

Cover Sheet: Request 10297

BCN 4XXX - Sustainable Housing: Putting the 3 E's into Residential Practice

Info

Process	Course New Ugrad/Pro
Status	Pending
Submitter	Schattner, Sallie A sallieas@ufl.edu
Created	7/8/2015 3:37:36 PM
Updated	10/13/2015 3:32:08 PM
Description	Sustainability: The balance and intersection of "the 3 e's": environment, economics and social equity. Post-industrial residential planning and building practices have neglected to address the 3 e's. In this course students will learn "Sustainable" includes more than building green and examine approaches to advance the development and building of sustainable housing.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	DCP - Construction Management 011503000	Ries, Robert		8/25/2015
No document changes					
College	Recycled	DCP - College of Design, Construction and Planning	Wehle, Andrew J	Recommend course changed to 4000 level. Resubmit with changes.	9/8/2015
No document changes					
Department	Approved	DCP - Construction Management 011503000	Ries, Robert		9/15/2015
Replaced BCN 4XXX. Sustainable Housing.pdf					9/14/2015
Added BCN 4XXX. Sustainable Housing.pdf					9/14/2015
College	Approved	DCP - College of Design, Construction and Planning	Wehle, Andrew J		10/13/2015
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			10/13/2015
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					

Step	Status	Group	User	Comment	Updated
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Recommended SCNS Course Identification

1. Prefix: BCN 2. Level: 4 3. Number: XXX 4. Lab Code: None

5. Course Title: Sustainable housing: Putting the 3 E's into Residential practice

6. Transcript Title (21 character max.): Sustainable housing

7. Effective Term: Spring

8. Effective Year: 2016

9. Rotating Topic: No

10. Amount of Credit: 3

11. If variable, # min. and # max. credits per semester.

12. Repeatable Credit: No

13. If yes, # total repeatable credit allowed.

14. S/U Only: No

15. Contact Type: Regularly Scheduled [base hr]

16. Degree Type: Baccalaureate

17. If other, specify: [Click here to enter text.](#)

18. Weekly Contact Hours: 3

19. Category of Instruction: Intermediate

20. Delivery Method(s): On-campus Off-campus Online

21. Course Description (50 words maximum)

Sustainability: The balance and intersection of "the 3 e's": environment, economics and social equity. Post-industrial residential planning and building practices have neglected to address the 3 e's. In this course students will learn "Sustainable" includes more than building green and examine approaches to advance the development and building of sustainable housing.

22. Prerequisites

None

23. Co-requisites

None

24. Rationale and Placement in Curriculum

Recent efforts have produced processes, practices, and innovations to rectify this situation. Some of these residential practices try to incorporate at least one of these "e's" into the design-development-financing-construction-occupancy process; some attempt to address more than one. The premise of this course is that "sustainable" includes, but is more than building "green." And that housing includes, but is more than simply a collection of individual dwellings. This course examines approaches that can advance the development and building of sustainable housing in this light. This is offered as an elective for Construction Management majors.

25. Course Objectives

To recognize consequences of climate change, demographic disruptions, and economic imbalances that threaten to unhinge residential stability and sustainability

In light of these threats, to become familiar with various approaches to developing/constructing sustainable residential environments, ones that incorporate environmental, social and/or financial sustainability practices

To understand and identify principles of active and passive sustainable building and infrastructure practices for: energy efficiency and renewables, water efficiency and reuse, ventilation, indoor air quality, waste reduction and recycling, lifespan adaptability and accessibility, occupant health, financial/economic sustainability

To compare and analyze these sustainable residential practices, identifying limitations, strengths, and contextual applications

To examine and explain various metrics and measurements for benchmarking and performance

To describe and compare guidelines of LEED for Homes, Enterprise Green Communities and other rating systems for residences/housing

For doctoral students, to examine ways that your specialty area can incorporate or reflect sustainability theories or approaches

26. Course Textbook(s) and/or Other Assigned Reading

Readings come from a variety of sources: books, academic and professional journals, trade magazines, online videos and newsletters. Readings from textbooks primarily come from three books, on reserve at the Science library:

Green Building: Principles and Practices in Residential Construction, by Abe Kruger and Carl Seville. 2013. Delmar.

Passive Solar Architecture, by David A. Bainbridge and Ken Haggard. 2011. Chelsea Green Publishing

Sustainable Residential Development, by Avi Friedman. 2007. McGraw-Hill

Required readings and videos are listed in separate handouts.

Readings and video viewings must be completed prior to class. For designated class sessions, students must post comments regarding these readings/videos prior to class using the website's Discussion board. You will also be notified when you must complete a short quiz on the reading material before class session.

27. Weekly Schedule of Topics

Jan 7 W

Introduction to Course

Jan 12 M

Overview of What Constitutes Sustainability in a Housing Context ; Tragedy of the Commons

Jan 14 W

How Did We Get Into This Mess? Some History of Unsustainable Housing Practices

Jan 19 M

HOLIDAY - NO CLASS

Jan 21 W

Ethics of Sustainability

Jan 26 M

Sustainability and Vernacular Housing - Vandana Bawega

Jan 28 W

Green Residential Structures and Construction: Heating, Cooling, Ventilation, Daylighting

Feb 2 M

Green Residential Structures and Construction: (continued)

Handout of Project 1: Instructions and Presentation
 Feb 4 W
 Green Residential Structures and Construction: (continued)
 Feb 9 M
 Green Residential Structures and Construction: (continued)
 Feb 11 W
 Affordable and Green: Energy Retrofits - Nick Taylor
 Feb 16 M
 Residential Green Certificates and Standards
 Feb 18 W
 Performance Assessment Processes: POE, Simulation, LCA, Performance Metrics
 Feb 23 M
 Performance Assessment Processes: Measurement Tools and Techniques -- Guest speakers Craig Miller, Hal Knowles. NOTE: Class meets at Program for Resource-Efficient Communities (PREC), Building 106, Mowry Rd
 Feb 25 W
 Performance Assessment in the Field - Bill Lazar and Thomas Stauffacher
 Mar 2 M
 NO CLASS
 Mar 4 W
 NO CLASS
 Mar 9 M
 Greening the Residential Infrastructure -- Pierce Jones
 Mar 11 W
 Greening the Residential Infrastructure (continued)

28. Grading Scheme

Type of Assessment, Activity or Other Assignment	Percent of Grade
Exam, Assignments, Discussion Posts, Class Participation	40%
Project 1	30%
Project 2	30%
A	92.5% and above
A-	90 - 92%
B+	87.5% - 89.5%
B	82.5 - 87%
B-	80 - 82%
C+	77.5% - 79.5%
C	72.5 - 77%
C-	70 - 72%
D+	67.5% - 69.5%
D	62.5 - 67%
D-	60 - 62%
E	59.5% and below

29. Instructor(s)

Sherry Ahrentzen, Ph.D.