# Course Title: ARC 3133 Architectural Representation

# Credit Hours: 3 credits

### Time and Location: TBA

### Prerequisites

### All lower division coursework required for entry into the FAU Bachelor of Architecture program.

**Corequisites:** none

**Course Logistics**

The course is offered in Fall and/or Summer semesters as a 3-credit course for the Bachelor of Architecture degree.

**Instructor Contact: TBA**

### Communications

Students may use any of the contact sources listed above but are requested to leave a detailed message with contact information, email address and/or a telephone number for return calls.

### Course Description

The course is concerned with design drawing techniques and skills for conceptualization, exploration and presentation of architectural ideas. The course focuses on the **interpretation and analysis of architectural form, order, spatial composition and representation**. Students are taught several different methods of design delineation with an emphasis on clear communication of spatial conditions and design intentions.

**Course Objectives**

The course is intended to teach and refine drawing and sketching skills of representation, descriptive communication, research and analysis pertaining to architectural design with an emphasis on developing awareness of visual communication as an extension of design thinking.

Intended outcomes for completion of this course require that the student:

* Be able to integrate drawing and sketching skills as a normal course of design process.
* Be able to apply drawing and sketching skills to research, analyze, evaluate and synthesize design responses.
* Be able to visually communicate architectural design intent through an understanding of ordering systems and compositional principles.
* Be able to create representations and presentations of buildings and spatial intentions with appropriate graphic techniques and media.

**COURSE EVALUATION METHOD**

**Grading Policy**

The grading policy is established in accordance with Florida Atlantic University and the School of Architecture policies as outlined in the Florida Atlantic University Course Catalog. The following criteria supplements those policies and will be used to evaluate your work. You will be graded often and in a timely manner so you are certain of your academic standing in studio. Also note, that failure to follow verbal and written directions will negatively affect your grade.

The basic grade shall depend directly upon demonstration of the minimum standard of learning expected from this course. *After the minimum standard of learning expected from this course has been met, the final grade will be determined by evaluating graphic communication skills and the quality of exploration from commencement through completion of the course.* All work must be corrected and improved prior to all scheduled presentations. Grade determination will include, but is not limited to, the following criteria: class participation, craftsmanship, graphic proficiency, concept/design development, and overall attitude.

Successful completion of the course requires a minimum passing grade of C or better, and is required for graduation from this program. Grade determination will include, but is not limited to, the following criteria: class participation, craftsmanship, graphic proficiency, composition, concept, and order.

**Course Grading Scale**

*In specific terms,* each *student may earn a maximum of two hundred (200) points* for this course.

Point allocation per project are as follows:

Project 1: 10 pts; Project 2: 10 pts; Project 3: 15 pts; Project 4: 15 pts; Project 5: 15 pts;

Project 6: 25 pts; Participation and engagement: 10 points

Project 7:15 pts; Project 8:10 pts; Project 9:10 pts; Project 10:15 pts; Project 11:10 pts; Project 12:15pts; Project 13:25 pts.

Final letter grade equivalents are as follows: **A: 94-100%; A-: 90-93%; B+87-89%; B:84-86%; B-: 80-83%; C+: 77-79%; C: 74-76%; C-: 70-73%; D+:67-69%; D:64-66%; D-: 60-63%; F: Below 60pts.**

*In general terms,* letter grades above indicate that students have achieved the following:

 **A to A- Excellent Work:** Work of exceptional quality typically achieved through purposive self-direction, rigor, and expansive design investigations of the studio objectives. This work demonstrates a very high level of intellectual and material craftsmanship with results that are beyond the expectations established for a student at this level of study.

 **B+ to B- Good Work:** Work of a high quality that exhibits insight, development, and academic performance above an average level. Work at this level exhibits a certain level of self-direction and discovery beyond a mere understanding of course content and objectives. Work is independently directed and demonstrates a high level of intellectual and physical craftsmanship.

 **C+ to C Average Work:** Average work satisfies the objectives of the course, demonstrating an understanding of course content, and competence in concept production, design development, and craftsmanship in final work products. This work is typical and exhibits modest or normative intellectual and design ambition.

 **C- to D- Marginal Work:** Marginal work is failing work, characterized by indifference and a marginal understanding of course content. This work is incomplete, manifesting little initiative, and lacking design development and integration of key concepts in the final work products. Students who earn a grade lower than a C typically do not read assigned literature, investigate relevant precedents, attend class, or maintain consistent progress in work production.

 **F Failing Work:** Failing work is unacceptable and without substantive consideration of course content and/or satisfactory design development in work products. This work typically lacks synthesis of content, detail, specific course objectives, and/or is substantially incomplete. The work betrays incompetence and the inability to perform in a satisfactory manner at this level of study.

**I Incomplete Work:** Work that is Incomplete for a minor part of the course requirements due to an illness or other excused absence. An Incomplete is not intended to be an extension of the semester due to marginal performance. A passing grade is expected once the work is completed. An “I” is merely provisional and rolls over to an F in the following semester.

### Attendance and Make-Up Policy

Attendance is mandatory for every class period, and for the entire class period. Students are expected to arrive to class on time, prepared, and having completed all assignments. Students are required to remain in class for the duration of class, unless excused by the instructor. Anyone leaving early without permission will be marked with an unexcused absence for that day. Each unexcused absence shall result in a penalty of 15 points from your final cumulative point total awarded by each faculty member. Students absent more than three classes without serious reasons (medical or otherwise) given in writing in advance of the class will automatically fail the class. Students absent from a required presentation, assignment, or examination will receive, without exception, a grade of zero for that presentation, assignment, or examination. Attendance will be taken at the beginning of each class. Students arriving after attendance has been taken shall be considered late, and will receive a 5 point penalty from their final cumulative point total awarded by that faculty. Students arriving more than 20 minutes after attendance has been taken shall be considered absent for the class, and will be penalized accordingly. Absence does not absolve the student from homework, assignments, or work progress due on the day of absence and the work due the following class. It is the student’s sole responsibility to contact someone from the class to get information on the material covered and assignments given.

*Students absent from a required presentation, assignment, or examination will receive, without exception, an grade of zero for that presentation, assignment, or examination. Students appearing more than 15 minutes late for a critique will be considered late and will not receive a critique.* Students are expected to arrive 10 minutes prior to the beginning of class with all required materials. Students should be pinned up and ready for pin-up or reviews by the start of class or students will receive a zero for that assignment. Every student for every class should bring NEW material for every pin-up or desk critique.

**University Attendance Policy Statement**

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University- approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student’s responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student’s final course grade as a direct result of such absence.

### Participation

Students are expected to bring all pertinent research notes, sketches, and drawings to class for discussion and review, to work a minimum of 6 hours per week in addition to posted class hours, are responsible for assigned readings and are expected to participate in related discussions.

**Student Performance Criteria**

In fulfillment of the School’s accreditation with the National Architectural Accreditation Board (NAAB) the faculty has assigned the following Student Performance Criteria for this course. Each student should have a copy of the NAAB criteria, which is available at the School of Architecture Administrator’s office or NAAB website. Also, consult NAAB’s descriptions of SPC’s. (See NAAB.org website, for the most recent Conditions and Procedures)

Primary

The following SPC’s will be engaged through coursework:

**A5** Ordering Systems: Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three- dimensional design.

Secondary

The following SPC’s will also be engaged through coursework, but will not be used to provide SPC evidence:

**A1** Professional Communication Skills: Ability to write and speak effectively and use representational media appropriate for both within the profession and with the general public.

**A6** 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.

**Decorum & Expectations (Classroom Etiquette Policy)**

Students are expected to conduct themselves in a collegial and professional manner, and should demonstrate respect for instructors and fellow students. This includes respecting the opinions of others, being attentive during lectures, and reviews, and participating fully in all discussions. During individual and group critiques students are expected to work productively at their drafting tables. Behavior that is disruptive to a positive learning environment will result in a warning on the first instance, and perhaps expulsion from the course in the second instance.

Electronic communications with persons outside of the classroom or studio (telephone, texting, social media, etc) is prohibited. In case of extenuating circumstances, students must make prior arrangements with faculty. Each disruptive use of electronic communication shall result in a deduction of 2 points from the student’s final cumulative point total. Students are expected to bring all pertinent research notes, sketches, drawings, and models to the studio for discussion and review. Furthermore, students are responsible for assigned readings and expected to participate in related discussions. For further information, please refer to the Studio Culture Policy in the FAU School of Architecture Website.

**Professional and Ethical Conduct**

Just as clear and concise drawing is essential to the effective communication of architectural ideas so too is the clear and concise use of language, both spoken and written. The School of Architecture expects students to communicate ideas effectively and in a professional manner. This includes legible handwriting and lettering, correct spelling, proper punctuation and grammar, and inclusion of referential citations that meet the Chicago Manual of Style standards for research and scholarly writing. All course work will be graded with consideration of these issues.

Work submitted constitutes individual work unless the instructor expressly indicates a group assignment. An idea, once documented in writing or in drawing, is the intellectual property of the author. When presenting an idea, phraseology, or drawing which is not your own, you are legally and ethically bound to identify your source. To do otherwise is plagiarism and constitutes a breach of academic integrity. **Plagiarism will not be tolerated in the School of Architecture. The penalty for cheating is a grade of F on the relevant work and may warrant further academic action including failure in the course, academic probation, or expulsion from the University.**

**Special Needs**

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU’s campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at [www.fau.edu/sas/](http://www.fau.edu/sas/)

**Counseling and Psychological Services (CAPS) Center**

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU’s Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <http://www.fau,edu/counseling/>

**Code of Academic Integrity**

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 or the following link: <http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf>

Information concerning academic regulations, student rights and responsibilities may be found in the current Florida Atlantic University Catalog and School of Architecture Student Handbook.

**Electronic devices**

The College for Design and Social Inquiry and School of Architecture prohibits audio or video recording of instructional activities in classrooms, laboratories, and studios without the express written consent of the instructor. This does not apply to students receiving services from the Office of Student Disabilities. When the instructors consent is given, materials are for personal use only and are not for distribution or sale in any fashion.

**Student Work**

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

**Media and Materials**

Students are required to maintain a drawing file containing sketches, notes, course assignments, submittals, and other works describing the student’s process and are expected to have standard architectural drawing and drafting supplies.

**Field Trips**

Instructors may organize field trips, student participation in field trips is not mandatory. Field trips are organized bona fide by the instructors, therefore, instructors and the FAU are not responsible of any damage or accident that may happen on a field trip. Students who participate in field trips are solely responsible for any damage or accident that may occur.

**General**

Information concerning academic regulations, student rights and responsibilities may be found in the current Florida Atlantic University Catalog and the School of Architecture Student Handbook.

**Projects are to be completed using analog (manual) formats unless otherwise indicated by the instructor.**

**Materials**

**All students must bring all required equipment to every class period, as you will be drawing during every class period.**

Students are required to have available the following materials:

**Drafting board; portable drafting board (24”x 36” min) or designated design studio drawing board with parallel bar (36” min, 42” recommended) for direct desk attachment.**

Sketchbook; 9x12 minimum sizes, 9x12, 11x17 (preferred)

Drafting tools; adjustable triangle or standard 45 & 36/60 triangles, templates, brush, french curves, & architects and engineers scale

Drawing paper; pad or roll of 1000H drafting vellum, 18”x24” (max sheet size needed)

Sketching paper; translucent tracing paper, 25 lb, 11”x17” (preferred)

Tracing paper; 18” roll of white sketch paper

Tape; Drafting tape or dots

Drawing pencils; sketching, drafting pencils and lead holder (grades 2h,h,hb,f,b)

Pencil sharpener; mechanical or manual pencil sharpener and pencil pointer for lead holders

Eraser; Kneaded eraser(s), mechanical or manual drafting eraser, erasing shield

Additional Materials\*;

Black permanent ink pens\*

Design markers\*

Colored pencils\*

Watercolor paint and brushes\*

Drawing papers and films\*

\* see separate handout of design drawing materials for these items as needed.

**Required Texts and References**

Students are required to have a copy of the following text:

Michael E. Doyle, Color Drawing: Design Drawing Skills and Techniques for Architects, Landscape Architects, and Interior Designers (3rd edition), John Wiley & Sons, Inc., 2006. ISBN # 0471741906

**Supplementary references**

Students are required to reference the following related texts for additional information:

Edward T. White, Concept Sourcebook: A Vocabulary of Architectural Forms, Architectural Media Ltd., 1975. ASIN# B000UDEIWI

Francis D.K. Ching, Architectural Graphics (4th or 5th edition), John Wiley & Sons, Inc., 2002.ISBN# 978047039911

Francis D.K. Ching, Architecture; Form, Space and Order (3rd edition), John Wiley & Sons, Inc., 2007. ISBN# 0442017928

Francis D.K. Ching, Design Drawing, Van Nostrand Reinhold, 1997. ISBN# 0471286540

Kimberly Elam, Geometry of Design: studies in proportion and composition, Princeton Architectural Press, 2001. ISBN# 1568982496

Kurt Hanks, Larry Belliston, Rapid Viz: a new method for rapid visualization of ideas, 3rd Edition, Course Technology, 2008. ISBN# 9781598632682

Mohammed Saleh Uddin, Composite Drawing: Techniques for Architectural Design Presentation, McGraw-Hill, 1997. ISBN# 0070657491

Rendow Yee, Architectural Drawing: A Visual Compendium of Types and Methods (4th edition), John Wiley & Sons, Inc., 2013. ISBN # 978111801287

**Course Topical Outline** (subject to revision)

**Week-1** Introduction: overview and goals

 Assign Project 1: Geometric Constructions (In-Class / Homework)

 Assign Project 2: Alphabet Constructions and lettering (Homework)

**Week-2** Review Project 1 and Project 2

 Assign Project 3: Orthographic Projection (In-Class / Homework)

**Week-3** Review Project 3

 Assign Project 4: Paraline Projection (In-Class / Homework)

**Week-4**  Review Project 4

 Assign Project 5: Exploded Paraline Projection (In-Class / Homework)

**Week-5** Review Project 5

 Assign Project 6: Revisions and Composition

**Week-6** Review Project 6

Assign domains.

**Week-7** Review Project 7, Part 1.

Assign Project 8: The diagram and its components: Plan, section, elevation and paraline analysis. Continue Part 2, Project 7.

**Week-8** Review Part 2, Project 7 and Project 8.

Assign Project 9: Artificial perspective. Continue Part 3, Project 7.

**Week-9** Review Part 3, Project 7 and Project 9.

Assign Project 10: Artificial perspective and a comparison with the axonometric.

Assign Project 11: Found object

**Week-10** Review Projects 10 and 11.

Assign Project 12: Constructing a wall section.

**Week-11** Review Project 12.

Assign Project 13: Comprehensive project 1.

**Week-12** Review of Project 13.

 Assign Project 14: Comprehensive project 2.

**Week-13** Review Project 14.

 Assign Revisions to comprehensive projects.

**Week-14**  Final Reviews.

**Week-15** Final Exams.