability science, and practice systems thinking. **Your weekly participation in class is required – your grade is based in part on you being an active participant in this dialogue part of the class. You are valued in this class.** Your participation is crucial to not just your own success in the course: vibrant class discussion is nonetheless a group effort, and your part of this group, and your presence and voice matter. Everyone brings something to offer to the class, whether it is personal experience, insight into readings, or a unique perspective.

The Reading Responses you'll prepare in advance of class will make sure we all come to class prepared for discussion – that is, not only having read the assigned material, but also considered the interconnections between the selections, etc. You will post your Reading Responses to the appropriate D2L Discussion board in advance of class so that we can read each other's reactions to and questions about the readings. **Detailed guidance and expectations for the Reading Responses is provided separately on D2L in the Syllabus & Assignment Guidelines Module inside Content.** You might consider subscribing in Digest form to this Discussion Forum, since getting daily emails with others' posts may remind you to post. [See more information on how D2L Discussions work here.](#)

## **Additional Notes on Assignments:**

- **There is a general [Q&A Discussion Forum](#) for asking questions** about things in the class and the instructor (Jess) or another student (feel free to answer each other's questions if you can) will answer. If your question is applicable to all students, this is the preferred method of asking, rather than email. You can post anonymously in the Q&A Discussion Forum only. You should subscribe to this Discussion Forum.
- **A note on citations:** Citations to sources should be used early and often in all assignments unless it's specified that they are not necessary. See the very, very important section below (highlighted in a garish green color in the online version of this Syllabus).
- **A note on late assignments:** Late assignments may be accepted if you communicate with me about your desire for an extension. Typically, I am willing to negotiate extensions with students who ask courteously and respectfully. I do appreciate it if you can ask before the deadline, but understand that this may not always happen. Repeated requests for extensions may not be granted unless you proactively communicate with the instructor about your needs and accommodations for this class.
- **A suggestion for writing discussion posts:** D2L does not save your discussion posts until you click "Post" and even then if you have an internet blip during the posting, you will lose your work. Therefore, **I strongly suggest that you draft all discussion posts in a Word or Google Doc first and then copy-paste to D2L Discussions.**
- **Working together on assignments:** For almost all of this course's content, I encourage you to work together to review and discuss material, and complete the work of assignments. While the final product you turn in for every assignment (except the Planetary Boundaries

Presentation), discussion post, etc. should be your own work, you may discuss with your classmates. Be advised that I will be running all your work through TurnItIn.com, however, so if you turn in work that substantially duplicates someone else's work – either in whole or in part – I will notice and reserve the right to file an Academic Integrity violation. See Academic Integrity below for more information.

## ADDITIONAL COURSE POLICIES

### **Academic Integrity:**

DePaul University is a learning community that fosters the pursuit of knowledge and the transmission of ideas within a context that emphasizes a sense of responsibility for oneself, for others and for society at large. Violations of academic integrity, in any of their forms, are, therefore, detrimental to the values of DePaul, to the students' own development as responsible members of society, and to the pursuit of knowledge and the transmission of ideas. Violations include but are not limited to the following categories: cheating; plagiarism (*incl. self-plagiarism*); fabrication; falsification or sabotage of research data; destruction or misuse of the university's academic resources; alteration or falsification of academic records; and academic misconduct. Conduct that is punishable under the Academic Integrity Policy could result in additional disciplinary actions by other university officials and possible civil or criminal prosecution. Please refer to your Student Handbook or visit Academic Integrity at DePaul University ([academicintegrity.depaul.edu](http://academicintegrity.depaul.edu)) for further details.

**For this course, if you do violate academic integrity in part of any assignment – no matter how small the violation – I reserve the right to give you a 0 on the assignment, and possibly fail you in the course and report the violation to the appropriate DePaul authorities.**

### **Citations:**

For all written work completed for this class you should be sure to consult sources (reading and other materials assigned for this class or additional sources you find on your own) and to properly cite these sources in your written work. **In Discussion Posts, if you are citing something assigned for class, please just use an appropriate author-year in-text citation; no formal "works cited" is necessary. If you're citing something not assigned for class that you found on your own (esp. for the What's Happened Since? assignment), use both in-text citations and a works cited section at the end of the document (paper, PowerPoint, etc.).**

### **Citation FAQs...**

- **When do I need to cite a source?**

In short, any time you consult or use information from any source, you need to cite it. Additionally, any piece of information that is beyond what might be considered "general knowledge" needs a citation to a source. This means you should cite all facts and figures, but also any general ideas you got from other sources. **Note that you do not have to directly quote a source in order to necessitate citing it (and indeed, quotations are strongly**



*discouraged* in scientific writing and for this class). See this article about when to cite: <https://undergraduateswrite.com/2019/06/21/citing-sources-when-do-i-have-to-cite/>

- **How do I cite sources?**

I've provided a "[Citations guidance](#)" document to you (posted to D2L in Content >> Writing, Reading, & Citing), which contains some basic, partial information for a few common types of scientific sources, but is not an all-inclusive reference for how to properly cite all sources you might encounter for this course. **If you've used MLA format in classes before, be advised that MLA is *\*not\** a proper citation formatting system for scientific purposes.** I recommend either using APA or Chicago style. The Purdue OWL website (<https://owl.english.purdue.edu/owl/>) is an excellent reference for how to properly cite sources if you're new to this.

**A note about online citation auto-formatting widgets & citation management software** (e.g., Endnote): *Please, please, please do not only use an online citation generator to auto-format your citations. If you do use an online tool, please double check its work and check for consistency across citations.* If you're in the market for a citation management software, something like Endnote or Mendeley can work very. But recognize that these citation management software still require the user (you) to double-check that all the information for a source is entered properly before their copy-paste functions will work accurately. *Be warned, incorrect in-text citations or improper Literature Cited references are major pet peeves of mine when I grade written work, but I am more than happy to help you learn how to properly cite sources if you're new to this game.* It's a relatively easy to master and tremendously valuable skill.

## **Writing Center:**

I strongly recommend you make use of the Writing Center throughout your time at DePaul. The Writing Center provides free peer writing tutoring for DePaul students, faculty, staff, and alumni. Tutors work with writers at all stages of the writing process, from invention to revision, and they are trained to identify recurring issues in your writing as well as address any specific questions or areas that you want to talk about. Visit [www.depaul.edu/writing](http://www.depaul.edu/writing) for more information. They can also help you with academic integrity and citations questions.

## **Technology Policies:**

### ***Technological Competency***

As graduate students, I expect that you are minimally competent using the basic features of a computer. This includes but is not limited to the following basic tasks:

- Opening, reading, editing, saving, and converting/exporting files in commonly used software programs:
  - Word processors (Microsoft Word, Google Docs, Apple's Pages);
  - Slide/presentation makers (Microsoft PowerPoint, Google Slides);
  - Spreadsheets (Microsoft Excel, Google Sheets); and
  - PDF readers (Preview on Macs, Adobe Acrobat on PC or Mac).
- Finding and viewing websites and downloading/uploading files using an internet browser (on a computer at minimum, but also ideally on a tablet or mobile device)

- In particular, I assume that you know how to view, download, save, retrieve, and upload files from D2L, including changing file formats (from Google Docs to Word or PDF for example).
- *All documents turned in via D2L Submissions should be in PDF or Microsoft Word form only. If I cannot open or read your file, I will not grade it and you will get a zero. If you need help converting from another word processor program (e.g., Pages, Google Docs) to PDF format, please let me know; I'm happy to assist.*

These skills are crucial in this and every graduate course (and for your future jobs). The DePaul Genius Squad (<https://offices.depaul.edu/information-services/support/Pages/genius-squad.aspx>) may be a good place to ask for help if you don't know how to do any of the tasks listed above. I'm also willing to help you, but I must confess to being a lifelong Mac user so I might not be much help to PC users.

It would also be helpful if you are comfortable reading and annotating (underlining, highlighting, making notes on) PDF documents on a computer or tablet (or if not electronically, on printed copies). You will be expected to have read assigned material in detail and taken notes on the important points, key questions you have, etc., and class discussions will go much better if you have access to both the assigned reading and your notes during class time. If you're doing all your reading for class on a computer or tablet, you should get used to annotating and taking notes on the computer or tablet. Here's a good source on how to make annotations on e-books, PDFs, websites, and more: <https://www.makeuseof.com/tag/annotations-guide-and-tools/>

### ***Statement on Digital Access and Digital Equity***

Digital devices (like laptops and smartphones) are becoming increasingly important to success in university. In this course, you will need digital devices to access readings, complete and submit written assignments, undertake certain activities via D2L, and coordinate with other students. I recognize that some students are unable to afford the cost of purchasing digital devices and that other students rely on older, more problem-prone devices that frequently break down or become unusable. I also recognize that those technology problems can be a significant source of stress for students. Given those challenges, ***I encourage students to be aware of the many technology-related resources that DePaul University provides***, including:

- A variety of free or low-cost software for personal computers, including Office 365 (Word, PowerPoint, Excel, Adobe, etc.): <https://offices.depaul.edu/information-services/services/Software/Pages/Software-for-Personal-Computers.aspx>
- Office 365 features, including free nearly-unlimited cloud storage through Microsoft OneDrive: <https://offices.depaul.edu/information-services/services/Software/Pages/Microsoft-Office-365-Features.aspx>
- Access to free technology help through the DePaul Genius Squad: <https://offices.depaul.edu/information-services/support/Pages/genius-squad.aspx>

If you experience a technology-related problem that interferes with your work in this course that cannot be resolved through the above resources, please contact me. This will enable me to assist you in accessing support. *However, please note that you are expected to save backed up versions of your work (Microsoft OneDrive – the cloud service available to DePaul students for free, mentioned above – works very well and if you need help in learning how to set it up, let me know).*



*Thus, requests for accommodation on late or missed assignments due to a crashing computer (or similar) will not be considered.*

### **Email Etiquette:**

I would prefer that you use email communication for all class business. This way, we all have a record of communications (and so I will remember when I agreed to meet with you, etc.!). Please practice the following email etiquette, which you might find useful not just in this class, but in all your email communications.

- Use a short but descriptive subject line. ***Something more than just the course title is crucial.***
- Continue conversations about the same topic or question in the same email thread by *replying* to the email rather than creating a new message.
- Emails should be as brief as possible but also include sufficient information for me to know what you're asking.
- See [emailcharter.org](http://emailcharter.org) for more suggestions on email etiquette to help keep our inboxes manageable.

### **Accessibility (Students with Disabilities):**

As the instructor of this class, I will strive to make the learning experience in this classroom as accessible and inclusive as possible. However, if you have specific accessibility needs that require academic accommodations, please consult and register with DePaul's Center for Students with Disabilities (CSD) in order to access accommodations and support services to assist your success. There are two office contacts:

- Loop Campus – Lewis Center #1420 – (312) 362-8002
- Lincoln Park Campus – Student Center #370 – (773) 325-1677

Students are also invited to contact me privately to discuss your challenges and how I may assist in facilitating the accommodations you will use in this course. This is best done early in the quarter and our conversations will remain confidential.

### **Parents and Caretakers:**

I know you all have lives outside of class, and some of you may be parents or the primary caretaker for an infant, young child, or a dependent adult. This may especially impact your learning during the (still ongoing) pandemic when daycares and schools may occasionally close or kids may need to quarantine due to classroom exposure. I don't have much to offer by way of suggestions for managing this, but just know that I understand and empathize: I am a working mom with an infant and a 4-year-old. Let me know if there are any accommodations I can make per this course to help you manage simultaneous caretaking and student-ing. For more information on DePaul's resources for students with children see: <https://offices.depaul.edu/student-affairs/support-services/for-specific-populations/Pages/students-with-children.aspx>

## **Support for Undocumented Students:**

DePaul reaffirms its continued support for undocumented students. DePaul students are welcomed to this university and supported throughout their time here regardless of citizenship status. The university will remain devoted to our mission and commitment to act as a community to ennoble the dignity of all people. Anyone in need of information to find resources can contact Johnny LaSalle, Associate Director, Office of Multicultural Student Success, at (773) 325-7516. In addition, the Illinois Department of Human Services shared these “Know Your Rights” resources for immigrants, refugees and asylum seekers:

[https://docs.wixstatic.com/ugd/a63516\\_2cb01893f8ca4e88bc7264745feb18ff.pdf](https://docs.wixstatic.com/ugd/a63516_2cb01893f8ca4e88bc7264745feb18ff.pdf)

## **Health & Wellness Statement:**

*(Inspired by and modified from a Tweet by Dr. Nicole Gonzalez Van Cleve, a professor at Brown University, <https://twitter.com/nvancleve/status/1168955364982841344>)*

As your professor, **I value your health and wellbeing.** In order to succeed in my class, in college, and beyond, you must work hard and balance the work with rest, exercise, hobbies, family, friends, etc., and attention to your mental and physical health.

Yes, this class will challenge you. There will be rigorous reading, writing assignments, and projects that ask you to integrate and synthesize your thinking. By the end of this class, I hope you will feel proud of your growth and learning.

However, this work cannot be at the expense of your wellbeing. **Working until exhaustion is not a badge of honor; it shows that you are out of balance.** As such, I plan to model wellbeing as a value in my class. There will be constant reminders about finding productive and healthy ways to find silence, relax, breathe, meditate, seek peace, to take a break. In that silence, we often find our greatest inspiration and the space to think new, creative thoughts.

As much as these and other individual efforts to maintain your own wellbeing are important, you should also ask for help when you need it. I and your larger DePaul community are here for you. In particular, **the Health Promotion and Wellness office at DePaul can be reached in Student Center suite 307, and at (773) 325-7290. There is also the My SPP app, which provides support and resources for students.** More info on that here: <https://offices.depaul.edu/student-affairs/support-services/health-wellness/mental-well-being/Pages/my-ssp.aspx>

I will also encourage you to have fun, celebrate, enjoy the small moments of college that are often your greatest memories. Even in this time of our now endemic pandemic, we can find silver linings, even if the rest of our lives or the world is a total shit show. I hope you will try to find that joy even when the stress of these times starts to loom. We got this!

Audre Lorde once said, “Caring for myself is not self-indulgence, it is self-preservation, and that is an act of political warfare.” **Please see your wellness as an act of power and perseverance. The core to your success.** Hold each other accountable. Hold me accountable. You have the power and permission to take breaks and ask for help. Let’s together turn our “achievement-oriented” culture into one that embraces wellbeing and personal growth. And, as always, take care DePaul.

### **Dean of Students Office:**

The Dean of Students Office (DOS) helps students in navigating the university, particularly during difficult situations, such as personal, financial, medical, and/or family crises. They are an excellent advocate and resource for your academic success. Absence Notifications to faculty, Late Withdrawals, and Community Resource Referrals, support students both in and outside of the classroom. Additionally, they have resources and programs to support health and wellness, violence prevention, substance abuse and drug prevention, and LGBTQ+ student services. The Office is committed to your success as a DePaul student. Please feel free to contact them at [studentaffairs.depaul.edu/dos](http://studentaffairs.depaul.edu/dos).