

Rutgers, The State University of New Jersey  
Landscape Architecture **11:550-337**

## **VISUALIZATION II: Design Communication**

Spring 2017

Tuesday 9:15am – 12:15pm

Friday 9:15am – 12:15pm

Rooms: Blake 129 (LA Computer Lab) for Lecture and Lab  
Blake 128 for Session with the Lab Monitor

## **Syllabus**

### **Instructors**

Office Hours by appointment

Anita Bakshi  
222 Blake Hall  
ab1332@sebs.rutgers.edu

Géza G. Schenk  
schenk@sebs.rutgers.edu

### **Section Information**

The class will be divided into two sections for the 1<sup>st</sup> half of the semester (ACAD):

*On Fridays: Section-1 will meet with the Instructor in the computer lab, and Section-2 will work with their laptops in Blake #128 with the Lab Monitor.*

*On Tuesday: Section-2 will meet with the Instructor in the computer lab, and Section-1 will work with their laptops in Blake #128 with the Lab Monitor.*

For the second half of the semester (Graphic Design) both sections will meet together for the lecture before dividing into their sections for lab. The lecture will take place upstairs in the Sophomore Studio

### **Course Description**

This course is an introduction to the fundamental principles of graphic design, digital representation, and computer drafting, as well as the software, techniques and products appropriate for presenting conceptual illustrative graphics. Essential tools for the landscape architect, both graphic design and computer-aided design (CAD) include visual communication and design software that can help the individual convey design intent throughout the lifecycle of the design, effectively communicating and selling ideas to fellow professionals and clients.

Adobe Design CS offers the designer a suite of graphic design programs while AutoCAD is the industry standard for drafting, bridging landscape architecture, architecture, and engineering and allowing for a seamless exchange of ideas and output. This course expands upon the drawing and drafting fundamentals acquired in Landscape Drawing 550:237 and the introductory studios, expanding the students' toolbox to include graphic design, digital representation, and AutoCAD.

### **Course Format**

This course presents the basic principles and techniques of design communication, as well as, an introduction to 2D drafting in AutoCAD through a combination of:

- Lectures
- Lab Lessons and Exercises
- Homework Assignments
- Quizzes
- A midterm and a final project

The Lab Periods will continue the presentation and demonstration of the topic(s) presented in the lecture, followed by a review of the completed assignment from the previous week. Each lab will contain in-class exercises to be performed simultaneously with the instructor and independently. If time allows, there will be an opportunity to begin the new weekly assignment in class. Where appropriate, the content of this course may be coordinated with the work in current or previous design studios. During the course of the semester, two projects (Midterm and Final Projects) will contribute to the students overall grade.

### **Learning Objectives**

- Develop novice-level knowledge of digital graphic tools appropriate for illustrative documents including:
  - The use of AutoCAD as a vector-based drafting tool
  - The use of Illustrator as a vector-based tool for board layout and representation.
  - The use of InDesign as a desktop publishing tool for booklets and other representations
  - The use of Photoshop in the production of illustrative graphics
- Build on basic hand drafting practices learned in Visualization I to create drawings at greater complexities of scale and information.
- Develop representational skills for use in the Design Studio sequence of classes.
- Illustrate a basic knowledge of theories of graphic composition and design.
- Demonstrate a general understanding of file structure and effective computer use.
- Demonstrate an awareness of the distinction between technical and illustrative graphics and an understanding of the appropriate use for different representational methodologies.

- Integrate illustrative graphics, drawing, and drafting.

### **Student Obligations and Expectations**

The course is a pre-requisite in the Landscape Architecture degree program and the second in the sequence of Visualization courses required by the student for graduation. This class is offered for three credits with time spent in lecture and in two separate lab sections (once per week with the Instructor and once per week with the Lab Monitor). In accordance with university policy, students *are expected to work an additional 9.75 hours per week* outside of class. Therefore, please prepare appropriate time in your schedule for this semester in relationship to your other course work and *the limited number of seats available in the computer lab*.

### **Other course obligations include:**

1. Quizzes and/or in-class exercises will be given during certain lectures. The lab period will be used to introduce tools appropriate for that week's exercise and the instructor will not review any content that was missed by a student's absence or tardiness.  
*Therefore, your attendance will be directly related to your success in this class.*
2. LATE HOMEWORK WILL NOT BE ACCEPTED. Exceptions will be made if contact with the instructor regarding the assignment has occurred prior to the due date and the absence meets the requirements of the Department for an excused absence.
3. Take notes during class presentations to help retain knowledge and repeat procedures outside of class.
4. **Practice:** Learning CAD and DTP programs requires consistent use outside of class time, as well as, a willingness to ask questions and review new techniques and tools introduced in the classroom.
5. Complete the midterm and final projects on time. Please Note: Late projects will lose one full letter grade for each day the project is past due.
6. Seek help, when needed *in advance* of an assignment's due date.

### **Equipment, Materials and Software**

The Landscape Architecture Department requires that each student purchase an individual Windows-based laptop according to specified guidelines:

([http://landarch.rutgers.edu/current\\_students/laptoprequire.html](http://landarch.rutgers.edu/current_students/laptoprequire.html)).

Mac [Apple] computers are not supported by the Department. Project deadlines will **NOT** be extended because resources were not available in the computer lab or due to incompatible file types/errors. The schedule for the Computer Lab is posted outside the Lab for each semester. Please plan accordingly.

- **Adobe Design CS6 or Creative Cloud (CC)** (The Creative Suites come in several different bundles and access options. For further information, please contact

Marcus Knowlton: knowlton@rci.rutgers.edu)

- **AutoCAD 2016** software: Students are required to download a copy of the free student license of AutoCAD 2013 software to their individual laptops for their personal use. Find the free download at: <http://www.autodesk.com/education/free-software/autocad>. Select the "Create New Account" tab on the middle of the page and follow the instructions to download the basic AutoCAD platform.

### Recommended Texts

Students are not required to purchase a textbook for the course. Students can utilize the free built-in and online software tutorials. However, recommended texts include:

- Adobe "Classroom in a Book" Series
- Cantrell, Bradley and Wes Michaels. (2010). **Digital Drawing for Landscape Architecture: Contemporary Techniques and Tools for Digital Representation in Site Design**. NY, NY. Wiley.
- Cramsie, P. (2010) **The Story of Graphic Design**. New York, NY. Abrams.
- Cullen, K. (2005). *Layout Workbook; A Real-World Guide to Building Pages in Graphic Design*. Gloucester, MA. Rockport Publishers.
- Elam, K. (2001). **Geometry of Design**. New York, NY. Princeton Architectural Press.
- Lupton, E./Cole Phillips, J. (2008). **Graphic Design - The New Basics**. New York, NY. Princeton. Architectural Press
- Omura, George. (2012). **Mastering AutoCAD 2013 and AutoCAD LT 2013** (*Autodesk Official Training Guide*). Hoboken, NJ. Sybex; 1 edition.

In addition, there are a number of free online software tutorials relevant to the course available on the web.

### Assignments and Grading

Students will receive grades and feedback on all assignments and exercises that are completed throughout the semester. The individual break down of the cumulative semester grade is as follows:

Attendance, Participation	15%
Quizzes	15%
Lecture / Lab Exercises	25%
Project #1 [Midterm]	20%
Project #2 [Final]	25%
<b>Maximum Course Grade</b>	<b>100%</b>

### Final Course Grades

All course grades are related to the following numerical scoring system (where x=your grade). Your final course grade is computed by cumulating each score received throughout the semester and weighted by the percentages given above.

x > 90	A
90 > x > 87	B+
87 > x > 80	B
80 > x > 77	C+
77 > x > 70	C
70 > x > 60	D

## Policies

Except for circumstances truly beyond the student's control, all projects and homework are due on the dates and at the times specified throughout the semester. No late homework will be accepted. Midterm and Final Projects that are incomplete on the due date should still be submitted on the date it is due to receive at least partial credit. Turning in no work for an assignment or a project will result in a grade of zero [0]. *Any final or midterm project submitted late will lose a letter grade for each day past due.* Working beyond a due date is both unrealistic in a professional setting and unfair to your classmates in this course.

If you encounter any personal circumstances that inhibit your ability to fulfill the requirements of this course, you should immediately contact the instructor[s]. In addition, any student with a special need, circumstance, or disability, should make an appointment to see the instructor[s] during the first week of classes.

Departmental policy allows for a total of three unexcused absences. Four or more absences will automatically lower your final grade by one full letter grade [for example, a B down to a C+]. Each additional three absences will result in another step reduction. If a circumstance arises beyond your control, please notify the Instructor *prior* to the class meeting, and other arrangements will be made. **Documented** medical and family emergencies are, of course, excused.

Attendance will be taken at the start of all lectures and labs. Late arrivals greater than 10 minutes will be marked as a full absence by the Instructor. Students on academic probation have NO ALLOWABLE ABSENCES.

Content missed due to an excused absence will be made available however, an excused absence does not automatically prolong an assigned due date for any exercise or project.

If there is a plotting problem, PDF files can be emailed to the instructor by the due date and the assignment will not be considered late. However, a plotted version is due by the following class period or a late penalty will be assessed thereafter.

All information in this syllabus and course schedule is subject to change throughout the semester and will be announced in the scheduled lecture periods and posted to Sakai. It is your responsibility to stay informed!

### Violations of the University Integrity Policy

The intentional copying of another student's file or portion of the file and presenting it as your own work, is in direct violation of the University Integrity Policy. Please refer to the complete Integrity Policy at: <http://academicintegrity.rutgers.edu/integrity.shtml>.

Any copying and/or "sharing" of exercises, assignments and projects will be treated as Level 2 violations and subject to the sanctions as outline in the Integrity Policy:

1. A failing grade on the assignment.
2. A failing grade for the course.
3. Disciplinary warning or probation.

<b>Weeks #1 – 7            AUTOCAD &amp; ILLUSTRATOR (ANITA)</b>		
	Tuesday	Friday
<b>WEEK 1</b> Jan. 17, 20	LECTURE (Tuesday) <b>Course Introduction</b> <b>Computer Setup</b> <b>Lab Introduction</b>  <b>SECTIONS #1 &amp; #2</b> LECTURE (Friday) - ANITA <b>Lecture 1: Transition: Visualization I to Visualization II Drawings &amp; AutoCAD / Introduction to AutoCAD Interface</b>	<b>SECTION #1</b> LECTURE (Friday) <b>Lecture 2: Basic Geometry- Maintaining Precision &amp; Accuracy / Layers &amp; Properties</b>  LAB <b>Exercise 1: SITE PLAN</b>
<b>WEEK 2</b> Jan. 24, 27	<b>SECTION #2</b> LECTURE (Tuesday) <b>Lecture 2: Basic Geometry- Maintaining Precision &amp; Accuracy Layers &amp; Properties</b>  LAB <b>Exercise 1: SITE PLAN</b>	<b>SECTION #1</b> LECTURE (Tuesday) <b>Lecture 3: Text &amp; Dimensions Plotting, Layouts, Blocks &amp; File Sharing (XREFS + WBlocks)</b>  LAB <b>Exercise 2: BENCH @ Cook Campus</b>  <i>9am today: Exercise #1 Due</i>
<b>WEEK 3</b> Jan. 31 & Feb. 3	<b>SECTION #2</b> LECTURE (Tuesday) <b>Lecture 3: Text &amp; Dimensions Plotting, Layouts, Blocks &amp; File Sharing (XREFS + WBlocks)</b>  LAB <b>Exercise 2: BENCH @ Cook Campus</b>  <i>9am today: Exercise #1 Due</i>	<b>SECTION #1</b> LECTURE (Friday) <b>Lecture 3 Continued.....</b>  LAB <b>Exercise 3: BUILDING PLANS &amp; ELEVATIONS</b> <i>Work on transferring original drawings to ACAD</i>
<b>WEEK 4</b> Feb. 7, 10	<b>SECTION #2</b> LECTURE (Tuesday) <b>Lecture 3 Continued.....</b>  LAB <b>Exercise 3: BUILDING PLANS &amp; ELEVATIONS</b> <i>Work on transferring original drawings to ACAD</i>  <b>SECTION #1: 9am today: Exercise #2 Due</b>	<b>SECTION #1</b> LECTURE (Friday) <b>Lecture 4: Creating As-Built drawings Inserting &amp; Scaling Images</b>  LAB <b>Exercise 3: BUILDING PLANS &amp; ELEVATIONS</b> <i>Work on finalizing your drawings and begin to compile them together on one sheet</i>  <b>SECTION #2: 9am today: Exercise #2 Due</b>

<p>WEEK 5 Feb. 14, 17</p>	<p><b>SECTION #2</b> LECTURE (Tuesday) <b>Lecture 4: Creating As-Built drawings Inserting &amp; Scaling Images</b></p> <p>LAB <b>Exercise 3: BUILDING PLANS &amp; ELEVATIONS</b> <i>Work on finalizing your drawings and begin to compile them together on one sheet</i></p>	<p><b>SECTION #1</b> LECTURE (Friday) <b>Lecture 10: Illustrator CS6</b></p> <p>LAB <b>Begin work on Midterm Assignments</b> Plan, Elevations, Section of : Your site for studio</p>
<p>WEEK 6 Feb. 21, 24</p>	<p><b>SECTION #2</b> LECTURE (Tuesday) <b>Lecture 10: Illustrator CS6</b></p> <p>LAB <b>Begin work on Midterm Assignments</b> Plan, Elevations, Section of : Your site for studio</p> <p><b>SECTION #1: 9am today: Exercise #3 Due</b></p>	<p><b>SECTION #1</b> LECTURE (Tuesday) <b>ACAD Import to Illustrator</b></p> <p>LAB <b>Continue work on Midterm Assignments</b></p> <p><b>SECTION #2: 9am today: Exercise #3 Due</b></p>
<p>WEEK 7 Feb. 28 &amp; March 3</p>	<p><b>SECTION #2</b> LECTURE (Friday) <b>ACAD Import to Illustrator</b></p> <p>LAB <b>Continue work on Midterm Assignments</b></p>	<p>Géza <b>BOTH SECTIONS</b></p> <p><b>Introduction InDesign I</b> Lecture and Exercise</p>

<b>GRAPHIC DESIGN BASICS, PHOTOSHOP &amp; INDESIGN (GÉZA)</b>			
<p>WEEK 8 March 7, 10</p>	<p>LECTURE BOTH SECTIONS (TUE) <b>1. Raster, vectors, resolution and color spaces</b></p>	<p>LAB <b>SECTION #1</b> (TUE) <b>Photoshop I</b> (Géza)</p>	<p>LAB <b>SECTION #2</b> (TUE) <b>FREE FOR ANY WORK</b></p>
	<p>LECTURE BOTH SECTIONS (FRI) <b>2. The basic design elements</b></p>	<p>LAB <b>SECTION #2</b> (FRI) <b>Photoshop I</b> (Géza)</p>	<p>LAB <b>SECTION #1</b> (FRI) <b>Photoshop I Exerc.</b> (Lab Monitor)</p>
<p><b>SPRING BREAK March 11-19</b></p>			

WEEK 9 Mar. 21, 24	LECTURE BOTH SECTIONS (TUE) <b>3. The design process</b>	LAB SECTION #1 (TUE) <b>Photoshop II</b> (Géza)	LAB SECTION #2 (TUE) <b>Photoshop I Exerc.</b> (Lab Monitor)
	LECTURE BOTH SECTIONS (FRI) <b>4. Professional ethics; symmetry, asymmetry and scale</b>	LAB SECTION #2 (FRI) <b>Photoshop II</b> (Géza)	LAB SECTION #1 (FRI) <b>Photoshop II Exerc.</b> (Lab Monitor)
WEEK 10 Mar. 28, 31	<b>Project #1 Presentations: Section 1 Only</b> (Section #2: Laser Cutter Training in Computer Lab)		
	<b>Project #1 Presentations: Section 2 Only</b> (Section #1: Laser Cutter Training in Computer Lab)		
WEEK 11 April 4, 7	LECTURE BOTH SECTIONS (TUE) <b>5. Resolution and the grid</b>	LAB SECTION #1 (TUE) <b>Photoshop III</b> (Géza)	LAB SECTION #2 (TUE) <b>Photoshop II Exerc.</b> (Lab Monitor)
	LECTURE BOTH SECTIONS (FRI) <b>6. Typography</b>	LAB SECTION #2 (FRI) <b>Photoshop III</b> (Géza)	LAB SECTION #1 (FRI) <b>Photoshop III Exerc.</b> (Lab Monitor)
WEEK 12 April 11, 14	LECTURE BOTH SECTIONS (TUE) <b>7. Hierarchy</b>	LAB SECTION #1 (TUE) <b>InDesign II</b> (Géza)	LAB SECTION #2 (TUE) <b>Photoshop III Exerc.</b> (Lab Monitor)
	LECTURE BOTH SECTIONS (FRI) <b>8. Color, time, motion and representation; framing, brief poster design history</b>	LAB SECTION #2 (FRI) <b>InDesign II</b> (Géza)	LAB SECTION #1 (FRI) <b>InDesign II Exerc.</b> (Lab Monitor)
WEEK 13 April 18, 21	LECTURE BOTH SECTIONS (TUE) <b>9. Complex information</b>	LAB SECTION #1 (TUE) <b>InDesign III</b> (Géza)	LAB SECTION #2 (TUE) <b>InDesign II Exerc.</b> (Lab Monitor)
	LECTURE BOTH SECTIONS (FRI) <b>10. Presentation boards</b>	LAB SECTION #2 (FRI) <b>InDesign III</b> (Géza)	LAB SECTION #1 (FRI) <b>FREE FOR WORK ON FINAL PROJECT</b>
WEEK 14 April 25, 28	<b>Final Review Sections 1 and 2 (TUE 25) PART 1</b>		
	<b>Final Review Sections 1 and 2 (FRI 28) PART 1</b>		
WEEK 15	<b>End of Semester, Reading Days</b>		