

# USP 563 Real Estate Construction

Summer Session 2021 June 21 - August 15  
Tuesdays and Thursdays  
4:40pm - 6:30pm

## Instructor Information

### Instructor

Bob Trapa

### Email

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### Office Location & Hours

The majority of this course is taught virtually. The best way to reach me is through email.

Welcome to “Real Estate Construction.” As a commercial building contractor, I look forward to sharing what I’ve learned from my building experiences over the past 33 years. I have worked as a laborer, surveyor, productivity engineer, assistant superintendent, estimator, project manager, preconstruction manager, chief estimator, director of construction and senior vice president on some challenging projects throughout the western United States. I have recently retired from Bremik Construction, a Portland based commercial building contractor, where I was in charge of the company’s daily operations. My most memorable project was my involvement in constructing the Mt. Hood Meadows South & Sahale Lodges. On the South Lodge we had to push 12 feet of snow in early May in order to start the project’s groundwork. Who would have ever expected to encounter challenges constructing a building on the side of a volcano at 6000’ of elevation? My academic background is from Montana State University where I received my B.S. in Construction Engineering Technology and my M.S. in Science and Engineering Management.

## General Information

### Expectations and Goals

USP 563 Real Estate Construction will explore different commercial building project types, building materials, sustainable practices, as well as touch on the construction contracts and the delivery method that best fits a given scenario. The goal of the class is to expose real estate and urban planning students to commercial building construction from a practical perspective.

Critical thinking will be required to determine the best practices and building types for several development scenarios. Students will need to read the material and know the basics, but what I am really interested in is how you apply the material that is being presented. My hope is that you will find the subject matter relevant to your own growth and career fulfillment.

### Attendance & Grading

This course has sixteen sessions from June 21<sup>st</sup> to August 15<sup>th</sup> 2021. Attendance is mandatory, unless excused by me in advance. The majority of the sessions will be discussion follow up from the previous class lecture and new lectures followed by class discussions on the topic. You are all accomplished individuals, so I expect that each and every one of you will have something to add in our discussions. There will also be occasions when we will have an outside guest lecturer and depending on the social distancing guidelines, we may be touring two in-progress construction projects in the Portland area. One of the projects, Rose Villa, is unique since a real-time construction camera captures the project’s progression. The link to this is: <https://app.truelook.com/?u=br1596825412>. So, if we are not able to tour the project, we’ll be able to track the progress virtually. Classes will have a required reading and some sessions will require follow up homework on a related question or questions. The mid-term exam will be a take-home essay response to several questions and the final project will be a written

and graphic response to the information presented in this course. There are seven (7) homework assignments. Mid-term exams and homework assignments turned in late will be marked down one letter grade. Because of the timing of the due date of the final project and when I need to turn in final grades to the university, it is critical that you turn your final project no later than the required due date.

Grades are based on the following: homework assignments (30%), class attendance & observations (20%), mid-term (20%) and final exam (30%). All graded assignments will be returned via email. **All homework assignments, observations, midterms, and final projects are to be submitted via D2L.**

### **Remote Teaching Method**

I will be teaching this class remotely (with the exception of the planned site visits) and I do realize remote interaction can present challenges at times. So touching on class participation and attendance, in order for you to achieve the maximum grade percentage you will be required to: 1) log in on time for the lecture, be present for the entire lecture and respond with mindful thought to questions that may be directed to you during the lecture, and 2) Follow up by turning in two observations you made concerning your own learning from the material presented during each session. Please make note observations should be made for each session, irrespective of whether the session is one of my sessions, a guest speaker, or a project site visit. If for some reason our project site visit is cancelled, you should be providing your observations from following the Rose Villa project web cam work progression (link found in attendance and grading paragraph above). **Your observations should be in cumulative format under each date/session using Microsoft Word and each observation should be one to two paragraphs in length. These observations will be due with your mid-term and final project and will be graded at those times.**

We will use technology for virtual meetings and recordings in this course. Our use of such technology is governed by FERPA, the Acceptable Use Policy and PSU's Student Code of Conduct. A record of all meetings and recordings is kept and stored by PSU, in accordance with the Acceptable Use Policy and FERPA. I will not share recordings of your class activities outside of course participants, which include your fellow students, TAs/GAs/Mentors, and any guest faculty or community based learning partners that we may engage with. **You may not share recordings outside of this course.** Doing so may result in disciplinary action.

### **Academic Misconduct**

Academic misconduct, including, but not limited to, plagiarism, cheating, falsification of records and documents, or using the work of another student will immediately result in a failing grade for the assignment.

### **Course Materials**

#### **Required Technology**

Students will need access to the following software: Microsoft Word, Project, Excel, Power Point and be able to view .pdf format. Students will also need a computer and internet connection that can accept at least 10mb attachments. There may be students who are utilizing Apple Macintosh personal computers. All applications, with the exception of Project are supported on the Apple OS. Although MS Project is not supported on the Apple OS, there are a number of scheduling applications for the Apple OS. I will be teaching off of the MS Project format, but please note whatever scheduling application you use, you will need to produce project durations in a Gantt chart format along with identifying critical path activities.

## Required Text

Fundamentals of Building Construction: Materials and Methods, Sixth Edition by Edward Allen and Joseph Iano. (I understand the 7<sup>th</sup> edition is now in print, and you are welcome to substitute this newer addition). I also know that the 6<sup>th</sup> edition is available via eBook.

## Optional Text & Materials

There is a book entitled “Construction Law” completed in 2009 by a group of lawyers who take part in the American Bar Association Forum on the Construction Industry. While this book exposes students to construction law principles, I have found this book an excellent reference source for those who are interested in construction technical subjects.

Additional materials may be provided to supplement weekly topics.

## Course Schedule

Week	Topic	Reading
June 22 <sup>nd</sup>	A historical perspective to design and construction & the participants in the design and construction industry (Homework assignment #1)	Chapter 1
June 24 <sup>th</sup>	Agreements & Contracting methods (Homework assignment #2)	Sample Contracts
June 29 <sup>th</sup>	Sustainability/LEED/Earth Advantage/Green Globes (Homework assignment #3)	
July 1 <sup>st</sup>	Construction Safety	Guest Lecturer
July 6 <sup>th</sup>	Shoring & Foundations Geotechnical Data & How this plays into the design (Homework assignment #4)	Chapter 2 Geotechnical Log Article on when things go wrong
July 8 <sup>th</sup>	Wood Structures (Homework assignment #5)	Chapters 3,4,5
July 13 <sup>th</sup>	Concrete Construction	Chapters 12,13, 14
July 15 <sup>th</sup>	Structural Steel Framed Construction	Chapter 11
July 20 <sup>th</sup>	Construction Insurance & Bonds	Guest Lecturer
July 22 <sup>nd</sup>	The Project Schedule, Contractors General Conditions & Site Logistics (Homework assignment #6)	Hand-out
July 27 <sup>th</sup>	Construction Estimating & Inflation (Homework assignment #7)	Hand-out

Week	Topic	Reading
July 29 <sup>th</sup>	The Building Envelope	Chapters 17, 19, 20
August 3 <sup>rd</sup>	Mechanical	Guest Lecturer
August 5 <sup>th</sup>	Site Visit - Rose Villa Senior Living	5:00 - 6:00 PM (time on the project site)
*August 10 <sup>th</sup>	Site Visit Susan Emmons	5:00 - 6:00 PM (time on the project site)
*August 12 <sup>th</sup>	CLT (Cross Laminated Timber)	Guest Lecturer

## Exams & Projects

Date	Subject
July 15 <sup>th</sup>	Mid-Term Issued
July 22 <sup>nd</sup>	Mid-Term Due (along with your lecture observations)
August 2 <sup>nd</sup>	Final Project Issued
August 12 <sup>th</sup>	Final Project Due (along with your lecture observations)

\* This course overlaps the last week (August 10<sup>th</sup> & 12<sup>th</sup>) with USP 569 Sustainable Cities & Regions. For those who have signed up for USP 569, to make up for the Susan Emmons site visit, you will need to observe the Rose Villa construction camera <https://app.truelook.com/?u=br1596825412> for 5 consecutive days during the week of July 20<sup>th</sup> for 15 minutes each time and write up a 1 page summary of what you observed during this week. **Turn this summary in with your final project.** Information will be provided for the CLT presentation.

## Diversity & Inclusion

PSU values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, useable, inclusive, and welcoming. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. The Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment.

## Accommodations

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations. The DRC is located in 116 Smith Memorial Student Union, 503-725-4150, [drc@pdx.edu](mailto:drc@pdx.edu), <https://www.pdx.edu/drc>.

- If you already have accommodations, please contact me to make sure that I have received a faculty notification letter and discuss your accommodations.
- Students who need accommodations for tests and quizzes are expected to schedule their tests to overlap with the time the class is taking the test.
- Please be aware that the accessible tables or chairs in the room should remain

available for students who find that standard classroom seating is not useable.

- For information about emergency preparedness, please go to the Fire and Life Safety webpage (<https://www.pdx.edu/environmental-health-safety/fire-and-lifesafety>) for information.

## **Title IX**

Portland State is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment (sexual assault, domestic and dating violence, and gender or sex-based harassment and stalking). If you have experienced any form of gender or sex-based discrimination or sexual harassment, know that help and support are available. PSU has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and on-housing accommodations, helping with legal protective orders, and more. Information about PSU's support services on campus, including confidential services and reporting options, can be found on PSU's Sexual Misconduct Prevention and Response website at: <http://www.pdx.edu/sexual-assault/get-help> or you may call a confidential IPV Advocate at 503-725-5672. You may report any incident of discrimination or discriminatory harassment, including sexual harassment, to either the Office of Equity and Compliance or the Office of the Dean of Student Life.

## **Sexual Harassment**

As faculty, one of our responsibilities is to help create a safe learning environment for students and for the campus as a whole. Please be aware that faculty have the responsibility to report any instances of sexual harassment, sexual violence and/or other forms of prohibited discrimination. If you would rather share information about sexual harassment to a confidential employee who does not have this reporting responsibility, you can find a list of those individuals here: <https://www.pdx.edu/sexual-assault/gethelp>.

## **Emergency Preparedness**

For information about emergency preparedness, please go to the Fire and Life Safety webpage (<https://www.pdx.edu/environmental-health-safety/fire-and-life-safety>) for information.

## **Student Health & Counseling (SHAC)**

The Center for Student Health and Counseling (SHAC) is a community-based health care organization that provides high quality, accessible mental health, physical health, dental, and testing services targeted to the needs of the PSU student population. To make an appointment with SHAC, please call SHAC at 503.725.2800 or go directly to the clinic (1880 SW 6th Ave. UCB, Suite 200).

## **Other Student Resources**

- The Writing Center: <https://www.pdx.edu/writing-center/>
- Center for Student Health and Counseling: <https://www.pdx.edu/shac/>

- Diversity and Multicultural Student Services: <https://www.pdx.edu/dmss/>
- Financial Wellness Center: <https://www.pdx.edu/student-financial/financial-wellnesscenter>
- For information on food assistance and other resources: <https://www.pdx.edu/studentaccess-center/>