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## **SYLLABUS**

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### **INSTRUCTORS**

Frank M. Bosworth, Ph.D., AIA  
Center for Emerging Media 304  
Office Hours M & R 12:00 – 1:30  
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### **GENERAL CATALOG DESCRIPTION**

ARC 6241 GRADUATE DESIGN STUDIO Section 076E (6 credits)

### **CLASS LOCATION AND MEETING TIMES**

CityLab-Orlando Studio, Center for Emerging Media Room 107 Monday, Wednesday and Thursday 1:30-4:30 PM

### **COURSE DESCRIPTION**

Advanced Graduate Architectural Design 1 studio introduces students to the challenges and rigors of developing a philosophical position and research-based design process as the foundation for a career in architectural design and practice. Emphasis is on cultivating self-directed speculation, analytical thinking, and synthetic design exploration within the framework of an organized studio program. The framed program anticipates incorporating multiple trajectories offered by companion courses both within and beyond the School of Architecture and students are encouraged to draw from this knowledge. Students will begin to develop authorship positions and self-directed processes to produce compelling design proposals. Students are expected to develop their ideas philosophically, conceptually, and architecturally to provide a strong foundation in critical thinking and architectural design. Students are encouraged to use this course to germinate scholarship and personal perspectives that will be expanded in future studios and the Masters Research Project or Thesis.

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## **The Development of a Concept of Material Kind<sup>1</sup>**

### **INTRODUCTION**

*“There is no law, no principle, based on past practice, which may not be overthrown in a moment, by the arising of a new condition, or the invention of a new material; and the most rational, if not the only, mode of averting the danger of an utter dissolution of all that is systematic and consistent in our practice, or of ancient authority in our judgment, is to cease for a little while, our endeavors to deal with the multiplying host of particular abuses, restraints, or requirements; and endeavor to determine, as the guides of every effort, some constant, general, and irrefragable laws of right—laws, which based upon man’s nature, not upon his knowledge, may possess so far the unchangeableness of the one, as that neither the increase nor imperfection of the other may be able to assault or invalidate them.”*

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<sup>1</sup> The title for this studio is borrowed from a 1987 article by David K. Dickenson discussing how to describe a child’s understanding of the physical world

*The Seven Lamps of Architecture: Lectures on Architecture and Painting, John Ruskin*

*“Concrete has been used in arches, vaults, and domes dating as far back as the Roman Empire. Today, it is everywhere—in our roads, bridges, sidewalks, walls, and architecture. For each person on the planet, nearly three tons of concrete are produced every year. Used almost universally in modern construction, concrete has become a polarizing material that provokes intense loathing in some and fervent passion in others.”*

*Concrete and Culture: A Material History by Adrian Forty*

This studio will focus on the materials and assemblies of architecture in Orlando’s macro and micro climatic conditions. We will work on two projects over the semester, each with defined segments allowing for adequate reflection and discussion while immersed in the project. The studio focus is on the architectural discourse of material qualities, the atmospheric nature of architecture and the specific role and meaning of materials as a driver of design versus an emphasis on form or idea. Central to this concept is the work of architects, whose buildings operate through the material rather than the conceptual, who you will discover as we move through the semester. Our discussions will begin by questioning a theoretical point of view that *a material is an architectural construct whose inherent properties are a matter of interpretation, and the conception and subsequent use of a material is defined by architectural doctrine, building practice, aesthetic outcome, and cultural strategies as well as constructional constraints.*

These are not new ideas, philosophers have grappled with the notion of substance (materiality) starting with the Greek theorists as you will see in your reading *Substance*. The reading by Rosmarie Haag Bletter, *The Interpretation of the Glass Dream-Expressionist Architecture and the History of the Crystal Metaphor* is a discussion of meaning, material and form. Rashida Ng’s article *Something Borrowed: Defining an Emergent Covenant between Architecture and Materials*, gets to heart of John Ruskin’s point in the introductory quote. Other readings on Tectonics and Stereotomics will assist you in making personal discoveries through making. The outcome of this semester will not be a fully formed building, but rather a series of conceptually integrated fragments that will assist you with reexamining older concepts of materiality, in order to develop conceptual tools to advance new material strategies. How architecture emerges from this investigation will be a journey of discovery as we investigate the power of materials to influence and be influenced by the public realm, culture, ecological context, economic development, and sustainability. Each segment of project work will have deadlines and it is important for you to be self-motivated and develop personal goals and targets to bring your ideas to resolution in order to meet the deadlines.

Over the course of the semester we will concern ourselves with how we communicate our ideas effectively. To that end the collective work of the studio must be developed into a cohesive narrative of the experience, to be presented at the CityLab-Orlando exhibit and reception in December.

**Project briefs will be provided for each segment outlining project objectives, outcomes and schedules.**

*Intensive differences, also known as gradients, are properties of matter with indivisible difference such as weight, elasticity, pressure, heat, density, color and duration. ...*

*Extensive differences are properties of matter with divisible differences, such as measurement, constraints, limits, codes/rules, modulation, mass, total volume, and time and all the elements of pure extension maintain a priority over that which they regulate. The new model must be understood not as a supercession of measuring but as the interplay between intensive and extensive differences.”*

*Atlas of Novel Tectonics by Jesse Reiser*

The making of architecture is often about dichotomies, light and shadow, open and closed, calm and excited, active and passive, smooth and rough, soft and hard, compression and expansion, cold and hot, the list is long. During our investigations this semester we will consistently focus on how the manifestations of dichotomies shape our design ideas. We will develop design narratives by questioning INTERPLAY, how seemingly disparate ideas act with one another; and INTERSECTIONS, the edges of the third dimension produced when dichotomies intersect. (Reiser 2006) This point of view argues for a more broad interpretation of tectonics, or as Reiser puts it, “gone forever, the myth of statics.”

The outcome of this studio will be a series of “fragments” emerging from your comprehension of materiality that expresses an architectural vision. A successful project is one where the perceiver clearly “reads” your narrative at all scales in your intervention. The finished products are expected to be well-developed providing evidence of your knowledge of building materials and methods.

## **STUDIO OBJECTIVES**

1. To encourage and refine speculative procedures of investigative production and collaboration as an integral component of design activity;
2. To intersect architectural disciplinary modalities and thinking with broader cultural developments and contextual responses as fundamental design skills;
3. To translate philosophical and conceptual ideas into architecture through investigation of architectural fragments;
4. To nurture independent and critically aware graduate students with strong visual, verbal and written communication skills.

## **PEDAGOGIC METHODS**

1. Making the familiar unfamiliar – finding the extraordinary within the ordinary and challenging ‘known’ contexts as places of renewed speculation and inspiration.
2. Placing emphasis is on communication of ideas to others, self-assessment and critique to establish and convey intellectual positions, frames of reference, and architecturally appropriate responses to the cultural and contextual issues introduced within a given project.

## **COURSE READING LIST (REQUIRED)**

- Defilippis, Francesco. Architecture and Stereotomy. The Relation Between the “Construction Apparatus” and the “Decorative Apparatus” of the Cut-Stone Vaults and Domes of Philibert de l’Orme and Andrés de Vandelvira Nd. (available in pdf format on the class Canvas site)
- Dickinson, David, The Development of a concept of Material Kind. 1986 (available in pdf format on the class Canvas site)
- Farrelly, Lorraine. *Construction + Materiality*. 2009 (available in pdf format on the class Canvas site)
- Frampton, Kenneth. Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture. Nd. Introduction only. (available in pdf format on the class Canvas site)
- Haag Bletter, Rosmarie. The Interpretation of the Glass Dream Expressionist Architecture and the History of the Crystal Metaphor. 1981. (available in pdf format on the class Canvas site)
- Ng, Rashida. Something Borrowed: Defining and Emerging Covenant between Architecture and Materials. Nd. (available in pdf format on the class Canvas site)
- Reiser, Jesse. *Atlas of Novel Tectonics*. New York: Princeton Architectural Press, 2006. ISBN 13: 978-1-56898-554-1 (available on Amazon and several used book dealers)
- Sanford Encyclopedia of Philosophy. Substance. 2014 [2004]. (available in pdf format on the class Canvas site)

## **COURSE READING LIST (SUPPORTIVE)**

- Holl, Steven, Juhani Pallasmaa, Alberto Perez-Gomez. *Questions of Perception: Phenomenology of Architecture*. New York: William K. Stout, 2007. ISBN-13: 978-0974621470
- *Architecture Spoken*. New York: Rizzoli, 2007. ISBN-13: 978-0847829200
- Pallasmaa, Juhani. *The Eyes of the Skin: Architecture and the Senses 2<sup>nd</sup> Edition*. Chichester, England: John Wiley and Sons, 2005. ISBN: 0470015780 (PB)
- Rubinowicz, Pawel. Geometric Order in Architecture and Design in *Journal for Geometry and Graphics*, v4 (2000) n2 (197-207). (available in pdf format)
- Zumthor Peter. *Thinking Architecture (Third Edition)*. Basal: Birkhäuser Architecture, 2010. ISBN 13: 978-3034605854
- *Atmospheres: Architectural Environments - Surrounding Objects* Basal: Birkhäuser Architecture, 2006. ISBN-13: 978-3764374952

## **STUDIO CULTURE**

Students arriving directly from undergraduate programs or returning from practice to complete their professional degree should be familiar with studio culture. It is critical that students and faculty contribute to a positive, rigorous and focused environment that is both challenging and rewarding. At the graduate level, students must be self-motivated and contribute to studio inquiry, discourse and production. Faculty will set the agenda, provide a framework of reference materials, and will provide feedback, criticism and guidance to students. Students will proactively engage the issues set forward, advance the inquiry and work collaboratively and individually to develop a body of work derived from the studio agenda.

## **ATTENDANCE**

Students are responsible for meeting all academic objectives as defined by the instructor. Absences count from the first class meeting. In general, acceptable reasons for absences from class include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official University activities. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) must be excused. Other reasons also may be approved. No more than three unexcused absences are permitted. More than three unexcused absences will result in being administratively dropped from the course.

## **COURSE OUTCOMES**

Course outcomes are the actual products and activities you attempt during the course. At the conclusion of this course you will have:

- (1) Completed assigned reading
- (2) Participated in multiple peer and cohort reviews
- (3) Completed studio assignments
- (4) Maintained a comprehensive design journal
- (5) Completed a cohort design studio publication, and exhibit
- (6) Prepared a digital record of the semester's work.

## **COURSE REQUIREMENTS AND EVALUATION**

Completion of all required work does not guarantee *acceptable mastery of the course material*. The following definitions of letter grades are from the University General Catalog.

## **GRADES**

The only passing grades for graduate students are A, A-, B+, B, B-, C+, C, and S. Grades of B-, C+ or C count toward a graduate degree if an equal number of credits in courses numbered 5000 or higher have been earned with grades of B+, A- and A, respectively. Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level, although the grade points associated with these letter grades are included in grade point average calculations.

Please note that The University requires that a graduate student maintain a 3.0 (B) average to remain in good academic standing. Every possible effort is made to counsel students in academic difficulty to determine the cause and possible solution so that the student can continue and complete their studies in the University. The graduate design studio and support courses are in required sequences that must be taken in order. A grade of I in a studio requires completion of the course before enrolling in the next studio in the sequence; failure to complete the studio before the beginning of the next semester requires a minimum one-year delay in progress through the program. A 'C-', 'D' or an 'E' grade in a studio results in either suspension or expulsion from the architecture program. Students receiving one of these grades must immediately contact the Assistant Director of the Graduate Program.

Grade points are not given for S and U grades; S and U grades are not used to calculate grade point averages. All letter-graded courses eligible to count toward the graduate degree, except 1000- and 2000-level courses.

Your final grade may be based on standardized scores (curving the final point values); however, minimum points for a specified grade shall be no greater than:

100-94	93-90	89-87	86-84	83-80	79-77	76-74	73-70	69-67	66-64	63-60	59-0
A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

**GRADE POINTS**

Course final grades will be based on the following:

<u>COURSE REQUIREMENT</u>	<u>POINTS</u>	<u>PERCENT</u>
Class participation (discussion, attendance, collaboration)	100	10 %
Project work (see individual briefs)	600	60 %
Project Design Journal	100	10 %
Cohort publication and exhibit	150	15 %
Digital Record of Semester's work	50	5 %
<i>Total</i>	<i>1000</i>	<i>100 %</i>

**COURSE MANAGEMENT SYSTEM | CANVAS**

CANVAS is UF's Course Management System (CMS), Students are responsible for accessing the content of this course online. Whenever possible, assignments, supplementary reading, and other materials will be provided and collected in a digital format. Students are responsible for accessing the CANVASI course site daily.

**SPRAY PAINTING POLICY**

Spray painting, or the use of any other sort of aerosol spray, is not allowed in the Center for Emerging Media.

**FABLAB**

All students may request access to the FABLAB at the School of Architecture on the Gainesville campus. See Dr. Bosworth if you are interested.

**INDIVIDUALS NEEDING ACCOMMODATIONS**

Any student needing special accommodations due to a disability must inform the instructor at the start of the semester and mutually develop an accessibility plan.

**READING AND WRITING CENTER**

All CityLab-Orlando students have access to The Reading and Writing Center, a part of the Office of Academic Technology. It is located in the mezzanine area of Southwest Broward Hall. The Center offers one-on-one tutoring and writing help for both undergraduate and graduate students. The Center often helps people with application essays and personal statements for school applications. It also offers help on papers written for graduate school classes, and theses or dissertations. The Center guarantees 30 minute sessions (longer if staff are not busy) to look over a student's writing. While multiple visits will give students feedback on the strengths and

weaknesses in their writing, it is difficult to provide anything like a comprehensive reading of any document as long as most theses and dissertations. For information, visit <http://at.ufl.edu/rwcenter>. Phone (352) 392-6420.

### **ACADEMIC HONESTY**

Academic misconduct is destructive to the central purposes of the University; is demeaning to the community of scholars in the School of Architecture; is unprofessional behavior, and inconsistent with an architect's code of ethics, and is universally disdained.

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior. See <http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php> for the full text of the student honor code.

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