

Methods of Inquiry for Sustainability and the Built Environment

"If today's students want to compete in this global society, they must be proficient communicators, creators, critical thinkers, and collaborators (the "Four Cs")." – National Education Association (NEA)

Instructor:	Hal Knowles Ph.D. Lecturer Program in Sustainability and the Built Environment (SBE) College of Design, Construction, and Planning (DCP) University of Florida
Office Location:	ARCH 0150 UF Building #0268
Office Hours:	Mondays 13:00 – 14:00 or by appointment
Office Correspondence:	352-294-6781 Canvas email (preferred) hknowles@ufl.edu (alternative)
Course Term & Credits:	Fall 2019 3 Credits
Course Time & Location:	Mondays Period 5 11:45 – 12:35 RNK 0210 UF Building #0268 Wednesdays Period 4-5 10:40 – 12:35 RNK 0210 UF Building #0268
Course Co/Prerequisite:	BCN 1582 (or) IDS 2154 (or) another course approved in the topic area
General Education Credit:	N/A
Final Exam Schedule:	TBD
Estimated Additional Costs:	~ \$60 textbooks \$0 materials & supplies ~ \$0-10 incidentals

Course Summary

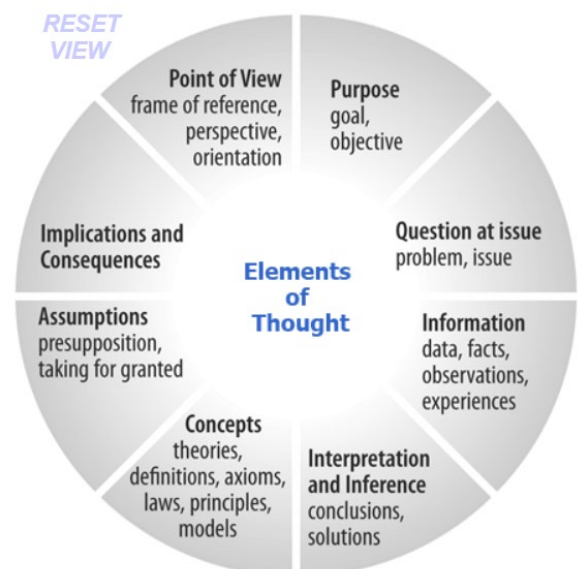
The breadth of methods of inquiry (the process of asking and then answering questions) commonly used by planners, designers and builders, as well as those who study the built and managed environments.

Course Overview & Purpose

This course provides an overview of the critical thinking process, the scientific method, and research design, with an emphasis on approaches pertinent to the field of sustainability in the built environment. Course assignments focus on analyzing and rebutting claims, developing a project management strategy, designing a research protocol, and gathering and evaluating data regarding each student's interests.

Course Goals & Objectives

- Learn and apply the elements of thought to evaluate claims within your field of interest.
- Utilize critical thinking strategies and research design methods to examine contemporary issues in sustainability and the built environment.
- Evaluate and develop personal philosophies of science.
- Explore data collection and analysis methods most applicable to different types of research questions.
- Conceptualize and develop a problem statement and a proposal for a research project (e.g., SBE Capstone).



Source: <https://www.criticalthinking.org/ctmodel/logic-model1.htm>

Student Learning Outcomes

Upon completion of this course, successful students will be able to:

- Distinguish sustainability and the built environment from other disciplines and better identify “good” science.
- Formulate and deliver higher quality verbal and written arguments.
- Demonstrate an ability to learn from other fields.
- Interact effectively as a part of a team exploring important issues.



Required & Optional Text(s)

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

- **REQUIRED** | Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage. 304 pp.
 - <http://www.worldcat.org/oclc/1047939791>
 - Cost | ~ \$67 (MSRP paperback) & ~ \$54 (discounted paperback)
- **OPTIONAL** | Fahy, F., & Rau, H. (2013). *Methods of sustainability research in the social sciences*. Los Angeles: Sage. 232 pp.
 - <http://www.worldcat.org/oclc/935610999>
 - Cost | ~ \$49 (MSRP paperback) & ~ \$37 (discounted paperback)

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/>).

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.CTE	Critical Thinking & Ethics	<ul style="list-style-type: none">• CTE.01 > Course Overview• CTE.02 > Elements of Thought• CTE.03 > Bias & Ethics• CTE.04 > Institutional Review Boards
CM.CA	Context & Approaches	<ul style="list-style-type: none">• CA.01 > Selection of Research Approaches• CA.02 > Review of the Literature• CA.03 > The Use of Theory
CM.RD	Research Design	<ul style="list-style-type: none">• RD.03 > Research Questions & Hypotheses• RD.02 > Abstracts & Introductions• RD.03 > Purpose Statements
CM.RM	Research Methods	<ul style="list-style-type: none">• RM.01 > Quantitative Methods• RM.02 > Qualitative Methods• RM.03 > Mixed Methods

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	Required	100	10%
Preparation & Participation	Readings, Discussions, & Class Activities (points vary) <ul style="list-style-type: none"> Weekly & Module-Based 	200	20%
Student Praxis (SP)	Individual and Team (50 points/each) <ul style="list-style-type: none"> SP.01 > Individual > FiLcHeRS Assessment SP.02 > Individual > IRB-02 Online Training SP.03 > Team > Questions & the Language of Science SP.04 > Team > Sampling Project SP.05 > Individual > Cover Letter & Resume SP.06 > Individual > Linked In Profile 	300	30%
Research Proposal (RP)	Individual (50 points/each + 100/RP.05) <ul style="list-style-type: none"> RP.01 > Step 1 > Ideas & Questions RP.02 > Step 2 > Literature Review RP.03 > Step 3 > Design & Methods RP.04 > Step 4 > Faculty Advising RP.05 > Step 5 > Final Submission 	300	30%
Quizzes (Q)	Individual (25 points/each) <ul style="list-style-type: none"> Q.01 > Critical Thinking & Ethics Q.02 > Context & Approaches Q.03 > Research Design Q.04 > Research Methods 	100	10%
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).

<i>Grade</i>	<i>Points (GPA)</i>	<i>Percent</i>	<i>Grade</i>	<i>Points (GPA)*</i>	<i>Percent</i>
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). *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

Minor, out-of-pocket student incidental expenses may include those associated with classroom activity and/or assignment logistics (e.g., office supplies) and/or personal mobile computing and file storage/transfer device(s) or web-based services to research, present, and share information in class.

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 in this class are participating in the pilot evaluation of the new course evaluation system called GatorEvals. The new evaluation system is designed to be more informative to instructors so that teaching effectiveness is enhanced and to be more seamlessly linked to UF's CANVAS learning management system. Students can complete their evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Please note your other classes this semester may be evaluated in the current GatorRater online evaluation system at <https://evaluations.ufl.edu>. Thank you for serving as a partner in this important effort.

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.

- *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/>
- *Dean of Students Office*, 202 Peabody Hall, 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>
- *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/>
- *Library Support*. Provides various ways to receive assistance with respect to using the libraries or finding resources. <http://cms.uflib.ufl.edu/ask>
- *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/>
- *UF Information Technology | Computing Help Desk*, 352-392-HELP (4357) or e-mail to helpdesk@ufl.edu. <http://helpdesk.ufl.edu/>
- *Sexual Assault Recovery Services (SARS)*, Student Health Care Center, 392-1161. Sexual assault counseling.
- *Career Resource Center*, Reitz Union, 392-1601. Career assistance and counseling. <http://www.crc.ufl.edu/>
- *University Police Department*, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>