

University of Arizona  
college of architecture and landscape architecture  
school of architecture  
ARC 202: design studio II – HUMAN + MEASURE  
Spring 2008

**Course Syllabus:**

**ARC 202: Seminar Component**

Sections 1, 2, 3, 4

1:00 pm-2:00 pm Monday, Room 103

**ARC 202: Design Studio Component**

Sections 1, 2, 3, 4

2:10 to 4:50 p.m. Monday, Architecture Room 102

1:00 to 4:50 p.m. Wednesday, Friday, Architecture Room 102

**FACULTY (Office Hours by appt.):**

Ronald Rael	Design Studio Coordinator.
Erin Moore	<a href="mailto:eemoore@u.arizona.edu">eemoore@u.arizona.edu</a>
Tom Powers	<a href="mailto:tpowers-ccmltd@qwest.net">tpowers-ccmltd@qwest.net</a>
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**TEACHING ASSISTANT:**

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**Course Objectives:**

The second semester of the second year of architectural design education is **comprised of 3 components: Design Studio, Architectural Topics Seminar and a 3-D Modeling Seminar.** ARC 202 employs the foundation skills learned in the first semester to begin investigating the relationship of space and performance through the examination of movements of the body, both as discrete actions and as an experience in spatial sequences. Ergonomics, human experience and programming are examined in a cumulative progression of projects. The studio emphasizes the development of design processes including value identification, design formation, modeling techniques and the synthesis of idea with spatial resolution. The experience of space to an architect is decidedly different than that of the user, thus, course also examines the internal and external influences, which order architecture. Sets of basic principles and architectural elements provide a design vocabulary for the composition of architectural constructs, while continued refinement of oral and visual communication skills further the effectiveness of expressing architectural ideas. Students will be taught lessons that provide the opportunity for their progress in developing their intellectual, compositional, and communicative (graphic and oral), skills, with a focus on digital visualization and design. Competency in these skills is required of all students for continuation to the next level of the program. As such, the achievement goals for the whole of this semester include the acquisition of the following abilities as outlined by the National Architecture Accrediting Board criteria:

4.12.5.1 Spoken and Written Communication Skills

*Ability to:* read, write, listen and speak effectively on professional curriculum subject matter.

4.12.5..2 Graphic Communication Skills

*Ability to:* communicate architectural ideas with hand-drawings, scale models, and computer-generated drawings and images.

4.12.5..3 Research Skills

*Ability to:* gather, assess, and apply relevant information in the conduct of all learning activities.

4.12.5..4 Critical 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 them against relevant criteria and standards, and effectively communicate those thoughts to others.

4.12.5..5 Fundamental Design Skills

*Ability to:* use creativity and basic architectural, interior architecture, urban design, and universal design principles in the design of increasingly complex buildings, their interior spaces, and their sites.

4.12.5..11 Use of Precedents

*Ability to:* use logical precedents in architecture and urban design projects, including those related to expansion or adaptation of existing buildings.

The course is organized around lecture, tutorial and studio: lectures will introduce topics and assignments provide and overview of issues and outline the design principles and communication concepts that are expected to be investigated. Tutorials will introduce students to specific skills and techniques. Studio will be a period of focused exploration of design issues and communication skills. Finished projects or work in progress will be presented and discussed during each studio session to make important points about design, verbal and visual communication and model making. Introductory instruction and practice in computer imaging and modeling will support the development of spatial visualization and presentation capabilities.

**Attendance:**

Attendance is expected at all class sessions and the student's presence throughout the entire class time is required. Students missing class must substantiate to their instructor a justifiable cause for their absence for it to be considered an excused absence. Accumulating four unexcused absences during the semester will automatically result in a full letter-grade drop in the final grade for the course. Any student accumulating three unexcused absences during the semester will be automatically dropped from the course (which may result in a failing grade). Whenever possible, the professor should be notified in advance of a student's inability to attend a class. Professors have responsibilities in excess of those of students, which may cause them to be tardy or to excuse themselves from class. This in no way reflects negatively on them, nor does it excuse tardiness on your part. In the event the professor is late for class, students are authorized to leave after a half hour wait.

**Assignments:**

The primary vehicle for instruction in this collaborative studio will be a sequence of assignments. These assignments will foster student understanding and achievement by promoting a holistic approach to design within historical, theoretical, analytical and synthetic design investigations.

**Quizzes:**

Students will be responsible for quizzes based on reading assignments given at various times throughout the semester.

**Readings:**

Readings are assigned to support tutorials, lectures and studio discussions. Familiarity and understanding of the information in the readings is important for success in this course. Required books are primary reference works to be relied upon throughout the course. Pertinent sections will be indicated as appropriate.

**Grading Policy:**

All assignments must be completed to receive a passing grade for the semester. No student will be allowed to miss a scheduled deadline unless they have a written excuse from a physician or evidence of an emergency of a similar nature.

Achievement of the course objectives stated above is the primary measure of a student's success in this course. Work on assignments, performance on oral presentations, and participation in class discussions form a body of evidence upon which to evaluate the fulfillment of these objectives. Students are required to demonstrate their achievement of these objectives for continuation to the next level of the curriculum. As such, grades on individual assignments and cumulative semester grades will be determined by the evaluation of the instructors, based on their expertise, under the following criteria:

Depth of understanding  
Positively-directed development  
Craftsmanship in execution and presentation

These criteria will be rigorously applied under the grading system that follows:

**A Excellent.** Indicates work of a very high character; the highest grade given. This grade is reserved for work that shows leadership and inspiration, demonstrating significant insight developed to its fullest extent and presented with exquisite craftsmanship.

**B Good.** Indicates work that is definitely above average, though not of the highest quality. This work shows thorough exploration and development, and is well presented with good craftsmanship, but it may not be exemplary of the highest level of excellence.

C Fair. Indicates work of average or medium character. Work in this category demonstrates complete fulfillment of the stated requirements and an understanding of the issues covered, but does not exceed the expectations of understanding, development, or execution.

D Pass. Indicate work below average and unsatisfactory. The lowest passing grade. Though work may meet the minimum requirements, it lacks depth, development or is unsatisfactorily crafted.

F Fail. Indicates work that the student knows so little of the subject that it must be repeated in order that credit may be received. Work in this category may be unfinished, unimaginative, underdeveloped or poorly executed, and shows minimal understanding of issues.

The final administered grades will be calculated using the following breakdown:

Class participation	10%
Quizzes	10%
Precedent Analysis	5%
Problem 1 Set	35%
Problem 2 Set	15%
Digital Design Assignments	25%

**Late Work:** Late work will not be accepted. If a student misses an established deadline due to a substantiated excused absence, the student must turn in the work in the next class period to avoid the late penalty along with a written excuse.

**Incompletes:** A notation of "incomplete" may be given in lieu of a final grade only to a student who has carried a subject successfully until the end of a semester, but who, due to illness or other unusual and substantiated cause beyond the student's control, has been unable to complete some limited amount of term work. An "incomplete" is not given unless the student proves to the instructor that he/she was prevented from completing course requirements for just cause as indicated above.

**Academic Integrity:** Academic dishonesty detracts from the value of a University of Arizona degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. Students are responsible for honest completion and representation of their own work, and for respect of others' academic endeavors. A student wishing to protest a course grade must first try to resolve any disagreement with the instructor. If unable to reach a resolution, or for any other reason, the student may consult the academic policies for this course, which can be found in *The University of Arizona 1999-2000 General Academic Catalog* (<http://catalog.arizona.edu/catalog1999/>). Refer specifically to the section titled "Code of Academic Integrity" for the principles, policies and procedures governing issues of academic integrity. More detailed information can be found at <http://w3.arizona.edu/~studpubs/handbook/policyframe.html>, or in the Dean of Students office, Rm. 203 Old Main.

**Dropping the Course:** Last day to drop courses resulting in deletion of course enrollment from record is Tuesday, February 12, 2008. The last day to drop a class with a grade of "W" (if passing) or to change to or from audit grading is Tuesday, March 11, 2008. An instructor's signature on a [Change of Schedule](#) form is required. After this day, all registration changes require not only the instructor's signature, but also the Dean's signature on a [Change of Schedule](#) form. By policy, permission from the Dean to make a registration change requires an extraordinary reason.

**Course Meetings:** Class meets 1:00 pm-2:00 pm Monday, Room 103, 2:10 to 4:50 p.m. Monday, Architecture Room 102 and from 1:00 to 4:50 p.m. Wednesday, Friday, Architecture Room 102. Course sessions may continue beyond the allotted time on occasion, particularly during assignment reviews. Students are expected to remain for the duration of any collective class activities, regardless of the hour.

**Participation by Students with disabilities:**

If a student should require special accommodations in order to meet any of the requirements of this course, contact the instructor as soon as possible.

**Accommodation for Religious Observances:**

Students will be allowed to complete requirements that are missed because of a recognized religious observance, provided sufficient prior notice is given to the instructor. Arrangements for the completion of work must be agreed to in advance by the instructor.

**Sexual Harassment:** Sexual harassment is reprehensible and will not be tolerated by the university. It subverts the mission of the university and threatens the careers, educational experience and well-being of students, faculty and staff. The University will not tolerate behavior that creates an unacceptable working environment among members of the University community.

**Work Location** All students are required to work in the studio on the premises both during and after class hours. It is often the influence of peers and colleagues that lend to the greatest learning experiences in design. It is common for projects to suffer when designed in isolation.

**Required Materials** The following is a list of materials which you will be required to have available to you at all times during studio throughout the semester. These are materials which you will continue to use throughout your architectural education and career.

- Laptop Computer with 2 button mouse (or similar)
- FormZ 6.0 or greater
- Parallel rule: minimum 48" Mayline
- Architectural Scale
- Circle template (1/32" to 2" diameter range)
- Compass set
- Cutting knives: Olfa and X-acto knife and blades
- Drafting Brush (horse hair)
- Drafting tape or draft dots
- Electric eraser (optional)
- Erasers: Mars white plastic #526-50
- Fantastik or Formula 409 for cleaning desks
- Glues: Hot glue gun and glue sticks, Elmer's Glue
- Lead pointer (handheld)
- Lead holder (at least 2) – retractable
- Leads: H, 2H, 4H, 6H
- Push pins – one box
- Scum – X (in pouch)
- Sketching pencils (variety)
- Steel Cutting Edge (14" with cork backing and 36")
- Tracing paper rolls (bum wad): 14"
- Triangles: 10" adjustable, 30/60 4" and 8", 45 degree 4" & 14"

Other recommended items:

- Swing arm desk lamp
- Tri-square (for woodshop use)
- Extension cords/ Power surge outlets
- Dremel set
- Screwdrivers, pliers and hammer
- Lock
- Large footlocker or storage unit (lockable)
- Electric Pencil Sharpener
- Safety glasses for the woodshop
- Dust masks

Students will also be responsible for purchasing material as required for design studio assignments, which can include wood, acrylic, plaster, resin, print outs, plots, and other materials and services.

**Sketchbook**

A sketchbook is required for the course. Sketchbooks are invaluable tools to architects and artists. It is a place where a designer can record and refer to trains or processes of thoughts, much like a journal. While recording ideas, thoughts, inspirations and research, one is able to continuously train the hand to respond to various levels of perception. This method of conveying an idea or image will help develop ones sketching ability. All students must purchase or make their own sketchbook. Everything you encounter, conceive, dream, experience, see, hear, smell, eat, feel, etc. should be entered, recorded or pasted in the sketchbook. Each entry should be dated. Fill each page with drawings, prose, poetry, painting, collage, etc. There will be periodic requests by instructors to review your sketchbook. Because of the personal nature of these sketchbooks, they will not be made public unless the student prefers otherwise.

**Required Texts:**

The following texts are available from Amazon.com

**Architecture: Form, Space and Order (2<sup>nd</sup> or 3<sup>rd</sup> Edition)**  
Ching, Francis

**formZ 4.0: 3D Modeling, Rendering, and Animation (Paperback)**  
by Lachmi Khemlani,

**Required Software:**

**Form Z version 5.0 or greater**

This software will be made available for purchase at the beginning of the semester.

**Archiving and Documentation:**

Periodically, students will be asked by their instructors to collect their drawings or models for the School of Architecture archive. Students are expected to participate in this process and should document their projects thoroughly.

**Amendments:**

Any necessary amendments to the information provided in this syllabus or in any course documents will be announced and posted in a timely manner in the studio. All amendments will be in force effective the date they are announced and posted.