

# SCMT 125: CONSTRUCTION METHODS II (3,3,0)

# Sustainable Construction Management Technology Okanagan College – Penticton Campus

**Professor:** Rishia McDowell

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**Office Location & Hours:** Wednesdays 11:50 – 12:30, Collaborate

Course Schedule: Wednesday (LEC) 9:30-11:50am online

Wednesday (LAB-S1) 12:30-3:30pm online

Credit Hours: (3)

**Presentation Format:** Online lecture and lab, 6 hours per week **Prerequisite:** SCMT 115: Construction Methods I

Co-requisite: None

# 1. COURSE DESCRIPTION:

This introductory course is a continuation of SCMT 115 and expands on equipment and materials associated with construction projects. Students learn the basic principles of equipment and material selection, safety implications and operational procedures. Students shall physically construct a range of wood frame construction details. Students will research alternative construction systems and present their findings to the class.

## 2. MAJOR TOPICS

Understating the methods of home construction and how to research information in the building code.

### 3. COURSE EVALUATION

Course Component	Percentage of Final Course Grade		
Class Participation	10%		
Quizzes	20%		
Assignments and project work	50%		
Final exam	20%		
Total	100%		

# 4. TENTATIVE CLASS SCHEDULE

Class Schedule	Lecture Agenda	Lab Activities	Deliverable(s)
Week 1	No class or lab this week		
(Jan. 6)			
Week 1	<ul> <li>Building a model home scale. Wall assembly details,</li> </ul>	Start prep all material	
(Jan. 13)	material list, scheduling, methods.		
Week 2	<ul> <li>Looking at the bearing loads, Modify the drawing if</li> </ul>	Building	Frame 2 walls, presentation,
(Jan. 20)	necessary "as built", Wall framing		R-value calculations
Week 3	• W-11 Commission	Building	
(Jan. 27)	Wall framing continued		
Week 4	Deal with the client: Change orders. BC Building code,	Building	Frame 2 walls, presentation,
(Feb. 3)	Wall framing continued		R-value calculation
	wan training continued		
Week 5		Building	Truss construction,
(Feb. 10)	Truss construction and installation		presentation, research roof
			finishes
Feb. 17	No Classes: Mid-Semester Study Break		
Week 7	n.c. c. : cc.:l	Building	Rafter framing, presentation,
(Feb. 24)	Rafter framing, roof finishes		roof finishes
Week 8	Presentation of Final (Built) Projects	Demolition	Presentation of finished
(March 3)	Life cycle of buildings, quality control		dollhouse project
Week 9	Timber frame and SIPS	Research	Timber frame research project
(March 10)			1 /
Week 10	D (1): 11 7F	Research and reading	Prefabricated building research
(March 17)	Prefabricated buildings		project
Week 11	No. 11 212	Research and reading	Metal buildings project
(March 24)	Metal building systems		
Week 12	Weatherproofing and building science	Compiling research	Student selected building
(Mar. 31)			research project
Week 13	• C4J4 C.J4JT4.	Presentations	Student selected topic
(April 7)	Student Selected Topic		presentation
Week 14	I ast Day of Class	Review	
(April 14)	Last Day of Class		
Exam Period	Exam Date TBA		

WINTER | 2021

### 5. COURSE MATERIALS

- (1) British Columbia Building Code 2018 Free Online
- (2) Personal Protective Equipment (PPE) Hard Hat, Vest, and Steel-Toed Boots

#### 6. LEARNING OUTCOMES

- Gain practical hands-on experience in carpentry and framing construction.
- Learning how to search and find information in the building code

#### 7. OCCUPATIONAL HEALTH & SAFETY

As a new worker to a job site, you will be expected to follow the rules and guidelines pertaining to your employment. All job sites should follow the same rules when it comes to PPE (personal protective equipment). As a new employee you will be expected to wear the proper clothing to protect you against the elements. You will be expected to provide your own work gloves and appropriate safety footwear and Safety headgear.

Your new employer is expected to supply you at no cost, with distinguishing apparel (safety vests of any colour as long as it is reflective and has fluorescent trim). The employer will also supply any other safety training and/or personal protective equipment that is specialized to your new employment.

The employer must ensure that a worker who wears personal protective equipment is adequately instructed in the correct use, limitations and assigned maintenance duties for the equipment to be used. If specialized safety training courses are required for you job then the employer must provide to you free of charge.

The employer will also have to discuss with you the following:

- Location of first aid equipment
- Reporting accidents, injuries, and unsafe working conditions
- Safe work procedures
- Right to refuse unsafe work
- Locations of fire exits. Routes and safe gathering areas
- Emergency procedures

On a new job site, you will be exposed to different types of hazards depending on what you are doing. The main thing is to be aware of your surroundings, and before moving from one section to another take 1 or 2 seconds and look around to make sure you path is safe. The next important thing is to make sure you know your escape route(s) in case something happens. Make sure to take a minute and walk it so you are familiar with it and it is clear from obstructions. Your responsibility is to speak up when you feel unsafe or your equipment is damaged or needs to be replaced. Your safety is your responsibility.

For more information on your rights and responsibilities with personal protective equipment please go to <a href="http://www2.worksafebc.com/publications/ohsregulation/Part8.asp">http://www2.worksafebc.com/publications/ohsregulation/Part8.asp</a>.

### 8. SCMT DEPARTMENT POLICIES

#### SCMT Department Passing Grade Requirements Policy:

Students must obtain a passing grade (at least 50%) in both the lecture component and the laboratory component of the course. If the student receives a failing grade (less than 50%) in either the lab or lecture component, the final mark for the whole course will be no more than 49%.

### **SCMT Department Attendance Policy:**

Fall 2020 and Winter 2021 academic year courses will be delivered in a live on-line format. While it is strongly encouraged that students attend all online lecture and laboratory sessions, attending class is the prerogative of the student. All course resources will be accessible within the respective course Moodle shells. SCMT courses use a dynamic delivery model and in-class group activities are the norm. Participating in these activities benefits all students. Should a student not be able to attend a live lecture or laboratory session, the following should be considered:

- It is the student's responsibility to review the course resources and remain up-to-date with the course;
- The SCMT instructors are not required to record the online sessions;
- All marked in-class assessments will only be open to the students during the allotted online timeframe;
- Arrangements for out-of-time assessments will only be made for special circumstances and is at the discretion of the course instructor; and
- Attending the SCMT program while outside of British Columbia or Canada does not constitute a special circumstance.

### **SCMT Department Late Policy:**

All late assignments and laboratories will have 10% per day deducted from the final mark. The maximum number of overdue days in which work will be accepted is seven days. Any work not submitted within seven days will be marked as incomplete. There are no exceptions to this rule unless accompanied by a doctor's note.

### SCMT Department Collection of Student Work Policy:

This is a requirement of the accreditation process. Samples of student work will be collected during the term. At the end of the semester, each professor is responsible for collecting a complete copy of the best student's work. This will include class notes, assignments, labs, exams etc. This copy will be archived.

### **SCMT Department Citation Style:**

All citations made within course deliverables (assignments, midterms, etc.) are to be cited using the APA citation style. Information regarding the APA citation style can be found at the following link:

http://www.okanagan.bc.ca/Assets/Departments+%28Administration%29/Library/PDFs/apa.pdf

#### 9. OKANAGAN COLLEGE POLICIES

# Okanagan College Academic Misconduct Policy:

Any incidents of academic misconduct, as outlined in the Academic Offences policy in the Okanagan College calendar, may result in a mark of 0% or another consequence permitted by the policy. In cases of severe or repetitive misconduct, the Dean's office and the College Registrar will be notified and the student may be given a failing grade for the course or a more serious consequence as permitted by the policy, such as expulsion. The Academic Offences policy can be located online at the following link:

http://webapps-1.okanagan.bc.ca/ok/calendar/Calendar.aspx?page=AcademicOffenses

# Okanagan College Student Notification of OC Policies:

Okanagan College requires that students are informed of acceptable student conduct specifically relating to OC Student Non-Academic Conduct and Student Academic Offences policies.

Student Non Academic Conduct: What Is The Disruption Of Instructional Activities?

At Okanagan College (OC), disruption of instructional activities includes student "conduct which interferes with examinations, lectures, seminars, tutorials, group meetings, other related activities, and with students using the study facilities of OC", as well as conduct that leads to property damage, assault, discrimination, harassment or fraud. Penalties for disruption of instructional activities can include a warning and/or a failing grade on an assignment, examination or course, or possible suspension from OC. The complete policy is available online at: <a href="http://www.okanagan.bc.ca/Assets/Departments+(Administration)/Legal+Affairs/Student+Non-Academic+Conduct+Policy.pdf">http://www.okanagan.bc.ca/Assets/Departments+(Administration)/Legal+Affairs/Student+Non-Academic+Conduct+Policy.pdf</a>

### 10. STUDENT ACADEMIC CONDUCT

#### What Is Cheating?

"Cheating includes but is not limited to dishonest or attempted dishonest conduct during tests or examinations in which the use is made of books, notes, diagrams or other aids excluding those authorized by the examiner. It includes communicating with others for the purpose of obtaining information, copying from the work of others and purposely exposing or conveying information to other students who are taking the test or examination."

Students must submit independently written work. Students may not write joint or collaborative assignments with other students unless the professor approves it in advance as a group/team project. Students who share their work with other students are equally involved in cheating.

## What Is Plagiarism?

Plagiarism is defined as "the presentation of another person's work or ideas without proper or complete acknowledgement." It is the serious academic offence of reproducing someone else's work, including words, ideas and media, without permission for course credit towards a certificate, diploma, degree and/or professional designation. The defining characteristic is that the work is not yours.

"Intentional plagiarism is the deliberate presentation of another's work or ideas as one's own." Intentional plagiarism can be a copy of material from a journal article, a book chapter, data from the Internet, another student, work submitted for credit in another course or from other sources.

"Unintentional plagiarism is the inadvertent presentation of another's work or ideas without proper acknowledgement because of poor or inadequate practices. Unintentional plagiarism is a failure of scholarship; intentional plagiarism is an act of deceit."

### What Are The Students' Responsibilities To Avoid Plagiarism?

Students have a responsibility to read the OC Plagiarism Policy and Procedures outlined in the OC calendar, which is available online at:

http://webapps-1.okanagan.bc.ca/ok/calendar/Calendar.aspx?page=AcademicOffenses

"Students are responsible for learning and applying the proper scholarly practices for acknowledging the work and ideas of others." Students who are unsure of what constitutes plagiarism should refer to the UBC publication "Plagiarism Avoided; Taking Responsibility for your Work". This guide is available in OC bookstores and libraries.

Students must acknowledge the sources of information used on all their assignments. This usually involves putting the authors' name and the year of publication in parentheses after the sentence in which you used the material, then at the end of your paper, writing out the complete references in a Reference section.

Students are expected to understand research and writing techniques and documentation styles. Unless otherwise directed by the professor, use the American Psychological Association (APA) or Modern Language Association (MLA) style and cite references using the APA guidelines. A copy of the APA manual is available in the OC libraries, and the library website has online resources available on both major citing styles.

#### What Are The Penalties For Plagiarism And Cheating?

Okanagan College professors may actively monitor student work for plagiarism or cheating and will follow the Okanagan College Policies when an offense is suspected. A student found to have committed an offense may receive a formal letter of reprimand outlining the nature of the infraction, or further disciplinary action depending on the severity of the offense or whether this is a repeat occurrence. The Dean's Office of the Science, Technology and Health portfolio, along with the College Registrar, record and monitor all reported instances of plagiarism and cheating.