

| Basic Course Information |   |   |  |
|--------------------------|---|---|--|
| Semester                 | Spring 2022                                       | Instructor's Name   | Hector M. Figueroa, BS, MM   |
| Course Title & #         | BC-101. Cal/OSHA<br>Construction Safety Standards | Instructor's Email  | <a href="mailto:hector.figueroa@imperial.edu">hector.figueroa@imperial.edu</a> |
| CRN #                    | Class No. 20590                                   | Webpage (optional)  |  |
| Room                     | #3112   | Office (PT Faculty:809)   |  |
| Class Dates              | February 15 - June 7, 2022                        | Office Hours<br>(n/a for PT Faculty)                            | Tuesday; 5-6 pm before class<br>Anytime by Text, Email, or Canvas              |
| Class Days               | Tuesday   | Office Phone #<br>(PT may use dept.<br>number)                  | (760) 427-6898 (8am – 8 pm)  |
| Class Times<br>Units     | 6:00 pm – 9:10 pm<br>3 Units                      | Who students should<br>contact if emergency<br>or other absence | Tisha Nelson @ 760-355-6361  |

### Course Description

Safety Standards is a course designed to afford the student the opportunity to earn the Construction Industry Cal/OSHA 30-Hour card. The course will provide the student with essential instruction and learning allowing the student to develop and master knowledge and skills associated with safety and health recognition and prevention at a worksite. Topics include: OSHA and Cal/OSHA standards, hazard analysis and identification, acceptable safety practices, proper selection and use of personal protective equipment, job hazard analysis and mitigation measures, hazard communication standards, and inspections, citations/notifications and penalties. Cal/OSHA card processing fee will apply. (Non-transferrable, AA/AS degree only)

### 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/performa 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.
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 and Cal/OSHA websites. Other industry-related websites.

### Course Requirements and Instructional Methods

#### Required Information—discretionary language

The classroom setting is set for;

- **Live feed via ConferZoom, course material on Canvas HUB**
- **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.

### Course Grading Based on Course Objectives

**Quiz every other week. Mid-term on Week 8/9 and the Final Exam on the last day of class, all via Canvas. The Quiz' and Exams are subject to change: dates to accommodate class schedules and allow for guest expert speakers.**

### Attendance

#### Required language

- 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. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

### Classroom Etiquette

#### Required Information –Discretionary language

- **This is where an instructor explains his/her policy on these matters. Here is some suggested language:**
- **Electronic Devices:** 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!** **Consider:** specifics for your class/program

- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: 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.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

### Academic Honesty

#### Required Language

- Plagiarism 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.
- Cheating 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

### Additional Help – Discretionary Section and Language

**The instructor can add the information pertinent to his or her class here. Some suggested language:**

- CANVAS LMS: 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 Reading and Writing Lab, Study Skills Center and/or Library
- Library Services: 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.

### Disabled Student Programs and Services (DSPS)

**Required Language:** 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

**Required Language:** 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

**Required Language:** 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 [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)

### Information Literacy

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

### Anticipated Class Schedule / Calendar

**Required Information –Discretionary Language and Formatting:** The instructor will provide a tentative, provisional overview of the reading, assignments, tests, or other activity for the duration of the course. The faculty may find a table format useful for this purpose. **Syllabus Subject to Change.**

| Date               | Activity, Assignment, and/or Topic   | Assignment                 |
|--------------------|--|----------------------------|
| Week #1<br>2/15/22 | Introductions, Syllabus, Canvas, Bangladesh Shipbreakers, Hooked on Safety by Billy Robins   | Buy your Books<br>Homework |
| Week #2<br>2/22/22 | Introduction to OSHA and the history of Cal/OSHA<br>Navigate Cal OSHA and OSHA websites  | Quiz #1<br>Homework        |
| Week #3<br>3/1/22  | Focus Four Hazards (Part 1): Caught in between, Struck by, Falls and Electrical Hazards.   | Homework                   |
| Week #4<br>3/8/22  | Focus Four Hazards (Part 2): Caught in between, Struck by, Falls and Electrical Hazards: LOTO, Fall Protection   | Quiz #2<br>Homework        |
| Week #5<br>3/15/22 | Managing Safety and Health Programs & Hazard Analysis, IIPP (8 elements), Partnership Programs   | Homework                   |
| Week #6<br>3/22/22 | Personal Protective Equipment and Life Saving Devices and Confine Spaces. Hierarchy of Controls, Employer/Employees Responsibilities, Permit required, Rescue Plan, Air Monitoring | Quiz #3<br>Homework        |
| Week #7<br>3/29/22 | Health Hazards in Construction. HCS, GHS, SDS's, Chemical, Physical, Biological, and Ergonomic Hazards   | Study for Mid-Term Exam    |
| Week #8<br>4/5/22  | Stairways and Ladders, Excavations and Tools Hand and Power. Competent Person vs. Qualified Person   | Mid-Term Exam              |
| Week #9<br>4/12/22 | Cranes, Powered Industrial Vehicles, and Motorized Vehicles, Walking, Working Surfaces and Cal/OSHA Access/Egress Evacuation   | Homework                   |

Imperial Valley College Course Syllabus – Course Title and number

|                     |  |  |
|---------------------|--|--|
| Week #10            | Spring Break – No Class this Week.   |  |
| Week #11<br>4/26/22 | Health Hazards in Construction (expansion). Heat Illness Prevention, Asbestos, Lead, Silica, Noise, Respiratory Hazards/Protection, Blood borne Pathogens, Hanta Virus, Histoplasmosis | Quiz#4<br>Homework   |
| Week #12<br>5/3/22  | Scaffolds in Construction, Material Handling in Construction, and Cranes, Derricks, Hoists, Elevators and Conveyors in Construction  | Homework   |
| Week #13<br>5/10/22 | Structural Steel Erections, and Welding, Cutting & Brazing Hexavalent Chromium (CrVI)  | Quiz #5<br>Homework  |
| Week #13<br>5/17/22 | Concrete and Masonry and Fire Protection and Prevention. Types of fire/extinguishers, PASS, Fire Triangle/Tetrahedron  | Homework   |
| Week #14<br>5/24/22 | Electrical Hazards in Construction, Hazards of Static Electricity and LOTO (Lockout / Tagout). Lock out and Tag out.   | Quiz #6<br>Homework  |
| Week #15<br>5/31/22 | Expand on Health Hazards in Construction   | Homework   |
| Week #16<br>5/31/22 | Foundations of Safety Management, Bangladesh Ship Breaker video, compare current safety knowledge to day one of class. Final Q & A   | Homework<br>Study for the Final Exam<br><b>Final Exam</b><br><b>Enjoy your Summer!</b> |

| Grading System  | % of total Grade |
|---|------------------|
| 1. Homework Assignments, Attendance, Punctuality and In-Class Participation | 35%              |
| 2. Quizzes  | 25%              |
| 3. Mid-Term Exam  | 20%              |
| 4. Final Exam   | 20%              |

*\*Must comply with IVC policy on attendance and punctuality.*

| #     | Class Assignments      | Weight in % | Class Assignments      | Earned by student | Weight in % |
|-------|------------------------|-------------|------------------------|-------------------|-------------|
| 1     | Homework               | 29.00%      | Homework               | %                 | 0.00%       |
|       | *Attendance            | 2.00%       | Attendance             |                   |             |
|       | *Punctuality           | 2.00%       | Punctuality            |                   |             |
|       | In-class participation | 2.00%       | In-class participation |                   |             |
| 2     | Quizzes                | 25%         | Quizzes = six          |                   | 0.00%       |
| 3     | Mid-Term               | 20%         | Mid-Term               |                   | 0.00%       |
| 4     | Final Exam             | 20%         | Final Exam             |                   | 0.00%       |
| Total |                        | 100%        | Total Earned           |                   | 0.00%       |

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

### **Mandatory Class Rules!**

1. Face cover mandatory, must wear a face cover / facemask the entire duration of class.
2. Do not attend class if you have covid-type symptoms. Comply with all other IVC mandated covid guidelines.
3. Be on time, class starts at 6 pm sharp. Class is from 6:00pm – 9:10 pm 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 before 5pm on due date. Late HW assignments automatically get 50% off.
7. No make-up sessions for missed classes. If you miss mandatory topics you will earn the OSHA card, these are OSHA's rules.
8. Be on time, alert and ready to learn, and participate. Note: Your comments must add value to the class.
9. In-class participation is part of your grade; you must participate at least once per class meeting to earn full credit for in-class participation points (2% of final grade).
10. **Please Note!** You must submit HW #5 (IIPP) and HW #9 (heat illness prevention plan) in order to pass the class. These two homework assignments are worth 10 points each, a high percentage of your overall grade.
11. No cell phone use in class! If you need to take a call please step outside to take your call.
12. Please contact me if you have questions about anything discussed in class (PowerPoint presentations, Homework assignments, Quizzes, and or Exams).
13. Office hours from 5:00 pm – 6:00 pm, one hour before class, in person or by cell phone. I can be reached via Canvass, text message and or by email anytime. By telephone 8am – 8pm only please.
14. Cost of Cal/OSHA Cards is \$10. Please pay your \$10 to IVC via PayPal, link will be provided at a later time.