1. COURSE DESCRIPTION

Graphic communication, also referred to as Representation, is an approach to communicating plans – specifically in the form of site plans, master plans, comprehensive plans, illustrative design codes or combination thereof. We use cartography produced by ortho-aerial photos and GIS to create a strong base for design and site analysis. This course explores real world planning and design communication graphics to help students realize the procedures in communication and information management within a planning process. Lessons also help students realize how graphics can be used to negotiate, analyze, test, learn, discover and synthesize information.

2. LEARNING OBJECTIVE

The objective of this course is to help students acquire basic skills in graphic communication techniques currently used in the planning, architecture and urban design fields. Specifically, this course teaches students to be familiar with the interface between AutoCAD, Sketch Up, InDesign and Photoshop. Students will also acquire some hand-rendering techniques to use with digital graphics for visualization, technical drawings, analytical drawings and presentation layouts. The assignments and lectures will encourage students to utilize these techniques and methods so that students can successfully produce graphics that will communicate planning ideas, test concepts and visualize solutions in the future planning practices.

3. COURSE FORMAT

This course consists of classroom lecture and lab sessions to learn computer programs. The course has four sections: (1) Line Drawing; (2) Graphic Presentation; (3) 3D Modeling; and (4) Illustrative Drawing. Class exercises and assignments will be your final document. Each exercise and assignment builds upon one another. Students will have a comprehensive understanding on the graphics as communication tool that is necessary for decision-making in urban planning practices.

4. REQUIRED COURSE MATERIALS

* Flash Drive  * Engineering Scale  * 2 or more #2 Pencils
5. GRADE

40% - Weekly assignments.
There are 11 assignments. Due date will be every Friday 9 am. Late submission will be accepted only once per student under specific conditions (i.e. Health Issue, Conference Participation or others). All other late submission will not be accepted unless there is a special permission in advance.

20% Class participation & Attendance
You are expected to attend all classes on time. If you are late more than 10 minutes, absence. Partial attendance must be explained in writing directly to me through the e-mail. Leaving a classroom without a written notice will count against your grade. Students are responsible to learn the missing information during their absence or late attendance. If you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. The absence notice is automatically sent to me. If you miss more than 2 unexcused classes, your final grade will drop a full letter grade.

Activities such as playing games, using smartphone, watching videos on Youtube, reading post on Facebook are not allowed. However, emergency phone calls may be allowed at any time.

40% Final Project
Final Document is required. Instruction will be provided on the 8th week of class. The final document will be the compiled works of your assignment and class exercises throughout the semester.

Grade will be assessed based on student’s level of understanding graphic techniques; use of computer programs; and application of these skills and presentation.

A  93 – 100  (Exceptional)
B+  87 – 92  (High)
B   80 – 86  (Very Good)
C+ 75 – 79  (Good)
C   70 – 74  (Fair)
D   65 – 69  (Weak)
F   64 or lower (Insufficient)

6. CLASS REQUIREMENT & POLICY

Students are expected to uphold the school’s Academic Integrity policy. It is your responsibility to understand the violation and the consequences of breaking any of the codes before attending class. The school’s Academic Integrity policy can be found in http://academicintegrity.rutgers.edu/integrity.shtml#
PART 1: UNDERSTANDING LINE DRAWINGS
Auto CAD

Week 1 (9/8) Introduction
Discussion: Graphic Communication in the Planning Practice
Exercise: AutoCAD Unit&Page Setup, Drawing tools, Modify Tools, Data management

Week 2 (9/15) Technical Drawing 1
Discussion: Graphic Communication in the Planning Practice
Exercise: AutoCAD drawing tools, Scale Drawings, Print Setting
Assignment 1: Clashing Grid Drawing

Week 3 (9/22) Technical Drawing 2
Discussion: Scale, line types, line weight, CAD Drawing Tools
Exercise: Drawing & Modify tools
Assignment 1: Due
Assignment 2: Topography Drawing
* Must bring your Engineering Scale

Week 4 (9/29) Technical Drawing 2
Discussion: Dimensioning Objects, Annotations
Exercise: Drawing Building Types & Street Sections
Assignment 2: Due
Assignment 3: Building & Street Types

Week 5 (10/6) Digitalizing Aerial Photo
Discussion: Extrapolating Information from Aerial Photos
Exercise: Inserting Aerial Photo, Tracing & Information Verification,
Assignment 3: Due
Assignment 4: Base Map

Week 6 (10/13) Digitalizing Hand Drawings
Online Tutorials: Digitalizing Hand-rendered Concept Plan
Exercise: Tracing & Dimensioning
Assignment 4: Due
Assignment 5: Concept & Final Site Plan
PART 2: GRAPHICS PRESENTATION
InDesign

Week 7 (10/20) - Diagrammatic Drawings - Infographics
Discussion: Diagrams, overlays, flow charts, tables
Exercise: coloring, labeling, annotation
Assignment 5: Due
Assignment 6: Land Use, Figure Ground Plan

Week 8 (10/27) - Document Setup in InDesign
Discussion: Diagrams, map overlays, zoning, flow charts, tables
Exercise: Coloring, labeling, annotation
Assignment 6: Due
Assignment 7: Final Document - 50% Complete

PART 3: 3D MODELING
Sketch Up

Week 9 (11/3) – 3D Modeling
Discussion: Graphic Communication Techniques for Volumetric & Spatial Relationships
Exercise: Site Model: Extrusion, layer management, grouping
Assignment 7: Due

Week 10 (11/10) – 3D Modeling: Individual Lab Session
Assignment 8: Site 3D Massing

Week 11 (11/17) – 3D Modeling: Individual Lab Session
Discussion: Developing an Urban Scene
Exercise: Streetscape Elements and Building Details
Assignment 9: Perspective View and Street Details
PART 4: PERSPECTIVE & ILLUSTRATIVE SITE PLAN
Photoshop

**Week 12 (11/22: Class Change) - Illustrative Site Plan**
Discussion: Site Plan Rendering
Exercise: Setup, layer management, drawing tools, filter effects
Assignment 8 & 9: Due
Assignment 10: Illustrative site plan

**Week 13 (12/1) - Illustrative Site Plan**
Discussion: Site Plan Rendering
Exercise: Setup, layer management, drawing tools, filter effects
Assignment 10: Due
**Assignment 11: Final Document - 90% Complete**

**Week 14 (12/8) – Final Lab Session**
Discussion: Renderings and Final Document Layout
Exercise: Final Document Requirement Review
Assignment 11: Due

**Week 15 (12/15) – Final Presentation**
Final Project Document Due