

Community Resilience: Assessment, Planning, & Action in Social-Ecological Systems

“At the heart of resilience thinking is the very simple notion – things change – and to ignore or resist this change is to increase our vulnerability and forego emerging opportunities.” – Brian Walker & David Salt

Instructor:	Hal Knowles Ph.D. Assistant Instructional Professor Sustainability and the Built Environment (SBE) College of Design, Construction, and Planning (DCP) University of Florida
Office Location:	ARC 0150 (Physical) Zoom PMI 558 657 6066 (Virtual)
Office Hours:	M Period 6 12:50 – 13:40 Also by appointment
Office Correspondence:	352-294-6781 Canvas email (preferred) hknowles@ufl.edu (alternative)
Course Term & Credits:	Fall 2021 3 Credits
Course Time & Location:	R Period 3-5 09:35 – 12:35 RNK 0220
Course Co/Prerequisite:	N/A However, DCP 3210 and DCP 3220 may be helpful to take in advance
General Education Credit:	N/A
Final Exam Schedule:	12/13/2021 @ 10:00 AM - 12:00 PM
Estimated Additional Costs:	~ \$30 textbooks \$0 field trip (N/A) ~ \$20 materials & supplies ~ \$0-10 incidentals



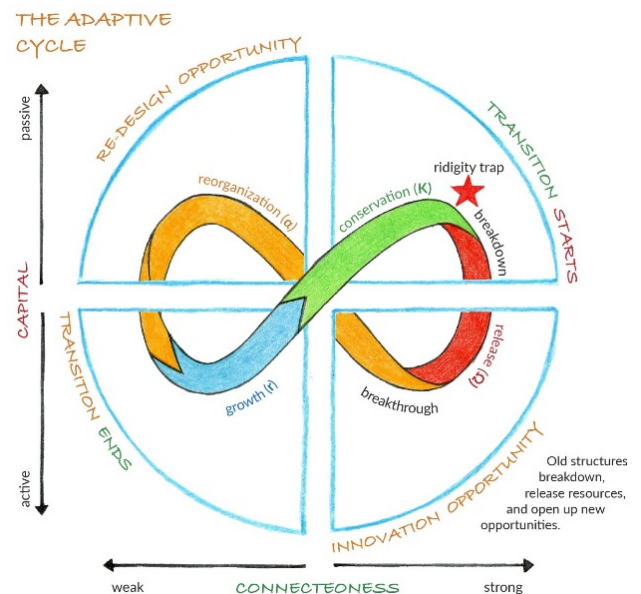
Course Summary

In the midst of the [Anthropocene](#), humanity is the dominant force of a rapidly changing Earth. Leveraging the [Wayfinder](#) process guide for resilience assessment, planning, and action in social-ecological systems, this course uses gaming and explores strategies for building adaptive capacity and transformative change as we navigate towards more sustainable, safe, and just futures...together. Within team environments, students develop, deploy, and peer-play resilience themed, tabletop strategy games.

Course Overview & Purpose

Teaching and learning strategies include theoretical and applied readings, civic discourse, real world case studies, individual and group projects, field tours, as well as both physical and virtual tabletop strategy gaming. Successful students are inquisitive, adaptable, creative, collaborative, self-directed, and willing to make manageable mistakes and learn lessons for iterative improvement in the “lab of life.” Course content revolves around the books, web tools, online [articles](#), [SDG Academy courses](#), [EdX courses](#), and [videos](#) developed by the [Resilience Alliance](#), the [Stockholm Resilience Centre](#), and other prominent [publications](#), researchers, and institutions at the forefront of resilience science.

“Many tend to interpret resilience as bouncing back after a disturbance, or recovery to what you were before in more general terms. This way of looking at the world often focuses on trying to resist change and control it to maintain stability. Our take on resilience, on the other hand, deals with complexity and true uncertainty and how to learn to live with change and make use of it” – Carl Folke, Stockholm Resilience Centre.



Source: Designing Regenerative Cultures, 2014 - www.danielchristofanwahi.com; Graphics: www.flavioargento.com

Source: <https://hackernoon.com/the-adaptive-cycle-panarchy-as-dynamic-maps-for-resilience-thinking-793fad49de5e>

Course Goals & Objectives

Through readings and reflections, student engagement, leadership skill building, games, role playing, and awareness raising activities this course aims to create a sense of empowerment, connection, and reciprocity in our relationships and stewardship of planet, people, and profit. During the semester, students will be...



Source: <https://wayfinder.earth/>

- Exploring planetary boundaries and the human experience in the Anthropocene epoch;
- Discovering the dynamics of complex systems;
- Learning principles of resilience thinking and practice;
- Considering the contexts and challenges of uncertainty and transformation in social-ecological systems;
- Assessing agency and building coalitions for change;
- Evaluating multiscale spatial and temporal interactions and adaptive management strategies;
- Collaborating, curating, and communicating core concepts and case studies;
- Learning and playing table-top strategy games; and
- Developing and deploying a community resilience game in a competitive, entrepreneurial environment.

The interdisciplinary course environment will be supported by in-class discussions, multi-media exploration, online engagement, and individual and collaborative team assignments.



Required & Optional Text(s) & Tool(s)

The required and optional text(s) for this course are as follows:

- **REQUIRED** | Lerch, D. (2017). *The community resilience reader: Essential resources for an era of upheaval*. Washington: Island Press. 336 pp.
 - <http://www.worldcat.org/oclc/1013540226>
 - Cost | ~ \$28 (MSRP paperback)
- **REQUIRED** | Walker, B., & Salt, D. (2009). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington: Island Press. 192 pp.
 - <http://www.worldcat.org/oclc/991761832>
 - Cost | ~ \$28 (MSRP paperback) or free online access for UF students and employees:
 - UF Catalog @ [Link](#) | eBook @ [Link](#)
- **REQUIRED** | Walker, B., & Salt, D. (2012). *Resilience practice: Building capacity to absorb disturbance and maintain function*. Washington: Island Press. 248 pp.
 - <http://www.worldcat.org/oclc/808419665>
 - Cost | ~ \$28 (MSRP paperback) or free online access for UF students and employees:
 - UF Catalog @ [Link](#) | eBook @ [Link](#)
- **REQUIRED** | The Wayfinder Guide
 - Free Online Tool | <https://wayfinder.earth/the-wayfinder-guide/>

In addition to the required text(s), various supplemental, free publications identified for class discussion and/or assignments may be supplied via the UF Canvas e-Learning portal (<https://lss.at.ufl.edu/>).

See Canvas for Additional Course Information

Additional information about the course is available on Canvas, including: instructional methods, tips for success, personal conduct policies, mobile communications and computing policies, and/or other relevant student guidance.

Course Modules (CM)

General course module main topics and sub-topics are summarized below. Official weekly readings, assignments, and course content will be posted within Canvas and are subject to change.

<i>Modules</i>	<i>Module Main Topics</i>	<i>Module Sub-Topics</i>
CM.CiC	Crises in Context (CiC)	<ul style="list-style-type: none"> • CiC.01 > Sustainability & Social Complexity • CiC.02 > Six Foundations for Building Community Resilience • CiC.03 > Planetary Boundaries in the Anthropocene • CiC.04 > Environment & Energy Crises • CiC.05 > Economy & Equity Crises
CM.RTP	Resilience Thinking & Practice (RTP)	<ul style="list-style-type: none"> • RTP.01 > Resilience Thinking • RTP.02 > Resilience Theory • RTP.03 > Resilience Practice
CM.CRS	Community Resilience Strategies (CRS)	<ul style="list-style-type: none"> • CRS.01 > Adaptation Action Planning • CRS.02 > Case Studies Part 1 • CRS.03 > Case Studies Part 2
CM.G	Gaming (G) as Strategic Decision Support	<ul style="list-style-type: none"> • G.01 > What is a Game? Why are Games Important? • G.02 > Introduction to Strategy Games • G.03 > Board Game Mechanics

Assignments and Grading

Assignment details, deliverables, due dates, and grades will be published on Canvas and may be subject to change.

<i>Grading Category</i>	<i>Additional Details</i>	<i>Points</i>	<i>% of Total</i>
Attendance & Punctuality (AP)	Required	100	10%
Preparation & Participation (PP)	Readings, Discussions, & Class Activities (20 points/each) <ul style="list-style-type: none"> • PP > Weekly & Module-Based 	220	22%
Personal Reflections (PR)	Individual (50 points/each) <ul style="list-style-type: none"> • PR.01 > CM.CiC • PR.02 > CM.RTP • PR.03 > CM.CRS • PR.04 > CM.G 	200	20%
Student Praxis (SP)	Individual and Group (varies by assignment) <ul style="list-style-type: none"> • SP.01 > Individual > Gaming Lessons Learned • SP.02 > Team > Strategy Game (Interim Milestones) • SP.03 > Team > Strategy Game (Peer Play Deliverables) • SP.04 > Team > Strategy Game (Final Deliverables) 	480	48%
Total		1000	100%

Grades are based on evidence that students have completed assigned readings, participated actively in all class discussions and activities, completed writing and presentation assignments, and completed both in-class and outside-of-class activities throughout the semester. Completed tasks will be evaluated based on pertinence of content, critical thinking, creativity, and communication. Details and due dates for assignments are posted on Canvas. The University standard suggests students might expect to study outside of class for up to 3 times the weekly class contact periods (e.g., a 3-credit course might be 3 x 3 periods = 9 hours in Fall/Spring or 3 x 6 periods = 18 hours in Summer A).

Grade	Points (GPA)	Percent	Grade	Points (GPA)*	Percent
A	930-1000 (4.00)	93.0-100.0%	C	730-769 (2.00)	73.0-76.9%
A-	900-929 (3.67)	90.0-92.9%	C-	700-729 (1.67)	70.0-72.9%
B+	870-899 (3.33)	87.0-89.9%	D+	670-699 (1.33)	67.0-69.9%
B	830-869 (3.00)	83.0-86.9%	D	630-669 (1.00)	63.0-66.9%
B-	800-829 (2.67)	80.0-82.9%	D-	600-629 (0.67)	60.0-62.9%
C+	770-799 (2.33)	77.0-79.9%	E	000-599 (0.00)	0.0-59.9%

Final student grades will follow University of Florida grades and grading policies.

- Undergraduate Students: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Teaching Philosophy & Expectations

I have experience in commercial construction management, planning, facilitation, systems ecology, and temporal and spatial analytics of land use change. I am passionate about the technologies and thought processes, policies, procedures, and decision-support strategies necessary to establish and sustain equitable, empowered, safe, healthy, and resilient communities adaptive to uncertainty.

- Student expectations of instructor:
 - Enthusiasm for the course; engaging lectures and discussions; application of knowledge through classroom activities and fieldwork; organized and neat course materials; unbiased guidance; encouragement of critical thought; and reasonable availability to meet with students outside of class.
- Instructor expectations of students:
 - Compassionate curiosity; positive attention and intention; willingness to learn with open heart, open mind, and open will; consistent attendance; punctual arrival; active participation in our class discussions and activities; advance reading of class content; on-time completion and submission of assignments; proper citation management; adherence to proper netiquette and all University rules and regulations.

Attendance Policies

Attendance is mandatory and participation is graded based on each class period (i.e., missing a multi-period day of class will count as multiple absences in accordance with the number of periods). As future sustainability professionals in training, you are preparing for potential future virtual meetings and collaboration. Thus, students are encouraged to participate via live video with dress and demeanor befitting an online workplace. *Students may miss up to the equivalent number of class periods as the course credits (e.g., 3 credits = 3 periods @ 50 minutes/each in Spring/Fall & 2 periods @ 75 minutes/each in Summer A) without penalty and with no need for an excuse.* Beyond those “waived” absences, students must provide a valid, and properly documented, excuse. Otherwise, unexcused points will be deducted proportional to the total number of periods where attendance was taken. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with University policies as found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Additional Expenses

Students will be expected to download the free [Steam online gaming software](#) and to purchase the fee-based [Tabletop Simulator software](#) (~ \$20), as well as to pay for a 2-day, 1-night field trip (~ \$175). These are required components of this course, as they provide a mix of classroom and field-based learning, extend professional networks, and build peer-to-peer interpersonal skills and collegiality among participating students. The field trip typically takes place during the second half of the semester, but must be paid for in the first half of the semester.

Beyond the required textbook and software purchase, minor, out-of-pocket student incidental expenses may include those associated with personal mobile computing and file storage/transfer device(s) or web-based services to research, present, and share information in class.

Online Course Privacy Statement

Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice audio recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat comments get cloud archived alongside the video, audio, and machine learning transcripts for the convenience of all students to replay and review on demand. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

See Canvas for Additional Course Information

Additional information about the course is available on Canvas, including: instructional methods, tips for success, personal conduct policies, mobile communications and computing policies, and/or other relevant student guidance.

University and General Policies

Student Responsibilities

"In 1995 the UF student body enacted an [honor code](#) and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students..."

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following responsibilities as delineated at <https://catalog.ufl.edu/UGRD/student-responsibilities/>.

- Academic Honesty
 - Preamble
 - The Honor Pledge
 - Student Responsibility
 - Faculty Responsibility
 - Administration Responsibility
- Student Conduct Code
- Alcohol and Drugs
 - What the University Community Can Do to Prevent Alcohol Abuse and Drug Abuse
- Relations Between People and Groups
- Service to Others
- Standard of Ethical Conduct

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Instructors reserve the right to use the TurnItIn app within Canvas to evaluate work originality. Plagiarism is a serious offense and will result in an honor code violation and potential failure of the course. Additionally, any use, access, or handling of technology (e.g., cell phone, smart watch) during an exam will result in an honor code violation and potential failure of the course.

Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>.

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. As such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Students with Disabilities

Students requesting accommodation for disabilities must first register with the Disability Resource Center (DRC). The DRC coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues.

Upon registering, the DRC will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations. The DRC may be contacted by visiting 001 Reid Hall, calling 352-392-8565, or viewing www.dso.ufl.edu/drc/.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and 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 <https://gatorevals.aa.ufl.edu/public-results/>.

Netiquette – Communication Courtesy

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Please refer to <http://biostat.ufl.edu/resources/e-learning-resources/e-learning-basics/etiquette-online/>.

Religious Observances

Please inform the instructor of any religious holidays or other days of special religious significance that may interfere with your participation in this class so that appropriate accommodations can be made.

Special Consideration

The principle of equal treatment of all students is a fundamental guide in responding to requests for special consideration. No student shall be given an opportunity to improve a grade that is not made available to all members of the class. This policy is not intended to exclude reasonable accommodation of verified student disability or the completion of work missed due to religious observance, verified illness, or absence due to circumstances beyond your control. Reconsideration of subjective judgments of an individual student's work will be done only if all students in the class can be and are given the same consideration.

Sexual Harassment

Sexual harassment is reprehensible and will not be tolerated by the University. It subverts our academic mission and threatens the careers, educational experience, and well-being of students, faculty, and staff. The University will not tolerate behavior between, nor among, members of this community that creates an unacceptable working environment.

Helpful Campus Resources

Your well-being is important to our University community. Students experiencing crises or personal problems that interfere with their general well-being or academic performance are strongly encouraged to talk to the instructor and/or to utilize the University's confidential counseling resources, available at no cost to currently enrolled students.

Academic & Professional Development Resources

- *Career Connections Center*, Reitz Union, 352-392-1601. Career assistance and counseling. <https://career.ufl.edu/>
- *E-Learning Technical Support*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://elearning.ufl.edu/student-help-faqs/>
- *Library Support*. Provides various ways to receive assistance with respect to using the libraries or finding resources. <http://cms.uflib.ufl.edu/ask>
- *Teaching Center*, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- *Writing Studio*, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- *UF Information Technology | Computing Help Desk*, 352-392-HELP (4357) or e-mail to helpdesk@ufl.edu. <http://helpdesk.ufl.edu/>

Safety, Health & Wellness Resources

- *Dean of Students Office*, 202 Peabody Hall, 352-392-1261. Among other services, the DSO assists students who are experiencing situations that compromises their ability to attend classes. This includes family emergencies and medical issues (including mental health crises). <https://www.dso.ufl.edu/care>
- *Sexual Assault Recovery Services (SARS)*, Student Health Care Center, 352-392-1161. Sexual assault counseling.
- *Student Health Care Center*. Call 352-392-1161 for 24/7 health care information. <https://shcc.ufl.edu/>
- *UF Health Shands Emergency Room / Trauma Center*, 1515 SW Archer Road, Gainesville, FL 32608, 352-733-0111. For immediate medical care call or go to the emergency room. <https://ufhealth.org/emergency-room-trauma-center>
- *U Matter, We Care, U Matter*, multiple locations, 352-392-1575. If you or someone you know is in distress, please contact umatter@ufl.edu or visit the website to refer or report a concern and a team member will reach out to the student in distress. <https://umatter.ufl.edu/>
- *University Counseling Center & Wellness Center*, 3190 Radio Rd., 392-1575. Personal and career counseling, as well as therapy for anxiety, stress and mental health issues. <http://www.counseling.ufl.edu/cwc/>
- *University Police Department*, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

Student Complaint Resources

- For student complaints related to on-campus situations, visit the Student Honor Code and Student Conduct Code webpage. <https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/>
- For student complaints related to online situations visit the Distance Learning Student Complaint Process webpage. <https://distance.ufl.edu/getting-help/student-complaint-process/>