FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL

DEPARTMENT NAME: School of Architecture

COLLEGE OF: College of Architecture, Urban and Public Affairs

RECOMMENDED COURSE IDENTIFICATION:

PREFIX ARC **COURSE NUMBER** 6368 **LAB CODE** (L or C) n/a

(*To obtain a course number, contact erudolph@fau.edu*)

COMPLETE COURSE TITLE: Design Research Paradigms and Methods

EFFECTIVE DATE
(first term course will be offered)

FALL 2009

CREDITS: 3

TEXTBOOK INFORMATION: Groat, Linda and David Wang. *Architectural Research Methods*. New York: Wiley, 2001.

GRADING (*SELECT ONLY ONE GRADING OPTION*): **REGULAR** **X** **PASS/FAIL** _____ **SATISFACTORY/UNSATISFACTORY** _____

COURSE DESCRIPTION, NO MORE THAN 3 LINES:
The course aims to introduce students to the objectives, norms, forms, methods, expectations, and consequences of research and to examine the specific issues of research in design and architecture.

PREREQUISITES W/MINIMUM GRADE:*

COREQUISITES:

ARC 6367

Design Research Seminar

OTHER REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL):

graduate students only, architecture majors only

PREREQUISITES, COREQUISITES & REGISTRATION CONTROLS SHOWN ABOVE WILL BE ENFORCED FOR ALL COURSE SECTIONS.

***DEFAULT MINIMUM GRADE IS D-.**

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE:
18 graduate semester hours in the teaching discipline with at least a master's degree

Other departments, colleges that might be affected by the new course must be consulted. List entities that have been consulted and attach written comments from each. This course is specific to students in the Architecture graduate program and should not affect other departments.

Philippe d'Anjou, pdanjou@fau.edu, 954-762-5065
Faculty Contact, Email, Complete Phone Number

SIGNATURES

SUPPORTING MATERIALS

Approved by:

Department Chair: _____

College Curriculum Chair: _____

College Dean: _____

UGPC Chair: _____

Dean of the Graduate College: _____

Date:

_____

_____

_____

_____

_____

Syllabus—must include all details as shown in the UGPC Guidelines.

Written Consent—required from all departments affected.

Go to: *http://graduate.fau.edu/gpc/* to download this form and guidelines to fill out the form.

Email this form and syllabus to *sfulks@fau.edu* and *eqirjo@fau.edu* one week **before** the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website by committee members prior to the meeting.

Florida Atlantic University

School of Architecture

Design Research Paradigms and Methods (ARC 6368)

3 credits

Corequisites: Design Research Seminar (ARC 6367)

Instructor: TBA

Phone: TBA

Email: TBA

Office Hours: TBA

Course Description

The course aims to introduce students to the objectives, norms, forms, methods, expectations, and consequences of research and to examine the specific issues of research in design and architecture.

Course Objectives

At the end of the course the students will be able to:

1) Distinguish between a research problem and a design problem.
2) Construct a research problem from a design problem.
3) Identify a research question and deduct the associated methodological questions.
4) Know the range of research methods available in design among qualitative and quantitative methods.
5) Understand the construction of a research plan.

Course development and evaluation

The course is composed of lectures, debates, and student presentations. There are critical discussions and debates related to specific texts and case studies, with the objective to individualize the outcome of the theoretical work towards each student's research project.

Student performance and evaluation will be based primarily on the following three tasks:

1) A comparative analysis of particular methods used in scientific research.
2) A critical synthesis of the different conceptual models found in the design research literature (journals, dissertations, theses).
3) A conceptualization of research protocol with an emphasis on the methodological aspect.

Grade determination will also include, but is not limited to, the following criteria: class participation, craftsmanship, project development, and overall attitude.

Letter grades are defined as follows:

A (4.00) to A- (3.67)   Exceptional work, above and beyond the requirements and exhibiting creative advancement in design theory or application.

B+ (3.33) to B (3.00)   Good work, meeting all of the requirements and exhibiting creative solutions that respond to the important project issues, communicated clearly.

B- (2.67) to C (2.00)   Marginal work, meeting less than the minimum requirements while exhibiting inconsistency in research, process, and lacking in clarity.

C- (1.67) to F (0.00)   Failing work, meeting less than the minimum requirements.

Students must earn a B- (2.67) or higher in order for this course to count toward the graduate degree requirements in Architecture.

Required Media

Students are expected to have appropriate sketching, drawing, drafting, and modeling supplies as needed to complete coursework.

Students are required to purchase the following textbook:

Architectural Research Methods by Linda Groat and David Wang

published by Wiley & Sons, 2001. [ISBN# 0471333654)

Professional and Ethical Conduct

The College of Architecture, Urban and Public Affairs expects students to communicate their ideas effectively and professionally. This includes legible text with proper spelling, punctuation, and grammar, as well as reference citations that meet the standards of your discipline for research and scholarly writing.

Once it is documented in writing or in drawing, an idea is the intellectual property of the author. When presenting anything that is not your own, you are legally and ethically bound to identify your source. To do otherwise is plagiarism, which constitutes cheating.

Using the ideas, writings, or drawings of another and attempting to pass them off as yours is plagiarism. Examples of plagiarism include, (but are not limited to): lifting material verbatim (or with minimal changes) directly from someone else's work without citing the original author, as well as submitting work prepared by someone else as your own.

Plagiarism is a very serious offense, as is submitting a product which was not originally prepared for this course, or one which is used to fulfill the requirements of more than one course. In any such case, the student will receive no credit for the work, and/or a failing grade for the course. Moreover, depending on the severity of the offense and any previous violations, additional penalties may be assessed by the university, (which can include academic probation or expulsion from the university). A grade of "F" received for academic misconduct cannot be removed from your transcript through the university's forgiveness policy.

The university's honor code *requires* that both faculty and students report plagiarism and other forms of cheating. A detailed description of the honor code is provided in the FAU catalog under *Academic Policies and Regulations* (*Florida Administrative Code,* section *6C5-4.001 Honor Code, Academic Irregularities, and Students' Academic Grievances).* You can also find it on the FAU website at *http://www.fau.edu/caupa/honor_code.*

Student Work
The School of Architecture reserves the right to retain any and all student work for the purpose of record, exhibition, and instruction. All students are encouraged to reproduce all work for their own records prior to submission of originals to the instructor. In the event of publication the author or the work will be recognized and receive full attribution.

General
Information concerning academic regulations, student rights and responsibilities may be found in the current Florida Atlantic University Catalog and Student Handbook. Personal communication devices such as pagers, beepers, and cellular telephones are to be disabled in class sessions. If any of these devices are not disabled, interrupting the class session, the owner will be asked to leave the class for the remainder of the period and shall be marked as absent for that day.

Special Needs

Students who require special accommodations due to a disability to properly execute coursework are encouraged to register with the Office for Students with Disabilities (OSD). More information, including office locations and contact information, is available at the OSD website: http://www.osd.fau.edu/

Course Content & Schedule

Week	Content
1	Understanding the world of scientific research and the world of design. Scientific project vs. design project
2	Introduction to epistemology. Knowing and acting. Common knowledge and scientific knowledge
3	Genesis of western scientific modernity
4	Major epistemic paradigms (empiricism, rationalism, idealism, realism, materialism, positivism, logical positivism, postmodern relativism, etc.) Exercise 1 due
5	The design perspective: the world as project
6	The canonic scientific method: epistemological foundations and rhetoric
7	The scientific method and its achievements and limits The different methods used and their expectations
8	Quantitative research methods
9	Qualitative research methods
10	Project-grounded research, a method for research in design
11	Professional practice-based research (Herzog & de Meuron, Koolhaas, etc.) Exercise 2 due
12	Comparative studies of research protocols in design
13	Research question development
14	Research plan development
15	Research plan development
16	**Conclusion** Exercise 3 due

Bibliography

Books

Booth, Wayne, Gregory Colomb, and Joseph Williams, *The Craft of Research*, Chicago: University of Chicago Press, 2003.

Creswell, John, *Research Design: Qualitative, Quantitative, & Mixed Methods Approaches*, Thousand Oaks: Sage, 2003.

Denzin, Norman and Yvonna Lincoln, *The Sage Handbook of Qualitative Research*, Thousand Oaks: Sage, 2005.

Groat, Linda and David Wang, *Architectural Research Methods,* New York: Wiley & Sons, 2001.

Howell, Martha and Walter Prevenier, *From Reliable Sources: An Introduction to Historical Methods*, Ithaca: Cornell University Press, 2001.

Barber, Sarah and Corrina Peniston-Bird (eds.), *History Beyond the Text: A Student's Guide to Approaching Alternative Sources* London: Routledge, 2009.

Preziosi, Donald, *The Art of Art History: A Critical Anthology,* Oxford: Oxford University Press, 1998.

Yin, Robert, *Case Study Research: Design and Methods*, Thousand Oaks: Sage, 1994.
Ziesel, John, *Inquiry by Design*, New York: Norton, 2006.

Articles

Altrichter, A. et Al. "The Concept of Action Research." *The Learning Organization*, Vol. 9, No. 3, 125-131.

Bayazit, N. "Investigating Design: A Review of Forty Years of Design Research." *Design Issues*, Vol. 20, No. 1, 16-29.

Biggs, M. & D. Büchler. "Rigor and Practice-based Research." *Design Issues*, Vol. 23, No. 3, 62-69.

Buchanan, R. "Design Research and the New Learning." *Design Issues*, Vol. 17, No. 4, 3-23.

Buchanan, R. "Myth and Maturity: Toward a New Order in the Decade of Design." *Design Issues*, Vol. 6, No. 2, 70-80.

Cross N. "Designerly Ways of Knowing: Design Discipline versus Design Science." *Design Issues*, Vol. 17, No. 3, 49-55.

Cross, N. "Design Research: A Disciplined Conversation." *Design Issues*, Vol. 15, No. 2, 5-10.

Glanville, R. "Researching Design and Designing Research." *Design Issues*, Vol. 15, No. 2, 80-91.

Robinson, J. "Architectural Research: Incorporating Myth and Science." *Journal of Architectural Education*, Vol. 44, No. 1, 20-32.

Roth, S. "The State of Design Research." *Design Issues*, Vol. 15, No. 2, 18-26.

Swann, C. "Action Research and the Practice of Design." *Design Issues*, Vol. 18, No. 2, 49-61.