Interim Progress Report
University of Arizona
College of Architecture and Landscape Architecture (CALA)
Bachelor of Architecture (174 credit units)
Master of Architecture (prerequisite Bachelor's degree + 102 credit units)
Year of the previous visit: 2016

Please update contact information as necessary since the last APR was submitted.

Chief administrator for the academic unit in which the program is located: Robert J. Miller, Professor, Director, UA School of Architecture

Provost: Dr. Jeffrey B. Goldberg, Interim Senior Vice President for Academic Affairs and Provost

President of the institution: Dr. Robert C. Robbins, President

Individual submitting the Interim Progress Report: Robert J. Miller

Name of individual(s) to whom questions should be directed: Robert J. Miller

Current term of accreditation: 2016–2023
Text from the most recent VTR or APR is in the gray text boxes. Type your response in the designated text boxes.

1. Progress in Addressing Not-Met Conditions and Student Performance Criteria

A.5 Ordering Systems (M. Arch. only)

2016 Team Assessment: The work exhibited in the team room from ARC 510d Advanced Design Studio 1 addressed ordering systems in terms of program organization, layout of vertical circulation, structural systems, and technical systems; however, there was no evidence of conceptual ordering in two or three dimensions or any exploration of parti in the exhibits for this studio or in any completed projects in the advanced studios.

University of Arizona, 2018 Response: For the first 8 weeks in a 16-week studio, students now develop conceptual ordering systems in drawings (plan, section, axonometric) and models (digital and analog), based on precedent research and each student's theoretical position. The site and program are determined by the students based on their particular position. The conceptual ordering process includes: Week 1: Investigate and identify a variety of conceptual ordering systems using theoretical and built precedent. Week 2-8: Develop conceptual ordering system(s) in drawings and models. Week 4-8: Develop detailed wall section(s) in relation to conceptual ordering system.

2. Changes or Planned Changes in the Program

Please report such changes as the following: faculty retirement/succession planning; administration changes (dean, department chair, provost); changes in enrollment (increases, decreases, new external pressures); new opportunities for collaboration; changes in financial resources (increases, decreases, external pressures); significant changes in educational approach or philosophy; changes in physical resources (e.g., deferred maintenance, new building planned, cancellation of plans for new building).

University of Arizona, 2018 Response:

FACULTY RETIREMENT / SUCCESSION PLANNING
Since the last visit there have been no retirements. Succession planning is in place for two senior faculty members:
Professor Nader Chalfoun: estimated retirement in 2020. Chalfoun is currently the key to our MS.Arch degree and runs the Design and Energy Conservation subplan. We have begun development of additional subplans in order to strengthen that degree as Chalfoun retires. A succession plan for the Design and Energy Conservation subplan will be developed in 2019.
Professor Mary Hardin: no estimated retirement date. Hardin is a key expert in our design/build program. Assistant Professor Anna Koosmann started in AY 2017-2018 as a succession hire.

ADMINISTRATION CHANGES
UNIVERSITY
President: President Robbins assumed authority in AY 2017-2018. A new University strategic plan has been developed and was announced to the Arizona Board of Regents in November 2018. Provost: President Robbins appointed an interim Provost in AY 2017-2018. A search is underway.

COLLEGE
Dean: At the College of Architecture, Planning, and Landscape Architecture, Dean Cervelli left in 2016. Professor Mary Hardin served as Interim Dean until Nancy Pollock-Ellward became CAPLA
Dean in AY 2017-2018. A new College strategic plan has been developed and will be unveiled in early 2019.

Director of Development: In 2018 Kay Brown was reassigned to Director of Alumni Relations and a search was opened, as yet unfilled, for a new DOD.

SCHOOL
Starting AY 2017-2018, the School hired Associate Director Laura Hollengreen, Ph.D., as an Associate Professor of Practice on a five-year term (majority paid by non-School funds). Hollengreen as a former Interim Director of the School and has contributed significantly to advancing administrative effectiveness and depth. This temporary position allows the Director to assume limited-time duties outside the School at low-cost to the School.

SCHOOL STAFF
Both primary staff positions in the School will retire between July-December 2019. A search is open for the first retirement. The Dean is conducting a workload study to determine whether the second position will be restored.

CHANGES IN ENROLLMENT
Bachelor of Architecture
Enrollments have dropped since the last visit, the B.Arch down 16% and graduate programs down 25% over two years. Please see Appendix I, Figure 1.
In the B.Arch, freshman enrollments (Foundation) have been recovering from the recession, albeit sporadically. We anticipate continued modest growth in applicants and plan to hold Foundation starts at 150. Please see Appendix I, Figure 2.
Admissions to the Professional Phase, beginning in 2nd Year, are capped at 80, due to space constraints but are limited to qualified applicants. As indicated, 2nd Year starts do not follow Foundation admissions. We plan to increase space in the next few years so the Professional Phase classes can grow to 100. B.Arch graduates have dropped due, not to performance declines or teaching degradation, but to small recession classes.

Graduate Programs
Graduate classes will grow to about 60 in the next two years. Graduate enrollments are down since the last visit, due largely to a decline in foreign applications and a hostile political environment created by the federal government for foreign students. Please see Appendix I, Figure 3.

Master of Architecture
Within this population, the M.Arch program has also shrunk. See Appendix I, Figure 4.
We have applied for STEM status to make our degrees more attractive to foreign students by improving their changes for government funding by their home countries. Meanwhile, we are shifting efforts to domestic recruiting and, with the other disciplines in our College, are working on more robust and better staffed recruiting programs.

NEW OPPORTUNITIES FOR COLLABORATION
Bachelor of Science in Architectural Engineering (BS.ARCE):
The SoA has contributed five new courses to Civil Engineering’s BS.ARCE, which was launched in 2016-2017, one of which is a B.ARCH course and the others new. This program will give another professional career option for students interested in the built environment; it will give a new
option for students who are not at home in the B.Arch and may provide a recruitment path into Architecture. The five courses will add modestly to our revenue stream.

Applied Humanities:
The SoA is going to contribute some course options to a new degree in Applied Humanities, with a similar but more modest impact as BS.ARCE.

CHANGES IN FINANCIAL RESOURCES
The School budget first increased, then declined, since the last visit, dropping 7% net over two years. See Appendix I, Figure 5.
School revenue is made up of state funds, retained fees (Differential Tuition and Program Fees), and other sources, all of which are allocated by the Dean. See Appendix I, Figure 6.
Retained fees are based solely on enrollments; state funds are dependent on overall enrollments at the University and are about 50/50 subvention and Responsibility Centered Management (incentivized distribution based on enrollments and majors). We anticipate continued fluctuations, and probably declines, in our budget due to factors outside our control:
1. Even if the Arizona legislator keeps university funding constraint, President Robbins has launched an aggressive Strategic Plan that needs significant resources. We expect a reduction in subvention to the colleges; with RCM at the end of its hold-harmless period, we also expect the distribution algorithm to be revised to provide more central funds (less to the colleges).
2. Our Dean has presided over a college strategic plan that will also need funds for realization. As the largest revenue source in the College, we anticipate some reduction in revenue.

SIGNIFICANT CHANGES IN EDUCATION APPROACH
Both accredited degrees have undergone a shift in philosophy that seeks to make students work smarter, not harder, and have increased curricular choice.
Master of Architecture
In 2017 the Faculty compressed the M.Arch curriculum, reducing the average semester load and lowering the degree total from 103-CU to 97-CU. Much of this change was realized by reductions in building technology courses, which were changed from domain-specific to integrated technology offerings. Prior to this change, students felt constantly overwhelmed and overloaded, without time to reflect and absorb learning. Comparisons to other programs also suggested we were asking too much. See revised curricula in Appendix II.
Bachelor of Architecture
Based on positive change in the M.Arch, the Faculty began an effort in AY 2017-2018 to Optimize the B.Arch. This change is ongoing with an anticipated adoption later this year for implementation beginning AY 2020-2021. The likely result will be a small reduction in CU, realized by a reduction in required courses but more required electives that fall under specified concentrations in the upper levels of the degree.

CHANGES IN PHYSICAL RESOURCES
Since the last visit, we have made modest changes:
1. Expanded utility drops in the East building studios, facilitating more furniture layouts and higher densities.
2. Removal of the wind tunnel and installation of a model shop, to improve model-making culture.
3. Improvements in Foundation studio for storing equipment and facilitating hot-desks. attached.
3. Summary of Activities in Response to Changes in the NAAB Conditions

**2014 NAAB Conditions**

*University of Arizona, 2018 update:* NAAB Conditions have not changed since our 2016 Accreditation.

4. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

*University of Arizona, 2018 update:* Please refer to the following Appendix items:
- Appendix I: Supporting Figures for Question 2, Changes or Planned Changes in the Program
- Appendix II: Revised Curricula
- Appendix III: New Course Syllabi
- Appendix IV: Curricula Vitae for New Faculty
APPENDIX I
Supporting Figures for Question 2,
Changes or Planned Changes in the Program

**figure 1:**

![Graph showing total enrollments](image)

**figure 2:**

![Graph showing B.Arch Enrollment/Graduates](image)
figure 3: 

SoA graduate students

figure 4: 

M.Arch Enrollments
figure 5: School budget

figure 6: budget composition
### PRE-PROFESSIONAL PHASE

#### Summer 1
- ARC 510a immersion studio 1: groundwork 4
- ARC 540a design communication 1 3

#### Fall 1
- ARC 510b immersion studio 2 6
- ARC 520a building technology 1 – structures 1 3
- ARC 520b building technology 2 – materials + methods 1 3
- ARC 529 intro to the built environment 3
- ARC 540b design communication 2

#### Spring 1
- ARC 510c immersion studio 3 6
- ARC 526 site analysis + planning 2
- ARC 530 history + theory of architecture 1 3

#### Year
- 41

### PROFESSIONAL PHASE

#### Summer 2
- ARC 509a immersion studio 4* 4
- ARC 509b immersion seminar 3* 3

#### Fall 2
- ARC 510d advanced studio 1: poetics + place 6 6
- ARC 520d building technology 4 – materials + methods 2 3 3
- ARC 531 history + theory of architecture 2 3
- ARC 540c design communications 3
- ARC 526 site analysis + planning 2
- ARC 530 history + theory of architecture 1 3

#### Spring 2
- ARC 510e advanced studio 2: urban focus 6 6
- ARC 520e building technology 5 – structures 2 3 3
- ARC 533 history + theory of architecture 3 3
- ARC 541 contract documents* 3
- ARC 530 history + theory of architecture 1 3

#### Year
- 18 18

### MILESTONE

#### Summer 3
- ARC 509a immersion studio 4* 4* 4*
- ARC 509b immersion seminar 3* 3* 3*

#### Fall 3
- S10f advanced studio3: technical integration + comprehensive* 6 6 6
- advanced elective 3 3 3
- advanced elective 3 3 3
- ARC 909 - masters project preparation 3 3 3
- ARC 526 site analysis + planning
- ARC 531 history + theory of architecture 2-seminar 3

#### Spring 3
- ARC 909 masters project 6 6 6
- ARC 520g building technology 7 – structures 3 3 3
- ARC 533 history + theory of architecture 3-seminar 3
- ARC 550c ethics and practice 2 2 2
- advanced elective 3 3 3
- advanced elective 3 3 3

#### Year
- 15 15 18

### TOTAL

- 109 109 109

**Total Required Credits:**

- 103 69 33

**Notes:**

- S ARC 510f + ARC 541 taken concurrently
- NAAB 2009 Conditions: min 168 total CU; 30 grad CU
- NAAB 2009 Conditions: min 45 non-arch CU
- optional developmental course
- Continuation requires passage of Milestone

approved by SoA Curriculum Committee:

- 2014.04.14
- 2016.02.18 corrected ARC 550c, from 2 to 3 CU
- 2016.05.09 corrected M.Arch II elective count; M.Arch III + II are deficient:
  - NAAB 2014 conditions requires 10 Optional Studies CU (electives)
# 2018–2019 M.Arch Curricula

## APPENDIX II

### PRE-PROFESSIONAL PHASE

#### Summer 1
- ARC 510a | immersion studio 1: space+composition 4
  - ARC 540a | design communication 1 3

#### Fall 1
- ARC 510b | immersion studio 2: tectonic 6
  - ARC 521a | integrated technologies I 3
  - ARC 530 | history+theory I 3
  - ARC 540b | design communication 2 3

#### Spring 1
- ARC 510c | immersion studio 3: land ethic 6
  - ARC 526 | site analysis + planning 2
  - ARC 521b | integrated technologies II 3
  - ARC 527 | architectural programming 1
  - ARC 533 | history+theory II 3

### PROFESSIONAL PHASE

#### Summer 2
- ARC 509a | immersion studio 4
- ARC 509b | immersion seminar 3

#### Fall 2
- ARC 510d | comprehensive studio 1: dwelling or institutional 6
  - ARC 521c | integrated technologies III 3
  - ARC 533 | history+theory III 3
  - ARC 540b | design communication 3

#### Spring 2
- ARC 510e | comprehensive studio 2: assembly 6
  - ARC 909 | masters project preparation 3
  - history + theory technical elective 3

### MILESTONE 2

#### Summer 3
- ARC 509a | immersion studio 4
  - ARC 509b | immersion seminar 3

#### Fall 3
- ARC 510f | advanced studio: options 6
  - ARC 520g | advanced elective 3
  - ARC 530 | history+theory technical elective 3
  - ARC 809 | masters project preparation 3

#### Spring 3
- ARC 521e | advanced elective options
  - ARC 520g | Structures III
  - ARC 561A | Water Efficiency in Buildings
  - ARC 561d | Computer Energy Analysis
  - ARC 561e | Sustainable Design and the LEED Initiative
  - ARC 561i | Materials: Properties and Tests
  - ARC 561j | Materials Modeling
  - ARC 561k | Energy and the Environment
  - ARC 561l | Energy Use in Buildings
  - ARC 561p | Environmental Science Laboratory
  - ARC 581f | Biomimetics
  - ARC 599 | Independent Study

### Total Required Credits

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<th>Year</th>
<th>M.Arch III</th>
<th>M.Arch II</th>
<th>M.Arch I</th>
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<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>97</td>
<td>67</td>
<td>67</td>
</tr>
</tbody>
</table>

### Notes
- ARC 510f + ARC 541 taken concurrently
- NAAB 2014 Conditions: min 168-CU total incl. pre-req; min. 30 grad CU
- NAAB 2014 Conditions: min. 10-CU Optional Studies
- *optional developmental course
- Δ Continuation requires passage of Milestone
- ∞ ARC 521e: technical elective options
- ARC 520g: Structures III
- ARC 561A: Water Efficiency in Buildings
- ARC 561d: Computer Energy Analysis
- ARC 561e: Sustainable Design and the LEED Initiative
- ARC 561i: Materials: Properties and Tests
- ARC 561j: Materials Modeling
- ARC 561k: Energy and the Environment
- ARC 561l: Energy Use in Buildings
- ARC 561p: Environmental Science Laboratory
- ARC 581f: Biomimetics
- ARC 599: Independent Study

Approved by SoA Curriculum Committee: 2014.04.14
2016.02.18 corrected ARC 550c, from 2 to 3 CU
2016.05.09 corrected M.Arch II elective count; M.Arch III + II are deficient
2016.11.14 NAAB 2014 conditions require 10 Optional Studies CU (electives)
2017.04.14 compress H+T and Technology Streams, increased Optional Studies CU
2018.01.31 removed ARC 529; added ARC 530; resequenced H+T curriculum
2018.02.14 revised ARC 521e technical elective options
2018.02.28 adopted H+T elective to replace ARC 529
APPENDIX III
New Course Syllabi

The following courses have been taught since the 2016 Accreditation Visit:

- ARC 101  Foundation Studio I, A+B
- ARC 220  History of Applied Building Technology
- ARC 303  Investigating the Exhibition
- ARC 461a/561a  Water Efficiency in Buildings
- ARC 471b/571b  Contemporary Urbanity and Public Space
- ARC 471b/571b  Trans Journal
- ARC 496d/596d  Social and Behavioral Issues in Built Environments
- ARC 496d/596d  Daylighting, Health and Behavior
- ARC 497b/597b  Health and Wellbeing in the Built Environment
- ARC 497b/597b  Latin American Practice Traditions
- ARC 497b/597b  Reading Architecture (Spring 2019 / DRAFT)
- ARC 497k/597k  The Portfolio: Advanced Graphics, Presentation, Layout, and Design
- ARC 521a  Integrated Technologies I
- ARC 521b  Integrated Technologies II
- ARC 521c  Integrated Technologies III
- ARC 521d  Integrated Technologies IV

SPC for non-elective courses are listed in the upper right corner of the first page of each syllabus.
ARC 101a: FOUNDATION STUDIO IA, 3-CU, 2018
Arizona

Instructors: Carr, Ford, Guerrero, Hazelbaker, Hoffman, Matharoo, Mostert

COURSE DATA
ARC 101a, Foundation Studio IA, Fall 2018 3-credit units

FACULTY
Laura Carr, Adjunct Lecturer
lacarr@email.arizona.edu
office hours: room 310: by appointment only

Alexander Ford, Adjunct Lecturer
forda90@email.arizona.edu
office hours: room 214: by appointment only

Eduardo Guerrero, Assistant Lecturer
eduardoguerrero@email.arizona.edu
office hours: room 312: by appointment only

Daci Hazelbaker, Assistant Lecturer
darch@email.arizona.edu
office hours: room 314: by appointment

Dan Hoffman, Professor of Practice, (Studio Coordinator)
studioma1@email.arizona.edu
office hours: room A203j: by appointment only

Prabheet Matharoo, Adjunct Lecturer
matharoo@email.arizona.edu
office hours: room 214: by appointment only

Stefan Mostert, Adjunct Lecturer
stefanmostert@email.arizona.edu
office hours: room 214: by appointment only

CRITERIA
FULFILLMENT
This course satisfies the first studio requirement for admission to the Professional Phase of the Bachelor of Architecture program

PREREQUISITES
Acceptance to Foundation program.

ENROLLMENT
The minimum and maximum enrollment will be determined annually by the School Director in consultation with the instructor of this course

CONTACT
Studios will meet in Architecture, Room 104 at times listed below:
Section Guerrero-Hazelbaker MWF, 8-11
Section Ford-Hoffman MWF, 2-5
Section Carr MWF, 5-8
Section Matharoo-Mostert T TH, 2-6:15
Lectures for all sections (including History-Theory) will meet in McClelland Park, Room 105 every Monday and Wednesday from 12:00 am – 12:50pm.

**WEB + D2L**
This course will be supported over D2L https://d2l.arizona.edu)

**COST**
In addition to the purchase of the required Material Kit ($350-$400), students will be expected to buy additional materials as each project requires. Students are encouraged to share materials with their colleagues to save cost. A suggested list of materials will be provided before the beginning of the course.

**COURSE CONTENT**

**CATALOGUE DESCRIPTION**
Develop a visual and haptic sensibility, rigor and awareness of architecture through freehand drawing, technical drafting and physical material manipulation.

**COURSE DESCRIPTION**
The course is designed to develop basic skills in architectural design and to develop an awareness of the role of architecture in the design of the built environment. It consists of two parts; Studio and History Theory.

The design Studio introduces students to the essential methods of visual communication and architectural design through a series of inter-related exercises. Techniques such as orthographic projection, technical drafting, model making, freehand sketching and photography are used to explore the possibilities of architectural design at various scales. Elemental architectural considerations such as spatial ordering, composition, structure, construction, program (use) and building orientation are introduced at increasing levels of complexity over the term.

The History Theory sequence provides an overview of the factors involved in the practice of architecture and the design of the built environment. The lectures describe how human beings have responded to and shaped their environment through the making of buildings and related constructions such as landscapes and cities and also serve as an introduction to the various disciplines that are part of the College of Architecture, Planning and Landscape Architecture (CAPLA) for those interested in pursuing other design disciplines.

**LEARNING OBJECTIVES**
To develop an understanding of the following:

- The role of architecture and related design disciplines in the design of the built environment
- The basic, physical (material) properties and systems at work in the built environment
- The global impact of the built environment
- The role of cultural and historical factors in the design of the built environment
- The various types of spatial and formal organization used in the design of the built environment

**LEARNING OUTCOMES**
To develop the following ability:

- Building scale models
- Drafting to scale in plan, section and elevation
- Using projective drawing techniques
- Hand sketching to study preliminary design concepts
- Utilize spatial and forma concepts
- To develop architectural designs using the above noted techniques

**Understanding:** The capacity to classify, compare, summarize, explain and/or interpret information. **Ability:** Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

**NAAB PERFORMANCE CRITERIA** (National Architecture Accrediting Board)
A 7i: Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors. (Introductory). The material covered in this course offers students proficiency (at the indicated level of accomplishment) in the following subject areas as defined by the National Architectural Accrediting Board (NAAB) http://www.naab.org/wp-content/uploads/01_Final-Approved-2014NAAB-Conditions-for-Accreditation.pdf1
SUSTAINABILITY PROTOCOL
The Sustainability Protocol is a school-wide initiative to incorporate basic sustainability concepts into the curriculum. This course provides introductions to the following areas of focus:

ENVIRONS – This area is focused on issues of sustainability as they relate to context and human settlement.
Learning Outcomes: students should exhibit knowledge of optimized settlement density options, programmatic use diversity and adaptability (including agricultural opportunities), pedestrian oriented environment considerations, and wildlife habitat preservation.

WATER – This area is focused on issues relating to natural water cycles, scarcity, conservation, and management.
Learning Outcomes: students should exhibit knowledge of natural, local and regional water cycles and flow patterns, availability, scarcity concerns, capturing and re-use systems, and strategies for biologic systems enhancement through storm water management.

ENERGY – This area is focused on issues of sustainability as they pertain to the production and consumption of energy by and through the built environment in addition to closely related uses.
Learning Outcomes: students should exhibit knowledge of renewable sources of energy, correlation between building configuration and energy consumption / human comfort, and principles of net-zero energy design.

MATTER – This area is focused on issues of sustainability as they relate to the use of physical materials and the processes by which they are manipulated for use in the built environment.
Learning Outcomes: students should exhibit knowledge of material life-cycle processes, conservation and re-use opportunities, the concept of embodied carbon footprints, and purposeful use of locally available and/or repurposed, non-toxic, materials, that are produced through fair labor and trade practices.

WELLNESS – This area is focused on optimized healthfulness of all people through the design and maintenance of a built environment providing universal modes of mobility, and equal access to natural light, fresh air, and natural settings.
Learning Outcomes: students should exhibit knowledge of strategies for providing living and working environments that are physically and psychologically healthful for all. This should include access to daylight, fresh air, and natural settings that are accessible to all members of society regardless of economic status or physical ability.

CULTURATION (CULTURE, HISTORY, AND TRADITIONS) – This area is focused on the recognition and application of established local cultural practices as they relate to the sustainable continuity and renewal of the built environment.
Learning Outcomes: students should exhibit knowledge of local precedents and principles of the construction and maintenance of sustainable built environments that are integral and contemporary to the cultures which they serve, or have served. Additionally, students should show evidence of the application /adaptation of these principles in a contemporary cultural and physical context.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course are currently anticipated to be as follows, but are subject to change as set forth above:
The course is comprised of two components; Studio and History Theory. There is one grade for the course, 75% of which is Studio and 25% History Theory.
There are two Studio projects assigned for the course. Individual grades for each project are based on design, craft (drafting and model making) and sketchbook (hand drawing). Final drawings and models will be presented at a class-wide exhibition at the completion of each project. The Studio grade distribution is as follows:

23% P1
23% P2
23% P3
23% P4

6% Participation/Collegiality/Progress/Collective Spirit

In History Theory, there will be two assignments for the term in the form of a brief essay and scanned (hand drawn and written) lecture notes. The grade distribution is as follows:

25% L1
25% L2
25% L3
25% L4

Project assignments will be posted to D2L (https://d2l.arizona.edu)

SEMESTER SCHEDULE A course calendar is attached to this syllabus.

POLICIES + STATEMENTS

GRADING: Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student's work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

GRADING SCHEDULE

<table>
<thead>
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<th>Grade</th>
<th>Scale</th>
<th>Undergraduate Criteria</th>
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<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td></td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>High competence in most areas of evaluation, competence in others.</td>
<td></td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td></td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td></td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td></td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student's control.</td>
<td></td>
</tr>
</tbody>
</table>
CHANGE: By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK: Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK: Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE GRADE APPEAL: Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal: http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE: Students are required to attend all studios and lectures for their duration. Upon the 6th absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence. The UA’s policy concerning Class Attendance, Participation, and Administrative Drops is available at: http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

EXCEPTIONS: The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable: http://policy.arizona.edu/human-resources/religious-accommodation-policy.

EXCUSED ABSENCE: The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE: The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or immediate family emergency.

WRITTEN EXCUSE: Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

VALIDITY
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

MAKE-UP-WORK
Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student maybe granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.
ARCHIVE DOCUMENTATION: Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention: ARCXXX_YYYYS_category_Lastname_F where ARCXXX is the course number, e.g., ARC101a; YYYYS is the year and semester (F/S/SUM), e.g., 2018F; category is the assignment type or drawing type, e.g., Site Plan, LongitudinalSection3, Homework4; and Last name_F is the student’s last name and first initial.

CLASSROOM BEHAVIOR + STUDIO CULTURE: As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:

http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES: Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

ACADEMIC INTEGRITY: Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog: http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

INCLUSIVE EXCELLENCE: This course will follow the UA diversity initiative designed to create a welcoming environment for all, http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT: Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination: http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE: This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGICARISM: The practice of taking someone else’s work or ideas and passing them off as one’s own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material. Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual of Style:
PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR: The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself: http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS: Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).

RETENTION OF WORK: The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

End of syllabus

Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act: http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html
# ARC 101a Schedule

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<tbody>
<tr>
<td><strong>august</strong></td>
<td>First Day of ARC 101a&lt;br&gt;P1 Assigned Lecture</td>
<td>Technique Lecture</td>
<td>HT Lecture 1</td>
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<td>week 1</td>
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<td><strong>august/september</strong></td>
<td>HT Lecture 2</td>
<td>HT Lecture 3</td>
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<td>week 2</td>
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<td><strong>september</strong></td>
<td>Labor Day&lt;br&gt;No Class</td>
<td>HT Lecture 4</td>
<td>HT Lecture 5</td>
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<td>week 3</td>
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<tr>
<td><strong>september</strong></td>
<td>P1 Exhibition</td>
<td>P2 Assigned Lecture&lt;br&gt;Technique Lecture 8</td>
<td>HT Lecture 6&lt;br&gt;Post HT 1 to D2L</td>
<td>HT Lecture 7</td>
<td>HT Lecture 8&lt;br&gt;Post P1 to D2L</td>
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<td>week 4</td>
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<td>P2 Assigned Lecture&lt;br&gt;Technique Lecture 8</td>
<td>HT Lecture 6&lt;br&gt;Post HT 1 to D2L</td>
<td>HT Lecture 7</td>
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<td><strong>september</strong></td>
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<td>HT Lecture 10</td>
<td>HT Lecture 11</td>
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<td>week 6</td>
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<td><strong>october</strong></td>
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<td>HT Lecture 12</td>
<td>HT Lecture 13</td>
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<td>week 7</td>
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<td><strong>october</strong></td>
<td>P2 Exhibition</td>
<td>HT Lecture 14&lt;br&gt;Post HT 2 to D2L</td>
<td>Last Day of ARC 101a&lt;br&gt;Post HT 2 to D2L</td>
<td>First Day of ARC 101b&lt;br&gt;HT Lecture 15</td>
<td>Post P2 to D2L</td>
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<td>week 8</td>
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All Lectures are in Koeffler, Rm. 218

D2L Posts no later than 10:00PM ib due date
# ARC 101b Schedule

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<td>week 9</td>
<td>P3 Assigned Lecture</td>
<td>HT Lecture 16</td>
<td>HT Lecture 17</td>
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<td>week 10</td>
<td>MID TERM GRADE REPORTS DUE</td>
<td>HT Lecture 18</td>
<td>HT Lecture 19</td>
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<td>week 11</td>
<td>HT Lecture 20</td>
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<td>week 12</td>
<td>P3 Exhibition</td>
<td>HT Lecture 22</td>
<td>Post HT 3 to D2L</td>
<td>P4 Assigned Lecture</td>
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<td>week 13</td>
<td>Technique Lecture</td>
<td>HT Lecture 23</td>
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<td>week 14</td>
<td>HT Lecture 24</td>
<td>Thanksgiving</td>
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<td>week 15</td>
<td>Studio Clean-Up</td>
<td>Studio Clean-Up</td>
<td>Last Day of ARC 101b</td>
<td>Post HT4 to D2L</td>
<td>Post P4 to D2L</td>
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<td>FINAL GRADE REPORTS DUE</td>
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All Lectures are in Koeffler, Rm. 218

D2L Posts no later than 10:00PM ib due date
ARC 101b: FOUNDATION STUDIO IB, 3-CU, 2018
Arizona

Instructors: Carr, Ford, Guerrero, Hazelbaker, Hoffman, Matharoo, Mostert

COURSE DATA
ARC 101a, Foundation Studio IB, Fall 2018 3-credit units

FACULTY
Laura Carr, Adjunct Lecturer
lacarr@email.arizona.edu
office hours: room 310: by appointment only

Alexander Ford, Adjunct Lecturer
forda90@email.arizona.edu
office hours: room 214: by appointment only

Eduardo Guerrero, Assistant Lecturer
eduardoguerrero@email.arizona.edu
office hours: room 312: by appointment only

Darci Hazelbaker, Assistant Lecturer
darcih@email.arizona.edu
office hours: room 314: by appointment

Dan Hoffman, Professor of Practice, (Studio Coordinator)
studioma1@email.arizona.edu
office hours: room A203j: by appointment only

Prabhjeet Matharoo, Adjunct Lecturer
matharoo@email.arizona.edu
office hours: room 214: by appointment only

Stefan Mostert, Adjunct Lecturer
stefanmostert@email.arizona.edu
office hours: room 214: by appointment only

CRITERIA
FULFILLMENT
This course satisfies the first studio requirement for admission to the Professional Phase of the Bachelor of Architecture program

PREREQUISITES
Acceptance to Foundation program.

ENROLLMENT
The minimum and maximum enrollment will be determined annually by the School Director in consultation with the instructor of this course

CONTACT
Studios will meet in Architecture, Room 104 at times listed below:
Section Guerrero-Hazelbaker MWF, 8-11
Section Ford-Hoffman MWF, 2-5
Section Carr MWF, 5-8
Section Matharoo-Mostert T TH, 2-6:15
Lectures for all sections (including History-Theory) will meet in McClelland Park, Room 105 every Monday and Wednesday from 12:00 am – 12:50pm.

WEB + D2L
This course will be supported over D2L https://d2l.arizona.edu

COURSE CONTENT

CATALOGUE DESCRIPTION
Develop a visual and haptic sensibility, rigor and awareness of architecture through freehand drawing, technical drafting and physical material manipulation. The course builds upon ARC 101a, developing higher level skills and understanding.

COURSE DESCRIPTION
The course is designed to develop basic skills in architectural design and to develop an awareness of the role of architecture in the design of the built environment. It consists of two parts; Studio and History Theory. The course builds upon ARC 101a, developing higher level skills and understanding of architectural design, history and theory.

The design Studio introduces students to the essential methods of visual communication and architectural design through a series of inter-related exercises. Techniques such as orthographic projection, technical drafting, model making, freehand sketching and photography are used to explore the possibilities of architectural design at various scales. Elemental architectural considerations such as spatial ordering, composition, structure, construction, program (use) and building orientation are introduced at increasing levels of complexity over the term.

The History Theory sequence provides an overview of the factors involved in the practice of architecture and the design of the built environment. The lectures describe how human beings have responded to and shaped their environment through the making of buildings and related constructions such as landscapes and cities and also serve as an introduction to the various disciplines that are part of the College of Architecture, Planning and Landscape Architecture (CAPLA) for those interested in pursuing other design disciplines.

LEARNING OBJECTIVES
To develop a higher level of understanding of the following objectives, first introduced in ARC 101a:

- The role of architecture and related design disciplines in the design of the built environment
- The basic, physical (material) properties and systems at work in the built environment
- The global impact of the built environment
- The role of cultural and historical factors in the design of the built environment
- The various types of spatial and formal organization used in the design of the built environment

LEARNING OUTCOMES
To develop the following abilities to a higher level, first learned ARC 101a:

- Building scale models
- Drafting to scale in plan, section and elevation
- Using projective drawing techniques
- Hand sketching to study preliminary design concepts
- Utilize spatial and forma concepts
- To develop architectural designs using the above noted techniques

Understanding: The capacity to classify, compare, summarize, explain and/or interpret information. Ability: Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

NAAB PERFORMANCE CRITERIA (National Architecture Accrediting Board)
A 7i: Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.(Introductory). The material covered in this course offers students proficiency (at the indicated level of accomplishment) in the following subject areas as defined by the National Architectural Accrediting Board.
SUSTAINABILITY PROTOCOL
The Sustainability Protocol is a school-wide initiative to incorporate basic sustainability concepts into the curriculum. This course provides introductions to the following areas of focus:

ENVIRONS – This area is focused on issues of sustainability as they relate to context and human settlement.
Learning Outcomes: students should exhibit knowledge of optimized settlement density options, programmatic use diversity and adaptability (including agricultural opportunities), pedestrian oriented environment considerations, and wildlife habitat preservation.

WATER – This area is focused on issues relating to natural water cycles, scarcity, conservation, and management.
Learning Outcomes: students should exhibit knowledge of natural, local and regional water cycles and flow patterns, availability, scarcity concerns, capturing and re-use systems, and strategies for biologic systems enhancement through storm water management.

ENERGY – This area is focused on issues of sustainability as they pertain to the production and consumption of energy by and through the built environment in addition to closely related uses.
Learning Outcomes: students should exhibit knowledge of renewable sources of energy, correlation between building configuration and energy consumption / human comfort, and principles of net-zero energy design.

MATTER – This area is focused on issues of sustainability as they relate to the use of physical materials and the processes by which they are manipulated for use in the built environment.
Learning Outcomes: students should exhibit knowledge of material life-cycle processes, conservation and re-use opportunities, the concept of embodied carbon footprints, and purposeful use of locally available and/or repurposed, non-toxic, materials, that are produced through fair labor and trade practices.

WELLNESS – This area is focused on optimized healthfulness of all people through the design and maintenance of a built environment providing universal modes of mobility, and equal access to natural light, fresh air, and natural settings.
Learning Outcomes: students should exhibit knowledge of strategies for providing living and working environments that are physically and psychologically healthful for all. This should include access to daylight, fresh air, and natural settings that are accessible to all members of society regardless of economic status or physical ability.

CULTURATION (CULTURE, HISTORY, AND TRADITIONS) – This area is focused on the recognition and application of established local cultural practices as they relate to the sustainable continuity and renewal of the built environment.
Learning Outcomes: students should exhibit knowledge of local precedents and principles of the construction and maintenance of sustainable built environments that are integral and contemporary to the cultures which they serve, or have served. Additionally, students should show evidence of the application/adaptation of these principles in a contemporary cultural and physical context.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course are currently anticipated to be as follows, but are subject to change as set forth above:
The course is comprised of two components; Studio and History Theory. There is one grade for the course, 75% of which is Studio and 25% History Theory.
There are two Studio projects assigned for the course. Individual grades for each project are based on design, craft (drafting and model making) and sketchbook (hand drawing). Final drawings and models will be presented at a class-wide exhibition at the completion of each project. The Studio grade distribution is as follows:
23% P1
23% P2
23% P3
23% P4
6% Participation/Collegiality/Progress/Collective Spirit

In History Theory, there will be two assignments for the term in the form of a brief essay and scanned (hand drawn and written) lecture notes. The grade distribution is as follows:
25% L1
25% L2
25% L3
25% L4

Project assignments will be posted to D2L (https://d2l.arizona.edu)

SEMESTER SCHEDULE A course calendar is attached to this syllabus.

POLICIES + STATEMENTS

GRADING: Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

GRADING SCHEDULE

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<th>Grade</th>
<th>Undergraduate Criteria</th>
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<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
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<tr>
<td>B (80 to &lt;90)</td>
<td>High competence in most areas of evaluation, competence in others.</td>
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<tr>
<td>C (70 to &lt;80)</td>
<td>Completed all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
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<tr>
<td>D (60 to &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
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<tr>
<td>E (0 to &lt;60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
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<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
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CHANGE: By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK: Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK: Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE GRADE APPEAL: Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal: http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE: Students are required to attend all studios and lectures for their duration. Upon the 6th absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence. The UA’s policy concerning Class Attendance, Participation, and Administrative Drops is available at: http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

EXCEPTIONS: The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable: http://policy.arizona.edu/human-resources/religious-accommodation-policy.

   Observances pre-approved by the UA Dean of Students will be honored, as listed at:
   http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

   Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
   tps://deanofstudents.arizona.edu/absences

   Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal: http://architecture.arizona.edu/student-forms-and-procedures

EXCUSED ABSENCE: The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE: The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or immediate family emergency.

WRITTEN EXCUSE: Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

VALIDITY
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

MAKE-UP WORK
Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student maybe granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.
ARCHIVE DOCUMENTATION: Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention: ARCXXX_YYYYS_category_Lastname_F where ARCXXX is the course number, e.g., ARC101a; YYYYS is the year and semester (F/S/SUM), e.g., 2018F; category is the assignment type or drawing type, e.g., Site Plan, LongitudinalSection3, Homework4; and Last name_F is the student’s last name and first initial.

CLASSROOM BEHAVIOR + STUDIO CULTURE: As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:

http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES: Academic policies can be found in The University of Arizona General Academic Catalog:

http://catalog.arizona.edu/allcats.html

ACADEMIC INTEGRITY: Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog: http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

INCLUSIVE EXCELLENCE: This course will follow the UA diversity initiative designed to create a welcoming environment for all. http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT: Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE: This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGIARISM: The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism:
http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material. Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).
b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual of Style: http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR: The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself: http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS: Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268). http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK: The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

End of syllabus

Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act: http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html
### ARC 101b Schedule

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All Lectures are in Koeffer, Rm. 218
D2L Posts no later than 10:00PM ib due date
COURSE DATA
ARC 220: History of Applied Building Technology
Fall 2017
3-credit units
FACULTY
Carrie Eastman, Adjunct Lecturer
ceastman@email.arizona.edu
Office Hours: To Be Determined

CRITERIA
FULFILLMENT
This course is an elective.

PREREQUISITES
There are no prerequisites for this course; however, students may find it beneficial to have a basic understanding of architectural concepts and western history.

ENROLLMENT
A Maximum enrollment of fifty (50) is allowed for this course.

CRITERIA
This is an online course. Specific, weekly meeting times are TBD.
WEB + D2L
This is an online course that will be supported by D2L, VoiceThread, and email.

HONORS CREDIT
Students wishing to contract this course for Honors Credit should email me to set up an appointment to discuss the terms of the contract. Information on Honors Contracts can be found at http://www.honors.arizona.edu/faculty-and-advisors/contracts.

COST
There are no additional costs associated with this course; however, students are responsible for purchasing, borrowing, or renting the primary required texts.

COURSE CREDIT
This course may be applied toward an ARCE major or to a General Education requirement, but not to both.
http://catalog.arizona.edu/policy/double-use-courses-double-dipping

COURSE CONTENT
CATALOGUE DESCRIPTION
This course provides an overview of global architectural history since the Industrial Revolution with an emphasis on how architects apply historical knowledge in contemporary practice.

COURSE DESCRIPTION
This course will survey global architecture from the Industrial Revolution to the present with the intention of revealing the ways in which contemporary architecture is informed by history, particularly in terms of the influence advancements in engineering, materials, and building technologies have had on design.

Architectural history will serve as the framework to achieve this intention; students will be asked to consider both significant architectural movements and how they relate to broad shifts in culture and building technologies, as well as seminal works, the architects who designed them, and the methods employed by these architects.

In addition, where appropriate, discussions will link themes in present professional practice to past ways of working. Examples of these themes include the way architects obtain commissions and collaborate with other disciplines, as well as long standing issues in the field such as lack of diversity and multinational practice and its relationship to colonialism. The purpose of this secondary exploration is to give students a realistic perspective on the current working environment of architects and engineers.

COURSE OBJECTIVES
Upon the successful completion of this course, students will have the ability to do the following:
• Comprehend the overall, chronological history of building from the Industrial Revolution to the present;
• Possess and employ the nomenclature and concepts specific to the subject matter;
• Understand the relationship of present building methods to those of the past, including vernacular traditions;
• Understand the changing ways architectural history has influenced architectural practice;
• Contemplate global architecture, design, and building relative to Western traditions.

LEARNING OUTCOMES
The learning outcomes for this course are that students will have the ability to do the following:
• Classify, in terms of type, period, construction method, and style a built work upon seeing or experiencing it;
• Identify major movements and seminal works in architecture since the Industrial Revolution;
• Analyze how contemporary architecture is informed by past methods of design and building;
• Identify important architects of this time and their specific methods of practice;
• Trace the historical origins of contemporary architecture;
• Outline relevant topics and concerns in professional practice;
• Process ideas in the form of carefully crafted written arguments based on the synthesis of required texts and group discussions.

ABET CRITERIA
Primary
(g) an ability to communicate effectively
(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
(i) a recognition of the need for, and an ability to engage in life-long learning
(j) a knowledge of contemporary issues
Secondary
(f) an understanding of professional and ethical responsibility

COURSE COMPONENTS AND CRITERIA
Reading and Writing Groups
In order to foster an environment of collaboration where students learn from their peers, there will be Reading and Writing Groups associated with this course. These groups are mentioned below in the description of Reading Journals and Essays. The instructor will determine the groups during the first week of the semester.

The components of this course are:

Readings
There are approximately 25 pages of required reading per week as well as the required viewing of films and other media when noted.

Discussions
The instructor will post 1 or more topics of discussion associated with each week’s topic.

Students are required to participate in online discussions every week of the semester. Participation includes responding to the instructor’s post(s) and responding to the discussion thread(s).

Participation includes all of the following:
• Respond with comments or questions to both of the instructor’s discussion topics;
• Respond to 2 comments or questions posted by classmates;
• Post 2 comments or questions that have not yet been posted.

This is an online course and lack of participation or late participation is the equivalent of being absent.

Writing Assignments
There will be 3 writing assignments during the semester. The topics of these writing assignments will pertain to the reading and discussions that have taken place up to that point. The topics will be released on D2L prior to their due dates. Students may use sources beyond those required or recommended for the course; all sources shall be properly cited. Each essay shall be 3-4 pages, double spaced, 12 point font with 1” margins.

Students are required to submit a first draft of each writing assignment for peer review and in turn, become a peer reviewer. The peer review structure will be based on how many student enroll in the course and determined at that time.
WEIGHT
The course components will be weighted as follows:

- 3 Writing Assignments @15% each: 45%
- Writing Assignment Peer Review: 5%
- 3 Quizzes @10% each: 30%
- Discussions: 20%
- Total: 100%
ARC 303: INVESTIGATING THE EXHIBITION, 3-CU, 2017
Instructor: Ashley Simone  University of Arizona

COURSE DATA
ARC 303 Investigating the Exhibition fall 2017
3-credit units

FACULTY
Ashley Simone, Adjunct Lecturer
simonea@email.arizona.edu

office hours by appointment

Lily Wong, Teaching Assistant
lilywong@email.arizona.edu

office hours by appointment

CRITERIA FULFILLMENT

This course is an elective and satisfies History & Theory Stream requirements and is applicable to the Minor in Architectural History.

PREREQUISITES

Completion of one Art History or Architectural History course.

ENROLLMENT

Minimum enrollment is ten students; maximum is seventy-five.

WEB + D2L

This course will be taught online through D2L.
COURSE CONTENT

CATALOGUE DESCRIPTION
This course will examine curatorial theory and contemporary exhibitions in the Americas and Europe with the intention sensitizing the student to cultural institutions, the ideas and discourse of curatorial practice, and connections between art, design and architecture.

COURSE DESCRIPTION
On January 29th, 2015 The New York Times published an article entitled No Detail Goes Unnoticed When Art is a Click Away: Art Museum are Increasingly Adding Their Collections Online. Nicholas Serota, the director of the Tate in London is quoted in the article as follows: “Those institutions which take up this notion fastest and furthest will be the ones which have the authority in the future.”

As a means to study exhibitions over the course of a semester students will draw upon historical references as well as contemporary exhibition catalogs, and the ever-expanding online resources maintained by cultural institutions. In addition to drawing on the resources maintained by larger institutions in major metropolitan areas such as London, Paris, New York, Los Angeles, and Rome, the course will examine exhibitions presented at more intimate New York venues, which may include, The Drawing Center, The Sculpture Center, the International Center of Photography, and contemporary art galleries.

The goal of the course is to provide students with the tools to critically evaluate curatorial practice and examine contemporary exhibitions, the subject matter of which does not adhere to chronology in a macro sense. The public consumes what institutions and curators put forward. The student of the museum shuttles through time and topics, is challenged to piece together history, to draw associations across time.

The course will guide analysis of exhibitions from multiple perspectives: concept, content, design, approach (historical, narrative, aesthetic). The intention of the course is to [i] generate an understanding of contemporary issues, related to art and architecture, as well as the cross-disciplinary nature of architecture, and [ii] foster the development of analytical skills with the intention of training students to read and interpret exhibitions on multiple levels - as curatorial exercises, design projects, spatial constructs, modes of communication, and sites with the potential to generate new ways of thinking.

OBJECTIVES AND OUTCOMES

1. Develop an awareness of contemporary exhibitions as a means to garner an understanding of aesthetic, social and political issues within architecture and related disciplines as well as the role of historical references as precedent and subject matter for/of contemporary exhibitions.
2. Develop the ability to understand and critique formal and conceptual aspects of exhibitions.
3. Hone the ability to critically evaluate curatorial practice in a variety of contexts.
4. Collaborate with and offer criticism to classmates and learn to receive productive criticism using the online format.
5. Contextualize architecture, art and design as associative practices.

6. Develop writing skills. This course fulfills Tier II writing requirements.

Graduate Students – in addition to developing awareness as indicated above, graduate students will be required to select an exhibition not covered in the course content and develop an analysis and critique under the guidance of the instructor. Critiques put forward by graduate students should be steeped in contextual/meta/historical understanding of the exhibition content. In many cases exhibition content is contextualized by curators; given this graduate students will further their ability to critique via evaluation of such contextualization.

STRUCTURE AND ORGANIZATION
The course will explore a variety of exhibitions per the schedule below. The study of each exhibition will be divided into three parts: [i] formal/spatial/aesthetic, [ii] concept / content (curatorial position), [iii] connotations / references. Students will write illustrated papers and participate in online discussions (see course components + criteria for evaluation for specific undergraduate/graduate requirements).

COURSE COMPONENTS + CRITERIA OF EVALUATION
The graded components of this course and their criteria of evaluation are listed below. Please note the grade weight varies for undergraduate and graduate students. While each student is required to participate in online discussions related to media + readings and to write papers, undergraduates will submit regular, short response papers (3-4 pages typed), while graduate students will select a particular topic to be explored over the course of the semester in a midterm (10 pages typed) and final paper (15 pages typed). Graduate student participation on the weekly discussion boards is weighted more heavily as they are expected to contribute in a more substantial way, both qualitatively and quantitatively.

TEXTS
All readings will be made available on D2L.

ONLINE POSTS + DISCUSSION
GOALS: The goal of the online discussion is to expand understanding of the course texts through conversation about the topics in the text and the relationships between the texts and the week’s featured exhibition. In a campus classroom environment, group discussions would include questions, opinions and personal connections; online discussions are meant to accomplish the same via posts to an online bulletin board. The point is for students to post their own thoughts and questions and, in turn, respond to those of their classmates. Such discussions are meant to stimulate thinking and learning, and this only happens through participation.

PROCEDURE: Online discussions will take place on the course D2L site, under the “Discussions” tab, then divided into “Forums” and “Topics.” Forums will be posted weekly by the instructor in response to the required texts. The instructor will also post Topics each week as “conversation starters.” Students are welcome to add their own topics to the message board so long as they pertain to the Forum topic and the course. Off-topic conversations will be removed by the instructor and will result in a lower grade for the student.
REQUIREMENTS: The instructor will post media to D2L weekly in the form of prompts, exhibition content and/or links to relevant online exhibition documentation. Students are required to do each of the following, every week, to show “participation”:

- **TOPICS**: Read each topic posted by the instructor and **post at least two (2) responses**. Each response should be about a paragraph (5-6 sentences) long and contain original thoughts about the subject. This does not mean students should not post their own thoughts if someone else has said something similar. Relate the topic to personal experience if possible.

- **QUESTIONS**: **Post at least one question** under the appropriate Forum or Topic. This should be a critical and thoughtful question that can open up the discussion in new ways. Thoughtless and careless questions will be removed by the instructor and the student will be notified. **Questions must be posted no later than Tuesdays at 11:30 PM to allow for discussions to generate.**

- **REPLIES**: Post at least two replies to another student’s response. This is done using the “reply” button. Keep replies connected to the original post.

- **POSTS**: Make **6 posts per week, minimum**. The “replies” above count as two (2) of your posts.

- **READ**: You must read at least twenty (20) posts

**DEADLINES**: All posts for the week’s readings must be completed by **11:30pm Thursdays** – see the Guidelines for Online Discussions for more details.

Additional participation on the discussion board is encouraged! For example, students may post links to content-related websites, podcasts, videos, images, and other related media that is relevant and interesting for this course.
PROJECTS/ESSAYS
Projects will take the forms of short response papers related to readings and the exhibitions studied. There will be a total of three (3) papers, the last will be a final paper or project. And will require the submission of a draft. **Essays are due by 11:30pm on the Thursdays they are due** – see the Guidelines for Written Assignments for more details.

TIER II WRITING REQUIREMENTS
In order to adhere to the Tier II writing requirements for the University, there will be a written component for each project and the final (approx. 1000 words each, 3-4 pages). In addition to a full text, students will produce shorter abstracts for each of their response papers (150 words). The abstract is a useful tool to concisely present concepts. Final papers will be subject to a peer review and the instructor will provide comments to an early draft of the final paper.

GRADES
The Course Components will be weighted as follows:

**UNDERGRADUATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>PROJECTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 01</td>
<td>15</td>
</tr>
<tr>
<td>Paper 02</td>
<td>15</td>
</tr>
<tr>
<td>Final Paper (Draft 10, final 15)</td>
<td>25</td>
</tr>
</tbody>
</table>

subtotal, papers 55

<table>
<thead>
<tr>
<th>TEXTS / Discussions</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

**GRADUATE REQUIREMENTS**

<table>
<thead>
<tr>
<th>MIDTERM PAPER</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXTS / Discussions</td>
<td>30</td>
</tr>
<tr>
<td>FINAL</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

REFERENCES
REQUIRED
A select list of exhibitions and institutions and resources is listed below.

Final bibliography will be contingent on the exhibitions selected during the course.

GENERAL
Bibliography related to critically framing exhibitions generally follows.

SEMESTER SCHEDULE
A course calendar is attached.
SEMESTER SCHEDULE

A course calendar is attached to the end of this syllabus and posted on D2L.

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student's work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

LATE WORK
Work submitted after the deadline will be graded at the discretion of the instructor and may not be graded at all. The minimum grade reduction for late papers is one full letter grades below what would have been awarded had the work been submitted on time. The instructor may choose not to grade the late work at all.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one full letter grade below what would have been awarded had the work been complete, appropriate to the extent of incompletion.

GRADING ONLINE WORK (DISCUSSIONS)
Online participation is worth 45% (undergraduate) 30% (graduate) of the final grade and will be assessed weekly. Failure to participate could result in failure of the course.

Grading of online discussion will be defined as follows (graduate scale in parentheses):

A (A): Exceeded the minimum number of posts; read more than 50 posts written by fellow students; posts were thoughtful, well-conceived, and brought up specific examples from the texts; additional texts, images, and other material was posted to support the discussion; questions and responses were original and insightful (i.e. a fellow student had not posted the question previously).

B: Completed all required posts; read at least 25 posts by fellow students; questions were thoughtful, relevant, and stimulated valuable discussion by peers.

C (B): Completed all required posts; read at least 10 posts by fellow students; questions were competent and relevant.

D (C): Completed less than the required posts; read at least 5 posts by fellow students; questions were posted but were redundant; did not cite specific examples from the texts.

E (E): Less than required for a D (C).
**GRADING SCALE**

Evaluation will be based on participation, quality of work, and online presence. Grades will be defined as follows.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Undergraduate Criteria</th>
<th>Graduate Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80-89)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70-79)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60-69)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0-59)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

**WRITTEN ASSIGNMENT GRADING RUBRIC**
The rubric for the grading of Written Assignments may be found in the Content section of D2L.

**GRADE APPEAL**
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal: [http://architecture.arizona.edu/student-forms-and-procedures](http://architecture.arizona.edu/student-forms-and-procedures)

**ATTENDANCE**
Online participation is required in lieu of attendance. Each week you are required to participate in online discussions, which requires posting questions and responding to prompts and peer questions. You must check-in online once prior to 11PM on Tuesday and complete discussion requirements by 11PM on Thursdays.

**DOCUMENTATION STANDARDS**
All work produced in fulfillment of University requirements becomes the property of, and may be retained by, the School. Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention: ARC 303_assignmentnumber (01-03 or FINAL)_Last Name-First Initial
COURSE BEHAVIOR
Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ONLINE RULES OF CONDUCT
BE CONCISE: Long posts (more than a single screen) are difficult to follow. Be clear, short, and to the point.

FREQUENCY: Log in to the discussion board at least three times per week in order to promote discussion and response. Logging in only after initial posts is not adequate participation.

NOT PERMITTED: Violation of the following standards will result in the removal of the post, loss of credit related to that post, and possible lowering of the course grade or forced withdrawal from the course:

- **Profanity**: Blasphemous or obscene language; a swear word or oath; an irreligious or irreverent remark.
- **Derogatory Comments**: Negative or disrespectful remarks that demean individuals or groups (distinct from insightful criticism which, though potentially negative, deal with course content in an insightful way).
- **Sexually Explicit Material**: Sexually explicit language, material, or links to sexually explicit material; suggestive commentary in this vein, even if not explicit.
- **Copyrighted Material**: Posts containing copyrighted material for which the user does not have rights.
- **Academic Dishonesty**: Academically dishonest or unethical actions or content.
- **Commercial Material or Solicitations**: Commercial content or solicitations that promote products or services.
- **Personal Information**: Posting phone numbers, email addresses, home or work addresses, last names, grades, or personal information (about the student or others).
- **Be Polite**: Online conversations do not have the benefit of vocal tone or physical cues that may indicate humor, irony, or other intentions that can alter the way content is received. Material that is not respectful, polite, or tolerant of the rights of others to have different opinions and different points of view is not acceptable.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

For the principles, policies, and procedures governing issues of academic integrity, see:
http://deanofstudents.arizona.edu/codeofacademicintegrity.
PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism:
http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to the intellectual property of professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR
All participants must follow the University of Arizona’s Policy on student behavior:
http://deanofstudents.arizona.edu/sites/deanofstudents.arizona.edu/files/disruptive_threat_bklt_web_0.pdf

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please contact the professor or Disability Resources (520-621-3268) to establish reasonable accommodations.
http://drc.arizona.edu/teach/syllabus-statement.html
RETENTION OF WORK
Work produced in this course is the property of the School of Architecture, which may retain any student project for display, accreditation, documentation, or other purposes.

CHANGES
This syllabus is subject to change with notice, as deemed appropriate by the instructor.

The purpose of a detailed syllabus is to make the course as transparent and as objective as possible, and thus to empower students to understand and earn the grades to which they aspire. It is not the intention of such a system to be used against learning or fairness.

Consequently, the professor retains the right to make adjustments that account for circumstances that were unforeseen when the course was designed and will notify the students when such changes are made. It may, for example, be advantageous to add or alter assignments or their criteria, or to modify criteria or project-weights, if it becomes evident that it is in the best interest of learning and fairness to do so. Students will notify the professor within one week of notification if such changes engender a hardship, after which time it will be agreed that students understand and are in accord with the change.

end of syllabus
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act:
http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html
References and Further Reading

Banham, Reyner. “Zoom Wave Hits Architecture.”


Lavin, Sylvia. “Showing Work.”


Obrist, Hans Ulrich “Curating, Exhibitions and the Gesamtkunstwerk”

Obrist, Hans Ulrich “Biennials”


EXHIBITION VENUES – SELECT LIST

Benesse Art Site, Naoshima, Japan
Centre Pompidou, New York
Canadian Centre for Architecture, Montreal
Chateau La Coste, Lacoste, France
Drawing Center, New York
Guggenheim Museum, New York
International Center of Photography, New York
MAXXI, Rome
The Metropolitan Museum of Art, New York
Museum of Contemporary Art, San Francisco
Museum of Modern Art, New York
Neue Museum, Berlin
Royal Academy of Art, London Sculpture Center, New York
Serpentine Gallery, London
Swiss Architecture Museum, Basel
Whitney Museum, New York
BLOGS / SITES RELATED TO ART + ARCHITECTURE

Anarchitecture (http://www.an-architecture.com/)
ArchDaily (http://www.archdaily.com/)
A/N Blog (http://blog.archpaper.com/wordpress/)
A Daily Dose of Architecture (http://archidose.blogspot.com/)
Architect (http://architect.com/)
BDGBlog - Geoff Manaugh (http://bdgblog.blogspot.com/)
City of Sound - Dan Hill (http://cityofsound.com/)
Curbed (http://ny.curbed.com/)
Design Boom (http://www.designboom.com/eng/)
Design Observer (http://designobserver.com/)
Dezain (http://www.dezain.net/en/)
Dezeen - Marcus Fairs; http://www.dezeen.com/
Flickr (http://www.flickr.com/)
General Economy (http://tinyletter.com/geneconyc)
Hello Beautiful! - Edward Lifson; (http://www.edwardlifson.blogspot.com/)
Interactive Architecture - Ruairi Glynn (http://www.interactivearchitecture.org/)
Kazys Varnelis (http://varnelis.net/blog)
Loud Paper (http://loudpaper.typepad.com/)
MAS studio blog (http://mas-studio.typepad.com/)
One-Way Street - Richard Prouty (http://onewaystreet.typepad.com/one-way-street/)
otrootroblog - Alejandro Hernandez Galvez (http://otrootroblog.blogspot.com/)
Plataforma Arquitectura - Chile (http://www.plataformaarchitectura.cl/)
Pruned - Alexander Trevi (http://pruned.blogspot.com/)
Scaffoldage (http://www.scaffoldage.com/)
Scouting NY (http://www.scoutingny.com/)
Tropolism (http://www.tropolism.com/)
Visual complexity (http://www.visualcomplexity.com/vc/)
arc 303 semester schedule
A course calendar is attached to this syllabus.

- Assignments and other Deadlines in RED – all assignments are due by 1130PM
- WRITTEN ASSIGNMENTS ARE DUE ON THURSDAYS
- DISCUSSIONS ARE DUE ON THURSDAYS

** Details for Assignments, Essay Topics, Procedures, etc. posted in D2L Content section

Week 1: Introduction

8/21–8/27 REVIEW: Syllabus, Schedule, D2L, Guidelines for Discussions and Written Assignments

READING:
* JL Cohen Mirror of Dreams
Cynthia Davidson, “Drawn In”

Week 1 Discussions / Student Introductions (must be posted by 8/24*)

Week 1 D2L Quiz, Due Thursday 8/24*

<<the percentage grade you receive on the quiz will not have an effect on your final grade; however, you MUST access the quiz from the D2L Main Menu and complete it to ensure you know how to use D2L – inability to successfully use D2L will have an effect on your grade. It is your responsibility to know and use the site.>>

* * IF YOU REGISTER LATE DO THESE ASSIGNMENTS IMMEDIATELY. IT IS YOUR RESPONSIBILITY TO CATCH UP. THESE ASSIGNMENT WILL NOT BE AVAILABLE AFTER 9/4.

Week 2: WHAT IS AN EXHIBITION? HISTORICAL VIEW + CONTEMPORARY SHIFTS

8/28 – 9/3 READING:
* JL Cohen Mirror of Dreams (read it again)
* Brian O’Doherty, “Notes on the Gallery Space” in “Inside the White Cube”

OPTIONAL: Ellen Upton, “From Noun to Verb”

Week 2 Discussions (must be posted by 8/31)

Week 3: (RE)PRESENTATION

9/4-9/10 READING:
* Roland Barthes, “The Photographic Message”
* Susan Sontag, “On Photography”

OPTIONAL: Rosalind Krauss, “Photography’s Discursive Spaces: Landscape/View”

Feature: Perpetual Revolution, International Center of Photography (NYC), 2017

Week 3 Discussions (must be posted by 9/07)
**Week 4:**  
**RE)PRODUCTION**  
9/11-9/17  
READING:  
* Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction”  
* Sylvia Lavin, “Showing Work”  
**Feature:** Richard Serra, Gagosian Gallery (NYC), 2016  
**Week 4 Discussions** (must be posted by 9/14)

**Week 5:**  
**AUTHORSHIP**  
9/18-9/24  
READING:  
* Hans Ulrich Obrist, “Curating, Exhibitions and the Gesamtkunstwerk”  
* Michel Foucault, “What is An Author?” (excerpts)  
**Feature:** Esperanza Spalding Selects, Cooper Hewitt National Design Museum (NYC), 2017  
**Week 5 Discussions** (must be posted by 9/21)

**Week 6:**  
**ESSAY: ON PRODUCTION**  
9/25-10/1  
WORK ON ESSAY ONE  
# 1 Essay on Weeks 1 - 5, Due 9/28**  

**Week 7:**  
**EXHIBITING WORK, EXHIBITING ARCHITECTURE**  
10/2-10/8  
READING:  
* Tina DiCarlo, “Exhibitionism”  
* Barry Bergdoll, “At Home in the Museum”  
* Barry Bergdoll, “Out of Site / In Plain View: One the Origins and Actuality of the Architecture (check D2L for inclusion)  
* Aaron Levy & William Menking, “Architecture on Display” (check D2L for inclusion)  
**Feature:** Home Delivery: Fabricating the Modern Dwelling, MoMA (NYC), 2008  
**Week 7 Discussions** (must be posted by 10/5)

**Week 8:**  
**THE BIENNAL + THE VENICE BIENNALE**  
10/9-10/15  
READING:  
* Hans Ulrich Obrist, “Biennials”  
* Carson Chan, “Diary from Venice”  
* Carson Chan, “Learning from Venice”  
* Cynthia Davidson, “Observations on the 14th International Architecture Exhibition”  
**Feature:** Venice Architectural Biennale, various years  
**Week 8 Discussions** (must be posted by 10/12)

**Week 9:**  
**THE MUSEUM AS PHYSICAL + VIRTUAL SPACE**
10/16 – 10/22  READING:
*Ken Johnson, “No Detail Goes Unnoticed When Art is a Click Away”
(The New York Times 1/29/2015) Link to "No Detail“ (also on D2L)

Week 9 Discussions (must be posted by 10/19)
Feature: Instagram, Social Media + Museums (check discussion section on D2L)

Week 10:  ESSAY: ON EXHIBITIONS + THE MUSEUM AS AN EVOLVING INSTITUTION
10/23 – 10/29  WORK ON ESSAY TWO
# 2 Essay on Weeks 7-9, Due 10/26**

Week 11:  CASE STUDIES: HISTORICAL EXHIBITIONS
10/30 – 11/05  READING: See D2L Content Section for Exhibition Summaries
CS1: Italy: The New Domestic Landscape. MoMA (NYC), 1972
CS2: Frank Lloyd Wright: From Within Outward. Guggenhein Museum (NYC), 2009

Week 11 Discussions (must be posted by 11/02)

Week 12:  CASE STUDIES: EXPERIMENTAL + HYBRID ART/ARCHITECTURE PRACTICE
11/6 – 11/12  READING: See D2L Content Section for Exhibition Summaries
CS1: Ernesto Neto. Anthropodino. Park Avenue Armory (NYC), 2009

Week 12 Discussions (must be posted by 11/09)

Week 13:  CASE STUDIES: EXPERIENTIAL EXHIBITIONS
11/13 – 11/19  READING: See D2L Content Section for Exhibition Summaries
*Juhani Pallasmaa, “The Eyes of the Skin: Architecture and the Senses”

Week 13 Discussions (must be posted by 11/16)

Week 14:  CASE STUDIES: THE ARCHITECTURAL RETROSPECTIVE
11/20 – 11/26  READING: See D2L Content Section for Exhibition Summaries
CS: Bernard Tschumi: Concept and Notation. Centre Pompidou (Paris), 2014

Week 14 Discussions (must be posted by WEDS 11/22**)
*11/23-26  Thanksgiving Holidays  **note discussions due 1 day earlier due to holiday
<table>
<thead>
<tr>
<th>Week 15:</th>
<th><strong>FINAL ESSAY (DRAFT): CASE STUDY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>11/27-12/3</td>
<td>WORK ON DRAFT OF FINAL ESSAY</td>
</tr>
<tr>
<td></td>
<td># 3, FINAL Essay, <strong>DRAFT</strong> Due 11/30**</td>
</tr>
<tr>
<td></td>
<td><strong>Week 15 Discussions</strong> (must be posted by WEDS 11/30**)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week 16:</th>
<th><strong>FINAL ESSAY: CASE STUDY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>12/4 – 12/14</td>
<td>WORK ON FINAL ESSAY</td>
</tr>
<tr>
<td></td>
<td># 3, FINAL Essay, Due 12/14**</td>
</tr>
</tbody>
</table>
COURSE DATA
ARC 461a / 561a: WATER EFFICIENCY IN BUILDINGS
Fall 2017
3-credit units

FACULTY
Courtney Crosson, Assistant Professor
AIA, LEED AP BD+C, LEED AP ND
ccrosson@email.arizona.edu
Office ARCH 203f

CRITERIA
FULFILLMENT
This course is required for the MS.Arch degree, an elective for the WSP Masters, and an elective to all other students. It is recommended to students at the masters level and upper level undergraduate students interested in Water Efficiency in Buildings.

PREREQUISITES
None.

CO-REQUISITES
None

CONTACT
Th 12:30-3:15 pm  CAPLA 204c

WEB + D2L
This course will be supported over D2L.

COST
None.

COURSE CONTENT
CATALOGUE DESCRIPTION
Learn methods and advanced techniques that conserve urban water usage while promotes water harvesting, water reuse, and water energy generation technologies in and around buildings.

COURSE DESCRIPTION
The course focuses on the effective use of water and its impact on energy consumption and building performance. It emphasizes the issue of water/energy nexus through a proposed four-faceted body of knowledge addressing 1) Water Conservation, 2) Water Harvesting, 3) Water Reuse, and 4) Water Energy Generation Technologies. Although water reduction and water harvesting have recently become more common in green buildings, water reuse and water energy generation are relatively newer technologies that demonstrates greater promise to contribute to the affordability of water and its use as alternative energy sources. The course also emphasizes the environmental benefits from integrating water saving strategies to modify thermal conditions --that would otherwise use energy to achieve-- while the saved water will facilitate exterior landscape development. Course delivery will include calculative and empirical methods, use of computer simulation, design nomographs and water budgets, and hands on inquiry based learning through selected laboratory sessions.

OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:
1. Understand the major factors affecting water use and consumption in and around buildings, its effect on thermal conditions and energy savings.
2. Be aware of building water codes and benchmark consumption set by the industry standard for green building design.
3. Acquire the necessary skills to conduct building and site survey techniques, the use of tools and site instruments, and data acquisition systems.
4. Conduct calculative and empirical methods, use of computer simulation, design nomographs and water budget, and hands on inquiry based learning through selected laboratory sessions.

COURSE COMPONENTS + CRITERIA OF EVALUATION

The graded components of this course and their criteria of evaluation are:

TEXT

Students will be assigned weekly readings and required to submit research reports on the reading material. Graduate students must submit additional case studies relevant to the reading material and explain the significance, depth, relevance, and logic of the research method used in these case studies.

PROJECTS

Students will be engaged in four projects each will include either a design or investigation of water efficiency in buildings. Depending on the module, for new designs, they will introduce methods and skills learned in the classroom supported by calculation methods, computer simulation or design nomographs and water budgets. For existing buildings, they will investigate water consumption using tools and instrumentation to then estimate water conservation savings and explain their proposed strategies. Graduate students must elaborate further and submit additional experiment (mathematic or empirical) to validate their proposed strategies.

OTHER

A final written exam will be administered and graded based on instructor criteria of comprehensiveness as well as completeness of the answers.

WEIGHT

The Course Components will be weighted as follows:

Module 1: Water Conservation 20%
Reading assignment 5
(Graduate students must analyze and submit one case study)
Module project 15
(Graduate students must submit water saving calculations)

Module 2: Water Harvesting 20%
Reading assignment 5
(Graduate students must analyze and submit one case study)
Module project 15
(Graduate students must submit water harvesting calculations)

Module 3: Water Reuse 20%
Reading assignment 5
(Graduate students must submit one case study)
Module project 15
(Graduate students must submit living machine calculations)

Module 4: Water Energy Generation 20%
Reading assignment 5
(Graduate students must submit one case study)
Module project 15
(Graduate students must submit energy production calculations)

Final Exam 20%
TOTAL 100%

REFERENCES

REQUIRED
Brad Lancaster, Rainwater Harvesting for Drylands and Beyond, Volume 1, (Rainsource Press, 2007)

**RECOMMENDED**


USGS. *How much water does the average person use at home per day?* [cited 2014]

*Rewater Grey Water Drip Irrigation Leed Greywater*. 2014


Green building. *Environmental Building News*:


**LINKS**
2. http://roemeragency.com/?m=201308
3. http://cals.arizona.edu/pubs/review/az1501/

**ACKNOWLEDGEMENTS**
Dr Nader Chalfoun has made great contributions in the formation of this course and establishment of this syllabus. His efforts and intellectual contribution are immensely appreciated.

**SEMESTER SCHEDULE**
A course calendar is attached to this syllabus.

**POLICIES + STATEMENTS**

**GRADING**

Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely *endeavor* to do so.

**CHANGE**

By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

**LATE WORK**

Work submitted after the deadline will be penalized 5% for every 12 hour period the work is delinquent. To clarify:

- less than 12hrs late 5% assignment grade reduction
- 12hrs – 24hrs late 10% assignment grade reduction
- 24hrs – 36hrs late 15% assignment grade reduction
- 36hrs – 48hrs late 20% assignment grade reduction, etc.

**INCOMPLETE WORK**

Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion.
Grading Scale
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Undergraduate Criteria</th>
<th>Graduate Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80-89)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70-79)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements, adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60-69)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0-59)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
</tbody>
</table>

Incomplete
Work left incomplete at the end of the semester due to circumstances beyond the student’s control.

In co-convened and joint assignments, graduate students will produce a greater quantity and higher quality of work than their undergraduate counterparts in meeting these criteria.

Grade Appeal
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

Attendance
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

to clarify:
3rd Absence 5% final grade reduction
4th Absence 10% final grade reduction
5th Absence 15% final grade reduction
6th Absence 20% final grade reduction, etc.

Exceptions
All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion in writing in advance of the event.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://www.registrar.arizona.edu/religiousholidays/calendar.htm

Excused Absence
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

Emergency Absence
The Instructor may grant an Emergency Absence for bona fide events outside the control of the student, such as sudden serious illness requiring hospitalization, bodily harm, or immediate family emergency. Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral; evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. “Immediate Family” is limited to parents, children, stepchildren, and cohabiting partners and spouses. To qualify as an Emergency Absence, an illness must be a true emergency (“requiring immediate professional medical attention”); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify. Students granted an Emergency Absence remain responsible for turning in all work as well as for getting all information and assignments covered, but may be granted extended deadlines. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

Documentation Standards
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

Project Documentation
Every sheet of every project will indicate the following information on its face:
DRAWING DOCUMENTATION
Every drawing will indicate:

- drawing type (plan, section, elevation, perspective, axonometric, etc.)
- graphic scale
- orientation indicator (north arrow for plan; directional description for vertical projections (e.g., South Elevation; Perspective Looking North)
- reference indicators (section and elevation markers, blow-up references) that link the drawing to relevant documents

ARCHIVE DOCUMENTATION
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

ARCXXX_YYYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student’s last name and first initial

STUDIO BOOK
This studio will produce a book of the work from the studio, available to the masterplan team, University of Arizona administration, and students. A template with submittal requirements will be provided to students before mid-term. Each student’s final grade will not be released until a complete and properly formatted submission for the book has been received.

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

For the principles, policies, and procedures governing issues of academic integrity, see:
http://deanofstudents.arizona.edu/codeofacademicintegrity.

PLAGIARISM
The practice of taking someone else’s work or ideas and passing them off as one’s own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a

1 A “DETAIL” is not a drawing type. Every drawing is a detail, considered from some perspective.
2 It is essential that all drawings have graphic scales, as notational scales are meaningless with digital documentation and dissemination.
failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style: http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR
All participants must follow the University of Arizona’s Policy on student behavior: http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please contact the professor or Disability Resources (520-621-3268) to establish reasonable accommodations. http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all. Instructors and students will use names and pronouns as requested and will accommodate modifications to names and/or pronouns after course registration. http://diversity.arizona.edu/

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.
NONDISCRIMINATION + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

end of syllabus
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act:
http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html

TEMPLATE VERSION: 2016.08.15
ARC 471b/571b: Contemporary Urbanity and Public Space, 3-CU, S2019
Instructor: Elena Canovas
University of Arizona

COURSE DATA
ARC 471b/571b Contemporary Urbanity and Public Space: From global debates to local circumstances.
Fall 2017
3-credit units

FACULTY
Elena Canovas, Professor of Practice
ecanovas@email.arizona.edu
CAPLA West 314
Office hours: by appointment.

CRITERIA
FULFILLMENT
This course is an elective in the History+Theory Stream and an allowable course for the Architectural History+Theory minor.

PREREQUISITES
M.Arch and B.Arch students in their 4th (could be 3rd)-Years and above; 3rd Year B.Arch and other CAPLA students by permission of instructor.

ENROLLMENT
This course is limited to 20 students.

CONTACT
One/two sessions per week; Room tbd.

WEB + D2L
This course will be supported over D2L.

COST
The course requires printing & binding a booklet with the final works (suggested format: 1/2 letter size, aprox. 80/120 pages, open technique bind / print). Students will be responsible for expenses associated. There is a maximum budget for this of $60. The design, content and format will be adapted to the maximum budget.

COURSE CONTENT

CATALOGUE DESCRIPTION
This course explores architectural history/theory topics in depth; it may be taken up to four times under different topics by permission of the Stream Coordinator.

COURSE DESCRIPTION
The course Contemporary Urbanity and Public Space: From global debates to local circumstances will review and discuss how the construction of contemporary public urban space has developed from late 20th century to the present and considers possible future developments. The definition of public space, urbanity and its dynamics will be the focus point of the seminar using the theoretical and applied history of European public spaces as a reference and will incorporate a wide variety of perspectives while following the current international debate and discourse of public space including how low-density urban configurations figure into the global conversation. The seminar will proceed in a multi-layered approach including the following frames of reference:
- Historical and emerging concepts of public space.
- The shifting and diffused boundaries between urban and non-urban environments (and all the in-betweens).
- Physical and geometrical magnitudes and accountable parameters (scale, density, economic, social and politic statistics…).
- Other non-apparent / non-physical conditions.
Relevant European case studies will be introduced as examples of possible strategies able to produce celebrated qualified and diverse public spaces. Barcelona will be a referential case study along with a review of examples taken from other cities including comparison of mutual effects with contemporary American cities. A local site will be chosen to demonstrate how the precedents and concepts introduced in the course can be applied. Graphic (mapping) and written techniques will be explored to describe/research/speculate the given site and to encourage debates about possible urban activities.

OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:
- Understand historically and conceptually ideas about public space and urbanity.
- Analyze and describe verbally and graphically contemporary public spaces from micro to macro scales.
- Distill the various elements that compose urbanity.
- Recognize the interactions between them as part of the actual debates.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

TEXTS
See listed References below. Some readings will follow current debates and lectures online since many discussions on public space are evolving in real time. The general reading is open to the needs of the research process and student performance.

PROJECTS
- Case-study research and presentation
  The presentation will review the notion of urban public space in the specific case: initial conditions, parameters, variables, (cartographies / description / programs /…), present and historical development. Specific bibliographical and documentary references will be given during class sessions. The case study sites will be selected during the first weeks of classes over the process of the assignment’s work.
- Research/writing, including personal graphics if needed.
  Each student is required to maintain a record of the research process. It will consist in the organized addition of writings, readings and personal research, properly indexed and organized. The production of the Personal Research Catalogue Public Space and Urbanity wills to be a tool for future designs and researches.

WEIGHT
There will be weekly or bi-weekly assignments that must be uploaded the night before may be presented in class (see documentation standards). Deliveries, presentations and meetings must follow punctually the courses schedule. Continuity in the assignments will generate substantial support for the final work.

The work will be reviewed during classes, in the midterm and final presentations, following the schedule.

Review 1, midterm:
Includes readings, research and assignments to date and the first draft of the Case Proposal and Documentation including a proper table of contents.

Review 2, Final presentation:
Includes all the assignments, a summary presentation with notes on class discussions; a complete bibliography of all sources of information, text, and images.
The Course Components are forecast to be

**ASSIGNMENTS AND CASE-STUDY**
- Research/reading* 15
- Case Proposal 15
- Writing * 15
- Graphics*** 15

**TEXTS required reading and discussion** 15

**COLLABORATION class sessions** 10

**DOCUMENTATION presentation and booklet ***
- Review 1 5
- Review 2 10
- Subtotal, Documentation 15
- Total 100%

*Quality, depth of knowledge and ability to expose clearly the thoughts during the presentation
**Quality of participation during class discussions and readings comments.
***Clarity in the organization of contents and quality of the edition

**REFERENCES**

**GENERAL**
Bibliographical references and general readings as historical support.

SEMESTER SCHEDULE

<table>
<thead>
<tr>
<th>wed</th>
<th>due</th>
</tr>
</thead>
<tbody>
<tr>
<td>w1</td>
<td>Jan 10</td>
</tr>
<tr>
<td>w2</td>
<td>The impossible definition of public space Assignment #1</td>
</tr>
<tr>
<td>w3</td>
<td>The European Public Space archive Assignment #2</td>
</tr>
<tr>
<td>w4</td>
<td>European cities/Public chances Assignment #3</td>
</tr>
<tr>
<td>w5</td>
<td>Feb 7</td>
</tr>
<tr>
<td>w6</td>
<td>American cities/Public chances Assignment #4</td>
</tr>
<tr>
<td>w7</td>
<td>17 Jan</td>
</tr>
<tr>
<td>w8</td>
<td>17 Jan</td>
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<td>w9</td>
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<td>17 Jan</td>
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<td>w15</td>
<td>17 Jan</td>
</tr>
<tr>
<td>w16</td>
<td>17 Jan</td>
</tr>
<tr>
<td></td>
<td>Last day of classes</td>
</tr>
</tbody>
</table>

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.
INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE
Grades will be defined as follows:

<table>
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<tr>
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<td>Excellence in most areas of evaluation, high competence in others.</td>
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</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
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<tr>
<td>C (70 to &lt;80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
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<tr>
<td>E (0 to &lt;60)</td>
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In co-convened and joint assignments, graduate students will be expected to produce a greater quantity or higher quality of work than their undergraduate peers in meeting these criteria.

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
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ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops:
http://catalog.arizona.edu/2015-16/policies/classatten.htm

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
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written excuse
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

validity
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

make-up work
Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

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ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless
otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog:
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a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

COPYRIGHT
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated, including being uploaded to file-sharing sites on the internet or elsewhere, without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act:

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end of syllabus

Elena Canovas_Jan 2018

TEMPLATE VERSION:
2017.10.24
COURSE DATA
ARC 471b/571b: Trans Journal
SPRING 2018
3-credit units

FACULTY
Instructor:
Clare Robinson, Ph.D
clarerobinson@email.arizona.edu
office hours: Thursday 11-noon

CRITERIA
FULFILLMENT
This course is a History/Theory Stream elective and fulfills credit requirements for the minor in
Architectural History and may fulfill other History/Theory Stream substitution requirements.

PREREQUISITES
B.Arch students must have completed and passed ARC231 and ARC 232, or have the permission of the
instructor; M.Arch students must have completed and passed ARC529, or have the permission of the
instructor.

ENROLLMENT
This course is limited to 15 upper division graduate and undergraduate students enrolled in CAPLA.

CONTACT
Time Tuesday 3:30pm-6pm
Room CAPLA 205A

WEB + D2L
This course will use good docs, box, and D2L as needed.

COST
Costs related to this class include the minimal costs associated with the production of a student-edited
journal. Students are responsible for the cost of prints to complete the assignments, research and
readings; they are not responsible for costs of printing or disseminating the final product.

Required software: Adobe Creative Suite.

COURSE CONTENT
CATALOGUE DESCRIPTION
This course explores architectural history/theory topics in depth; it may be taken up to four times under
different topics by permission of the Stream Coordinator.

COURSE DESCRIPTION
This is a team-based course designed to instruct students on a variety of professional and academic skills
related to the creation of a student-edited journal. Through group and individual exercises, students will
learn how to be critical editors of written and graphic content.

Individually, each student will learn to:
● Critically review academic and student-edited journals from the past and present.
● Create a catalogue of critical reviews.
● Use critical review skills to evaluate submissions for [TRANS-].

In addition, depending on their choice of team objective, they will learn one or more of the following:
● Craft a well-written Call for Submissions for [TRANS-].
● Apply for a grants, including the Douglas Haskell Award for Student Journals.
● Design intelligent graphical branding content for [TRANS-].
● Design and manage a website.
● Engage the architectural community to attract potential contributors for [TRANS-].
● Use InDesign to create and publish a physical journal, a PDF, and an eBook copy of [TRANS-].
OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:
1. Demonstrate an historical understanding of academic journals and architectural discourse by considering ideas and images in their socio-political, economic, cultural contexts.
2. Understand effective written and visual communication through critical analysis of past and present, peer-reviewed and new works.
3. Think critically and independently about academic discourse as it relates to the aspirations of designers and theoretical ideas involved in architectural design.
4. Collaborate to organize and execute tasks associated with the publication of a journal.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students' abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

PROJECTS
Module 01: Architectural Journal Research Catalogue (30% of semester grade)
- **Assignment Type:** Individual
- **Duration:** Weeks 1-4
- **Purpose:** To gain an understanding of the canon of architectural journals, organization by theme, and written and graphical content types editing processes.
- **Deliverables:** Each student is responsible for writing critical reviews of two academic journals and two articles chosen with permission of the instructor. These critical reviews will then be compiled in a catalog of research and precedents of existing architectural journals and articles.
- **Graded By:** Instructor
- **Grading Criteria:** Clarity of writing; Completeness; Demonstration of critical understanding of academic journals.

Module 02: Interim Team-Based Development Projects (20% of semester grade)
- **Assignment Type:** Team
- **Duration:** Weeks 5-9
- **Purpose:** To work collaboratively towards the completion of team tasks, gain leadership, professional, and academic skills related to the chosen field.
- **Deliverables:**
  - **Public Relations Team:**
    - Promotion of 2018 Call for Submissions on web-based platforms, email, and networking (ex. send Call for Submissions to ArchDaily, Bustler, ACSA, AIAS, University of Arizona, Alumni email, professional and academic contacts, word-of-mouth, etc.)
    - Email communication in response to questions and queries in regards to the journal
    - Email instructions and reminders to participants in the 2018 [TRANS-]journal
    - Graphics and website to accompany the 2018 Journal*** (collaborate with design team)
  - **Writing Team:**
    - 2019 Call for Submissions
    - 2018 Statement of Journal Intent
    - Grant writing* (collaborate other teams)
  - **Design Team:**
    - Catalogue of Architectural Journal Critical Reviews
    - Graphics and website to accompany the 2018 Journal and 2019 Call for Submissions** (collaborate with public relations team)
- **Graded By:** Team Evaluations with feedback and assessment by instructor
Grading Criteria: Participation; Quantitative contribution; Qualitative contribution; Ability to work with others

Module 03: Review Submissions (20% of semester grade)
- **Assignment Type:** Individual
- **Duration:** Weeks 11-12
- **Purpose:** To synthesize and practice critical reviews skills learned during Module 01 and to critically review submissions to [TRANS-] based on topicality and quality.
- **Deliverables:**
  - Scoring sheets for submissions
  - Participation in discussions about acceptance or rejection of submissions
- **Graded By:** Instructor
- **Grading Criteria:** Completeness; Demonstration of thoughtful evaluation; Ability to thoughtfully discuss the pro’s and con’s of accepting or rejecting submissions

Module 04: Final [TRANS-] journal Development (30% of semester grade)
- **Assignment Type:** Team
- **Duration:** Weeks 11-18
- **Purpose:** To work collaboratively towards the completion of team tasks, gain leadership, professional, and academic skills related to the chosen field.
- **Deliverables:**
  - **Public Relations Team:**
    - Collection and management submissions through email
    - Communication with submitters in response to acceptance or rejection, and/or more information
    - Promotion of finished 2018 [TRANS-]journal
  - **Writing Team:**
    - 2017 Letter from the Editors (based on Statement of Journal Intent)
    - Editing of included works (written and visual) for grammatical errors or other possibilities for improvement
  - **Design Team:**
    - Design and formatting of the 2018 [TRANS-]journal for print and online editions
- **Graded By:** Team Evaluations with feedback and assessment by instructor
- **Grading Criteria:** Participation; Quantitative contribution; Qualitative contribution; Ability to work with others

WEIGHT
The Course Components are forecast to be:

<table>
<thead>
<tr>
<th>Project</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Architectural Journal Research Catalogue</td>
<td>30%</td>
</tr>
<tr>
<td>2: Interim Team-Based Development Projects</td>
<td>20%</td>
</tr>
<tr>
<td>3: Submission Review</td>
<td>20%</td>
</tr>
<tr>
<td>4: Final [TRANS-] journal Development</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

REFERENCES
REQUIRED

GENERAL
Additional material related to the class readings can be found in:

- *Rethinking Architecture*, Neal Leach, ed.
- *Programs and Manifestoes of the Twentieth Century*, Ulrich Conrads, ed.
- *Theorizing a New Agenda for Architecture*, Kate Nesbit, ed.


Excellent histories of architectural theory can be found in:

Modern Architectural Theory: A Historical Survey 1673-1968, by Henry Francis Mallgrave

Words and Buildings: A Vocabulary of Modern Architecture, by Adrian Forty

Contemporary journals that publish architectural theory:

AA Files
AD (Wiley)
Future Anterior
Grey Room (available through Jstor)
Harvard Design Magazine
Journal of Architecture (UK)
Journal of Architectural Education (available through Jstor)
Log
Perspecta (available through Jstor)
Praxis
306090
Thresholds
Volume

Out of print of worth a look:

Assemblege (available through Jstor)

Oppositions

FURTHER RESOURCES
Chicago Manual Style (available online at the University of Arizona).

SEMESTER SCHEDULE
See semester schedule attached at the end of this syllabus.

Module 01: Architectural Journal Research Catalogue (Week 01 - Week 04)

Module 02: Formatted Catalogue, Call for Submissions 2018; Statement of Journal Intent; Website for 2018 [TRANS-] Edition (Week 04 - 09)

Module 03: Submission Review ( Week 11 - Week 13)

Module 04: Grant, Submission Management, Final Editing, Final Publication Design (Week 11 - Week 18)

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.
LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Undergraduate Criteria</th>
<th>Graduate Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

In co-convened and joint assignments, graduate students will be expected to produce a greater quantity or higher quality of work than their undergraduate peers in meeting these criteria.

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.
EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or immediate family emergency.

written excuse
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

validity
“InImmediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

make-up work
Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

ARCHIVE DOCUMENTATION
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

ARCXXX_YYYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student’s last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:

http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:

http://catalog.arizona.edu/allcats.html

ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless
otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog:
http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all.
http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

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end of syllabus

TEMPLATE VERSION:
2017.08.24—Section 2: changes to 100% Engagement (now Student Engagement and Career Development);
2017.09.11—Section 3: added copyright section and deleted copyright clause at end-of-syllabus footer.
2017.10.24—Section 1: Added Honors clause. Section 3: revised Emergency Absence policy.
Schedule (subject to change)

Week 2: Jan 16
Course introduction, introduction to [Trans] and other journals, introduction to 2018 theme “media"

Homework
Create google or box folder for shared docs
Review and edit proposed 2018 “call for submissions”
Review and propose graphic approach to website

Read 1-3 chapters of Marchall McLuhan and Terrence Gordon Understanding Media: the extension of Man (New York: Gingko Press, 2013)
  All read The Medium is the Message, then choose at least one of the following:
  Roads and Paper Routes
  Clothing: our extended skin
  Housing: new look and new outlook
  Clocks: the scent of time
  The Print: how to dig it
  The printed word: architect of nationalism
  Wheel, Bicycle, and airplane
  The Photograph: the brothel-without-walls
  Motorcar: the mechanical bride
  Ads: keep upset with the Joneses
  …or another chapter of a student choice
  Write a 1 paragraph summary of key takeaways/main points

Week 3: Jan 23
Finalize “call for submissions”
Determine deadline for submissions (suggest beginning of week 10 or 11 (no later))
Determine information/data desired from authors
Assign journals/articles for review A

Homework
Build and launch website with call for submissions and submission portal (or use email)
Email “call” to CAPLA and beyond
Review journals/articles, write 1 paragraph summary and 1 paragraph critique

Week 4: Jan 30
Discuss review of journals/articles A
Assign review of journals/articles B

Homework
Review journals/articles, write 1 paragraph summary and 1 paragraph critique

Week 5: Feb 6
Discuss review of journals/articles B
Examine style of previous [Trans] journals

Homework
Graphics team: create template for current [Trans] journal to include font and sizes, bold, italic, capitals, margins, spaces between title/author/first paragraph/all paragraphs, page number location, etc. [Use the previous version as the starting point. ONLY change template when layout did not work well]
Graphics team: collect images for graphic approach to front and back cover for class vetting/discussion
Writing and communication team: draft submission review criteria and form
**Week 6: Feb 13**  
Review of journal template  
Discussion of front/back cover  
Discussion of review criteria, possible responses to author questions  

**Homework:**  
Graphics team: finalize template, develop top front/back cover options  
Writing and communications team: finalize review criteria and form  
All: research 2019 journal themes (identify key words, identify key theoretical texts in which to “hang” call for submissions)  

**Week 7: Feb 20**  
Discuss and choose direction of front/back cover of current issue  
Brainstorm and choose future journal theme  

**Homework:**  
Graphics team: develop the top front/back cover of current issue, collected possibilities for future issue website of journal that correspond to future theme  
Writing and communications team: draft call for submissions  
All: read article/skim book on future theme  

**Week 8: Feb 27**  
Discuss front/back cover of current issue  
Discuss future call for submissions, subthemes, theory  
Discuss web images for future theme  

**Homework:**  
Graphics team: narrow/develop top images for future theme website  
Writing and communications team: redraft call for submissions  

**Week 9: spring break**  

**Week 10: March 13**  
Discuss redrafted call for submissions for next year’s journal  
Discuss/narrow direction of graphics for future journal  
Prepare to review submissions (criteria, form, and recruitment of TSD members)  

**Week 11: March 20**  
[Discuss submissions received]  

**Homework:**  
All: review submissions (mark accept, accept with minor revisions, accept with major revisions, reject; note relevance to theme, note strengths/concerns)  

**Week 12: March 27**  
Determine short list of acceptances  

**Homework:**  
Review and vet questionable submissions that need further consideration  

**Week 13: April 3**  
Determine the final list of submissions to accept, determine protocol for major revisions  
Discuss table of contents/order to publish work  
Discuss front/back cover design, formatting, etc.  

**Homework:**  
Graphics team: mock up journal with unedited work to see heft and the quantity of decisions to make about graphic design  
Writing and communications team: conduct minor edits (major edits will need permission and review of the author, send requests) and upload to common folder
Week 14: April 10
Review and discuss full mock up

Homework:
Graphics team: continue to finalize graphic design with edited submissions that are ready for print
Writing and communications team: follow up on major edits/requests for major edits, complete as many as possible, upload to common folder
Prepare website to promote and sell journals

Week 15: April 17
Review and discuss almost final journal

Homework: assigned as needed

Week 16: April 24
Review and discuss final journal

Homework: assigned as needed

Week 17: May 1
Launch party (assuming the journal has been uploaded to Blurb!)
COURSE DATA
ARC 496d/596d Social and Behavioral Issues in Built Environments
Fall 2018
3-credit units

FACULTY
Altaf Engineer, Ph.D., NCARB, LEED AP BD+C
aengineer@email.arizona.edu
Smith House, 1195 E. Speedway Blvd., Bldg. 199A
OFFICE HOURS: TUE, 1:00 PM – 3:00 PM

CRITERIA
FULFILLMENT
This course is a recommended elective for MS.Arch. students in the Health and the Built Environment (HBE) program and for master’s level and upper level undergraduates interested in pursuing careers that integrate human health and wellbeing in the built environment.

PREREQUISITES
Undergraduate architecture majors 4th year and above may take this course with the permission of the instructor.

ENROLLMENT
This course is limited to 16 students.

CONTACT
Tue: 9:00am – 11:30am | Smith House

WEB + D2L
This course will be supported over D2L.

COURSE CONTENT
CATALOGUE DESCRIPTION
This course explores specific Technology topics in depth; it may be taken up to four times under different topics by permission of the Stream Coordinator.

COURSE DESCRIPTION
This course introduces students to social and psychological issues in architecture and urban design and to the burgeoning field of environment and behavior. Students will examine social and behavioral factors in environmental design through case studies, critical thinking and discussions, and small-scale design exercises. A variety of built environments will be discussed, ranging from building interiors to parks, urban plazas, streets, and sidewalks.

Students will understand how to apply the outcomes of environment-behavior research to their design projects and existing places and spaces. As future designers committed to social responsibility, students must anticipate and respond to people’s needs. Ignoring these needs not only leads to costly errors, but also negatively influences health, wellbeing, productivity, and performance.

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

1. Critically analyze major works and synthesize useful information for social and behavioral issues in architecture and urban design
2. Conduct small-scale environment-behavior studies in built indoor and outdoor environments
3. Communicate research outcomes for evidence-based design recommendations via effective oral, written, and visual techniques

In addition, students who complete the graduate course will be able to:

1. Identify research studies in the social sciences and environmental psychology with findings that
may apply to human-centered architecture and urban design, and synthesize this information into a research report or publication

COURSE STRUCTURE AND ORGANIZATION
This course meets once a week and is comprised of interactive lectures and student participation and presentations, both informal and formal. The course is broken into the following phases:

- **Leading a seminar discussion** on social and behavioral issues in the built environment
- **Environmental-Behavior studies**
- **Final project:** Environment-Behavior study of a public plaza
- **Synthesis:** Documentation, and compilation of a final research report (Graduate students only)

There are regular reading assignments, and assigned tasks that involve finding and critiquing additional research articles not in the required reading list for each phase. Students will also present design recommendations based off of the readings for each phase, and participate in field exercises in which they observe and document social and behavioral issues in existing spaces on campus and make design recommendations for improvements.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

TEXTS
Reading assignments are outlined on the syllabus and course calendar; these assignments should be supplemented with more in-depth research and readings by students. Do not rely solely on web-based sources. While you will have a number of these referenced within the class, please be aware that the instructor knows that these sites are creditable and reliable. The instructor may frequently recommend other sources for in-depth readings. Students should also be prepared to share useful sources that they find on their own, with other classmates. All class sessions will in part, be group discussion format.

PROJECTS
1. **Leading a seminar discussion:** Develop an informative and engaging slide presentation discussing any one chapter in your textbook: *Environmental Psychology for Design*. Using the text as a basis for your information, expand upon it with additional sources drawn from other readings in this syllabus or your own research. Lead a class discussion and engage other students in discussion questions or activities listed in your chapter as well as your own. Compare, analyze, and critique two different, contrasting designs of any one building type based on concepts discussed in the chapter. Include your evaluation of these two designs in your slides and present to class. This is an individual assignment.

2. **Environment-behavior studies:** This assignment is subdivided in four small-scale environment-behavior studies based on concepts discussed in class, readings, and sources drawn from your own research. Details of each exercise will be provided in advance. Potential research questions for these studies will include: How do people perceive and recognize the environment? How do they manage their personal space? How does this impact their experience and use of different spaces – both indoor and outdoor? Your studies should also reflect your understanding of wayfinding and territoriality. Study methods may include participant observations, short interviews, and surveys. Present your findings to the class in a slide presentation and discuss their design implications. Further details of presentation requirements will be discussed in class. These are individual assignments.
3. **Final project: Environment-behavior study of a public plaza:** The goal of this exercise is for you to employ qualitative research strategies learned throughout the semester to analyze the use of an existing urban plaza and subsequently propose improvements to improve its experience. Select a public plaza – preferably on-campus or in an urban setting. Your approach will be based on the premise that every public place has a distinct subculture with physical and social characteristics. Become a participant observer in the scene by familiarizing yourself with the place, observing, and interviewing people. Maintain a field notebook, and develop graphic representations for your observations and analyses. Interviews may help reveal rules of conduct, norms of behavior, and rituals of public life that are supported or hindered by the physical environment. Compile all behaviors and activity patterns in a composite map. Suggest design improvements for the plaza based on your findings.

Present your findings and potential design improvements to the class in a slide presentation. Presentations must include the processes described above; further details of presentation requirements will be discussed in class. Class time will be allotted to discuss ideas, show progress and get feedback from instructor as well as peers. This is an individual assignment and also the final one for this class.

**PARTICIPATION**
Discussion and peer critiques are a large part of what makes this course successful. Students are expected to engage in these activities regularly throughout the semester in addition to their own presentations.

**DOCUMENTATION**
Documentation of slide presentations and exhibits in PDF format, uploaded to the shared class folder on time (noted on the course calendar) is required to get full credit noted below, under **Weight**. Graduate students, are required to synthesize their findings into an additional research report that has potential for publication or conference presentation in consultation with the instructor.

**WEIGHT**
The Course Components are forecast to be:

**PROJECTS**
- Leading a Seminar Discussion 10
- E-B Study 2a 10
- E-B Study 2b 10
- E-B Study 2c 10
- E-B Study 2d 10
- Final Project 30
- **subtotal, Projects** 80

**PARTICIPATION**
- 10

**DOCUMENTATION**
- Instructor review 10
- **Total** 100%

Grading criteria for graduate and undergraduate students for each project will be different, and will vary according to the deliverables of the specific project. Instructor will provide students with this information before the beginning of the project.

**REFERENCES**

**REQUIRED**

**GENERAL**

**ADDITIONAL READING RECOMMENDATIONS:**


USEFUL WEB LINKS FOR YOUR REFERENCE:
Environmental Design Research Association (EDRA): www.edra.org

SEMESTER SCHEDULE
A course calendar is included at the end of this syllabus.

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student's work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely *endeavor* to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor's discretion.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor's discretion.
GRADING SCALE

<table>
<thead>
<tr>
<th>scale</th>
<th>undergraduate criteria</th>
<th>graduate criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

In co-convened and joint assignments, graduate students will be expected to produce a greater quantity or higher quality of work than their undergraduate peers in meeting these criteria.

GRADE APPEAL

Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE

Students are required to attend all classes for their duration. Upon the 2nd unexcused Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per each unexcused absence beyond the initial 2nd.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops:
http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

EXCEPTIONS

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE

The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE

The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or other emergency.

Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of
the event and must include the certifying professional's contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student's related personal information.

validity

“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

make-up work

Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor's discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it unlikely for the student to be able to achieve a competent level of accomplishment consistent with expectations for the rest of the class; in such cases students are advised to drop the course or seek a medical withdrawal.

DOCUMENTATION STANDARDS

A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

- archive documentation
  Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

  ARCXXX_YYYYS_category_Lastname_F

  where
  ARCXXX is the course number, e.g., ARC401;
  YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
  category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
  Lastname_F is the student's last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE

As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:


The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES

Academic policies can be found in The University of Arizona General Academic Catalog:

http://catalog.arizona.edu/allcats.html

along with the UA Final Exam Regulations:

https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information

and Final Exam Schedule:

http://www.registrar.arizona.edu/schedules/finals.htm

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies:

http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete
http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal
ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog:
http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all.
http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work's name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

COPYRIGHT
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated, including being uploaded to file-sharing sites on the internet or elsewhere, without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act:

THREATENING BEHAVIOR
The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself:
http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

dead of syllabus

TEMPLATE VERSION:
2018.01.24—Section 1: Changed title of OBJECTIVES AND OUTCOMES to LEARNING OUTCOMES at request of the Graduate College; added tips and a guide to distinguishing between Learning Outcomes and Course Objectives.
Section 2, COURSE STRUCTURE AND ORGANIZATION: Added clarifying notes requested by the Office of Academic Affairs.
Section 3, ATTENDANCE: Revised clause to make it clear that the grade penalty takes effect after the specified number of allowed unexcused absences; Added notes pertaining to online courses; updated link to UA policy.
MAKE-UP WORK: Clause revised according to Graduate College.
ACADEMIC POLICIES: Expanded to include new required sections by Office of Academic Affairs.
ARC 496d/596d: Daylighting, Health, and Behavior, 3-CU, 2018
Instructor: Altaf Engineer
University of Arizona

COURSE DATA
ARC 496d/596d Daylighting, Health, and Behavior
Spring 2018
3-credit units

FACULTY
Altaf Engineer, Ph.D., NCARB, LEED AP BD+C
aengineer@email.arizona.edu
Smith House, 1195 E. Speedway Blvd., Bldg. 199A
Office hours: Wed, 2:00 PM – 5:00 PM

CRITERIA
FULFILLMENT
This course is a recommended elective for MS.Arch. students in the Health and the Built Environment (HBE) program and for master’s level and upper level undergraduates interested in pursuing careers that integrate human health and wellbeing in the built environment.

ENROLLMENT
The minimum-maximum enrollment will be determined annually by the School Director in consultation with the instructor of this course.

CONTACT
Tue/Thu: 9:30am – 10:45am | Architecture, Rm 205A

WEB + D2L
This course will be supported over D2L.

COURSE CONTENT
CATALOGUE DESCRIPTION
This course explores specific Technology topics in depth; it may be taken up to four times under different topics by permission of the Stream Coordinator.

COURSE DESCRIPTION
Daylighting influences the social, cultural, and behavioral aspects of spaces. Daylight can be used as a creative medium; it can be sculpted and controlled to impart a spirit of place as well as influence physical and mental health outcomes.

This course focuses on the critical analysis and design of daylighting systems for human comfort, physical and psychological wellbeing. Students will investigate the phenomenon of natural light in built environments via observations and surveys, study how these findings may impact human behavioral and social factors in design, and how they may be implemented to achieve multiple goals of sensory design, comfort, wellbeing, and productivity. We will study the integration of natural and artificial lighting systems in the building design process. We will test various daylighting design strategies discussed in class via group and individual projects which will include physical scale modeling in the sky simulator as well as the outdoor environment, photography, and computer simulations.

OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:

1. Formulate their own definitions of what constitutes good daylighting.
2. Understand how daylighting strategies impact occupants’ health, behavior, and performance via qualitative research methods.
3. Analyze an existing daylighting scheme and create a new, improved scheme via scale modeling, photography, and simulation techniques.
4. Learn how to use daylight as a creative medium in design, integrate it with artificial lighting systems in a building, develop a comprehensive lighting strategy for their project, and communicate it via suitable presentation and documentation techniques.
COURSE COMPONENTS + CRITERIA OF EVALUATION

This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

TEXTS

Reading assignments are outlined on the syllabus; these assignments should be supplemented with more in-depth research and readings by students. Do not rely solely on web-based sources. While you will have a number of these referenced within the class, please be aware that the instructor knows that these sites are creditable and reliable. The instructor may frequently recommend other sources for in-depth readings. Student should also be prepared to share useful sources that they find on their own, with other classmates. All class sessions will in part, be group discussion format.

PROJECTS

1. **Case study and precedent analysis:** Perform an in-depth case study of daylighting in an existing building on campus or in a geographically close area. Discuss your building selection with the instructor before proceeding with the study. Focus on the lighting features of the building using class lectures, examples and case studies described in the textbook and additional readings, as reference guides. Gather information on the building space, document lighting strategies by photographs, and collect illumination measurements with light meters (to be provided by instructor). Select one large space/room in the building such as a large classroom, conference room, auditorium, library reading room, atrium, or art gallery for a more in-depth, daylighting analysis. Measure illumination levels in different parts of the room. Select two precedent studies that employ daylighting strategies similar to what you would like to pursue in the next assignment: #2, Daylighting design. Present your analysis of the existing space, along with a minimum of two precedent studies per team, in a slideshow to the class. Further details of presentation requirements will be discussed in class. This is a two-person team assignment.

2. **Daylighting Improvements:** Based on lighting deficiencies found in your survey and analysis of the existing space and precedent studies, suggest a design improvement—through modifications or additions or both—in the form of daylighting strategies. This new strategy should focus on the following improvements: 1) Introduce daylight into spaces currently without daylight 2) Get daylight to penetrate deeper into spaces with some daylighting already, via light shelves, skylights, or other innovative strategies. Present this improvement to the instructor in the form of drawings, sketches, and rough study models in class and get approval to proceed with a final model. Construct a physical scale model (min. scale of 1” = 1’) for testing daylighting strategies for the selected space in a sky simulator as well as the outdoor environment. Present drawings, photographs of your scale models with improvements, and daylight measurements of illuminance levels in a sky simulator to the class in a slideshow. This presentation should effectively demonstrate how you have improved the daylighting scenario in the room, potentially leading to implications for occupant satisfaction, health, productivity, and energy savings in the entire building. Further details of presentation requirements will be discussed in class. This is a two-person team assignment; the team should be same as the one in the previous assignment.

3. **Daylighting Design:** The goal of this exercise is for you to create an effective daylighting design scheme for your individual projects. Select one large space in your design studio project or design a new space with the goal of demonstrating efficient daylighting strategies and integrating it with the artificial lighting scheme. Examples of such spaces include meeting rooms, conference rooms, class rooms, auditoriums, a large retail space, one residential space...
(such as the living room), etc. Create a three-dimensional computer model, a physical model, or a combination of both so that your renderings and photographs represent an accurate, real-world lighting scenario. Class time will be allotted to discuss ideas, show progress and get feedback from instructor as well as peers. Register for the International Velux Design Award (http://iva.velux.com), review award brief, document as per award guidelines and present in a final review. This is an individual assignment and also the final one for this class.

PARTICIPATION
Discussion and peer critiques are a large part of what makes this course successful. Students are expected to engage in these activities regularly throughout the semester in addition to their own presentations.

DOCUMENTATION
Students will prepare one image, landscape layout, 32 inches wide X 18 inches high (9600 wide X 5400 pixels high) in line with the International Velux Design Award submission requirements. Students will present this image in a final review.

See International Velux Design award website (http://iva.velux.com/competitions/international-velux-award-2018/pages/award-brief--2) for further detail on award submission requirements.

WEIGHT
The Course Components are forecast to be:

PROJECTS
- Case study and precedent analysis 20
- Daylighting improvements 20
- Daylighting design 40
  subtotal, Projects 80

PARTICIPATION 10

DOCUMENTATION
- review 1 10
  subtotal, Documentation 10
  Total 100%

Grading criteria for graduate and undergraduate students for each project will be different, and will vary according to the deliverables of the specific project. Instructor will provide students with this information before the beginning of the project.

REFERENCES
REQUIRED

GENERAL
Additional reading recommendations:


USEFUL WEB LINKS FOR YOUR REFERENCE:

- Center for the Built Environment (CBE), University of California, Berkeley: http://www.cbe.berkeley.edu
- Designing with Light companion site: http://www.designinglight.com
- Daylighting Pattern Guide: http://patternguide.advancedbuildings.net/
- “Daylight Dividends”, Lighting Research Center research and case studies: http://www.lrc.rpi.edu/programs/daylighting/
- Sun position calculation: http://www.susdesign.com/sunposition/index.html
- Sun angle calculation: http://www.susdesign.com/sunangle/
- UC Davis, California Lighting Technology Center: http://cltc.ucdavis.edu/index.php

SEMESTER SCHEDULE

A course calendar is included at the end of this syllabus.

POLICIES + STATEMENTS

GRADING

Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely *endeavor* to do so.

CHANGE

By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.
LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE
Grades will be defined as follows:

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<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>High competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
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<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
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</tr>
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</table>

In co-convened and joint assignments, graduate students will be expected to produce a greater quantity or higher quality of work than their undergraduate peers in meeting these criteria.

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.
EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or other emergency.

written excuse
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

validity
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

make-up work
Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

archive documentation
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

ARCXXX_YYYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student’s last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described
INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all.
http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected
to create a tolerant and open environment where such opinions can be expressed without bullying or
discrimination. The University is committed to creating and maintaining an environment free of
discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective
gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the
semester, upon student request.

PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as
plagiarism and is a serious violation of academic and professional ethics. The consequences for
plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the
University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources
(whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant
messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students
operating digital devices in testing situations when not authorized to do so shall be assumed to be
cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers.
Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in
total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the
original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is
an acceptable practice as long as the original sources are properly cited. Textual citations should follow the
Chicago Manual Of Style. Citations of buildings and other designed works should include both a) the project and b) the source information:

a) project citation: the work's name or title, its location, the name of its designer(s), and the date
designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained
formatted according to the Notes and Bibliography format specified in the Chicago Manual Of
Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair
advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of
record.

COPYRIGHT
Materials in this course may be copyrighted. They are intended for use only by students registered and
enrolled in the course and are only for instructional activities associated with and for the duration of the
course. They may not be retained in another medium or disseminated, including being uploaded to file-
sharing sites on the internet or elsewhere, without the written permission of the instructor. They are
provided in compliance with the provisions of the Teach Act:

Students should refer to University copyright policies:
http://www.library.arizona.edu/help/tutorials/copyright/index.html
THREATENING BEHAVIOR
The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself:
http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

end of syllabus

TEMPLATE VERSION:
2017.10.24—Section 1: Added Honors clause. Section 3: revised Emergency Absence policy.
### COURSE CALENDAR (subject to change)

<table>
<thead>
<tr>
<th>Date/ Week</th>
<th>Topic</th>
<th>Readings/Preparation work</th>
<th>Deliverable</th>
</tr>
</thead>
</table>
| Week 1: Thu 01/11 | Introduction to the course, syllabus, assignments, and schedule overview Light and perception; Fundamentals of lighting; Introduction to assignment 1 | Please save the course syllabus and schedule sent to you, print or access electronically for class (you may bring your laptops).  
- Tregenza chapter 2  
- Livingston: Start reading chapters 1 though 5 and complete by next class. | Form teams of two for Assignments 1 and 2, begin looking at options for case studies.  
Begin background research and data collection on your selected case study.  
Contact design firms (architecture and lighting) or use campus resources as necessary, to get more information. |
| Week 2: Tue 01/16 & Thu 01/18 | Daylighting strategies with examples; sample case studies; in-depth discussion of assignments 1 and 2.  
Introduction to light meters and in-class demonstration. Location TBD. |  
- Tregenza chapters 3 and 4  
- Finish Livingston chapters 1 through 5, and read chapter 10 | Thursday 01/18: Meet at location decided by instructor for workshop on light meters and how to make daylight observations.  
Submit team names and case study choice for Assignments 1 and 2 |
| Week 3: Tue 01/23 & Thu 01/25 | Field visit: Observation of daylighting strategies. Tour of Ball-Paylor house by Arthur Brown, to be given by Professor Christopher Domin |  
- Tregenza chapter 9  
- Livingston chapters 6 and 13. | Tuesday, 01/23: Meet directly at Ball-Paylor house at 9:30 am  
Thursday 01/25: Teams will show collected data for Assignment 1 and discuss case study with instructor in class. |
| Week 4: Tue 01/30 & Thu 02/01 | Attend lecture by Kappl + Piippo on Monday 01/29, Tucson Museum of Art at 6 pm. This lecture will count as an official class; no class on Tuesday 01/20. |  
- Tregenza – “Worksheets”, section 11: “How to measure light”  
- Independent research from general, recommended readings list and websites | Thursday, 02/01: Team presentations of case study to class: Assignment 1  
Upload team presentations in PDF format by 12 am on |
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<tbody>
<tr>
<td></td>
<td>Attend lighting workshop on Tuesday 01/30 for 2 guaranteed participation points. Daylighting case study: Team presentations</td>
<td>as required</td>
<td>this day to assigned location in D2L. Start working on modifications/additions to proposed daylighting design strategies of case study based on instructor and student feedback in class.</td>
</tr>
</tbody>
</table>
| Week 5: Tue 02/06 & Thu 02/08 | Daylighting analysis workshop: Introduction to VELUX Daylight Visualizer + in-class analysis exercises |  ● Tregenza chapter 1  
● Livingston chapter 16  
● Independent research from general, recommended readings list and websites as required  
● Download Velux Daylight Visualizer on your computers prior to class. Review program tutorials and additional online sources as necessary. | Teams to begin working on Assignment 2: New daylighting strategies and proposed design modifications—discuss with instructor, and finalize. Please show sketches, drawings, and rough study models to instructor. Begin final models and start using Daylight Visualizer program for your daylighting analysis. |
| Week 6: Tue 02/13 & Thu 02/15 | Daylighting, health, and productivity; Discussion of daylighting design strategies continued Daylighting and energy efficiency |  ● Tregenza chapters 5 and 6  
● Livingston chapters 14 and 15 | Teams to continue presentation work and final models for Assignment 2. Please show sketches, drawings, and models to instructor. |
| Week 7: Tue 02/20 & Thu 02/22 | Overview of previous student work on daylighting projects Daylighting improvements exercise - continued. |  ● Independent research from general, recommended readings list and websites as required | Teams to continue presentation work and final models for Assignment 2. Please show sketches, drawings, and models to instructor. |
| Week 8: Tue 02/27 & Thu 03/01 | Daylighting improvements exercise: Team presentations |  ● Independent research from general, recommended readings list and websites as required | Tuesday, 02/27 & Thursday, 03/01:  
**Assignment 2: Team presentations of daylighting improvements to class**  
Upload team presentations in PDF format by 12 am on
<table>
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<tr>
<td>Week 9</td>
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<td>Spring Break</td>
</tr>
</tbody>
</table>
| Week 10: Tue 03/13 & Thu 03/15 | Guest speaker: Claudia Kappl and Concept Lighting Labs. Integration of daylighting with electrical lighting strategies, color, temperature, controls, and how they influence human perception and comfort | ● Livingston chapters 7, 8 and 9  
● Bring your current design studio project drawings (plans and sections) printed on 11 x 17 size sheets or any materials required to discuss a new design project | Begin Assignment 3: Select an area/room in your current design studio project and discuss its possible daylighting design individually with instructor. OR Design a new space on-campus to demonstrated desired daylighting design strategies  
*Note: This project will also be your submission for the International Velux Award.* |
<p>| Week 11: Tue 03/20 &amp; Thu 03/22 | Electrical lighting fundamentals and integration with natural light | ● Livingston chapters 11 and 12 | Continue Assignment 3: Begin sketches and conceptual models – 3D or physical, for your project. |
| Week 12: Tue 03/27 &amp; Thu 03/29 | Daylight in the outdoors: Understanding the natural phenomenon via observations | ● Minnaert et al: Light and Color in the Outdoors | Thursday, 03/29: Continue Assignment 3 |
| Week 13: Tue | In-class daylighting design workshop: Individual student | ● Please bring any drawings, physical models, etc. that are required to discuss the new design project | Complete Assignment 3: Individual daylighting design projects and get... |</p>
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<td>04/03 &amp; Thu 04/05</td>
<td>discussions with instructor</td>
<td>required for discussing your daylighting design. Be prepared to work in class on your laptops.</td>
<td>final approval for its design from instructor. Begin Assignment 4: Select one large interior space in your project and discuss its lighting design individually with instructor. Begin modeling it in the program for lighting simulations.</td>
</tr>
<tr>
<td>Week 14: Tue 04/10 &amp; Thu 04/12</td>
<td>Energy implications of daylighting design via case studies</td>
<td>• Independent research in consultation with instructor</td>
<td>Thursday, 04/12: Discuss individual daylighting computer simulations with instructor in-class</td>
</tr>
<tr>
<td>Week 15: Tue 04/17 &amp; Thu 04/19</td>
<td>Daylighting design project: Individual presentations</td>
<td>• Independent research in consultation with instructor</td>
<td>Assignment 3, final review; design: Individual presentations of daylighting design projects to class: All students will upload their presentation in PDF format by 12 am on Tuesday 04/17 to assigned location in D2L. This includes all students who are presenting in the next class on Thursday.</td>
</tr>
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<td>Week 16: Tue 04/24 &amp; Thu 04/26</td>
<td>Daylighting design project documentation: Individual presentations Final questions, clarifications, and overview of concepts discussed in class</td>
<td>• Independent research for required material in consultation with instructor</td>
<td>Tuesday, 04/24 and Thursday, 04/26 (cont’d.): Assignment 4, final review; documentation: Individual presentations of daylighting design project documentation to class. All students will upload their presentation in PDF format by 12 am on Tuesday 04/24 to assigned location in D2L. This includes all students who are presenting in the next class on Thursday. Submit final image on International Velux Awards</td>
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<td></td>
<td></td>
<td></td>
<td>2018 website.</td>
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</table>
COURSE DATA
ARC 497B & 597B Latin American Practice Traditions
Fall 2017
3-credit

FACULTY
Eduardo Guerrero, Assistant Lecturer
Contact information: eduardoguerrero@email.arizona.edu / guerrero.archud@gmail.com
Office hours: by appointment

CRITERIA
FULFILLMENT
This course is an elective.

ENROLLMENT
18 students maximum.

CONTACT
Thursdays, 5:30 to 8 PM.

WEB + D2L
Essential course information is posted on D2L.

COST
None.

COURSE CONTENT

CATALOGUE DESCRIPTION
This research course explores a specific aspect of the practice of architecture in depth.

COURSE DESCRIPTION
This course presents professional practice in the context of Latin cultures, introducing Spanish architectural vocabulary, to native and non-native speakers. It allows students to translate what they learn in the School’s professional degrees, based on American standards, to the Latin context. From how architects think about design and professional services, to how those services are rendered, to contracting methods, to how buildings are permitted and built, this course illuminates the cultural differences that distinguish Anglo and Latin practices. It also offers a guide to professional nomenclature in Spanish as well as tips for job searching in Latin cultures.

As part of this course, students will research case studies in design and professional practices in Central and South America.

The course is taught in English. Fluency in Spanish is not a prerequisite or needed to excel in the class.

LEARNING OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:

1. Demonstrate an understanding of architecture, landscape architecture, and urbanism characteristic of Central and South America, thus expanding the students’ understanding of global architectural practices.
2. Demonstrate an ability to compare and contrast buildings and modes of professional practice in varying social, economic, and political contexts.
3. Work analytically through research and drawing.
4. Identify the key components of the built environment in Spanish, including exterior and interior spaces, structures, and finishes.
COURSE COMPONENTS + CRITERIA OF EVALUATION
The graded components of this course and their criteria of evaluation are:

TEXTS
Required texts (averaging 1 per week) are posted on D2L and must be read prior to the day they are discussed. Graduate students read the same texts but are expected to conduct more in-depth analysis.


RESEARCH PROJECTS
Students will research and analyze several recent architectural projects in Central and South America, noting form, materials, structural strategies, construction methods, and professional practices. Through research, analysis, presentation, and discussion, students will learn the variety of architectural practice traditions in these countries. Research projects are short in duration and meant to rapidly introduce themes and concepts.

Prezi presentation. 8 slides minimum per project.

Groups of 2-3 selecting 2 or 3 projects to present.

See project brief for more information.

STUDIO PROJECT PRESENTATION
Students enrolled in a studio course will translate and annotate presentation drawings in Spanish, and present an element of the project. Non-studio students will be assigned a project to translate and annotate for presentation participation.

Graphic presentation. Studio boards or Printed Prezi presentation paper 11x17.

See project brief for more information.

ANALYTICAL CASE STUDY
Students will research and analyze an iconic architectural project in Central or South America, noting form, materials, structural strategies, construction methods, and professional practices. Through research, analysis, presentation, and discussion students will further their understanding of architectural practice traditions in these countries. Analytical case studies are longer in duration and developed for several weeks in the course.

Graphic presentation paper 11x17.

Individual project.

See project brief for more information, including a suggested list of projects.

QUIZZES
Students will practice architectural Spanish vocabulary at the beginning of each class, based on course’s texts and a selection of terms provided by the instructor. At two points in the semester, students will be quizzed on their knowledge of key Spanish nomenclature.
PARTICIPATION
Faithful attendance and participation is an important part of learning. Students are expected to participate and share their critical intellectual points of view during each class session.

WEIGHT
The Course Components will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>5%</td>
</tr>
<tr>
<td>Research Projects</td>
<td>25%</td>
</tr>
<tr>
<td>Studio Project Presentation</td>
<td>25%</td>
</tr>
<tr>
<td>Analytical Case Study</td>
<td>35%</td>
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REFERENCES
See texts above.

GENERAL
Use complete citation, formatted per the *Chicago Manual of Style*, “Notes and Bibliography” style *Chicago Manual of Style* (http://www.chicagomanualofstyle.org/tools_citationguide.html) when applicable.

SEMESTER SCHEDULE
A course calendar is attached to this syllabus.

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely *endeavor* to do so.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion.

GRADING SCALE
Grades will be defined as follows:

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<tr>
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<th>Undergraduate Criteria</th>
<th>Graduate Criteria</th>
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<tr>
<td>A</td>
<td>(90-100) Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B</td>
<td>(80-89) High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C</td>
<td>(70-79) Fulfilled all course requirements with competence. (Competence; the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
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<td>D</td>
<td>(60-69) Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
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<td>E</td>
<td>(0-59) Substantially incomplete work and/or work of an unsatisfactory quality.</td>
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In co-convened and joint assignments, graduate students will produce a greater quantity and higher quality of work than their undergraduate counterparts in meeting these criteria.
GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

EXCEPTIONS
All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion in writing in advance of the event.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://www.registrar.arizona.edu/religiousholidays/calendar.htm

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

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The Instructor may grant an Emergency Absence for bona fide events outside the control of the student, such as sudden serious illness requiring hospitalization, bodily harm, or immediate family emergency. Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral; evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. “Immediate Family” is limited to parents, children, stepchildren, and co-habiting partners and spouses. To qualify as an Emergency Absence, an illness must be a true emergency (“requiring immediate professional medical attention”); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

Students granted an Emergency Absence remain responsible for turning in all work as well as for getting all information and assignments covered, but may be granted extended deadlines. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

ARCHIVE DOCUMENTATION
All work produced in fulfillment of University requirements becomes the property of, and may be retained by, the School. Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:
ARC XXX_YYYYS_category_Lastname_F

where
ARC XXX is the course number, e.g., ARC 401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
LastName_F is the student’s last name and first initial
CLASSROOM BEHAVIOR + STUDIO CULTURE
The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

For the principles, policies, and procedures governing issues of academic integrity, see:
http://deanofstudents.arizona.edu/codeofacademicintegrity.

PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to the intellectual property of professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

   a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

   b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR
All participants must follow the University of Arizona’s Policy on student behavior:
http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please contact the professor or Disability Resources (520-621-3268) to establish reasonable accommodations.
http://drc.arizona.edu/instructors/syllabus-statement
RETENTION OF WORK
Work produced in this course is the property of the School of Architecture, which may retain any student project for display, accreditation, documentation, or other purposes.

CHANGES
This syllabus is subject to change with notice, as deemed appropriate by the instructor.

The purpose of a detailed syllabus is to make the course as transparent and as objective as possible, and thus to empower students to understand and earn the grades to which they aspire. It is not the intention of such a system to be used against learning or fairness.

Consequently, the professor retains the right to make adjustments that account for circumstances that were unforeseen when the course was designed and will notify the students when such changes are made. It may, for example, be advantageous to add or alter assignments or their criteria, or to modify criteria or project-weights, if it becomes evident that it is in the best interest of learning and fairness to do so. Students will notify the professor within one week of notification if such changes engender a hardship, after which time it will be agreed that students understand and are in accord with the change.

end of syllabus
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act: http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html

TEMPLATE VERSION: 2015.08.06 / 2016.03.06
<table>
<thead>
<tr>
<th>Week</th>
<th>Objectives and Outcomes</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lecture 1</td>
<td>Presentation of the Course / Introduction / Vocabulary</td>
</tr>
<tr>
<td>2</td>
<td>1A Demonstrate an understanding of architecture, landscape architecture, and urbanism characteristic of Spanish-speaking countries.</td>
<td>Research project: Climatic features of Latin America countries and impact in design Prezi presentation.</td>
</tr>
<tr>
<td>3</td>
<td>1B Demonstrate an understanding of architecture, landscape architecture, and urbanism characteristic of Spanish-speaking countries.</td>
<td>Research project: Emblematic projects of Latin America: Social / Economic / Politic / Prezi presentation.</td>
</tr>
<tr>
<td>4</td>
<td>1C Demonstrate an understanding of architecture, landscape architecture, and urbanism characteristic of Spanish-speaking countries.</td>
<td>Research project: Two native architects of Latin America / Prezi presentation.</td>
</tr>
<tr>
<td>5</td>
<td>Lecture 2</td>
<td>Vernacular Architecture and Natives + debate</td>
</tr>
<tr>
<td>6</td>
<td>4 Identify the key components of the built environment in Spanish, including exterior and interior spaces, structures, and finishes.</td>
<td>Studio project presentation: Practice Graphic presentation, Prezi or 11x17.</td>
</tr>
<tr>
<td>7</td>
<td>3A Work analytically through research and drawing.</td>
<td>Analytical Case Study: Analyze an iconic architectural precedent of a country Graphic presentation 11x17.</td>
</tr>
<tr>
<td>8</td>
<td>3A Work analytically through research and drawing.</td>
<td>Analytical Case Study: Analyze an iconic architectural precedent of a country Graphic presentation 11x17.</td>
</tr>
<tr>
<td>9</td>
<td>Lecture 3</td>
<td>PREVI LIMA and ELEMENTAL + debate</td>
</tr>
<tr>
<td>10</td>
<td>4 Identify the key components of the built environment in Spanish, including exterior and interior spaces, structures, and finishes.</td>
<td>Studio project presentation: Practice Graphic presentation, Prezi or 11x17.</td>
</tr>
<tr>
<td>11</td>
<td>2A Demonstrate an ability to compare and contrast buildings and modes of professional practice in varying social, economic, and political contexts.</td>
<td>Research project: Professional practice differences between two countries Prezi presentation.</td>
</tr>
<tr>
<td>12</td>
<td>Lecture 4</td>
<td>Latin American Architects + debate</td>
</tr>
<tr>
<td>13</td>
<td>2B Demonstrate an ability to compare and contrast buildings and modes of professional practice in varying social, economic, and political contexts.</td>
<td>Research project: Compare similar program/use building in two different countries Prezi presentation.</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Thanks Giving</td>
</tr>
<tr>
<td>15</td>
<td>4 Identify the key components of the built environment in Spanish, including exterior and interior spaces, structures, and finishes.</td>
<td>Studio project presentation Final Graphic presentation 11x17.</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>Studio week</td>
</tr>
</tbody>
</table>
### Some case study projects

<table>
<thead>
<tr>
<th><strong>CHILE</strong></th>
<th><strong>BRAZIL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quinta Monroy, Elemental, Iquique</td>
<td>Parque Do Flamengo, Rio de Janeiro</td>
</tr>
<tr>
<td>Universidad Adolfo Ibáñez, Peñalolén, Santiago</td>
<td>Parque Novo Santo Amaro V Social Housing in Sao Paulo</td>
</tr>
<tr>
<td>Ruca Dwellings by Undurraga Devés Arquitectos. La Pincoya, Huechuraba, Santiago</td>
<td>Museum of Modern Art of Rio de Janeiro (MAM), Rio de Janeiro</td>
</tr>
<tr>
<td>CEPAL Economic Commission for Latin America and the Caribbean, Santiago</td>
<td>Plaza of the three powers, Brasilia</td>
</tr>
<tr>
<td>Santuario de Auco by Undurraga Devés Arquitectos. Calle Larga, Región de Valparaíso</td>
<td>Museum of Modern Art, Rio de Janeiro</td>
</tr>
<tr>
<td>Mestizo Restaurant, Santiago</td>
<td>Contemporary Art Museum Niteroi</td>
</tr>
<tr>
<td>Termas de Puritama / Termas Geometricas</td>
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<thead>
<tr>
<th><strong>PERU</strong></th>
<th><strong>MEXICO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>PREVI Lima - Proyecto Experimental de Vivienda, Lima</td>
<td>El Pedregal de San Angel, Mexico City</td>
</tr>
<tr>
<td>House in Cañete, Cañete</td>
<td>CUBE Tower, Guadalajara</td>
</tr>
<tr>
<td>Equis House, Playa La Escondida</td>
<td>National Autonomous University of Mexico, Mexico City</td>
</tr>
<tr>
<td>Pre School for Early Childhood, Timayui</td>
<td>House of Diego Rivera and Frida Kahlo, Mexico City</td>
</tr>
<tr>
<td>Cao Museum, Magdalena de Cao</td>
<td>Casa Barragan, Mexico City</td>
</tr>
<tr>
<td>Classroom building Inca Roca Ricardo Palma University, Santiago de Surco</td>
<td></td>
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</tbody>
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<thead>
<tr>
<th><strong>URUGUAY</strong></th>
<th><strong>ARGENTINA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Iglesia del Cristo Obrero, Church in Atlántida</td>
<td>Bank of London and South America (now Banco Hipotecario), Buenos Aires</td>
</tr>
<tr>
<td>Fair of Craftsmen, Sheds for Fishermen, Services and Design of public Space, Punta del Diablo</td>
<td>Altamira Residential Building, Rosario</td>
</tr>
<tr>
<td>Pre School for Early Childhood, Timayui</td>
<td>Atelier ciudad de las Artes, Córdoba</td>
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<tr>
<th><strong>CUBA</strong></th>
<th><strong>BOLIVIA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>National School of Plastic Arts, Ricardo Porro, Havana</td>
<td>Campus Universidad Andina Simón Bolívar, Sucre</td>
</tr>
<tr>
<td>Coppelia (Gelato), Havana</td>
<td>Mamani Silvestre, El Alto</td>
</tr>
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<table>
<thead>
<tr>
<th><strong>COLOMBIA</strong></th>
<th><strong>GUATEMALA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAI - Peripheral Immediate Attention Center, Medellín</td>
<td>National Theater, Guatemala City</td>
</tr>
<tr>
<td>Transmilenio transit system, Bogotá</td>
<td></td>
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<tr>
<td>Park Towers, Bogota</td>
<td></td>
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<tr>
<td>Bamboo Childhood Center</td>
<td></td>
</tr>
<tr>
<td>FORMAKERS _ Canopy, Medellín</td>
<td></td>
</tr>
<tr>
<td>Pre School for Early Childhood, Kindergarten Ciudad de La Alegria, Timayui in Santa Marta</td>
<td></td>
</tr>
</tbody>
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<thead>
<tr>
<th><strong>DOMINICAN REPUBLIC</strong></th>
<th><strong>ECUADOR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair of Peace and Fraternity of the Free World Site, Santo Domingo</td>
<td>Entre Muros House, Quito</td>
</tr>
<tr>
<td>Corporativo 2010, Santo Domingo</td>
<td>X House, La Tola, Quito</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>OTHER SOURCES:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>MCHAP. Mies Crown Hall Americas Prize (Illinois Institute of Technology)</td>
</tr>
<tr>
<td><a href="https://arch.iit.edu/prize/mchap/nominated">https://arch.iit.edu/prize/mchap/nominated</a></td>
</tr>
<tr>
<td><a href="https://arch.iit.edu/life/inaugural-mchap-outstanding-projects-announced">https://arch.iit.edu/life/inaugural-mchap-outstanding-projects-announced</a></td>
</tr>
</tbody>
</table>
COURSE DATA
ARC 497B / 597B Reading Architecture
Fall 2015
3-credit units

FACULTY
Dan Hoffman, Professor of Practice, Adjunct Lecturer
hoffman@studioma.com

CRITERIA
FULFILLMENT
This course is an elective in the Practice Stream requirement

PREREQUISITES
M.Arch and B.Arch students in their 4th-Year and above; 3rd Year B.Arch and other CAPLA graduate students by permission of instructor.

ENROLLMENT
This course is limited to 16 students.

CONTACT
One session per week; time and place TBD.

WEB + D2L
This course will not be supported over D2L.

COST
The course requires a three-day trip to Los Angeles to tour and study contemporary architecture. Students will be responsible for all expenses associated with this trip.

COURSE CONTENT
CATALOGUE DESCRIPTION
This course explores specific Practice topics in depth; it may be taken up to four times under different topics by permission of the Stream Coordinator.

COURSE DESCRIPTION
Increasingly buildings are justified solely by their relations rather than by their autonomous qualities. Rather than speaking about the inherent nature of a building, its spatial organization, the manner of its construction, its particular sensual and phenomenal qualities, buildings are described as interconnected sets of information which serve to break the building down into simple, rationalized units while at the same time expanding its effects to increasingly larger scales. (From carbon to global warming.) This tendency makes it increasingly difficult to understand a building on its own terms, as an autonomous object existing amongst other entities. This is not to say that architecture is without relation to hyper objects such as global warming, capitalism, or discrete objects such as cell phones. For this course, an architectural object is simply a starting point from which other objects are referenced.

The course is based upon the close reading of a contemporary architecture based upon the Quadruple Object framework offered by the philosopher Graham Harman. The framework offers a way to understand an object through four phenomenological frames: perception (Merleau-Ponty), intentionality (Husserl), presence/absence (Heidegger) and technics. Taken together the four frames offer a deeper understanding of architecture and its meaning potential.

Significant contemporary buildings will be used as case study demonstrations of the Fourfold framework, providing a method through which students can begin to assess the meaning potential in their work.
The reading will be based upon a selection of contemporary buildings in Los Angeles using existing documentation, the form of drawings and published photographs. A re-reading of these buildings will take the form of a re-drawing and re-representation of the building based upon experience gathered from a visit to the building. Case Study examples of other significant buildings will be presented in class.
OBJECTIVES AND OUTCOMES

After taking this course, students will:

1. Understand how a building can provide a unique and meaningful experience for the viewer.
2. Understand the concepts of the relationship between intention, perception, context and technics can be used to "read" the inherent meaning in a building/object. how a building is represented and how it is experienced.
3. Understand how to "read" a building through a close examination of its physical (real) qualities.
4. Gain an awareness of contemporary philosophy and its application to architecture. how a philosophical position can inform a reading of contemporary architecture.

COURSE COMPONENTS + CRITERIA OF EVALUATION

This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students' abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

TEXTS

See References, below.

See below for grade weight of texts. A 1,000 word precis of each required reading will be required.

PROJECTS

See below for the grade weight of the required project: analysis of an existing built and proposed (Capstone) project using the Fourfold framework. re-representation of a contemporary building in Los Angeles done through the process of drawing, collaging, and/or montaging of photographs taken during a site visit. A more detailed brief will be distributed when this project is assigned.

WEIGHT

The Course Components are forecast to be:

- Documentation of Existing Building
- Precis of Assigned Text 1
- Precis of Assigned Text 2
- Student Project Analysis – Initial
- Student Project Analysis - Final

RE -REPRESENTATION PROJECT

| Precis 1 and 2 documentation | 3025 |
| Student Project Analysis re-representation | 3025 |

subtotal  6050

DISCUSSING TEXTS  15
WRITING  15
COLLABORATION (with one other student)  10

DOCUMENTATION

- review 1  5
- review 2  5

subtotal, Documentation  10

Total   100%

REFERENCES

REQUIRED


Heidegger, Martin, Basic Writing, Building, Dwelling, Thinking, pp. 343-364.
M. Merleau Ponty, The Visible and the Invisible, Eye and Mind, pp. 121-130.
Husserl, Edmund, The Crises of European Sciences, and Transcendental Phenomenology

GENERAL


SEMESTER SCHEDULE
Week 1: Introduction and Review of Course
Week 2: Selected Readings in Object Oriented Ontology - Perception (1)
Week 3: Selected Readings in Object Oriented Ontology - Intentionality (2)
Week 4: Selected Readings in Object Oriented Ontology – Presence/Absence, ContextPresentation of Case Study Example (1)
Week 5: Selected Readings in Object Oriented Ontology - TechnicsSite Visit to Los Angeles
Week 6: Case Study 1: Mies van der Rohe, The Receding Horizon Review of Site Visit Material
Week 7: Case Study 2: LeCorbusier – Koolhaas, Programmatic Topologies (Site Visit to Los Angeles)Commence Redrawing of Selected Buildings
Week 8: Case Study 3: Frei Otto – Fusing the Physical and ComputationalPreliminary Building Narrative
Week 9: Mid-Review of Student Project AnalysisPresentation of Case Study Example (2)
Week 10: Case Study 4: Kanzai Airport – Phenomenology of FlowMid-Review of Building Drawings and Narratives
Week 11: Case Study 5: OOO SpeculationsPresentation of Case Study Example (3)
Week 12: Presentation of Building Drawings and Narratives

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompleteness and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE
Grades will be defined as follows:
GRADE APPEAL

Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:

http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE

Students are required to attend all classes for their duration. Upon the 2nd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

EXCEPTIONS

All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion in writing in advance of the event.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:

http://www.registrar.arizona.edu/religiousholidays/calendar.htm

EXCUSED ABSENCE

The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE

The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or immediate family emergency.

written excuse

Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

validity

“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

make-up work

Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS

A professional standard in contract documents insuresthat every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:
ARCHIVE DOCUMENTATION
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

ARCXXX_YYYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., Site Plan, Longitudinal Section3, Homework4; and
Lastname_F is the student’s last name and first initial.

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

For the principles, policies, and procedures governing issues of academic integrity, see:
http://deanofstudents.arizona.edu/codeofacademicintegrity.

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b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
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ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should feel free to discuss them with the Instructor; If barriers remain or if students are uncomfortable speaking with the Instructor, students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

dead of syllabus
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act: http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html

TEMPLATE VERSION: 2016.03.30
ARC 497b/597b: Health and Wellbeing in the Built Environment, 3-CU, 2018
Instructor: Altaf Engineer

COURSE DATA
ARC 497b/597b Health and Wellbeing in the Built environment: A Tour of the Senses and Beyond
Spring 2018
3-credit units

FACULTY
Altaf Engineer, Ph.D., NCARB, LEED AP BD+C
aengineer@email.arizona.edu
Smith House, 1195 E. Speedway Blvd., Bldg. 199A
Office hours: WED, 2:00 pm – 5:00 pm

CRITERIA
FULFILLMENT
This course is a requisite for MS.Arch. students in the Health and the Built Environment (HBE) program
and a recommended elective for master’s level and upper level undergraduates interested in pursuing
careers that integrate human health and wellbeing in the built environment.

ENROLLMENT
The minimum-maximum enrollment will be determined annually by the School Director in consultation
with the instructor of this course.

CONTACT
WED: 9:00a – 11:30 | Smith House

WEB + D2L
This course will be supported over D2L.

COURSE CONTENT

CATALOGUE DESCRIPTION
The practical application of theoretical learning within a group setting and involving an exchange of ideas
and practical methods, skills, and principles. Students may take 497B/597B up to four times provided the
topics are different.

COURSE DESCRIPTION
What we see, hear, and breathe affects our wellbeing. Consequently, designers have a profound impact
on the people who inhabit their buildings. This course will offer future design professionals experience in
the scientific understanding needed to capitalize on advancements in design informed by research.
Designers who can not only understand, but translate existing research into practice will be more
competitive in the market and have a larger impact. The course begins with a primer on scientific literacy
in the context of design, followed by modules that dive into the physiology, psychology, and design
implications related to our senses.

Students will learn how to find and critique research that connects wellbeing outcomes with the built
environment through written paper critiques in each module (Visual, Haptic, Aural, Gaseous, and Natural
Systems). At the end of each module, students will prepare a design implication strategy informed by the
required readings + one additional research paper. Finally, each student will prepare a final course project
that critiques a current studio project or an existing built space on campus and makes design
recommendations. This final project may be presented in the form of a poster, a paper with photographs
and diagrams/sketches, or a slide deck, depending on the student’s individual goals and expertise.

OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:

1. Exhibit how to find research articles that are relevant to health and wellbeing and the built
   environment;
2. Exhibit a scientific base of understanding of how existing human health and wellbeing research
can impact design;
3. Critique existing research for its scientific relevancy to the design world and for the appropriateness of the methodologies used;
4. Communicate scientific literature critiques effectively to other students through writing, speaking, and visuals;
5. Synthesize and communicate design recommendations and implications based on existing health and wellbeing research

STRUCTURE AND ORGANIZATION
This course meets twice a week and is comprised of interactive lectures and student participation and presentations, both informal and formal. The course is broken into the following phases:
- Introduction to the science of health and wellbeing in the context of design
- Module 1: Visual systems
- Module 2: Haptic and Aural systems
- Module 3: Gaseous systems
- Module 4: Natural systems
- Synthesis: Final course project

There are regular reading assignments, and assigned tasks that involve finding and critiquing additional research articles not in the required reading list for each module. Students will also present design recommendations based off of the readings for each module, and culminate with a final project that critiques an existing space on campus and makes design recommendations.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship.

Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

TEXTS I PAPER CRITIQUES
Students will submit written summaries and critiques of required readings and additional research articles found on their own outside of the reading list. Instructor will provide, in advance, a list of questions that will need to be answered as well as serve as an outline for each summary and critique. These summaries will be submitted on D2L and discussed with the class once per module and once during the course introduction weeks for a total of 25 points.

PROJECTS I DESIGN IMPLICATIONS
Students will present to the class a design implication based off of the required readings and their own additional research articles of choice for each module. These will be submitted in slide format for a total of 40 points. Students may select an existing built environment as a case study or a current studio project for this exercise.

FINAL PROJECT
Students will synthesize their readings over the semester into a set of evaluative criteria that inform a final project that is a critique with design recommendations for an existing space on campus or a current studio project. The format can be a slide deck or design poster—agreed upon after discussion with the instructor considering the student’s future endeavors and specific skill set. Graduate students are required to prepare and submit an additional research report that has potential for publication or conference presentation in consultation with the instructor.

Although the final project may be delivered in different formats, there are common criteria for evaluation:
- Appropriately cited readings and graphics
- Lack of grammatical errors
- Documentation of the existing space
- Annotated, original graphics regarding design recommendations for the existing space
- Explanation of potential benefits of the design recommendations
- Overall cohesiveness (each project needs to convey to the audience the process involved, from interpreting existing literature to its translation to design recommendations)

PARTICIPATION
Discussion and peer critiques are a large part of what makes this course successful. Students are expected to engage in these activities regularly throughout the semester in addition to their own presentations.

WEIGHT
The Course Components are forecast to be:

PAPER CRITIQUES
- Introduction Module 5
- Visual Module 5
- Haptic and Aural Module 5
- Gaseous Module 5
- Natural Systems Module 5
  5

DESIGN IMPLICATIONS
- Visual Module 10
- Haptic and Aural Module 10
- Gaseous Module 10
- Natural Systems Module 10
  40

FINAL PROJECT
  25
PARTICIPATION
  10
Total
  100%

Graduate students are expected to engage in the research in this course at a more comprehensive level. To ensure this, each module’s deliverables will be evaluated according to the use and interpretation of all readings listed for each section, whereas undergraduates are responsible for a subset of the listed readings. Graduate students will lead certain class discussions based on these readings and this activity will count towards their participation points. They are also required to submit an additional research report as part of their final project in alignment with their individual interests and in consultation with the instructor.

REFERENCES
REQUIRED

All other required readings for this course listed below (subject to change), are posted on the D2L site in PDF or electronic link format, and are subject to change based on developments in relevant research. Graduate student readings are **bolded**.


GENERAL ADDITIONAL READING RECOMMENDATIONS:


SEMESTER SCHEDULE

A course calendar is included at the end of this syllabus.

POLICIES + STATEMENTS

GRADING

Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE

By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK

Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor's discretion.

INCOMPLETE WORK

Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompleteness and the importance of the assignment, at the Instructor’s discretion.
GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Undergraduate Criteria</th>
<th>Graduate Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 &lt; 90)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 &lt; 80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 &lt; 70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 &lt; 60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

GRADES APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or other emergency.

Written excuse
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

PROJECT DOCUMENTATION
Every sheet of every project will indicate the following information on its face:

- course number
- semester/year
- professor
- student author(s)
- current date of the work
- page or sequence number

ARCHIVE DOCUMENTATION
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

ARCXXX_YYYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student’s last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described
INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all.

NONDISCRIMINATION + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism:

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

COPYRIGHT
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated, including being uploaded to file-sharing sites on the internet or elsewhere, without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act:

Students should refer to University copyright policies:

http://www.library.arizona.edu/help/tutorials/copyright/index.html
THREATENING BEHAVIOR
The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself:
http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

end of syllabus

TEMPLATE VERSION:
2017.10.24—SECTION 1: ADDED HONORS clause. SECTION 3: REVISED EMERGENCY ABSENCE policy.
#ARC 497b/597b
Health and Wellbeing in the Built Environment: *A Tour of the Senses and Beyond*
Spring 2018, 3 CU

Instructor: Altaf Engineer

## COURSE CALENDAR (subject to change)

<table>
<thead>
<tr>
<th>Date/Week</th>
<th>Topic</th>
<th>Readings (Note: graduate student readings are bolded)</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td><strong>01/10</strong></td>
<td><strong>Introduction to wellbeing and design; overview of modules</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Week 2** | **01/17** | **Scientific research and the designer**  
*Guest Lecture:*
Why is scientific research important?  
How does it inform design?  
Critical thinking as scientific thinking.  
Where can you find it? Primer on scientific literacy.  
Designers as public health practitioners | Sternberg CH 1 & 2 |
| **Week 3** | **01/24** | **Visual module**  
Physiological and psychological background. | **1, 2, 3, 4, 5**  
**Paper critique 1 due (wellbeing and design; scientific research)** |
| **Week 4** | **01/31** | **Visual module**  
*Guest Lecture (tentative):*  
Applied health and wellbeing research.  
Design implications, case studies, and special populations.  
Visual comfort research at CAPLA | **6, 7, 8, 9, 10, 11** |
| **Week 5** | **02/07** | **Visual module**  
Student presentations and group discussions | **Paper critique 2 (visual systems)**  
**Design implication presentation 1 (visual systems)** |
| **Week 6** | **02/14** | **Haptic and Aural module**  
Physiological and psychological background. | **Sternberg CH 3, 12, 13**  
**Final project topic submission** |
<table>
<thead>
<tr>
<th>Week 7</th>
<th><strong>Haptic and Aural module</strong></th>
<th>14, 15, 16</th>
<th>Paper critique 3 due (haptic and aural systems)</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/21</td>
<td>Applied health and wellbeing research. Design implications, case studies, and special populations. Designing for haptic and aural senses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 8</td>
<td><strong>Haptic and Aural module</strong></td>
<td></td>
<td>Design implication presentation 2 (haptic and aural systems)</td>
</tr>
<tr>
<td>02/28</td>
<td>Student presentations and group discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 9</td>
<td>03/07 – No classes – Spring break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 10</td>
<td>Guest Lecture (tentative): Healing Spaces; current sensing methods</td>
<td></td>
<td>Final project check-in</td>
</tr>
<tr>
<td>03/14</td>
<td>Gaseous module Physiological and psychological background. Applied health and wellbeing research. Design implications, case studies, and special populations.</td>
<td>Sternberg CH 4, 17, 18, 19, 20, 21, 22, 23</td>
<td>Final project draft discussions</td>
</tr>
<tr>
<td>Week 11</td>
<td><strong>Gaseous module</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/21</td>
<td>Presentations and group discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td><strong>Gaseous module</strong></td>
<td></td>
<td>Paper critique 4 (gaseous systems) Design implication presentation 3 (gaseous systems)</td>
</tr>
<tr>
<td>03/28</td>
<td>Presentations and group discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 13</td>
<td><strong>Natural systems module</strong></td>
<td>Sternberg CH 12, 24, 25, 26, 27, 28, 29, 30</td>
<td></td>
</tr>
<tr>
<td>04/04</td>
<td>Applied health and wellbeing research. Design implications, case studies, and special populations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 14</td>
<td><strong>Natural systems module</strong></td>
<td>31, 32, 33, 34, 35, 36</td>
<td>Paper critique 5 (natural systems) Design implication presentation 4 (natural systems)</td>
</tr>
<tr>
<td>04/11</td>
<td>Presentations and group discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 15</td>
<td><strong>Class workshop for final project presentations</strong></td>
<td></td>
<td>Discussion of final projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>04/18</td>
<td>Course project presentations</td>
<td>Final project presentations</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Week 16</td>
<td>04/25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
COURSE DATA
ARC 497k | 597k The Portfolio
Fall 2017
3-credit units

FACULTY
Anna Koosmann, Architect, Assistant Professor
akoosmann@email.arizona.edu
office location: Smith House
office hours: by appointment

CRITERIA
FULFILLMENT
This course is an elective in the Practice Stream.

PREREQUISITES
B.Arch – ARC 302
M.Arch – ARC 510d
MLA – LAR 610

ENROLLMENT
This course is limited to 24 upper division graduate and undergraduate students enrolled in the College of Architecture, Planning, and Landscape Architecture.

CONTACT
Tuesday 5:15pm – 6:30pm Lab; CAPLA West I Room 205 Computer Classroom
Thursday 5:15pm – 6:30pm Lecture; CAPLA West I Room 302A

WEB + D2L
Course material will be available at the course D2L site (https://d2l.arizona.edu). It is the student’s responsibility to regularly check D2L for updates.

COST
Students are responsible for all course expenses and materials for project assignments and the final, physical portfolio. Actual amounts will vary among students, with an estimate cost of $100.

COURSE CONTENT

CATALOGUE DESCRIPTION
The architecture portfolio is a timeless way to represent a cohesive body of work and it is essential for seeking employment and academic advancement for the emerging professional. This course takes students through a process of discovery and formal graphic composition that will enhance the final, physical portfolio for career development.

COURSE DESCRIPTION
This course is a practical overview that draws from current trends in the profession. Through self-assessment and reflection, the course is structured to evaluate student work and develop a professional style and narrative. Students will research firms and professional opportunities to identify an audience and develop a resume, cover letter, and an elevator pitch. Applying a hands-on approach using computer tools, students will enrichen their practical skills for creating and completing both a physical and a digital, web-hosted portfolio. Students will apply their cumulative knowledge over the course of the semester and solidify the experience through mock interviews facilitated by invited, practicing professionals. The class will meet in two locations (see CONTACT above): the computer lab for hands-on learning with computer-aided editing tools; and a traditional classroom for lectures, peer discussion, and reviews.
OBJECTIVES AND OUTCOMES
After taking this course, students should be able to:

1. EVALUATE: previous works for strengths and weaknesses in five architecture streams: design studio, design communications, history and theory, practice, and technology.
2. IDENTIFY: current trends and a professional audience that will inform the aesthetic content of the final portfolio project.
3. IDENTIFY: professional goals to guide the portfolio process.
4. CREATE: a narrative through written, visual, and verbal presentation that reinforces a cohesive style in delivering a professional resume, cover letter, elevator pitch, work samples, and portfolio.
5. COMPETENCY: in presentation and graphic representation.
6. EMPLOY: computer-aided graphic and editing tools to streamline workflow.

NAAB PERFORMANCE CRITERIA:
There are no NAAB Performance Criteria defined for this course.

STRUCTURE AND ORGANIZATION
Students will be graded on assignments, the physical and web-hosted portfolio, and class participation. Students will develop cumulative work throughout the semester that will inform the final portfolio. Assignments will be issued to engage self-assessment and reflection, written, verbal, and graphical representation. Lectures will be enhanced through discussions, small group learning, and peer reviews. Student participation is essential to creating a dynamic learning environment. Students will get time during class to explore topics and complete assignments; however, sufficient research and execution will require additional time outside of scheduled hours. Students will complete assignments on time and upload their work to D2L to receive full credit.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. At any point modifications may be adapted to better serve student learning. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

Course expectations and outcomes will vary based on individual majors and academic level.

*Graduate students will explore a topic of interest and give a class tutorial in a mode of architectural visualization, computer graphics, and web-based formats.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

PORTFOLIO
The portfolio will be developed through iterative engagement and assignments throughout the course. Students will use Adobe Creative Suites to edit and compose images, develop layout templates, and work samples, for the completion of a physical and digital, web-hosted portfolio.

WRITTEN
Graphic work will be supplemented with written documents to provide project narratives and descriptions. In addition to the portfolio written documents, students will compose and format a resume and cover letter for a complete, professional package. Students will compose and present an elevator pitch.

MOCK INTERVIEW
Students will prepare all documents for an end-of-semester mock interview facilitated by professionals in practice.

PARTICIPATION
Student participation is an essential part of this workshop and enhances the learning experience. Participation will be graded according to the level of student engagement through: attendance, constructive discussion, inquiry and investigation, peer and small group discussion, providing assistance to classmates, collaboration, and overall classroom productivity.
*TUTORIAL – FOR GRADUATE STUDENTS ONLY

Graduate students will be individually responsible for researching and presenting a tutorial to the class one time during the semester. The topic will be chosen and a presentation date will be identified during the first weeks of class.

WEIGHT

The Course Components are forecast to be:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PORTFOLIO</strong></td>
<td>50</td>
</tr>
<tr>
<td>assessment</td>
<td>10</td>
</tr>
<tr>
<td>template</td>
<td>10</td>
</tr>
<tr>
<td>draft</td>
<td>10</td>
</tr>
<tr>
<td>digital</td>
<td>10</td>
</tr>
<tr>
<td>physical</td>
<td>60</td>
</tr>
<tr>
<td><strong>WRITTEN</strong></td>
<td>20</td>
</tr>
<tr>
<td>resume</td>
<td>40</td>
</tr>
<tr>
<td>cover letter</td>
<td>40</td>
</tr>
<tr>
<td>elevator pitch</td>
<td>20</td>
</tr>
<tr>
<td><strong>MOCK INTERVIEW</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>PARTICIPATION</strong></td>
<td>20 *10</td>
</tr>
<tr>
<td><strong>TUTORIAL (GRADUATE ONLY)</strong></td>
<td>*10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

REFERENCES

REQUIRED

There are no required texts for this course.

GENERAL


<table>
<thead>
<tr>
<th>WEEK</th>
<th>DAY</th>
<th>ROOM</th>
<th>CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TU Aug 22</td>
<td>205</td>
<td>Introductions and Course Overview</td>
</tr>
<tr>
<td></td>
<td></td>
<td>302A</td>
<td>Lecture: Portfolio Overview</td>
</tr>
<tr>
<td></td>
<td>TH Aug 24</td>
<td></td>
<td><em>Issued: Assignment 1</em></td>
</tr>
<tr>
<td>2</td>
<td>TU Aug 29</td>
<td>205</td>
<td>Computer: Orientation and Work Flow</td>
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<tr>
<td></td>
<td>TH Aug 31</td>
<td>302A</td>
<td>Lecture: Assessment</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td><em>Due: Assignment 1</em></td>
</tr>
<tr>
<td>3</td>
<td>TU Sep 05</td>
<td>205</td>
<td>Computer: InDesign</td>
</tr>
<tr>
<td></td>
<td>TH Sep 07</td>
<td>302A</td>
<td>Lecture: Audience and Precedent</td>
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<td></td>
<td><em>Issued: Assignment 2</em></td>
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<tr>
<td>4</td>
<td>TU Sep 12</td>
<td>205</td>
<td>Computer: Creative Suites</td>
</tr>
<tr>
<td></td>
<td>TH Sep 14</td>
<td>302A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Due: Assignment 2</em></td>
</tr>
<tr>
<td>5</td>
<td>TU Sep 19</td>
<td>205</td>
<td>Computer: Graphic Design</td>
</tr>
<tr>
<td></td>
<td>TH Sep 21</td>
<td>302A</td>
<td>Lecture: Layout</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Issued: Assignment 3</em></td>
</tr>
<tr>
<td>6</td>
<td>TU Sep 26</td>
<td>205</td>
<td>Computer: Layout</td>
</tr>
<tr>
<td></td>
<td>TH Sep 28</td>
<td>302A</td>
<td>Lecture: Images and Text</td>
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<td><em>Due: Assignment 3</em></td>
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<td>7</td>
<td>TU Oct 03</td>
<td>No Class</td>
<td>Design Studio 301 Field Trip</td>
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<td>TH Oct 05</td>
<td>302A</td>
<td>Lecture: Resume, Cover Letter, and Elevator Pitch</td>
</tr>
<tr>
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<td><em>Issued: Assignment 4</em></td>
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<tr>
<td>8</td>
<td>TU Oct 10</td>
<td>205</td>
<td>Computer: Graphic Design</td>
</tr>
<tr>
<td></td>
<td>TH Oct 12</td>
<td>302A</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td><em>Due: Assignment 4</em></td>
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<tr>
<td>9</td>
<td>TU Oct 17</td>
<td>205</td>
<td>Computer:</td>
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<td></td>
<td>TH Oct 19</td>
<td>302A</td>
<td>Lecture: Representation</td>
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<tr>
<td>10</td>
<td>TU Oct 24</td>
<td>205</td>
<td>Computer:</td>
</tr>
<tr>
<td></td>
<td>TH Oct 26</td>
<td>302A</td>
<td>Lecture:</td>
</tr>
<tr>
<td>11</td>
<td>TU Oct 31</td>
<td>205</td>
<td>Computer:</td>
</tr>
<tr>
<td></td>
<td>TH Nov 02</td>
<td>302A</td>
<td>Lecture: Printing and Binding</td>
</tr>
<tr>
<td>12</td>
<td>TU Nov 07</td>
<td>205</td>
<td>Computer: Work Day</td>
</tr>
<tr>
<td></td>
<td>TH Nov 09</td>
<td>302A</td>
<td>Lecture: Digital Format and Web-hosting</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Due: Portfolio Draft</em></td>
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<tr>
<td>13</td>
<td>TU Nov 14</td>
<td>205</td>
<td>*Tutorial Presentations Graduate Students</td>
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<td></td>
<td>TH Nov 16</td>
<td>302A</td>
<td>Mock Interviews and Work Day</td>
</tr>
<tr>
<td>14</td>
<td>TU Nov 21</td>
<td>205</td>
<td>*Tutorial Presentations Graduate Students</td>
</tr>
<tr>
<td></td>
<td>TH Nov 23</td>
<td>No Class</td>
<td>Thanksgiving</td>
</tr>
<tr>
<td>15</td>
<td>TU Nov 28</td>
<td>205</td>
<td>Mock Interviews and Work Day</td>
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<td></td>
<td>TH Nov 30</td>
<td>302A</td>
<td>Mock Interviews and Work Day</td>
</tr>
<tr>
<td>16</td>
<td>TU Dec 12</td>
<td></td>
<td>Due: Final Portfolio 5:00pm Smith House</td>
</tr>
</tbody>
</table>
POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

10% assignment deduction for each 24 hour period past the due date

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Undergraduate Criteria</th>
<th>Graduate Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence in most areas of evaluation, high competence in others.</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 &lt;90)</td>
<td>High Competence in most areas of evaluation, competence in others.</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 &lt;80)</td>
<td>Fulfilled all course requirements with competence. (Competence: the answering of all requirements; adequate fitness, ability, capacity; sufficient for the purpose.)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 &lt;70)</td>
<td>Less than competent work in one or more areas of evaluation. One or more requirements lacking and/or sub-standard quality.</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 &lt;60)</td>
<td>Substantially incomplete work and/or work of an unsatisfactory quality.</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per absence.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops is available at:
http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop
EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://www.registrar.arizona.edu/religionsholidays/calendar.htm

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or immediate family emergency.

Emergency Absences must be certified by a professional in writing, such as doctor's excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional's contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student's related personal information.

Immediate Family is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

ARCHIVE DOCUMENTATION
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:
ARCXXX_YYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student's last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf
The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES
Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog:
http://deanofstudents.arizona.edu/codeofacademicintegrity.

INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all.
http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGIARISM
The practice of taking someone else's work or ideas and passing them off as one's own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work's name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).
b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

THREATENING BEHAVIOR
The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself:
http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; If barriers remain or if students are uncomfortable speaking with the Instructor, they are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

end of syllabus
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act: http://www.copyright.com/Services/copyrightoncampus/basics/teach.html. Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html

TEMPLATE VERSION: 2017.03.22
ARC 521A: Integrated Technologies 1, 3-CU, 2018  
Instructor: Christopher Domin

COURSE DATA
ARC 521A Integrated Technologies 1  
Fall 2018
3-credit units

FACULTY
Christopher Domin  
Architect + Associate Professor  
Office: CAPLA West #312
Email: cdomin@u.arizonaa.edu

CO-REQUISITES
ARC 510b

ENROLLMENT
This course is limited to 24 students.

CONTACT
Monday (204c) 9:00 – 11:15 a.m.
Tuesday (204c) 9:00 – 11:15 a.m.

OFFICE HOURS
Tuesday (312 CAPLA West) 8:00 – 9:00 a.m.

WEB +D2L
This course will be supported over D2L.

FULFILLMENT
This course satisfies a Technology Stream requirement for the M.Arch degree.

COST
Students are responsible for all personal expenses, including that required for class projects, course documentation and a research field trip. Estimated average expense: $100-$125 (Modeling expenditures will vary greatly contingent upon design intention, material selection and resourcefulness). $100-$150 (Field trip expenditures will vary greatly contingent upon proactive planning and resourcefulness).

COURSE CONTENT

CATALOGUE DESCRIPTION
Introduction to principles of structures, materials and methods of construction, and environmentally adaptive systems as integrated technologies.

COURSE DESCRIPTION
This is the first integrated technologies course introducing principles and precedent of structures (40% course content), materials and methods of construction (40% course content), and environmentally adaptive systems (20% course content). Through analysis of integrated technology, students gain an understanding of how building technologies work together as a system.

COURSE OBJECTIVES
1. Understanding of the fundamental principles of material properties.
2. Understanding of fundamental structural principles, forces, and elements.
3. Understanding of thermal properties as they relate to various building materials.
4. Awareness of relevant precedent demonstrating material, structural and thermal principles.
COURSE OUTCOMES

1. Awareness of regional precedents demonstrating material assemblies, structural systems and environmentally adaptive systems in small to medium scale buildings.
2. Understanding of traditional and emergent building structural systems, materials, and assemblies.
3. Ability to understand the structural design logic of a small-to-medium scale buildings and the interrelationship of structural systems, elements, and connections.
4. Understanding of passive systems in small-to-medium scale buildings

NAAB PERFORMANCE CRITERIA:
The material covered in this course offers students proficiency (at the indicated level of accomplishment) in the following subject areas as defined by the National Architectural Accrediting Board (NAAB), http://www.naab.org/accreditation/2009_Conditions.aspx:

A.6.u Use of Precedents ABILITY to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

A.2.i Design Thinking Skills ABILITY to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

B.6.i Environmental Systems ABILITY to demonstrate the principles of environmental systems’ design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.

B.8.pi Building Materials and Assemblies, Introductory claim: UNDERSTANDING of the basic principles used in the appropriate selection of interior and exterior construction materials based on their inherent performance, including environmental impact and reuse.

STRUCTURE AND ORGANIZATION
Course organization is included in WEIGHT.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

Students will lead and participate in graduate lecture and seminar discussions related to assigned readings as indicated on the Semester Schedule.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

PROJECTS
Semester assignments will include an initial precedent study and two subsequent integrated technologies projects with due dates as per the Semester Schedule.

COLLABORATION
Student will take responsibility for aspects of leadership as well as teamwork on collaborative projects as per project briefs.

Understanding: The capacity to classify, compare, summarize, explain and/or interpret information.

Ability: Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.
DOCUMENTATION
Students will be evaluated on the thorough and timely representation and documentation of projects.

WEIGHT
The Course Components are forecast to be:

PROJECT
  Regional Precedent  10
  Integrated project 1  10
  Integrated project 2  30

EXAM
  Midterm  25
  Final  25

TOTAL  100%

REQUIRED READING
Constructing Architecture: Materials, Processes, Structures [Paperback]

Louis I. Kahn: Building Art and Building Science [Paperback]
Thomas Leslie, George Braziller.


GENERAL READING


SEMESTER SCHEDULE
A course calendar is attached to this syllabus.

POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK
Incomplete work will be graded as such and points will only be given for the work that is submitted.

GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
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ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final course grade will be lowered by 5% per each unexcused absence beyond the initial 2.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops:
EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
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The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or other emergency.

Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

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DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

PROJECT DOCUMENTATION
Every sheet of every project will indicate the following information on its face:

☐ course number
☐ semester/year
☐ professor
☐ student author(s)
☐ current date of the work
☐ page or sequence number

DRAWING DOCUMENTATION
Every drawing will indicate:
ARCHIVE DOCUMENTATION

Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

ARCXXX_YYYYS_category_Lastname_F

where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student’s last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE

As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
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http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal

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INCLUSIVE EXCELLENCE

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2 A “DETAIL” is not a drawing type. Every drawing is a detail, considered from some perspective.
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Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style: http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

COPYRIGHT
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated, including being uploaded to file-sharing sites on the internet or elsewhere, without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act: http://www.copyright.com/Services/copyrightoncampus/basics/teach.html.

Students should refer to University copyright policies: http://www.library.arizona.edu/help/tutorials/copyright/index.html

THREATENING BEHAVIOR
The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself: http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students
ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

end of syllabus

TEMPLATE VERSION:
2017.08.24—Section 2: changes to 100% Engagement (now Student Engagement and Career Development);
2017.09.11—Section 3: added copyright section and deleted copyright clause at end-of-syllabus footer.
2017.10.24—Section 1: Added Honors clause. Section 3: revised Emergency Absence policy.
2018.01.24—Section 1: Changed title of OBJECTIVES AND OUTCOMES to LEARNING OUTCOMES at request of the Graduate College; added tips and a guide to distinguishing between Learning Outcomes and Course Objectives.
Section 2, COURSE STRUCTURE AND ORGANIZATION: Added clarifying notes requested by the Office of Academic Affairs.
Section 3, ATTENDANCE: Revised clause to make it clear that the grade penalty takes effect after the specified number of allowed unexcused absences; Added notes pertaining to online courses; updated link to UA policy. MAKE-UP WORK: Clause revised according to Graduate College.
ACADEMIC POLICIES: Expanded to include new required sections by Office of Academic Affairs.
2018.06.14—Section 2: added MatLAB online safety certification.
COURSE DATA
ARC 521b: Integrated Technologies II, 3-CU, 2019
Spring 2019
3-credit units

FACULTY
Aletheia Ida, Ph.D., Assistant Professor
School of Architecture, Office Rm. 203e
aida@u.arizona.edu
Office hours: W. 9am-11am, or by appointment

CRITERIA
FULFILLMENT
This course is required for the Master of Architecture.

PREREQUISITES
ARC 521a or admission to M.Arch II.

CO-REQUISITES
ARC510c

ENROLLMENT
This course is limited to 24 students.

CONTACT
TU 2:30pm – 3:20pm Arch. Rm. 205A
TU 3:30pm – 4:45pm Arch. Rm. 205 (Computer Lab)
TH 2:30pm – 3:20pm Arch. Rm. 205A
TH 3:30pm – 4:45pm Arch. Rm. 205A (or Material Lab, see schedule)

WEB + D2L
This course will be supported over D2L

COST
Costs associated with required components of the course—required lab projects and/or field trip[s]—will be the responsibility of the student. Out-of-town trips may be organized in coordination with the concurrent design studio, at the option of the Instructor. Estimated average expense: $100-$200 (modelling expenditures will vary greatly contingent upon design intention, material selection and resourcefulness). $100-$150 (Field trip expenditures will vary greatly contingent upon proactive planning and resourcefulness).

COURSE CONTENT
CATALOGUE DESCRIPTION
This course introduces fundamentals of small to medium building structures, materials and methods, and environmentally adaptive architectural design.

COURSE DESCRIPTION
This is the second integrated technologies course. It covers precedents and principles of structural systems (40% course content), materials and methods of construction (20% course content), and environmentally adaptive systems (40% course content) in small to medium scale buildings. By presenting the course material as integrated technologies, students gain a deep understanding of how building technologies work together.
LEARNING OUTCOMES
Upon successful completion of this course, students will have an:

1. Awareness of precedents demonstrating material assemblies, structural systems and environmentally adaptive systems in small to medium scale buildings.

2. Understanding of systems and assemblies as communicated through technical drawings, detailed models, and digital modelling and analysis.

3. Ability to conceive and develop a schematic comprehensive structural design of a small-to-medium scale building and understanding of the interrelationships of structural systems, elements, and connections.

4. Ability to identify structural loading conditions and reactions / internal stress through physical model testing as part of an iterative design process driven by design intent and building synthesis.

5. Understanding of appropriate selection processes for environmentally adaptive systems relative to performance and choreographed environmental flows (climate, solar, light, airflow); understanding of how these choices affect building synthesis and site response.

6. Understanding of passive systems as the preferable design agenda, with active systems used to supplement performance, in small-to-medium scale buildings; understanding of how to conceive and design building envelope assemblies in line with environmentally adaptable systems integration.

NAAB PERFORMANCE CRITERIA:
The material covered in this course offers students proficiency (at the indicated level of accomplishment) in the following subject areas as defined by the National Architectural Accrediting Board (NAAB) http://www.naab.org/wp-content/uploads/01_Final-Approved-2014-NAAB-Conditions-for-Accreditation.pdf

The “I” designation in each of these claims is designated by CAPLA as an introductory claim and is not intended to fully satisfy NAAB criteria.

B.5.i Structural Systems
ABILITY to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

B.6.i Environmental Systems
ABILITY to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

B.7.i Building Envelope Systems and Assemblies
UNDERSTANDING of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

B.10.i Financial Considerations
UNDERSTANDING of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

C1.ai Research (Applied)
UNDERSTANDING of the theoretical and applied research methodologies and practices used during the design process.

Understanding: The capacity to classify, compare, summarize, explain and/or interpret information. Ability: Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.
COURSE STRUCTURE AND ORGANIZATION
The class convenes in two basic formats: collaborative learning lectures and lab sessions. This course is designed around four primary learning modules. Each learning module lasts for a period of 3-weeks during which time students will develop and complete a lab assignment for submission at the end of each module. There is a fundamentals quiz in the beginning of the semester to aid in assessment of foundation knowledge in order to address any gaps before advancing with the course learning contents. The students will also submit a final project based on a synthesis of all prior lab assignments. The lab assignments and final project are focused on the structural design development and iterative environmental analysis of an architect’s studio for the individual student to be located in a climate site of their choice anywhere in the world.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

   EXAMS
An early exam will be conducted to evaluate the learning performance of individual students on a baseline understanding of physics fundamentals. Exam content will be based on lecture materials and assigned readings.

   LAB PROJECTS
Lab projects will be executed for each fundamental segment of the course and will be based on a simple building program that will be assigned to all students individually. The lab projects consist of both physical and digital empirical methods of analysis and evaluation. Labs will be primarily conducted in-class during dedicated lab sessions and will be executed following directed instruction for methods to be employed. The lab projects are intended to serve as a pedagogical tool for students to engage in applied learning of the contents delivered during the lectures and in the assigned readings for this course.

   FINAL PROJECT
The final project for the course is a comprehensive synthesis of the accumulative and iterative progression of lab project exercises. The final project is intended to allow students a final iteration on their proposed design developed through the previous lab exercises. Final projects must improve upon the earlier studies and integrate the appropriate balance of design strategies for the given climate conditions, regional context, and structural forces.

   PARTICIPATION
Students are expected to actively participate in all course activities. This requires that students attend all classes as per the Course Schedule and be prepared for active engagement as per any assigned readings or assignments. Attendance at classes will be regularly documented, and pop quizzes in lectures may be conducted based on assigned readings or current lecture material. Active participation will be required at all lab sessions, which requires students to be present with the required lab materials appropriately prepared for assigned lab activities.

   READING ASSIGNMENTS
Readings will be assigned on a weekly basis as per content from the required textbooks or otherwise posted on the course D2L site. The reading assignments are intended to prepare students for active listening, participation, and engagement during lecture and lab sessions, and thus should be completed prior to the beginning of class as indicated on the course schedule. Pop Reading quizzes may be conducted during lecture sessions without prior notice and will contribute to the student’s Participation grade.
WEIGHT
The Course Components are forecast to be:

EXAMS 10
Exam 1 Physics Fundamentals 10

LAB PROJECTS 60
Lab 01 Structures + Climate Fundamentals 15
Lab 02 Framing + Solar Fundamentals 15
Lab 03 Envelope + Daylighting Fundamentals 15
Lab 04 Detailing + Airflow Fundamentals 15

FINAL PROJECT 25
Comprehensive Passive Design 25

PARTICIPATION 5
Total Weight 100

REFERENCES
REQUIRED

REQUIRED SOFTWARE
The software required for this course will be available on all computers in the CAPLA Computer Lab and
may also be installed directly on student computers for their use in conducting the digital component of
assigned lab exercises and executing the documentation thereof:

Rhino 5 (for Windows)
https://www.rhino3d.com/order-na-std

Grasshopper
http://www.grasshopper3d.com/page/download-1

Ladybug + Honeybee
http://www.food4rhino.com/project/ladybug-Honeybee?ufh
https://github.com/mostaphaRoudsari/ladybug/blob/master/resources/Installation_Instructions.md

Kangaroo (2.4.2)
http://www.food4rhino.com/app/kangaroo-physics

GHPython (0.6.0.3)
http://www.food4rhino.com/project/ghpython?ufh

Radiance (4.2)
http://radsite.lbl.gov/radiance/download.html

DAYSIM (4.0)
http://daysim.ning.com/page/download

EnergyPlus (8.3.0)
https://energyplus.net/downloads

Autodesk Flow Design
http://www.autodesk.com/education/free-software/flow-design

Adobe Creative Suite 6
=OLS-EDU

ADDITIONAL TEXTS
The following texts can be found at the University of Arizona Science or Main Library to supplement the
assigned readings and lecture content of this course:

GENERAL
Banham, Reyner. The architecture of the well-tempered environment. Chicago: University of Chicago,
1969.
Fernández-Galiano, Luis. Fire and memory: on architecture and energy. Cambridge, Mass: MIT Press,
2000.

**MATERIALS AND METHODS**

Contemporary Curtain Wall Architecture, Scott Murray, Princeton Architectural Press, 2009
Leach, N., Turnbull, D., and Williams, C., *Digital Tectonics*. Chichester, UK: John Wiley & Sons Ltd., 2004

**STRUCTURES**


ENVIRONMENTAL SYSTEMS

SEMESTER SCHEDULE
A course calendar is distributed to students separately and will be available on the course D2l page.
POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK
Work submitted that is incomplete will be graded one or more letter grades below what would have been awarded had the work been complete, appropriate to the extent of incompletion and the importance of the assignment, at the Instructor’s discretion.

GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or sub-standard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd unexcused Absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per each unexcused absence.

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://uhap.web.arizona.edu/policy/appointed-personnel/7.04.02

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored:
https://deanofstudents.arizona.edu/absences
EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or other emergency.

written excuse
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

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“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

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- professor
- student author(s)
- current date of the work
- page or sequence number

DRAWING DOCUMENTATION
Every drawing will indicate:

- drawing type (plan, section, elevation, perspective, axonometric, etc.)
- graphic scale
- orientation indicator (north arrow for plan; directional description for vertical projections (e.g., South Elevation; Perspective Looking North)
- reference indicators (section and elevation markers, blow-up references) that link the drawing to relevant documents

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Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style: http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

COPYRIGHT
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ACCESSIBILITY AND ACCOMMODATIONS
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RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By
contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

end of syllabus

TEMPLATE VERSION:

2018.01.24—Section 1: Changed title of OBJECTIVES AND OUTCOMES to LEARNING OUTCOMES at request of the Graduate College; added tips and a guide to distinguishing between Learning Outcomes and Course Objectives. Section 2, COURSE STRUCTURE AND ORGANIZATION: Added clarifying notes requested by the Office of Academic Affairs. Section 3, ATTENDANCE: Revised clause to make it clear that the grade penalty takes effect after the specified number of allowed unexcused absences; Added notes pertaining to online courses; updated link to UA policy. MAKE-UP WORK: Clause revised according to Graduate College. ACADEMIC POLICIES: Expanded to include new required sections by Office of Academic Affairs.

2018.06.14—Section 2: added MatLAB online safety certification.

2018.09.12—Section 2: Changed Learning Outcomes to Learning Objectives; added Course Objectives section.

2018.10.02—Section 2: Changed Learning Objectives back to Learning Outcomes; Section 3: Clarified ATTENDANCE policy; Sections 1+2: Added structured discussion section language.
COURSE DATA
ARC 521C: Integrated Technologies 3
Fall 2018
3-credit units

FACULTY
Valerie A. Lane, Senior Lecturer
School of Architecture, Office Rm. 310
laneva@email.arizona.edu
Office hours: by appointment

CRITERIA
FULFILLMENT
This course satisfies a Technology Stream requirement.

PREREQUISITES
ARC 521 A+B or admission to M. Arch II.

CO-REQUISITES
ARC510d

ENROLLMENT
This course is limited to 24 students.

CONTACT
Tuesday & Thursday: Lecture Arc 205A 12:30-1:20pm
Monday & Wednesday: Lab Studio - Arc A304 11:30am-12:45pm

WEB + D2L
This course will be supported over D2L. You are responsible for checking this daily – announcements will be posted there regularly.

COURSE CONTENT
CATALOGUE DESCRIPTION
Advanced structures, materials and methods of construction, and environmentally adaptive systems as integrated technologies.

COURSE DESCRIPTION
This is the third integrated technologies course covering precedents and principles of structural systems (40% course content), materials and methods of construction specific to building envelopes and primary structural systems (40% course content), and environmentally adaptive systems (20% course content) in medium to large scale buildings. By presenting them as integrated technologies, students gain a deep understanding of how building technologies work together as a system.

LEARNING OUTCOMES
Upon successful completion of this course, students will be able to:
1. Identify and analyze the application of elements in building precedents demonstrating various material assemblies, structural systems and environmentally adaptive systems in medium to large scale buildings.
2. Make technically clear drawings and construct physical and digital models illustrating and identifying building systems and assembly of materials as a means for communicating building design intent.
3. Conceive and develop a schematic comprehensive structural frame design of a medium to large scale building and demonstrate an understanding of the interrelationships of structural systems, elements, and material connections through technical drawings and models.
4. Analyze and diagram structural loading conditions and reactions through physical model testing and utilize this information in an iterative design process driven by design intent and building synthesis.
5. Select and communicate application of building envelope systems relative to performance, aesthetic, moisture transfer, durability, energy and material resources and explain how these choices affect building synthesis and construction sequencing.
6. Integrate active and passive environmentally adaptive systems in medium to large scale buildings and articulate conceived building envelope assemblies as they relate to those environmental systems through technical drawings and modeling.
NAAB PERFORMANCE CRITERIA:
The material covered in this course offers students proficiency (at the indicated level of accomplishment) in the following subject areas as defined by the National Architectural Accrediting Board (NAAB), http://www.naab.org/accreditation/2009_Conditions.aspx:

**B.4.e Technical Documentation**
ABILITY to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design related to building envelope.

**B.5.h Structural Systems**
ABILITY to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system. HIGH-RISE UNDERSTANDING of the fundamental principles of gravitational, seismic, and lateral forces in multi-story buildings.

**B.7-p Building Envelope Systems and Assemblies**
UNDERSTANDING of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources. PRINCIPLES of selection.

**B.8-p Building Materials and Assemblies**
UNDERSTANDING of the basic principles involved in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse. PRINCIPLES of selection.

**MATERIALS LAB SAFETY CERTIFICATION**
In support of modeling craft and safety, each student will take the proctored online MaterialsLAB safety certification. This is not a graded component of this course but your ability to utilize the materials lab is integral to your success in this course. All students enrolled will be required to participate in the construction of models as outlined in project statements.

**STRUCTURE AND ORGANIZATION**
Through lectures, readings, discussions, and short writing assignments, students will be introduced to structural principles and mechanisms that relate to and support the building form and patterns. Pointed attention will be paid to the buildings’ envelope, and therefore the threshold between indoor and outdoor environments. Students will test their understanding of lecture content through group and individual projects. In project 1, students will work in teams to review a series of case study examples of built works that are comparable programmatic precedents to their concurrent studio work. Students will be asked to review notable buildings / structures and document conditions in preparation for application to their own designs. Project 2 is the application of concepts learned in project 1. Students will go through a similar task breakdown as Project 1, but instead of studying built works, they will utilize the process to communicate and develop their own studio designs. There is an intentional collaboration with Studio instructors to provide students the opportunity to cultivate a deeper level of complexity in their Studio design work.

**COURSE COMPONENTS + CRITERIA OF EVALUATION**
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

**SEMINAR**
Students will lead and participate in seminar discussions related to assigned readings as assigned in class. Seminar discussions may take the place of lectures on various occasions. Participation in these discussions is vital for deeper learning and will enrich the experience of the collective whole of the class.

**PROJECTS**
Semester assignments will include an initial precedent study and subsequent integrated technologies projects with due dates as per the Semester Schedule.

**COLLABORATION**
Student will take responsibility for aspects of leadership as well as teamwork on collaborative projects as per project briefs.

**DOCUMENTATION**
Students will be evaluated on the thorough and timely representation and documentation of projects. Work is expected to be turned in on time and complete for instructors to provide valuable feedback as design work progresses throughout the semester.

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Understanding: The capacity to classify, compare, summarize, explain and/or interpret information.

Ability: Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.
**SEMESTER SCHEDULE**
A course calendar is attached to this syllabus and will be available to students on the course D2L site.

**WEIGHT**
The Course Components are forecast to be:

**Precedent – Project 1 (group – precedents chosen with input from Studio instructor)**

<table>
<thead>
<tr>
<th>Project 1.1 – precedent studies - typology analysis</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1.2 – structure/envelope fundamentals – digital documentation</td>
<td>25%</td>
</tr>
<tr>
<td>Project 1.3 – structure/envelope fundamentals – projected detailing</td>
<td>25%</td>
</tr>
<tr>
<td>Project 1.4 – structure/envelope fundamentals – physical model</td>
<td>25%</td>
</tr>
</tbody>
</table>

Sub total Project 1: 35 points

**Integrated Design – Project 2 (individual and in collaboration with studio design work)**

<table>
<thead>
<tr>
<th>Project 2.1 – overall structural and form resolution – building integration</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 2.2 – structure/envelope fundamentals – digital documentation</td>
<td>25%</td>
</tr>
<tr>
<td>Project 2.3 – structure/envelope fundamentals – projected detailing</td>
<td>25%</td>
</tr>
<tr>
<td>Project 2.4 – structure/envelope fundamentals – physical model</td>
<td>25%</td>
</tr>
</tbody>
</table>

Sub total Project 2: 55 points

Subtotal Projects 90 points

<table>
<thead>
<tr>
<th>Participation / Attendance</th>
<th>10 points</th>
</tr>
</thead>
</table>

Total Course 100 points

**REFERENCES**

**REQUIRED**

There is no current required textbook for this course. Be aware that useful resources will be recommended during class that you would benefit from gaining access to. Any required readings will be made available to students by distributed copies in class or by post to the course D2L site.

**MATERIALS AND METHODS**


Contemporary Curtain Wall Architecture, Scott Murray, Princeton Architectural Press, 2009


Leach, N., Turnbull, D., and Williams, C., *Digital Tectonics*. Chichester, UK: John Wiley & Sons Ltd., 2004


**STRUCTURES**


POLICIES + STATEMENTS

GRADING
Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

CHANGE
By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

LATE WORK
Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

INCOMPLETE WORK
Incomplete work will be graded as such and points will only be given for the work that is submitted.

GRADING SCALE
Grades will be defined as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90-100)</td>
<td>Excellence to High Competence in most areas of evaluation.</td>
</tr>
<tr>
<td>B (80 to &lt;90)</td>
<td>Very good to competent work in most areas of evaluation; fulfilled requirements.</td>
</tr>
<tr>
<td>C (70 to &lt;80)</td>
<td>Less than complete or competent work in some areas; requirements lacking and/or substandard quality.</td>
</tr>
<tr>
<td>D (60 to &lt;70)</td>
<td>Substantially incomplete or inadequate quality.</td>
</tr>
<tr>
<td>E (0 to &lt;60)</td>
<td>Grossly inadequate.</td>
</tr>
<tr>
<td>Incomplete</td>
<td>Work left incomplete at the end of the semester due to circumstances beyond the student’s control.</td>
</tr>
</tbody>
</table>

GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal: http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Students may be administratively dropped for excessive absences. Students will be counseled by the instructor at 3 absences and referred to the department’s academic advisor upon 6 absences.

Upon the 4th unexcused absence (whether in part or for a session’s entirety), the final grade will be lowered by 5% per each unexcused absence beyond the initial 4.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops: http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:

http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://www.registrar.arizona.edu/religiousholidays/calendar.htm

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.
EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or immediate family emergency.

written excuse
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

validity
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.

make-up work
Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS
A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

PROJECT DOCUMENTATION
Every sheet of every project will indicate the following information on its face:
- course number
- semester/year
- professor
- student author(s)
- current date of the work
- page or sequence number

DRAWING DOCUMENTATION
Every drawing will indicate:
- drawing type (plan, section, elevation, perspective, axonometric, etc.)
- graphic scale
- orientation indicator (north arrow for plan; directional description for vertical projections (e.g., South Elevation; Perspective Looking North)
- reference indicators (section and elevation markers, blow-up references) that link the drawing to relevant documents

ARCHIVE DOCUMENTATION
Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:
ARCXXX_YYYYS_category_Lastname_F
where
ARCXXX is the course number, e.g., ARC401;
YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
Lastname_F is the student’s last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE
As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:
http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings. Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

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2 A “DETAIL” is not a drawing type. Every drawing is a detail, considered from some perspective.
3 It is essential that all drawings have graphic scales, as notational scales are meaningless with digital documentation and dissemination.
ACADEMIC POLICIES

Academic policies can be found in The University of Arizona General Academic Catalog:
http://catalog.arizona.edu/allcats.html

along with the UA Final Exam Regulations:
https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information

and Final Exam Schedule:
http://www.registrar.arizona.edu/schedules/finals.htm

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies:
http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete
http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal

ACADEMIC INTEGRITY

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog:
http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

INCLUSIVE EXCELLENCE

This course will follow the UA diversity initiative designed to create a welcoming environment for all.
http://diversity.arizona.edu/

NONDISCRIMINATION + ANTI-HARASSMENT

Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE

This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGIARISM

The practice of taking someone else’s work or ideas and passing them off as one’s own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism: http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

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end of syllabus

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TEMPLATE VERSION:
2017.08.24—Section 2: changes to 100% Engagement (now Student Engagement and Career Development);
2017.09.11—Section 3: added copyright section and deleted copyright clause at end-of-syllabus footer.
2017.10.24—Section 1: Added Honors clause. Section 3: revised Emergency Absence policy.
2018.01.24—Section 1: Changed title of OBJECTIVES AND OUTCOMES to LEARNING OUTCOMES at request of the Graduate College; added tips and a guide to distinguishing between Learning Outcomes and Course Objectives.
Section 2, COURSE STRUCTURE AND ORGANIZATION: Added clarifying notes requested by the Office of Academic Affairs.
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ACADEMIC POLICIES: Expanded to include new required sections by Office of Academic Affairs.
2018.06.14—Section 2: added MatLAB online safety certification.
ARC 521D: Integrated Technologies 4, 3-CU, 2018
Instructors: Valerie A. Lane, Ray Barnes University of Arizona

COURSE DATA
ARC 521D Integrated Technologies 4
Spring 2018
3-credit units

FACULTY
Valerie A. Lane, Lecturer
School of Architecture, Office Rm. 310
laneva@email.arizona.edu
Office hours: by appointment

Ray Barnes, Lecturer
School of Architecture, Office Rm. 212
rbarnes@email.arizona.edu
Office hours: by appointment

CRITERIA
FULFILLMENT
This course is required for the Master of Architecture.

PREREQUISITES
ARC 521a, 521b, and 521c, or advanced placement to M. Arch II.

CO-REQUISITES
ARC510e

ENROLLMENT
This course is limited to 24 students.

CONTACT
MON 9:00pm – 9:50pm (Lecture) Arch. Rm. ARC 200
MON 10:00pm – 11:15pm (Lab) Arch. Rm. ARC 304
WED 9:00pm – 9:50pm (Lecture) Arch. Rm. ARC 200
WED 10:00pm – 11:15pm (Lab) Arch. Rm. ARC 304

WEB + D2L
This course will be supported over D2L.

COST
Costs associated with required components of the course—required lab projects and/or field trip[s]—will be the responsibility of the student. Out of town trips may be organized in coordination with the concurrent design studio, at the option of the Instructor. Estimated average expense: $100-$200 (modelling expenditures will vary greatly contingent upon design intention, material selection and resourcefulness). $100-$150 (Field trip expenditures will vary greatly contingent upon proactive planning and resourcefulness).

COURSE CONTENT
CATALOGUE DESCRIPTION
This course covers advanced concepts of medium to large scale building structures, materials and methods of construction, and environmentally adaptive systems designs.
COURSE DESCRIPTION
This is the fourth integrated technologies course. It covers precedents and principles of structural systems (40% course content), materials and methods of construction (20% course content), and environmentally adaptive systems (40% course content) in medium to large scale buildings. By presenting the course material as integrated technologies, students gain a deep understanding of how building technologies work together as a system.

OBJECTIVES AND OUTCOMES
After taking this course, students will have an:

1. Awareness of precedents demonstrating material assemblies, structural systems, and environmentally adaptive systems in large-scale buildings.

2. Understanding of systems and assemblies as communicated through technical drawings, detailed models, and digital models of building service systems.

3. Ability to conceive and develop a schematic structural frame design of a large-scale building and understanding of the interrelationships of structural systems, elements, and connections in large-scale building design.

4. Ability to analyze and diagram structural load conditions in long span and tower designs. Ability to predict internal stress distribution and load transfer is developed by physical modelling and load test observations.

5. Understanding of selection processes for building envelopes, structural systems, and building service systems in large-scale buildings that meet specific performance, durability, energy, and material criteria.

6. Understanding the integration of active systems as the primary design agenda, with passive systems to supplement, in large-scale buildings; conceptualizing and designing building envelope assemblies for environmentally adaptable systems integration.

NAAB PERFORMANCE CRITERIA
The material covered in this course offers students proficiency (at the indicated level of accomplishment) in the following subject areas as defined by the National Architectural Accrediting Board (NAAB)

B.6 Environmental Systems
ABILITY to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

B.7 Building Envelope Systems and Assemblies
UNDERSTANDING of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, DURABILITY, AND ENERGY AND MATERIAL RESOURCES.

B.9 Building Service Systems
UNDERSTANDING of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security, and fire protection systems.

COURSE COMPONENTS + CRITERIA OF EVALUATION
This course is designed to achieve the learning objectives indicated. Because architecture is an art as well as a science, and because every student and student-group present new challenges in the teaching of design, instructors may add, alter, or modify assignments, criteria, or project weights in order to adapt to evolving circumstances that are inherent in the practice of Architecture, and also to evaluate students’ abilities to make such adaptations. The Instructor will notify the students in advance of such changes; students for their part will notify the professor within one week of such notification if the proposed changes will cause undue hardship. Students acknowledge the dynamic nature of this course.

The graded components of this course and their criteria of evaluation are currently anticipated to be as follows, but are subject to change as set forth above:

1Understanding: The capacity to classify, compare, summarize, explain and/or interpret information.Ability: Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.
LAB PROJECTS
Lab projects will be executed for each fundamental segment of the course. Lab 1 consists of digital and physical modelling of a large scale building of non-descript program and design. A generic 3-D model will be provided and will become the learning vehicle for a design process geared at implementing complex environmentally adaptive systems designs into the structural shell. Students will simultaneously design and model all building systems and determine an appropriate structural system with member sizing and connection detailing. Lab 2 consists of the same set of projects dictated through Lab 1 but will apply knowledge to student designs being developed in the concurrent studio course.

COLLABORATION / PARTICIPATION
Student will take responsibility for aspects of leadership as well as teamwork on collaborative projects as per project briefs. Students are expected engage actively in the learning process. This requires students to attend all classes per the course schedule and be prepared for active participation in all class activities. Active participation is required at all lab sessions, which requires students to be present with the required lab materials appropriately prepared for assigned lab activities.

DOCUMENTATION
Students will be evaluated on the thorough and timely representation and documentation of projects in accordance with project briefs.

SEMESTER SCHEDULE
A course calendar will be distributed to students separately and will be available on the course d2l page.

WEIGHT
The Course Components are forecast to be:

<table>
<thead>
<tr>
<th>PROJECTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab 1 – Transfer Building (Group)</td>
<td>30</td>
</tr>
<tr>
<td>Lab 2 – Studio Structures Component (Individual)</td>
<td>40</td>
</tr>
<tr>
<td>Sketch Journal (Cumulative)</td>
<td>20</td>
</tr>
<tr>
<td>Participation / Attendance</td>
<td>10</td>
</tr>
</tbody>
</table>

TOTAL POINTS 100

*each project has multiple deliverables or iterations, each component contributing to overall grade – for grading breakdown for each project, refer to respective project statements provided in class and on d2l.

REFERENCES
REQUIRED TEXTS

REQUIRED SOFTWARE
The software required for this course will be available on all computers in the CAPLA Computer Lab and may also be installed directly on student computers for their use in conducting the digital component of assigned lab exercises and executing the documentation thereof:

Autodesk Revit

Rhino 5 (for Windows)
https://www.rhino3d.com/order-na-std

Adobe Creative Suite 6

ADDITIONAL TEXTS
The following texts can be found at the University of Arizona Science or Main Library to supplement the assigned readings and lecture content of this course:
**STRUCTURES**


**ENVIRONMENTAL SYSTEMS**


Daniels, Klaus. *Advanced Building Systems: A Technical Guides for Architects and Engineers.* Translated by Elizabeth Schwaiger.


**POLICIES + STATEMENTS**

**GRADING**

Evaluations will be distributed at intervals during the semester and will indicate performance according to the stated criteria of evaluation. Students are expected to use this system to monitor and adjust their performance and to seek additional support from the professor, as appropriate. Evaluations will be based primarily on student’s work, rather than effort expended. Students are expected to acquire knowledge and skill, not merely endeavor to do so.

**CHANGE**

By its very nature, the practice of architecture requires an ability to adapt to change, both by responding to unforeseen events in the delivery of services and in the revision of the work. Because an ability to adapt and embrace change is an essential skill in our profession, it may be considered in evaluations for this course.

**LATE WORK**

Work submitted after the deadline will be graded one or more letter grades below what would have been awarded had the work been submitted on time, appropriate to the length of delay and the importance of the assignment, at the Instructor’s discretion.

**INCOMPLETE WORK**

Incomplete work will be graded as such and points will only be given for the work that is submitted.

**GRADING SCALE**

Grades will be defined as follows:
GRADE APPEAL
Students who believe they have been unfairly graded should follow the multi-step procedure outlined in the CAPLA Grade Appeal:
http://architecture.arizona.edu/student-forms-and-procedures

ATTENDANCE
Students are required to attend all classes for their duration. Upon the 3rd Absence (whether in part or for a session’s entirety), the final course grade will be lowered by 5% per absence.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops:
http://catalog.arizona.edu/2015-16/policies/classatten.htm

EXCEPTIONS
The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:
http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Observances pre-approved by the UA Dean of Students will be honored, as listed at:
http://www.registrar.arizona.edu/religiousholidays/calendar.htm

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See:
https://deanofstudents.arizona.edu/absences

EXCUSED ABSENCE
The Instructor may grant an Excused Absence for an outside educational opportunity at the request of the Director or another instructor. Students granted an Excused Absence remain responsible for turning in work on time, even if due on the excused date, as well as getting all information and assignments covered during an Excused Absence. An Excused Absence does not count against the number of Absences specified above.

EMERGENCY ABSENCE
The Instructor may grant an Emergency Absence for bona fide events outside the control of a student, such as sudden serious illness, bodily harm, or other emergency.

WRITTEN EXCUSE
Emergency Absences must be certified by a professional in writing, such as doctor’s excuses, police reports, or evidence of funeral. Written evidence must be submitted by the student within two weeks of the event and must include the certifying professional’s contact information. Faculty or staff may verify the legitimacy of the source but may not inquire into the student’s related personal information.

VALIDITY
“Immediate Family” is limited to parents, children, stepchildren, siblings, and cohabitating partners and spouses. To qualify as an Emergency Absence, the illness or event must be an actual emergency (i.e., events that require immediate attention); otherwise it will be treated as a standard Absence. Scheduled doctor consultations do not qualify.
MAKE-UP WORK

Students granted an Emergency Absence remain responsible for turning in all work as well as obtaining all information and assignments covered in their absence. At the Instructor’s discretion, the student may be granted extended deadlines appropriate to the impact of the event. Instructors are not obliged to grant Emergency Absences if the period missed makes it impossible for the student to achieve a competent level of accomplishment consistent with expectations for the rest of the class.

DOCUMENTATION STANDARDS

A professional standard in contract documents insures that every page indicates sufficient information to link it to its host set and, similarly, every drawing provides sufficient metadata that it is clearly linked to its dataset. In keeping with this data standard, documentation in this course will comply with the following standards:

PROJECT DOCUMENTATION

Every sheet of every project will indicate the following information on its face:
- course number
- semester/year
- professor
- student author(s)
- current date of the work
- page or sequence number

DRAWING DOCUMENTATION

Every drawing will indicate:
- drawing type (plan, section, elevation, perspective, axonometric, etc.)
- graphic scale
- orientation indicator (north arrow for plan; directional description for vertical projections (e.g., South Elevation; Perspective Looking North)
- reference indicators (section and elevation markers, blow-up references) that link the drawing to relevant documents

ARCHIVE DOCUMENTATION

Work shall be submitted for this course that demonstrates both the learning objectives and the final project(s), as requested by the professor. Digital files shall be submitted in the following naming convention:

`ARCXXX_YYYYS_category_Lastname_F`

where
- ARCXXX is the course number, e.g., ARC401;
- YYYYS is the year and semester (F/S/SUM), e.g., 2013F;
- category is the assignment type or drawing type, e.g., SitePlan, LongitudinalSection3, Homework4; and
- Lastname_F is the student’s last name and first initial

CLASSROOM BEHAVIOR + STUDIO CULTURE

As a condition of enrollment, students agree to abide by the standards set forth in the Student Code of Conduct:

http://azregents.asu.edu/rrc/Policy Manual/5-308-Student Code of Conduct.pdf

The use of cell phones, pagers, electronic devices or other materials unrelated to course specific activities are not permitted during course hours; neither are unauthorized discussions amongst students or other disturbances.

All electronic media are limited to narrowcasting (headsets) at all times, set to a volume that is not audible to others. Per the University policy, non-assist animals are forbidden from University buildings.

Students are responsible for checking their UA email and course D2L sites Monday-Friday, at least once every twenty-four hours, for communications from the Professor.

ACADEMIC POLICIES

Academic policies can be found in The University of Arizona General Academic Catalog: http://catalog.arizona.edu/allcats.html

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2 A “DETAIL” is not a drawing type. Every drawing is a detail, considered from some perspective.

3 It is essential that all drawings have graphic scales, as notational scales are meaningless with digital documentation and dissemination.
ACADEMIC INTEGRITY
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog:
http://deanofstudents.arizona.edu/codeofacademicintegrity.

INCLUSIVE EXCELLENCE
This course will follow the UA diversity initiative designed to create a welcoming environment for all.
http://diversity.arizona.edu/

NONDIVERSITY + ANTI-HARASSMENT
Students are encouraged to express well-formed opinions and their reasons there for. They are expected to create a tolerant and open environment where such opinions can be expressed without bullying or discrimination. The University is committed to creating and maintaining an environment free of discrimination:
http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

ELECTIVE NAME AND PRONOUN USE
This course sponsors an educational environment of inclusion and mutual respect, including elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request.

PLAGIARISM
The practice of taking someone else’s work or ideas and passing them off as one’s own is known as plagiarism and is a serious violation of academic and professional ethics. The consequences for plagiarism are severe, including a failing grade for the course, suspension, or expulsion from the University per the UA policy on plagiarism:
http://deanofstudents.arizona.edu/codeofacademicintegrity

TESTING: In any testing situation, whether graded or not, students shall not refer to outside resources (whether printed materials, such as books and journals, texts, Internet, e-mail, Google, instant messaging, or other resources) unless explicitly instructed to do so by the professor of record. Students operating digital devices in testing situations when not authorized to do so shall be assumed to be cheating.

CITATION: Plagiarism applies to professional and public works, as well as to the work produced by peers. Students shall be assiduous in citing the work of others, whether in copying a graphic, either in part or in total, in quoting a text, or in building upon ideas, designs, or forms. Citation is used to give credit to the original author and to allow others to identify and trace source material.

Building upon the work of others is an inevitable part of learning and inherent to scholarship; hence it is an acceptable practice as long as the original sources are properly cited. Textual citations should follow the Chicago Manual Of Style. Citations of buildings and other designed works should include both a) project and b) source information:

a) project citation: the work’s name or title, its location, the name of its designer(s), and the date designed (or, if built, constructed).

b) source citation: the source from which the information or illustration of the work was obtained formatted according to the Notes and Bibliography format specified in the Chicago Manual Of Style:
http://www.chicagomanualofstyle.org/tools_citationguide.html

PRODUCTION: Using the labor of others, whether paid or freely given, offers the beneficiary an unfair advantage relative to peers and is prohibited unless expressly authorized in writing by the professor(s) of record.

COPYRIGHT
Materials in this course may be copyrighted. They are intended for use only by students registered and enrolled in the course and are only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated, including being uploaded to file-sharing sites on the internet or elsewhere, without the written permission of the instructor. They are provided in compliance with the provisions of the Teach Act:

Students should refer to University copyright polities:
http://www.library.arizona.edu/help/tutorials/copyright/index.html
THREATENING BEHAVIOR
The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself:
http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students

ACCESSIBILITY AND ACCOMMODATIONS
Universal Design is the obligation of every architect and should be a quality of every environment. It is also the University’s goal that learning experiences be accessible. Students who anticipate or experience physical or academic barriers based on disability, should discuss them with the Instructor; students are encouraged to explore possible accommodations with the Disability Resources Center (520-621-3268).
http://drc.arizona.edu/instructors/syllabus-statement

RETENTION OF WORK
The School of Architecture may retain samples of student work produced in this course as part of the accreditation process of the National Architectural Accrediting Board, Inc. (NAAB) or other University purposes. This may include models, mock-ups, prints, and other physical documents. Students will be notified of work that needs to be retained and shall submit those to the Archivist or the Instructor, as determined by the Instructor, before grades will be released. After accreditation review, the owners of the retained work will be given the opportunity to reclaim it at their own expense (at the name and email address affixed to the product by the student at the time of submittal) for up to 30 days after notification. By contributing work students aid the School in certifying its work, which is essential to the standing and reputation of the institution, for which the Faculty is grateful.

end of syllabus

TEMPLATE VERSION:
2017.08.24—Section 2: changes to 100% Engagement (now Student Engagement and Career Development);
2017.09.11—Section 3: added copyright section and deleted copyright clause at end-of-syllabus footer.
2017.10.24—Section 1: Added Honors clause. Section 3: revised Emergency Absence policy.
### APPENDIX IV
New Faculty Curricula Vitae

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>ANTICIPATED CONTRIBUTIONS TO PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonathan Bean</td>
<td>Assistant Professor</td>
<td>Teaching: start-up MS.Arch subplan in Sustainable Market Transformations; sustainability and business expertise. Funded/Research in changes in the design and building industry due to conversion to sustainability practices; collaborations with Eller College of Management.</td>
</tr>
<tr>
<td>Andrea Bertassi</td>
<td>Assistant Professor of Practice</td>
<td>Teaching: European perspective on design and practice.</td>
</tr>
<tr>
<td>Elena Canovas</td>
<td>Professor of Practice</td>
<td>Teaching: European perspective on design and practice; leadership in mid-level B.Arch studios; expertise on urban design.</td>
</tr>
<tr>
<td>Laura Carr</td>
<td>Lecturer</td>
<td>Teaching: Revit and construction documents expertise; mid- to upper-level B.Arch studios; professional practice topics. Outreach: experience in work with native nations.</td>
</tr>
<tr>
<td>Carrie Eastman</td>
<td>Lecturer</td>
<td>Teaching: contributions to GenED teaching.</td>
</tr>
<tr>
<td>Altaf Engineer</td>
<td>Assistant Professor</td>
<td>Teaching: start-up MS.Arch subplan in Health and the Built Environment; expertise in daylighting. Funded Research in Health and the Built Environment; collaborations with Institute for Place and Well-Being and College of Medicine.</td>
</tr>
<tr>
<td>Alex Ford</td>
<td>Lecturer</td>
<td>Teaching: beginning design students.</td>
</tr>
<tr>
<td>Laura Hollengreen</td>
<td>Associate Professor of Practice</td>
<td>Administration: extend expertise and capacity for supporting and developing faculty; managing study-abroad; develop multi-disciplinary partnerships. Teaching: add to History+Theory expertise.</td>
</tr>
<tr>
<td>Anna Koosmann</td>
<td>Assistant Professor</td>
<td>Teaching: succession hire for Prof. Hardin; design/build pedagogy; professional practice pedagogy. Research: Post-occupancy evaluations.</td>
</tr>
<tr>
<td>Oscar Lopez</td>
<td>Lecturer</td>
<td>Teaching: lower-level design B.Arch studios; study-abroad. Service: Liaison to AIAS.</td>
</tr>
<tr>
<td>Prabhjeet Matharoo</td>
<td>Lecturer</td>
<td>Teaching: beginning design students; fabrication and design/build.</td>
</tr>
<tr>
<td>Stefan Mostert</td>
<td>Lecturer</td>
<td>Teaching: lower-level design B.Arch studios; study-abroad.</td>
</tr>
<tr>
<td>William Sarnecky</td>
<td>Adjunct Lecturer</td>
<td>Teaching: upper-level B.Arch studios.</td>
</tr>
<tr>
<td>Doug Thompson</td>
<td>Lecturer</td>
<td>Teaching: metal and shop fabrication.</td>
</tr>
<tr>
<td>Eric Watson</td>
<td>Adjunct Lecturer</td>
<td>Teaching: upper-level B.Arch studios.</td>
</tr>
<tr>
<td>Omar Youssef</td>
<td>Lecturer</td>
<td>Teaching: online energy courses.</td>
</tr>
</tbody>
</table>
JONATHAN BEAN, PH.D., CPHC
Assistant Professor

Courses Taught:
ARC 461q/561q Architecture Competition
SBE 301 Design Thinking
SBE 201 Sustainable Design and Planning

Educational Credentials:
2011 Ph.D., University of California Berkeley
2009 M.S. Arch, University of California Berkeley
2002 B.A. Arch, University of California Berkeley

Teaching Experience:
2017–present. School of Architecture, School of Planning and Landscape Architecture, and Eller College of Management, University of Arizona: Assistant Professor of Architecture, Sustainable Built Environments, and Marketing
2013–2017. School of Management, Bucknell University: Assistant Professor of Markets, Innovation, and Design

Professional Experience:
2016–present. Research-consulting on high performance building design

Licenses/Registration:
Passive House Institute United States: Certified Passive House Consultant

Professional Memberships:
American Sociological Association
Society of Building Science Educators
Association for Computing Machinery
Association for Consumer Research
Consumer Culture Theory Consortium

Selected Publications and Recent Research:


Bean, Jonathan, Shelly Pottorf, and Mary Rogero. “Getting to Zero.”

Target: Journal of Architectural Education.


Target: Journal of Public Policy and Marketing.
ANDREA BERTASSI ARCHITECT, NL/IT Registered Architect
Assistant Professor of Practice

Courses Taught:
ARC 201 Design Studio I (Fall 2016, Fall 2017, Fall 2018)
ARC 202 Design Studio II (Spring 2017)
ARC 302 Land Ethic (Spring 2018)
ARC 451b/510f (Fall 2016, Fall 2017)

Educational Credentials:
2004. M.Arch., University of Venice (Italy)
1996. Master degree in Music, Conservatory F.A. Bonporti, Trento (Italy)

Teaching Experience:
2018–present. School of Architecture, University of Arizona: Assistant Professor of Practice
2016-2018. School of Architecture, University of Arizona: Lecturer
2014-2016. School of Architecture at Taliesin (Scottsdale, AZ/Spring Green, WI): Visiting Teaching Fellow (Faculty Chair 2015-16)
2013-2014. KRVIA, University of Mumbai, India: Guest Professor
2013. TU Delft: Tutor
2011-2012. Piet Zwart Institute at the Academie voor Bouwkunde in Rotterdam, The Netherlands: Guest Professor
2009. University of Central America in San Salvador, El Salvador: Visiting Professor
2007. University of Cagliari, Italy: Visiting Professor

Professional Experience:

Licenses/Registration:
Italy (Ordine degli Architetti), The Netherlands (Stichting Architectenregister)

Professional Memberships:
Ordine degli Architetti della Provincia di Cagliari, Italy
ELENA CÁNOVAS, ARCHITECT
Professor of Professional Practice

Courses Taught:
ARC 201 Second Year Studio
ARC 302 Third Year Studio
ARC 401 Fourth Year Studio
ARC 451a Option Studio
ARC 471b/571b Contemporary Urbanity and Public Space

Educational Credentials:
2007. Diploma of Advanced Studies (DEA) and Advanced Research Accreditation (ABD) Doctorate Program ETSA Barcelona, UPC
(Universitat Politècnica de Catalunya)

Master's Degree in Architecture, expertise in Urban design (level 7, European Qualifications Framework (EQF)
Bachelor's Degree in Architecture, Major in Design, Town Planning and History

Teaching Experience:
2017–present. Professor of Practice, School of Architecture, University of Arizona.
2016–2017. Professor of Practice, Washington University in St Louis, Sam Fox School of Design and Visual Arts College of Arch.
2013–2016. Senior Lecturer, Washington University in St Louis, Sam Fox School of Design and Visual Arts College of Arch.
2008–2014. Associate Professor Abroad, Barcelona Summer Program MARCH, Washington University in St Louis, Sam Fox School of Design and Visual Arts College of Arch.
2001. Guest Professor, University of Clemson, South Carolina, Barcelona Architecture Center, UPC, 2001

Professional Experience:
1996–present. aSZ arquitectes, Founder and Co-Principal

Licenses/Registration:
Licensed architect in October 1992, Spain. European Community registration System.

Professional Memberships:
Member #23.694-6 of the Architectural Association Col.legi d’Arquitectes de Catalunya (COAC) since January 1993.

Awards:
2008. ECOLA (European Conference of Leading Architects) award finalist.
LAURA CARR
Lecturer

Courses Taught:
ARC 101 Foundation Studio I.
ARC 102 Foundation Studio II.
ARC 441 Contract Documents
ARC 541 Contract Documents
ARC 422 Structures III
ARC 202 Design Studio
ARC 401 Design Studio

Educational Credentials:
2005 B.Arch, University of Arizona
1995. BA Mathematics, Northern Arizona University

Teaching Experience:
2017–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
1996 - 1997 Native Americans for Community Action (Flagstaff, AZ): Mathematics Instructor
1997 - 2000 Coconino Community College (Flagstaff, AZ): Mathematics Instructor
2004 - 2007 Drachman Institute, CAPLA (Tucson, AZ): Project Manager
2010 - 2012 Recreational Equipment Inc. (Phoenix, AZ): Market Outreach Specialist (Education, Marketing, Volunteerism)
2012 - 2014 GoLite, LLC (Phoenix, AZ / Boulder, CO): Regional Merchandiser
2012 - 2017 Nelsen Partners Architects and Planners (Scottsdale, AZ): Project Architect

Licenses/Registration:
Not Licensed

Professional Memberships:
None

Selected Publications and Recent Research:
None
CARRIE EASTMAN, LEED AP
Lecturer

Courses Taught:
ARC 220 History of the Built Environment
ARC 471s History 4: Theory (online)

Educational Credentials:
Master of Landscape Architecture, University of Virginia.
Bachelor of Arts, History of Art and Architecture, Brown University

Teaching Experience:
2017–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
Landscape Architect. RGR Landscape Architecture and Architecture, NYC.
Freelance Landscape Designer, NYC.
Marketing Coordinator. Perkins Eastman Architects, NYC.

Professional Memberships:
United States Green Building Council

Selected Projects:
East River State Park, Brooklyn, NY.
Scenic Hudson RiverWalk Park, Tarrytown, NY.
Etsy Headquarters, Brooklyn, NY
4 World Trade Center
ALTAF ENGINEER, Ph.D., NCARB, LEED AP BD+C
Assistant Professor

Courses Taught:
ARC 496d/596d Daylighting, Health, and Behavior
ARC 497b/597b Health and Wellbeing in the Built Environment: A Tour of the Senses and Beyond
ARC 496d/596d Social and Behavioral Issues in the Built Environment
DSC 558 Daylighting
ARCH 374 Junior design studio: Architecture and the City
ARCH 475 Senior design studio: Institute for Glass Technology
ARCH 272 Sophomore design studio: Pavilion; Single Family Home
ARCH 475 Junior design studio: The Museum of Ancient Life

Educational Credentials:
2015, Ph.D. in Architecture, University of Illinois at Urbana-Champaign
2005. M.Arch., University of Illinois at Urbana-Champaign
2002. B.Arch., IES College of Architecture, Mumbai University, India

Teaching Experience:
2017–present. School of Architecture, University of Arizona: Assistant Professor.
2016. School of Architecture, University of Arizona: Assistant Professor.
2012–2014. Illinois School of Architecture, University of Illinois at Urbana-Champaign: Instructor.
2005. Illinois School of Architecture, University of Illinois at Urbana-Champaign: Teaching Assistant.

Professional Experience:
2015–present. Architects For Society P.S.C. (Minneapolis, MN): Advisory Board Member, Co-Founder

Licenses/Registration:
New York, License # 039740, 2017–present.
Council of Architecture, India, License # CA/2007/40389

Professional Memberships:
National Council of Architectural Registration Boards (NCARB) (member), 2017–present.
Council of Architecture, India (member), 2005–present.
U.S. Green Building Council (USGBC) (member), 2008–present.

Selected Publications and Recent Research:


ALEXANDER FORD
Lecturer

Courses Taught:
ARC 101 Foundation Studio I.
ARC 102 Foundation Studio II.

Educational Credentials:
2016. MS.HP Columbia University
2014. B.Arch., University of Arizona

Teaching Experience:
Fall 2017–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:

Selected Publications and Recent Research:
Forthcoming (May 2019): CONTACT 67 CENOTAPH

Forthcoming (2019): U.S.S. ARIZONA MEMORIAL RE-DESIGN (with Nicholas Gervasi)

Forthcoming (2019) DOG SKIN HOUSE (with Nicholas Gervasi)
[TRANS-] Journal, Volume 04: Media. University of Arizona

Forthcoming (contracted, publication date undetermined): VERUM FICTUM. Editor
by Brian Delford Andrews. Culicidae Architectural Press.

2017: A TOMB THAT LIVES (with Nicholas Gervasi)
INTaR Journal for Adaptive Re-Use, Volume 08: Water as Catalyst. Rhode Island School of Design

2017: PHX2065 (with Blank Studio Architects)
Amarillo Museum of Art, Biennial 600 Exhibition.

2015: A DESIGN INTERVENTION FOR THE TERRACE ON THE PARK (with Nicholas Gervasi)
Cleo and James Marston Fitch Prize for Preservation, Columbia University

2015: PHX2065 (with Blank Studio Architects)
Phoenix AIA Metro’s “Make A Place” design competition; First Prize
LAURA HOLLENGREEN  
Associate Professor of Practice and Associate Director

Courses Taught:  
ARC 231/530: History + Theory I: Early World Architecture, Ancient to Medieval  
ARC 499/599: History + Theory Independent Study: How Do We Dwell?

Educational Credentials:  
1998. Ph.D., University of California, Berkeley  
1989. M.A., University of California, Berkeley  
1985. A.B., Princeton University

Teaching Experience:  
2017-present. School of Architecture, University of Arizona: Associate Professor of Practice.  
2009–2016. School of Architecture, Georgia Institute of Technology: Associate Professor.  
2006-2009. School of Architecture, University of Arizona: Associate Professor.  
2000-2006. School of Architecture, University of Arizona: Assistant Professor.  
1999. School of Art, University of Arizona: Instructor.  

Professional Memberships:  
Arizona Center for Medieval and Renaissance Studies (member), 1995-present.  
Association of Collegiate Schools of Architecture (member), 2000–present.  
College Art Association (member), 1988-present.  
International Center of Medieval Art (member and officer), 1988-present.  
Medieval Academy of America (member), 1988-present.  
Society of Architectural Historians (member), 2000-present.

Selected Publications and Recent Research:  
Publications  

Recent Research  
My recent research, in collaboration with a colleague at Rensselaer Polytechnic Institute, has focused on a “genealogy” of the effects of immediacy and hypermediacy reaching back from digital media to works of art from the premodern past. It has resulted in the following peer-reviewed conference papers that have been or will be delivered:  
[July 2019 “Virtual and Augmented Reality in the Middle Ages.” 26th International Medieval Congress, University of Leeds, U.K.  
October 2018 “Space, Seam, Scenario: Medieval Architecture and Architectural Representation as an analogue to Contemporary Augmented Reality.” Southeast Chapter of the Society of Architectural Historians, Manhattan, KS.
ANNA KOOSMANN, NCARB
Assistant Professor

Courses Taught:
University of Arizona
ARC 301 Design Studio III
ARC 451a Design Studio VI
ARC 451b/510f Design Studio VII
ARC 459/550c Ethics and Practice
ARC 497k/597k Portfolio
ARC 499 Independent Study
ARC 509a Summer Immersion Design Studio
ARC 509b Summer Immersion Seminar
ARC 510a Summer Immersion Design Studio
ARC 540a Design Communications
ARC 599 Independent Study

Foundation University
ARCH 42a Design Studio 8
ARCH 47a Building Technology 5
ARCH 48a Research Methods
ARCH 51a Design Studio 9
ARCH 52a Design Studio 10
ARCH 57a Community, Planning, and Development
ARCH 60a Comprehensive

Educational Credentials:
2007. M.Arch., University of Washington
2002. B.S.Arch., University of Wisconsin – Milwaukee, cum laude, minor Art History

Teaching Experience:
2017–present. School of Architecture, University of Arizona: Assistant Professor.

Professional Experience:

Licenses/Registration:
Washington
NCARB Certification

Professional Memberships:
Association of Collegiate Schools of Architecture (member), 2017–present.

Selected Publications and Recent Research:
Koosmann, Anna. "Evaluating the First Filipino Design-Build University Program," 2018 EDRA Core Recipient Project Profiles www.edra.org/page/2018_core_recipients
OSCAR LOPEZ, ASSOCIATE AIA
Lecturer

Courses Taught:
ARC 201 Dwelling Studio I.
ARC 202 Dwelling Studio II.
ARC 496a/596a Special Topics in Architecture
ARC 497b/597b Special Topics in Architecture

Educational Credentials:
2009. B.Arch., Arizona State University
2012. M.Arch., Arizona State University

Teaching Experience:
2016–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
2016–present: s p a c e BUREAU (Tucson, AZ): Principal.

Licenses/Registration:
N/A

Professional Memberships:
American Institute of Architects (Associate Member), 2016–present.

Selected Publications and Recent Research:
2019–AIA Western Mountain Region Pettigrew Leadership Scholarship
2018–AIA Arizona Associate Award
2018–AIA Western Mountain Region Design Excellence, Merit Award: Local Nomad
2018–AIA Western Mountain Region Design Excellence, Citation Award: Anello
2018–AIA Arizona Design Excellence, Merit Award: Anello
2018–AIA Southern Arizona Design Excellence, Merit Award: Anello
2017–AIA Arizona Design Excellence, Citation Award: Local Nomad
2017–AIA Southern Arizona Design Excellence, Merit Award: Local Nomad
PRABJEET SINGH MATHAROO
Lecturer

Courses Taught:
ARC 101 Foundation Studio I
ARC 102 Foundation Studio II

Educational Credentials:
2016. MS.Arch., University of Arizona, School of Architecture
2009. B.Arch., University of Arizona, School of Architecture

Teaching Experience:
2017–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
Summer 2010/Summer 2011. Module Engineering Consultancy (Muscat, Oman), Intern
May–June 2012. Matharoo Trading and Contracting Company LLC (Muscat, Oman): Intern
June–July 2012: Muriya Tourism (Muscat, Oman), Intern
August–October 2014. HA|RU Studios, LLC (Tucson, AZ) Designer and Fabricator
January–December 2016. UA School of Architecture (Tucson, AZ), Teaching Assistant
August 2017–Present. UA School of Architecture (Tucson, AZ) Lecturer

Licenses/Registration:
AWS D1.1 3G+4G Welding Certificate

Professional Memberships:
American Institute of Architects (member), 2016

Selected Publications and Recent Research:
ASCA 2018 Architectural Education Award Winner – Sonoran Pentapus S-Cape
AIA–Arid City Synergy Design Competition – Honorable Mention
AIA–Southern Arizona Design Awards – Sonoran Bus Shelters – Citation Award
STEFAN MOSTERT, SACAP (South Africa)
Lecturer

Courses Taught:
ARC 101 Foundation Studio I.
ARC 102 Foundation Studio II.
ARC 103 Foundation Studio III.

Educational Credentials:
2009. M.Arch. University of the Free State, South Africa
2005. B.Arch. University of the Free State, South Africa

Teaching Experience:
2016–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
2010-2013. Koop Design (Durban, South Africa): Architect

Licenses/Registration:
Professional Architect South Africa (SACAP)
WILLIAM G. SARNECKY, NCARB
Adjunct Lecturer

Courses Taught:
ARC 451b Design Studio VII.

Educational Credentials:
1992. B.A. History, University of Arizona
1999. M.Arch., University of New Mexico

Teaching Experience:
2006-2017 College of Architecture, Art and Design, American University of Sharjah: Associate Professor
2017 College of Architecture and Design, New Jersey Institute of Technology: Adjunct Instructor
2018–present. School of Architecture, University of Arizona: Adjunct Instructor

Professional Experience:
1999–Present. Sarnecky Design (Tucson, AZ): Principal
2005–2006. Marengo Morton Architects (La Jolla, CA): Project Coordinator
1999–2000. Hagy Belzberg Architects (Santa Monica, CA): Project Coordinator

Licenses/Registration:
New Mexico #004870
NCARB Certification #70201

Professional Memberships:

Selected Publications and Recent Research:

2014 Sarnecky, William. 2014. “Tarkeeb Assembly Lab: (Im)Precision in Digital and Analog Fabrication.” Project and poster presented at and in proceedings of Globalizing Architecture/Flows and Disruptions, the 102nd Annual ACSA Meeting, Miami Beach, April 10-12, 2014.


Awards:
2016. Andeu World Int’l Furniture Design Competition—Special Mention for Wedge Table
2015. AIA/Middle East Design Award for Excellence—CAAD Display Wall design/build (“Design Award” equivalent to Honor Award”)
2013. AIA/Middle East Merit Award CAAD Display Wall design/build—Unbuilt Architecture Award;
2013. AIA/Middle East Merit Award Salone Satellite Booth B-51
DOUG THOMPSON
Lecturer

Courses Taught:
ARC 297m Digital Fabrication I

Teaching Experience:
2017–present. Lecturer, School of Architecture, University of Arizona.

Professional Experience:
1980–present. President and Founder of DT Metalcraft

Professional Memberships:
Artist Blacksmith Association of North America
ERIC D WATSON, AIA, LEED AP BD+C
Lecturer

Courses Taught:
ARC 401 Design Studio V Technical Systems Integration

Educational Credentials:
2001. B.Arch., Montana State University

Teaching Experience:
2018–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
2017–present. coLAB Studio (Phoenix, AZ): Principal.

Licenses/Registration:
Arizona

Professional Memberships:
American Institute of Architects (member), 2005–present.
United States Green Building Council (member), 2008–present.
International Living Future Institute

Selected Publications and Recent Research:
Sources in Design (Design Icon) – Issue 13, 2018
Guest Speaker AIA WMR – 2018 - “Data Driven Design with a Touchy-Feely Edge”
Guest Speaker Taliesin West -2018 – Vali Homes “Designing net Zero Housing”
OMAR YOUSSEF, PH.D.
Lecturer

Courses Taught:
ARC 461a 561a Water Efficiency in the Built Environment
ARC 461e 561e Sustainable Design and the LEED Initiative
ARC 461k 561k Energy and the Environment
ARC 461l 561l Energy Use in Buildings
ARC 461m 561m Energy Efficient Design
ARC 461n 561n Energy Modeling and Auditing
ARC 461p 561p Environmental Science Laboratory
ARC 461q 561q Special Topics in Architectural Research

Educational Credentials:
2018. Ph.D., University of Arizona, USA
2014. M.Sc.Arch., University of Arizona, USA
2010. B.Sc.Arch. Eng., Greenwich University, UK
2010. B.Sc.Arch. Eng., Modern Sciences and Arts University, Egypt

Teaching Experience:
2014–present. School of Architecture, University of Arizona: Lecturer.

Professional Experience:
2010–present. EO-Designs (Cairo, Egypt): Principal.
2008-2010. rmc (Cairo, Egypt): Intern.

Licenses/Registration:
Cairo, Egypt

Professional Memberships:
US. Green Building Council (AZ Ambassador), 2016-2018

Selected Publications and Recent Research:
Youssef, O., Elzomor, M. (2018) Integrating Social Media Platforms in STEM Increases Student Engagement and Retention, American Society for Engineering Education – abstract accepted