

## Bldg Const-101 (Cal/OSHA Standards). Wednesday Class. 6:00 pm - 9:10 pm

### **Basic Course Information**

Semester:	Spring Semester 2023	Instructor Name:	Hector M. Figueroa, MM
Course Title & #:	BC-101 (OSHA Standards)	Email:	Hector.figueroa@imperial.edu
CRN #:	20910	Webpage (optional):	https://www.imperial.edu/
Classroom:	Room #3112	Office #:	Room #3112
Class Dates:	February 15 – June 7, 2023	Office Hours:	5:00pm – 6:00pm
Class Days:	Wednesday	Office Phone #:	(760) 427-6898
Class Times:	6:00 pm – 9:10 pm	Emergency Contact:	Tisha Nelson Tel. 760-355-6361
Units:	3 Units	Class Format:	In-Person Room #3112

## **Course Description**

This Safety Standards course is designed to afford the student the opportunity to earn the Construction Industry Cal/OSHA 30-Hour card. The course provides student with essential instruction and learning allowing them to develop and master knowledge and skills associated with <u>Safety and Health Hazard Recognition and Prevention at places of work</u>. Topics include: OSHA and Cal/OSHA standards, hazard analysis and identification, industrial hygiene, acceptable safety practices, proper selection and use of personal protective equipment (PPE), job hazard analysis and mitigation measures, hazard communication standards, and inspections, citations/notifications and penalties. Cal/OSHA card processing fee of \$10 will apply. (Non- transferrable, AA/AS degree only).

### Course Prerequisite(s) and/or Corequisite(s)

None. This class is an introductory course to safety, safety process and standards. No previous knowledge in safety is required to take this class, everyone is welcome.

Anyone wanting to learn about Safety in general is welcome to take this course, regardless of your major.

## **Student Learning Outcomes**

Upon course completion, the successful student will have to acquire new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1. Understand the appropriate use of personal protective equipment (PPE) depending on job specifics and the job performed (ILO1)
- 2. Understand code of safe work practices, jobsite hazard analysis and appropriate steps to work/perform a safe and healthy workplace (ILO1, ILO2)
- 3. Understand the purpose of lockout/tag-out of equipment (ILO1, ILO2, ILO5)

## **Course Objectives**

Upon satisfactory completion of the course, students will be able to:



- 1. Demonstrate an understanding of the Occupational Safety and Health (Cal/OSHA) standards as they apply to Construction requirements, and to General Industry (and Electrical Safety Orders).
- 2. Reference the OSHA standards and determine the requirements for compliance within a prescribed situation
- 3. Analyze job site hazards and identify acceptable mitigation measures
- 4. Complete an acceptable incident report and reference OSHA subpart and section
- 5. Demonstrate and understanding of OSHA Inspections, citations and penalties
- 6. List Personal Protective Equipment (PPE) and list one limitation for the use of each PPE item
- 7. List and discuss the application of the Job Hazard Analysis model
- 8. Explain the difference between OSHA Compliance and OSHA Consulting and their role in the industry

#### Textbooks & Other Resources or Links

- Cal/OSHA Construction & Electrical Safety Orders June 2021 Edition SKU: 53B-001-21
- Cal/OSHA General Industry & Electrical Safety Orders June 2021 Edition SKU: 51B-001-21
- Resources: OSHA, Cal/OSHA, EPA websites, and other industry-related websites.
  - o https://www.dir.ca.gov/dosh/
  - o https://www.osha.gov/
  - o <a href="https://www.epa.gov/">https://www.epa.gov/</a>

### **Course Requirements and Instructional Methods**

Required Information—discretionary language, the classroom setting is set for;

- Course material on Canvas HUB
- Industry Related websites (OSHA, Cal/OSHA, EPA, NIOSH, ACGIH, Dig-Alert, ASTM, ANSI, etc.).
- Audio/Visual
- Demonstration and hands-on
- Discussion
- Group Activity
- Individual Assistance
- Lecture
- Simulation/Case Study/Workshop

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

You will use Canvas in this class. Canvas will be our SharePoint site/central HUB for this class. I will place all class material in Canvas, HW is submitted through Canvas and Quizzes and Exams will be done on Canvas.

## **Course Grading Based on Course Objectives**

- Homework assignment every day on Canvas, due the following week one hour before class (29% of total grade).
- Quiz every other week on Canvas (25% of total grade).
- Mid-term on Week 8 or 9 of semester, on Canvas (20% of total grade).

• Final Exam on the last day of class, on Canvas (20% of total grade).

Punctuality, Attendance and In-class Participation are also part of your final grade (6% of total grade).

 Three (3) unexcused absences will get you dropped from class (3 unexcused absences and you will be dropped from class). <u>+6%</u> 100%

29%

25% 20%

20%



- Must meet OSHA requirements to earn the Cal OSHA card (You must earn a C or better in class and you must attend all mandatory and elective topic to earn the 30 hour Cal OSHA Construction Industry card).
- You must do good in all five areas listed above to pass this class (1. Homework assignments, 2. Quizzes, 3. Participation (in-class participation, punctuality, and attendance), 4. Mid-Term Exam, 5. Final Exam).

### **Course Policies**

#### **Classroom Etiquette and Discretionary language**

- <u>Electronic Devices</u>: Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor. No Cell phones use in class! No Computer/tablet use in Class!
- <u>Food and Drink are prohibited in all classrooms</u>: Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- <u>Disruptive Students</u>: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- <u>Children in the classroom</u>: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

### Academic Honesty.

- <u>Plagiarism</u> is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment ;(c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, € use of a commercial term paper service.

#### **Attendance**

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an
  online class will be dropped by the instructor as of the first official meeting of that class. Should re-admission be
  desired, the student's status will be the same as that of any other student who desires to add a class. It is the
  student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences
  exceed the number of hours the class is scheduled to meet per week may be dropped (3 unexcused absences
  will get you dropped from this class).
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.



## **Other Course Information**

- <u>CANVAS LMS</u>: Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use the link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. *Additionally, a 24/7 Canvas Support Hotline is available for students to use: (877) 893-9853*.
- You may consult your college map for the <u>Reading and Writing Lab, Study Skills Center and/or Library</u>
- <u>Library Services</u>: As you know there is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

#### **IVC Student Resources**

#### **Disabled Student Programs and Services (DSPS)**

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. If you feel you need to be evaluated for educational accommodations, the DSP&S office is located in Building 2100, telephone 760-355-6313.

Physical Conditions: Notify the instructor if you have any physical conditions which could possibly affect your safety or health in the performance of the course class/laboratory assignments. Adjustments to your assignments, if necessary, will be made.

## **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

#### **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at <a href="http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762">http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762</a>

#### **Information Literacy**

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at <a href="http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/">http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/</a>

## **Anticipated Class Schedule/Calendar**

## Course Schedule \*\*subject to change without prior notice\*\*

Date or Week	Activity, Assignment, and/or Topic	Assignment
Week 1 2/17/2023	Introductions, Syllabus, Canvas, Bangladesh Shipbreakers exercise	Buy your Books HW #1
Week 2 2/24/2023	Time Management and Organizational Skills Hooked on Safety by Billy Robins, Introduction to OSHA	Quiz #1 HW #2
Week 3 3/03/2023	Focus Four Hazards (Part 1): Caught in between, Struck by, Falls and Electrical Hazards.	HW #3
Week 4 3/10/2023	Focus Four Hazards (Part 2): Caught in between, Struck by, Falls and Electrical Hazards: LOTO, Fall Protection	Quiz #2 HW #4



Date or Week	Activity, Assignment, and/or Topic	Assignment
Week 5 3/17/2023	Managing Safety and Health Programs & Hazard Analysis, IIPP (8 elements), Partnership Programs	HW #5
Week 6	Personal Protective Equipment and Life Saving Devices and.	Quiz #3
3/24/2023	Hierarchy of Controls,	HW #6
	Employer/Employees Responsibilities, Permit required, Rescue	
	Plan, Air Monitoring	
Week 7	Health Hazards in Construction. HCS, GHS,	HW #7
3/31/2023	SDS's, Chemical, Physical, Biological, and Ergonomic Hazards	
Week 8	Health Hazards in Construction. Asbestos, lead, silica, heat	Mid-Term Exam
4/07/2023	illness, bloodborne pathogens	HW #8
Week #9 4/14/2023	Spring Break – No Class this week	Week #9
Week 10	Confine Spaces, and Stairways and Ladders, Excavations and	HW #9
4/21/2023	Tools Hand and Power. Competent Person vs. Qualified Person	
	Cranes, Powered Industrial Vehicles, and Motorized Vehicles,	
	Walking, Working Surfaces and Cal/OSHA Access/Egress	
	Evacuation	
Week 10	Scaffolds in Construction, Material Handling in Construction,	Quiz #4
4/28/2023	and Cranes, Derricks, Hoists, Elevators and Conveyors in Construction	HW #10
Week 11		1114/ #44
5/05/2023	Ergonomics, Material handling, Steel Structures, Concrete and Masonry	HW #11
Week 12	May 13, - Last Day to Drop Class with a "W"	Quiz #5
5/12/2023	Structural Steel Erections, and Welding, Cutting & Brazing	HW #12
5/13/23 – "W"	Hexavalent Chromium (CrVI)	
Week 13	Concrete and Masonry and Fire Protection and Prevention.	HW #13
5/19/2023	Types of fire/extinguishers, PASS, Fire Triangle/Tetrahedron	
Week 14	Electrical Hazards in Construction, Hazards of Static Electricity	Quiz #6
5/26/2023	and LOTO (Lockout / Tagout). Lok out and Tag out.	HW #14
Week 15	Health Hazards in Construction (expansion). Heat Illness	HW #15
6/02/2023	Prevention, Asbestos, Lead, Silica, Noise, Respiratory Hazards/Protection, Blood borne Pathogens, Hanta Virus,	Study for the Final Exam
Week 16	Foundations of Safety Management, Bangladesh Ship Breaker	Final Exam
6/09/2023	video, compare current safety knowledge to day one of class.  Final Q & A	That Exam

# **Grade Scale**

Point Score ( in %)	Letter Grade	
90-100	A – Excellent	
80-89	B – Better than average	
70-79 (C or better to earn card)	C – Average	
60-69	D – Below Average	
59 or lower	F – Fail	



## **Mandatory Class Rules**

- 1. Follow IVC Covid-19 guidelines and regulations.
- 2. Do not attend class if you have Covid-type symptoms.
- 3. Be on time, class starts at 8am sharp. Class is from 6:00pm-9:10pm and you must stay the duration of the entire class to earn full credit and earn the OSHA card.
- 4. If you miss mandatory topics, you will not earn the Cal/OSHA Card. Attendance is Mandatory!
- 5. Do not be late and do not leave early if you want to earn full credit.
- 6. Must submit homework assignments by 5pm on due date, one hour before class.
- 7. Quizzes and Exams by 5pm, one hour before class.
- 8. No make-up sessions for missed classes. If you miss mandatory topics you will earn the OSHA card, these are OSHA's rules.
- 9. Be on time, alert and ready to learn, and participate in class.
  - a. **Note:** Your comments in class must add value to the class.
  - b. **Note:** If you need to take a nap, please do so at couches in the hallway of this building, not in my class. Come back into class when you are fully awake.
  - c. Note: No phone use in class.
- 10. In-class participation is part of your grade; you must participate at least once per class meeting to earn full credit for the in-class participation points (2% of final grade).
- 11. No cell phone use in class! If you need to take a call please step outside to take your call, come back into class when done.
- 12. No computer/tablet use in class. No surfing the net in class. No navigating your social media platforms in class.
- 13. Please contact me if you have questions about anything discussed in class (Power Point presentations, Homework assignments, Quizzes, and or Exams).
- 14. Office hours from 7:00am 8:00am, one hour before class, in person or by cell phone. I can be reached via Canvass, text message and or by IVC email anytime. By telephone, please call me between 8am 8pm only please, or anytime if case of an emergency.



- 15. The cost of Cal/OSHA Cards is \$10. Please pay your \$10 to IVC via PayPal, or in person at the administration office. The link to IVC's PayPal account will be provided to those students who pass the class and meet the other requirements only.
- 16. *Note:* Class Rules are subject to change.

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