# University of Washington, College of Built Environments URBDP 573A/CEP 498A: Digital Design Practicum

Tutorial/Lab: MW 1:30-3:20 pm

**Additional Lab**: F 1:30-3:20 pm (Reserved lab time) **Meeting place:** Gould 007F, Digital Commons

Credits: 4/5 (MUP/CEP)

Course Website: https://canvas.uw.edu/courses/1039045/

#### **Instructor:**

Katherine Idziorek, AICP kidzi@u.washington.edu Office hours: W 3:20-4:20 pm Gould 007F & by appointment

## **Teaching Assistant:**

Chungho Kim 418 Gould Hall

charisut@u.washington.edu
Office hours: F 1:30-3:20 pm

Gould 007F

**prac-ti-cum** (pr $^{a}k^{'}t^{'}-k^{a}m$ ) n. A school or college course, especially one in a specialized field of study, which is designed to give students supervised practical application of previously studied theory.

#### **COURSE DESCRIPTION & OBJECTIVES**

Today, design and planning professionals use digital technologies in their everyday work to document, analyze and communicate all facets of the built environment. This course will prepare you to meet the varying challenges of the practice world by making you familiar with some of the digital tools used extensively in the professional world. This is a <a href="https://www.hands.course.course">hands-on course</a> in which you will develop a working knowledge of three specific software packages through real-world case study projects focused on a variety of urban issues.

The overarching goals of the course are as follows:

- To obtain working knowledge of the software packages commonly used in practice and to develop expertise in their analytical capabilities.
- To learn to communicate spatially using digital graphic media—a useful skill for forging better working relationships with clients/community.

# **SOFTWARE**

The set of software used in this course includes:

**Adobe Creative Suite** provides a unified design environment combining Photoshop, Illustrator, InDesign, and Acrobat software. Of these, we will cover the following two in this class:

**Adobe InDesign** shares common tools, palettes, and commands with other Adobe applications including Illustrator and Photoshop. This integration provides a fluid environment for professional-quality desktop publishing. In design and planning fields, the software is often used for the production of professional reports, posters and presentation boards.

**Adobe Photoshop** is a photo editing software used primarily in graphic design and in the photo industry. The design and planning professions use Photoshop extensively in visualizing the environment and in developing scenarios using photo manipulation and montage techniques.

**ArcGIS** is a geographic information system (GIS) software that has a broad range of applications in the design and planning fields dealing with spatial information on parcels, zoning, land use, buildings, landscapes and transportation networks. The software utilizes geodatabase technology as a framework for data access and management. The basic capabilities of ArcGIS include visualization, querying, and analysis as well as creating and editing geographic data.

**3D** Analyst is an extension of ArcGIS that provides tools for creating, visualizing, and analyzing GIS data in a three-dimensional context. In the design and planning professions, this extension is often used to view a surface from multiple viewpoints, to query a surface, to create a realistic perspective image that drapes raster and vector data over a surface, and to perform three-dimensional navigation.

**SketchUp** is a 3D modeling software that designers and planners use to create massing studies that articulate buildings, spaces and neighborhoods. SketchUp is a relatively easy-to-use conceptual tool with a simple interface that allows the incorporation of GIS data to ensure modeling accuracy. You can search, upload, download, and share 3D models in SketchUp's 3D Warehouse collection, an online open source library of free model assemblies.

#### STRUCTURE

#### **Tutorials and Lab Time**

In the *tutorial sessions*, students are given guided introductions for each of the software packages and relevant software features.

During the *supervised lab* sessions, students have an opportunity to develop their assignments with the instructors available for guidance.

## **ASSIGNMENTS**

**Assignments** focused on a study area will form the core of the course. The assignments will be posted on the class website. You are required to use the lab time to work on the assignments.

The **final portfolio** will be developed to organize and display your previously completed assignments. The completion of the portfolio will help you to synthesize what you have learned in this course. You will create a professional-looking package that organizes your work and demonstrates your digital design skills.

# **BOOKS (Recommended)**

- 1. Smith, C. InDesign CS6 Digital Classroom. Wiley, 2012 (online access)
- 2. Smith, J. Photoshop CS6 Digital Classroom. Wiley, 2012 (online access)
- 3. Ormsby et al. *Getting to Know ArcGIS desktop*. ESRI Press, 2010 (on reserve in the CBE library)
- 4. Wilson, M. Learning ArcGIS 10.2 Basics. CreateSpace, 2014 (available on Amazon)
- 5. Brown, D. *Learning Sketchup Pro 2015*. InfiniteSkills, 2015 (available on Amazon or online download at http://www.infiniteskills.com/training/learning-sketchup-pro-2015.html)

## **REQUIRED MATERIALS**

- 1. Notebook
- 2. Access to a digital camera
- 3. External drive

#### **POLICIES**

**Participation:** Participation in all structured course segments is required. You are expected to use the lab time to develop your assignments when the instructors are around to assist you. Class participation also includes submitting products of tutorials and/or in-class assignments.

**Expenses:** In addition to the reference materials and supplies listed above, other costs include expenses incurred for color printing, photocopying, and transportation to the project site.

**Evaluation**: Your final grade will be based on the following:

Assignment 1: 10 points
Assignment 2: 15 points
Assignment 3: 20 points
Assignment 4: 25 points
Final Portfolio: 20 points

Class Participation: 10 points (based on use of class time and products of tutorials)

**Deadlines:** Deadlines are VITAL. Standard exceptions for documented medical situations apply; such situations should be discussed with the instructor. Penalties for late submissions are:

Up to 1 day late: -10% 2-7 days late: -25% After 7 days: No credit

Online File Storage: UW students have access to the U Drive service, a central online file storage system that will store and back up 30 GB of data per student. Within your U Drive, be sure to create a folder for this course in which you can store, organize and share your project files with team members. For more information on U Drive file storage, see: <a href="https://itconnect.uw.edu/wares/online-storage/u-drive-central-file-storage-for-users/">https://itconnect.uw.edu/wares/online-storage/u-drive-central-file-storage-for-users/</a>

**Course Website (Canvas):** The course website is the central portal for the class. All assignments and project-related materials will be posted on the website. It will also provide you with access to class discussion boards and assignment drop boxes. It is recommended that you check the course website regularly (daily) for updates and announcements.

**Software:** The computers in the Digital Commons have all the software you will need for the class. However, if you want to have the flexibility to work on your personal computer, you may consider purchasing some or downloading trial versions:

- 1. ArcGIS 10.2: You can download and install a 1-year educational version from the company website: http://www.esri.com/industries/apps/education/offers/promo/index.cfm
- 2. Adobe Creative Suite: Adobe now offers a 1-year student Creative Cloud membership for \$19.99/month: <a href="http://www.adobe.com/creativecloud/buy/students.html">http://www.adobe.com/creativecloud/buy/students.html</a> You can also download a 30-day demo version from the website: <a href="http://www.adobe.com/downloads/">http://www.adobe.com/downloads/</a>
- 3. SketchUp Pro 2015: Sketchup now provides a 1-year student license for \$49: <a href="http://www.sketchup.com/download">http://www.sketchup.com/download</a>. The license will allow you to install the software on both your desktop and laptop computer.

**Questions/Clarifications:** If you have any questions/comments about the assignments or tutorials, please post them to the assigned boards on the Canvas site. The boards will be reviewed <u>once every day</u> and a reply will be posted. You are encouraged to review the boards periodically and to respond to postings as well. <u>Please make sure that you post to the appropriate boards</u>. Avoid sending direct emails to the instructors with questions about the assignments/tutorials.

#### **Deliverables:**

**E-Submission of assignments and project:** Submit pdf versions of the assignments titled "LAST NAME\_ASSIGNMENT NUMBER" in the designated assignment drop folders on the course website. The assignment drop folders record the time of submission.

Hard copy of assignments: Submit a printed color copy of the assignment in class on the day it is due or in the TA's (Chungho Kim) mailbox in Gould 410. Be aware that Gould 410 closes at 5:00 p.m.

**Collaboration:** You will complete the final project in teams of two. Each participant is expected to contribute equitably to the process and product.

**Other policies:** This class is governed by all of the University's student policies, including those regarding plagiarism and multiple submissions. It is your responsibility to be familiar with these. More information can be found at:

https://depts.washington.edu/grading/pdf/AcademicResponsibility.pdf

**Cell Phones and other Internet distractions:** Please be courteous and refrain from personal Internet activity and using your phone during lab time. Lab time should be used for working on class assignments.

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## **SCHEDULE**

- All assignments are due by 1:20 pm in the course drop box; paper copies are due in class or in Chungho Kim's mailbox in Gould 410 on the assignment due date.
- All Friday lab times are supervised unless otherwise stated. <u>Participation in Friday sessions</u> is not mandatory for graduate students, but it is recommended, especially if you need individualized assistance with developing your assignments. <u>CEPs are expected to attend all Friday sessions</u>.

			In Class	Deadlines/Benchmarks
Week 1	Mon	28-March	Intro to the course (participants/content/structure) Intro to the study area	
	Wed	30-March	Intro to InDesign Tutorial 1.1: InDesign Intro to Assignment 1	
	Fri	1-April	No lab this week	Study area site visit
Week 2	Mon	4-April	Tutorial 1.2: InDesign	
	Wed	6-April	Lab time: Assignment 1	
	Fri	8-April	Reserved lab time	
Week 3	Mon	11-April	Intro to Photoshop Intro to Assignment 2 Tutorial 2.1: Photoshop	Due: Assignment 1
	Wed	13-April	Lab time: Assignment 2	
	Fri	15-April	Reserved lab time	
Week 4	Mon	18-April	Tutorial 2.2: Photoshop Lab time: Assignment 2	
	Wed	20-April	Lab time: Assignment 2	
	Fri	22-April	Reserved lab time	

Week 5	Mon	25-April	Intro to ArcGIS Intro to Assignment 3	Due: Assignment 2
	Wed	27-April	Tutorial 3.1: Basic mapping	
	Fri	29-April	Reserved lab time	
Week 6	Mon	2-May	Tutorial 3.2: Working with Assessor's data	
	Wed	4-May	Tutorial 3.3: Socio-demographic analysis	
	Fri	6-May	Reserved lab time	
Week 7	Mon	9-May	Intro to ArcGIS 3D Analyst Tutorial 3.4: Massing and Terrain	
	Wed	11-May	Intro to SketchUp Intro to Assignment 4 Tutorial 4.1: Sketchup	Due: Assignment 3
	Fri	13-May	Reserved lab time	
Week 8	Mon	16-May	Tutorial 4.2: Sketchup	
	Wed	18-May	Lab time: Assignment 4	
	Fri	20-May	Reserved lab time	
Week 9	Mon	23-May	Lab time: Assignment 4	
	Wed	25-May	Intro to Final Portfolio	Due: Assignment 4
	Fri	27-May	Reserved lab time	
Week 10	Mon	30-May	Memorial Day – No Class	
	Wed	1-June	Lab time: Final Portfolio	
	Fri	3-June	Reserved lab time	
Finals Week	Mon	6-June		Due by 5pm: Final Portfolio