# PUP 3204 - SUSTAINABILITY

**Section:** 0W60

*College of Sciences*

School of Politics, Security, and Intl Affairs

## Course Information

**Term:** Fall 2024
**Class Meeting Location:**
**Modality:** WW
**Credit Hours:** 3.00

## Instructor Information

Jacopo Baggio
**Title:** Dr.
**Office Location:** HPH 302 (ask the front desk)
**Office Hours:**
Tuesday 11 - 12.30pm and Wednesday 11 to 12.30pm

Zoom available (although in-person will have priority and it is always based on a first come first serve basis, please be patient if you are in the zoom waiting room):

Zoom Link: https://ucf.zoom.us/j/97591989929?pwd=ebeXpbPJZif8HSxuabzyK7gr8Nntaw.1

Meeting ID: 975 9198 9929

Passcode: 896028
**Email:** Jacopo.Baggio@ucf.edu

## Course Description

PUP 3204 COS-POLS 3(3,0)Sustainability: PR: ENC 1102 or Junior standing. Environmental politics through the lens of sustainability. Attention devoted to the relationships of culture, economics, and ecology. Odd Fall.

# Introduction

Today the world is changing at an unprecedented rate. Changes are coming fast, due to environmental, technological and socio-economic changes. Sustainability, concerned with issues relating to the ability of present society to enjoy resources and levels of wealth, while not jeopardizing the ability of future generations to do so, is becoming more prominent.

The objective of this course is giving students the ability to critically think around issues related to sustainability, increase knowledge on issues related to socio-economic, political, demographic processes as well as environmental ones concerning the sustainable use of resources, and be able to present concisely and clearly problems and potential solutions to current and possible future concerns related to “sustainability”.

# Description

This course is an introduction to concepts related to sustainability, resilience and common pool resources. The course will focus on introducing concepts, metrics and examples of issues and problems that fall under the umbrella of “sustainability” with a focus on managing common pool resources sustainably and an introduction to resilience and social-ecological systems. Both traditional lecture and student led lectures/presentation will be used in this class.

# Expectations

It is expected that students read the material provided. Students should engage with **all the material provided and are strongly encouraged to search for additional materials**. In other words:

- Read the text assigned, think and critically assess the readings,
- Search for papers assigned and other that are important for your essay/video presentation.
- Prepare for and participate in the weekly discussions.
- Read the material
- Turn in the assignments on time.

In this course we will utilize turnitin.com, an automated system which instructors can use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you will be expected to submit assignments through the Canvas Assignment Tool in electronic format. After the assignment is processed, as an instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process, visit http://www.turnitin.com .

**SYLLABUS DISCLAIMER:**

**This syllabus is NOT a contract. All parts of this syllabus can be amended in accordance with the students based on specific educational needs and non-foreseeable circumstances. Any change to the syllabus will be announced via Webcourses@UCF.**

## Student Learning Outcomes

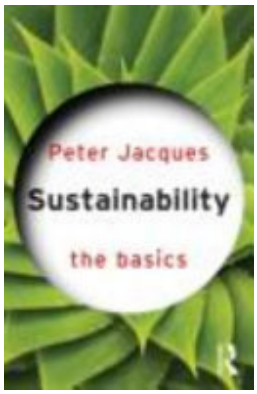
By the end of the semester student should be more familiar with pressing issues related to sustainability, understand what social dilemmas are and trade-offs that exist when dealing with "sustainability" as well as "resilience" and have a more holistic view related to problem solving and the environment. Further, by the end of the course, students should be:

- Familiar with concepts related to sustainability (sustainability, equity, legitimacy, fairness etc.), common pool resources (social dilemmas, common pool resource systems etc.), and resilience (social-ecological systems, resilience, vulnerability etc.)
- Able to read peer-reviewed literature, and critically assess it and discuss it.
- Able to search for added information using proper peer-reviewed literature (e.g. via google scholar, or the library, or ISI web of knowledge etc.)
- Ability to assess sustainability from an holistic point of view understanding trade-offs and potential unintended consequences of specific sustainability decisions.

Finally, students will be evaluated via:

- Weekly Group Discussions (10)
- One video presentation or 1000 words essay on the topic of your choice but related to sustainability
- One 1000-word essays that blends concepts learned during this course and a topic of your choice.
- Mid-Term and Final Exam

## Course Materials and Resources




**Sustainability**
**ISBN:** 9780415608480
**Authors:** Peter Jacques
**Publication Date:** 2015-01-01
**Edition:** Either first or second

**Sustaining the Commons**
**Authors:** John M. Anderies, Marco A. Janssen
**Publication Date:** 2024-04-26
**Online Access:** http://sustainingthecommons.asu.edu

image not available

## Course Assessment and Grading Procedure

A maximum of 100 points is given in this course. You will be evaluated via 1 video presentation/essay, 1 final essays, 10 weekly discussions and 2 exams (1 mid-term and 1 final). Essay and/or video presentation will assess your ability to critically think and engage with the material proposed as well as searching for material other than the one presented in class. Exams will be based on course content that comprises the material covered in the modules and the readings assigned. Weekly discussions are build to assess and discuss current issues related to sustainability and the module/weekly topics

# Weekly Discussions

Weekly you will be required to post a discussion post and reply twice to two different original discussion posts of your class-mates. Each original discussion post has to be at least 100 words in length and need to be pertinent to the topic discussed. Each "response" must be at least 50 words in length. Failure to post an original 100 words discussion post, AND 2 responses at least 50 words long will lead to 0 point for that discussion.

# Video Presentation

If you choose to build a video presentation (max 5 minutes), the evaluation will take into account content (you will need to research new content that goes beyond what has been done in class), style and flow of the presentation as well as the delivery.

Presentations will be evaluated on:

- Content - based on the topic of your choice and how well you relate it to course content
- Overall logical flow of the presentation
- Use of introductory and concluding paragraph
- Consistency of the presentation (is it one presentation or is it a puzzle/collage of multiple not "well related" presentations?)

# Essays

**All Essays will be submitted to Turnitin, avoid plagiarism!**

Essays are can be done on the topic of your choice. Essays must be:

- Maximum 1000 words
- Formatting:
  - Line spacing: 1.5
  - Font: Times New Roman or Arial or Calibri
  - Font Size: 11 or 12
- Contain at least 5 peer reviewed article outside the ones assigned. These article will need to be appropriately referenced (either APA or Chicago style referencing must be used).
- **No quotations are allowed, you must paraphrase or summarize other people work. Essay with quotation will have at least 5 points deducted.**

Essays will be evaluated on:

- Content - based on the topic of your choice and how well you relate it to course content
- Overall logical flow of the essay
- Correct use of sources (at least 5 sources outside the once assigned and optional readings of the syllabus, plus sources that are present in the syllabus)

- Concluding paragraph in which the student evaluates the argument, the views and draws her/his own conclusions.

# Exams

Based on the readings assigned (books and papers) and modules' content. Exams will be in the form of multiple choice questions AND open-ended questions.

# Assignment Submission

All assignments must be submitted via Webcourses@UCF. They will need to be uploaded as pdf, playable video format or word-documents. Any other file format will not be taken into consideration. All assignments must to be uploaded individually by each class participant. Exams will be on Webcourses@UCF (quizzes)

## Grading Scale

# Summary of Assignment, points and due dates

| Due Date | Assignment | Max Points | Submitting Assign |
|---|---|---|---|
| Weekly Discussions - Modules 2, 3, 4, 6, 7, 9, 10, 11, 12, 13. Discussions are due on Sundays at 11.59pm. | Discussion | 3 points each (max 30 points) | Use discussion boar module/week on Webcourses@Ucf |
| September 15th | 1000 word First Essay or Video Presentation | 15 | Upload essay or vid presentation on Webcourses@Ucf |
| | | | |

| | | | |
|---|---|---|---|
| October 7th | Mid-Term Exam | 15 | On Webcourses@U |
| November 24th | 1000 word Essay | 20 | Upload essay on Webcourses@Ucf |
| December 3rd | Final-Exam | 20 | On Webcourses@U |

## Grade Conversion (Points -> Letter)

| Grade Points Acquired | Grade |
|---|---|
| =>93 | A |
| =>90 | A- |
| =>87 | B+ |
| =>83 | B |
| =>80 | B- |
| =>70 | C |
| =>60 | D |
| < 60 | F |

## Policies for Course Grade

## Excusable late assignments and make up work conditions:

Only for medical reasons or for UCF excusable events.

## Late assignments:

Late not-excused assignments will be penalized 1 point every 6 hours, after 48hr passed the deadline, assignments will not be considered and evaluated 0 points.

Details of the video presentations and essays will be discussed via Webcourses@UCF (Canvas) conversation boards and/or during office hours.

## Make-up Exams and Assignments

Per university policy, you are allowed to submit make-up work (or an equivalent, alternate assignment) for authorized university-sponsored activities, religious observances, or legal obligations (such as jury duty). If this participation conflicts with your course assignments, I will offer a reasonable opportunity for you to complete missed assignments and/or exams. The make-up assignment and grading scale will be equivalent to the missed assignment and its grading scale. In the case of an authorized university activity, it is your responsibility to show me a signed copy of the Program Verification Form for which you will be absent, prior to the class in which the absence occurs. In any of these cases, please contact me at least one week ahead of time to notify me of upcoming needs.

### Grade Dissemination

Grades will be recorded and posted in Webcourses@UCF and will follow student data classification and security standards

**Extra Credit: NO** extra credit will be offered during this course.

## Course Accessibility

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need access to course content due to course design limitations should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). For students connected with SAS, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential course access and accommodations that might be necessary and reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student. Further conversation with SAS, faculty and the student may be warranted to ensure an accessible course experience.

## Academic Integrity

Students should familiarize themselves with UCF's Rules of Conduct at Student Conduct and Integrity Office. According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather obtained through someone else's efforts and used as part of an examination, course assignment, or project.
3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
4. Falsifying or misrepresenting the student's own academic work.

5. Plagiarism: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
7. Helping another violate academic behavior standards.
8. Soliciting assistance with academic coursework and/or degree requirements.

**Responses to Academic Dishonesty, Plagiarism, or Cheating**

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, *The Golden Rule*. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and respond to academic misconduct when necessary. Penalties for violating rules, policies, and instructions within this course can range from a zero on the exercise to an "F" letter grade in the course. In addition, an Academic Misconduct report could be filed with the Office of Student Conduct, which could lead to disciplinary warning, disciplinary probation, or deferred suspension or separation from the University through suspension, dismissal, or expulsion with the addition of a "Z" designation on one's transcript.

Being found in violation of academic conduct standards could result in a student having to disclose such behavior on a graduate school application, being removed from a leadership position within a student organization, the recipient of scholarships, participation in University activities such as study abroad, internships, etc.

Let's avoid all of this by demonstrating values of honesty, trust, and integrity. No grade is worth compromising your integrity and moving your moral compass. Stay true to doing the right thing: take the zero, not a shortcut.

## Title IX

Title IX prohibits sex discrimination, including sexual misconduct, sexual violence, sexual harassment, and retaliation. If you or someone you know has been harassed or assaulted, you can find resources available to support the victim, including confidential

resources and information concerning reporting options at Let's Be Clear and UCF Cares.

For more information on diversity and inclusion, Title IX, accessibility, or UCF's complaint processes contact:

- Title IX – OIE – Office of Institutional Equity & askanadvocate@ucf.edu
- Disability Accommodation – Student Accessibility Services – Student Accessibility Services & sas@ucf.edu
- Access and Community Engagement – Office of the VP for Access and Community Engagement
- UCF Compliance and Ethics Office – Compliance, Ethics, and Risk Office & complianceandethics@ucf.edu
- The Ombuds Office is a safe place to discuss concerns.

## Reporting an Incident or Issue

If you believe you have experienced abusive or discriminatory behavior by any faculty of staff member, contact the Office of Institutional Equity online or at 407-823-1336. You can also choose to report using the UCF Integrity Line and can report anonymously or as yourself at 1-855-877-6049 or using the online form. UCF cares about you and takes every report seriously. For more information see the Reporting an Incident or Issue Webpage.

## Deployed Active-Duty Military Students

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

## Campus Safety

At UCF Public Safety and Police, safety is the top priority. Emergencies on campus are rare, but if one should arise, it's important to be familiar with some basic safety and

security concepts.

- In an emergency, always dial 911.
- Every UCF classroom has an **Emergency Procedure Guide** posted on a wall near the door, which will show you how to respond to a variety of situations. This guide can also be found online here.
- In the event of an active threat, remember **AVOID, DENY, DEFEND**. Choose the best course of action and act immediately. Watch the video here to learn more.
    - **AVOID**. Pay attention to your surroundings and have an exit plan. Get as much distance and as many barriers between you and the threat as quickly as possible.
    - **DENY.** When avoiding is difficult or impossible, deny the threat access to you and your space. Lockdown by creating barriers, turning the lights off and remaining quiet and out of sight. Make sure your cell phone is silenced, but do not turn it off.
    - **DEFEND.** When you are unable to put distance between yourself and thee threat, be prepared to protect yourself. Commit to your actions, be aggressive and do not fight fairly. Do whatever it takes to survive.
- For emergencies on campus, UCF will utilize the UCF Alert system. All UCF students, faculty and staff are automatically enrolled to receive these email and text alerts, however, it's a good idea to frequently ensure your contact information is up to date.

## Financial Aid Accountability

All instructors/faculty are required to document students' academic activity at the beginning of each course. In order to document that you began this course, please complete this activity by the end of the first week of classes or as soon as possible after adding the course. Failure to do so may result in a delay in the disbursement of your financial aid.

## Class Schedule

# Course Schedule and important dates

This course schedule as well as the syllabus can change depending on class educational needs. Some topics / skills may require more time than envisioned and in such cases the course schedule will be adjusted. Students are required to search and download the readings assigned. In bold the readings that are considered necessary and mandatory.

1.

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 0 and Module 1 | Online | ◦ Course Orientation<br>◦ Searching, reading and referencing appropriately peer-reviewed papers | Syllabus Quiz - academic engagement | Friday Aug 23rd 2024 | Check this blog out, grea writing papers: http://www.raulpacheco.o |
| Module 2 | Online | ◦ Sustainability Basics<br>◦ Sustainability Principles | Weekly Discussion | Sunday, Aug 25th 2024 | ◦ **Jacques,*Sustainabil***<br>◦ Goodland, R. (1995). Sustainability. *Annual 26*(1), 1–24. http://doi.org/10.1146/<br>◦ Dixon, J. A., & Fallon, sustainability: Origins, *Society and Natural R* http://doi.org/10.1080/<br>◦ Princen, T. (2003). Pri Cooperation and Effic *Environmental Politics* http://doi.org/10.1162/ |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 3 | Online | ◦ What are the commons? | Weekly Discussion | Sunday, Sept 1st 2024 | ◦ **Anderies and Janss Chapter 1.1 to 1.4 (1**<br>◦ Hardin, G. (1968). Th *162*(3859), 1243–124 http://doi.org/10.1126/<br>◦ Dietz, T. (2003). Strug *302*(5652), 1907–191 http://doi.org/10.1126/<br>◦ Lambert, J., Epstein, Identifying Topics and Resources Using Nat *International Journal* https://doi.org/10.533 |
| Module 4 | Online | ◦ Design principles for Common Pool Resources | Weekly Discussion | Sunday, Sept 8th 2024 | ◦ **Anderies and Janss Chapter 7**<br>◦ **Cox, M., Arnold, G., Design Principles fo Resource Managem**<br>◦ **Baggio, J. A., Barne Ratajczyk, E., Rollin Explaining success configural nature of principles. *Internatio* *10*(2). http://doi.org/1**<br>◦ Barnett, A. J., Baggio, Ibarra, I., Rubinos, C. approach to case stu analysis of quantitativ *of the Commons*, *10*( http://doi.org/10.1835 |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 5 | Online | ◦ Measuring Sustainability | **Essay or Video Presentation Due** | Sunday, Sept 15th 2024 | ◦ **Jacques,*Sustainabil***<br>◦ Jacques,*Sustainabilit*<br>◦ Bradshaw, C. J. A., &<br>population reduction i<br>problems. *Proceeding*<br>*Sciences*, *111*(46), 16<br>http://doi.org/10.1073/ |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 6 | Online | ◦ Planetary boundaries<br>◦ Overshoot and Collapse | Weekly discussion | Sunday, Sept 22nd 2024 | ◦ **Steffen, W., Richards Fetzer, I., Bennett, E boundaries: Guiding planet. *Science*,*347*( 1259855. http://doi.o**<br>◦ **Jacques,*Sustainabil***<br>◦ **Tainter, J. A. (2006). Collapse. *Annual Re* 74. http://doi.org/10. 36**<br>◦ Rockström, J., Steffer Chapin, F. S., Lambin Boundaries: Exploring Humanity Recommen *14*(2), 472–475. http:/<br>◦ Wackernagel, M., Sch C., Jenkins, M., Kapo the ecological oversh *Proceedings of the Na* 9266–9271. http://doi.<br>◦ Arrow, K., Dasgupta, Heal, G., … Walker, B Much? *Journal of Eco* http://doi.org/10.1257/ |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 7 | Online | ◦ Ethics, justice and fairness | Weekly Discussion | Sunday, Sept 29th 2024 | ◦ **Jacques,*Sustainabil***<br>◦ Adger, W. N., Brown, J., Rosendo, S., & Se sustainability: Toward decisionmaking. *Envi* 1110. http://doi.org/10 |
| Module 8 | Online | **Midterm Exam** | **Mid-Term exam (online)** | Monday, Oct 7th 2024 | |
| Module 9 | online | ◦ Social Dilemmas | Weekly Discussion | Sunday, Oct 13th 2024 | ◦ **Anderies and Janss Chapter 4** (**Disclaime** introduced in chapter want to quickly skim t<br>◦ **Anderies and Janss Chapter 5, 6, 7 and 8**<br>◦ Janssen, M. A., Holah Lab experiments for t *Science*,*328*(5978), 6 http://doi.org/10.1126/<br>◦ Baggio, J. A., Rollins, (2015). Irrigation expe environmental variabi *Society*, *20*(4), 12. htt<br>◦ Janssen, M. A., Bous Worrapimphong, K. (2 dilemmas. *Agricultura* |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 10 | Online | ◦ Complex Adaptive Systems | Weekly Discussion | Sunday, Oct 20th 2024 | ◦ **Glouberman, S., & Z *and Complex Syster of Medicare Look Lil Health Care in Cana* 32778-0**<br>◦ **Baggio, J. A. (2017). Simulations and Age *Methods in Tourism*. https://doi.org/https**<br>◦ Sellberg, M. M., Quinl Peterson, G. D. (2021 resilience practice. *Ec*<br>◦ Janssen, M. (1998). U modeling global chan https://doi.org/10.100<br>◦ Lansing, J. S. (2003). *Reivew of Anthropolo* https://doi.org/10.114 |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 11 | Online | ◦ Social-Ecological Systems | Weekly Discussion | Sunday, Oct 27th 2024 | ◦ **Anderies and Janss Chapter 12 and 13**<br>◦ **Folke, C., Polasky, S F., Lamont, M., … Wa *Anthropocene biosp* https://doi.org/10.10**<br>◦ Folke, C. (2006). Res perspective for social- *Environmental Chang* http://doi.org/10.1016/<br>◦ Holling, C. S., Folke, ( (2000). *Resilience of Institutions - Final Rep*<br>◦ Anderies, J. M., Janss framework to analyze systems from an instit *society*,*9*(1), 18. |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 12 | Online | ◦ Resilience “principles” for ecosystem management | Weekly Discussion | Sunday, Nov 3rd 2024 | ◦ **Baggio, J. A., Brown Boundary object or network analysis of *20*(2), 2.**<br>◦ **Biggs, R., Schlüter, BurnSilver, S., Cund Principles for Enhan Services. *Annual Re Resources*, *37*(1), 42 http://doi.org/10.114**<br>◦ **Carpenter, S., Walke (2001). From Metaph What to What? *Ecos* 781. http://doi.org/10**<br>◦ Carpenter, S. R., Broc Scheffer, M. (2015). A operating space for e *the National Academy* http://doi.org/10.1073/<br>◦ Anderies, J. M. (2015 challenges for the Ant *National Academy of* http://doi.org/10.1073/ |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| Module 13 | Online | ◦ Politics, Resilience and Sustainability | Weekly Discussion | Sunday, Nov 10th 2024 | ◦ **Folke, C., Biggs, R., Rockström, J. (2016) biosphere-based su *Society*, *21*(3), art41. 210341**<br>◦ **Jacques, Sustainabi**<br>◦ **Schoon, M., & Cox, M adaptation, and scal governance for sust *(Switzerland)*,*10*(3). h**<br>◦ **Schoon, M., Robards C. L., & Biggs, R. (20 ecosystem services. *Sustaining Ecosyste Systems*, 32–49. http://doi.org/10.101**<br>◦ Olsson, P., Galaz, V., Sustainability transfor *Ecology and Society*, 06799-190401<br>◦ Bahadur, A., & Tanner thinking: Putting peop urban climate resilien *26*(1), 200–214. http:/ |
| Module 14 | Online | ◦ Relating resilience, sustainability and common pool resources | **Essay Due** | **Sunday, Nov 24th 2024** | **Optional readings on tip those interested:**<br>◦ Otto, I. M., Donges, J. Hewitt, R. J., Lucht, W tipping dynamics for s |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| | | | | | *Proceedings of the Na*<br>201900577. https://do<br>◦ Milkoreit, M., Hodbod,<br>Calderón-Contreras, F<br>(2018, March 1). Defi<br>systems scholarship -<br>*Environmental Resea*<br>https://doi.org/10.108<br>◦ Lenton, T. M. (2020).<br>*Transactions of the R*<br>*Biological Sciences*, 3<br>https://doi.org/10.109<br>◦ Lade, S. J., Walker, B<br>Resilience as pathwa<br>and temporal perspec<br>*Society*, *25*(3), 1–14.<br>250319<br>◦ Abel, N., Wise, R. M.,<br>R. A., Ryan, P., … O'<br>pathways to transform<br>charge”:<br>Darling Basin. *Ecolog*<br>https://doi.org/10.575<br>◦ Moore, M. L., Olsson<br>F. R. (2018). Navigati<br>as key transformative<br>Fellowship program. *E*<br>*Society*, *23*(2). https:/<br>◦ Moore, M.-L., Tjornbo<br>Baggio, J. A., … Bigg |

| Module | Mode | Topic | Assignments | Due Dates | Readings (Bold = mand |
|---|---|---|---|---|---|
| | | | | | of change: toward an deliberate social-ecol *Society*, *19*(4), art54. 190454 |
| Module 15 | Online | ◦ Study Guide and Recap for Final Exam | | | |
| | Online | **Final Exam** | | Tuesday, Dec 3rd 2024 | |