RINKER SCHOOL OF CONSTRUCTION MANAGEMENT
UNIVERSITY OF FLORIDA

ADVANCED TOPICS IN LCA

COURSE NUMBER: *BCN 5905*

NUMBER OF CREDIT HOURS: *3*

RINKER HALL ROOM 240

SEE ELEARNING FOR CLASS MEETING TIMES BY SECTION

INSTRUCTOR: *Robert Ries*

332 Rinker Hall
email through Canvas preferred
rries@ufl.edu
352 273 1155

OFFICE HOURS: *See ELEARNING for office hours*

TEACHING ASSISTANT: *TBD*

341 Rinker Hall

OFFICE HOURS: *See ELEARNING for office hours*

RESOURCES:

Resources provided on course website

COURSE DESCRIPTION: *Framework, methods, and tools that can be applied to decision making in the design, construction, operation, maintenance, and decommissioning of the built environment, particularly when reducing environmental impact of the built environment and construction activities is a goal. Topics include the principles of life cycle assessment, case studies of applications of life cycle assessment, methods for life cycle inventory, methods for life cycle impact assessment, uncertainty and variability, scenario analysis, and the use of industry-standard life cycle assessment software to model the life cycle of the built environment.*

PREREQUISITE KNOWLEDGE AND SKILLS: *None*

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

1. *Create life cycle assessment models to quantify environmental impact in the built environment;*
2. *Identify data sources and data preparation techniques for life cycle assessment;*
3. *Acquire a working knowledge and hands-on experience with life cycle assessment methods and software tools;*
4. *Understand the strengths and limitations of life cycle assessment;*
5. *Encourage research in environmental assessment of the built environment.*

TEACHING PHILOSOPHY: *Students will be able to apply and reinforce learning through hands-on assignments that reinforce the concepts in lectures. Students will demonstrate learning by applying the skills acquired in the course and creating and interpreting life cycle assessment models of the built environment. Examples and practice in-class and in assignments will assess and guide learning. Questions and discussions that enhance learning for all are strongly encouraged.*

INSTRUCTIONAL METHODS: *Lectures will introduce concepts and scheduled in-class work will allow students to apply and demonstrate skills; a final project developed during the course will assess the student's knowledge and skills.*

ASSESSMENTS: *Four graded assignments, two project progress presentations and reports, and a final project presentation and report.*

COURSE POLICIES:

ATTENDANCE POLICY: *Required at all lectures. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:* https://go.ufl.edu/syllabuspolicies

ASSIGNMENT POLICY: *Assignments submitted after the late submission date without instructor's permission will NOT be accepted.*

COURSE TECHNOLOGY: *Software will be available through links on ELEARNING. Some software may be available for installation on student's computers.*

UF POLICIES:

PLEASE SEE THE FOLLOWING FOR ALL UF POLICIES:

https://go.ufl.edu/syllabuspolicies

COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, discussions and other communication. Communicating using electronic devices while in class may disturb others and is strongly discouraged.

GRADING POLICIES:

Attendance and participation	*10%*
In-class exercises & Homework	*20%*
Project Progress Presentations and Reports	*20%*
Final Project Presentation and Report	*35%*
TOTAL	*100%*

Given the hands-on and collaborative nature of the course work, attendance is critical. Arriving late or leaving before the end of class is NOT considered class attendance. There are no make-ups for missed classes unless you discuss your absence with the instructor before the class(es) you will miss. Requirements for class attendance, unplanned absences and make-up exams, assignments, and other work in this course are consistent with university policies at https://go.ufl.edu/syllabuspolicies

GRADING SCALE:

Letter Grade	*% Grade*
A >=	*93.3*
A- >=	*90*
B+ >=	*86.7*
B >=	*83.3*
B- >=	*80*
C+ >=	*76.7*
C >=	*73.3*
C- >=	*70*
D+ >=	*67.7*
D >=	*63.3*
D- >=	*60*
E <	*60*

COURSE SCHEDULE:

SEE ELEARNING FOR TOPICAL SCHEDULE

Disclaimer: This syllabus represents the current plans and objectives. As we go through the semester, those plans may need to change to enhance class learning. Such changes, communicated clearly, are not unusual and should be expected.