

### Basic Course Information

<b>Semester:</b>	Fall 2022	<b>Instructor Name:</b>	Jose Velasquez
<b>Course Title &amp; #:</b>	BLDC 135	<b>Email:</b>	jose.velasquez@imperial.edu
<b>CRN #:</b>	10404	<b>Webpage (optional):</b>	www.imperial.edu
<b>Classroom:</b>	3117	<b>Office #:</b>	3118
<b>Class Dates:</b>	Aug 15 to Dec 10	<b>Office Hours:</b>	M-TH 9:00am -10:00am
<b>Class Days:</b>	Monday & Wednesday	<b>Office Phone #:</b>	760-355-5758
<b>Class Times:</b>	MW 10:15am-11:20am MW 11:20am-12:45pm	<b>Emergency Contact:</b>	760-355-6217
<b>Units:</b>	3	<b>Class Format:</b>	Face to Face  Lecture & Lab

### Course Description

This course is an introductory study of the layout and fabrication of a residential plumbing system. Discussion will include water and wastewater plumbing systems for residential applications. In addition, there will be a component on residential plumbing design, with emphasis on repair and maintenance of fixtures faucets and drains and water leaks. Installations will be guided by the local and national plumbing codes. Learning opportunities will be enhanced through a combination of lectures and laboratory activities. (Nontransferable, AA/AS degree only)

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

BLDC 110 Recommended

### Student Learning Outcomes

1. Explain the importance of locating and protecting underground utilities (critical thinking skills)

2. Demonstrate positive work ethics and demonstrate ability to work well with others and perform group tasks in a timely manner. (Personal Responsibility)
3. Apply information on various tables to determine adequate size of DWV piping and water supply piping. (Critical thinking skills)

### Course Objectives

[Paste in the course objectives from the COR, located at <https://imperial.curricunet.com/Search>]

Upon successful completion of this course, the students will:

1. Demonstrate safe use of tools and equipment
2. Read and understand mechanical drawings of plumbing layouts
3. Identify and explain the function of fittings in water and wastewater systems
4. Calculate proper wastewater pipe size
5. Measure, Cut and solder copper pipes
6. Understand layout and design code requirements for plumbing in residential construction.

### Textbooks & Other Resources or Links

Modern Plumbing. E. Keith Blankenbaker & Charles H. Owenby 8<sup>th</sup> Edition

ISBN-13: 978-1619608634

ISBN-10: 1619608634

### Course Requirements and Instructional Methods

Lab practices and lectures will be face to face from the beginning of the semester and There will be a series of chapter quizzes, tests, and lab assignments as part of the class.



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**Class material such as chapter presentations and assignments will be available on Canvas.  
Field trip to actual house under construction to inspect the rough plumbing**

**Reading and Writing:**

**Write a 2000 word report that will be shared and discussed in class.**

**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**

**Course Grade will be based on a 400point scale**

**A= 90%-100% Excellent**

**B= 80%-89% Good**

**C= 70%-79% Satisfactory**

**D= 60%- 69% Pass, less than satisfactory**

**F= 59%&Below Failing**

**The course grade will be determined by various factors such, as class participation, classroom assignments, chapter reviews & drawing project, midterm & final exams. The grading range is as follows:**

**Chapter Reviews = 100points**

**Laboratory Project = 100points**

**Midterm = 100points**

**Final Exam = 100points**

**Attendance, Late Assignments:**

**Absences and tardiness provide an opportunity to miss valuable instruction presented by the instructor, guest speakers, and site administrators. Tardiness will contribute to lower scores on assignments and subsequently a lower course grade. All assignments are due on the specified completion dates and all students have the same and equal time to complete all assignments as per the course calendar. Considerations will be given to those late**

assignments accompanied by a written medical statement from a physician. 25% of possible points will be penalized for late work. Any assignment can be turned in prior to the due date!

## Course Policies

*[Describe other policies such as attendance, academic honesty, netiquette, expected classroom behavior, etc.]*

- **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 readmission 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. Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences. **Ultimately it is the student responsibility to drop from the course, in the event that they stop coming to class. If a student fails to come to class and fails to drop from the course, will be awarded a Letter grade of an F, for lack of participation in the course and required lab and lecture assignments.****
- **Students are expected to have their cameras on while Zoom(online) instruction is given for lab and lecture classes.**
- **Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.**
- **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 by the instructor.**
- **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**

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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, only students enrolled in the class may attend; children are not allowed.
- **What is netiquette?** Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- **Students are to comply with the following rules of netiquette:** (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the importance of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- **Plagiarism** is taking and presenting 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 "cite a source" correctly, 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 that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing 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 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; (e) using a commercial term paper service.

### Other Course Information

- Students are expected to have their cameras on while Zoom(online) instruction is given for lab and lecture classes.
- 3 or more absences from the lab or the lecture will cause students to be dropped.

### IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

### Anticipated Class Schedule/Calendar

<b>Date or Week</b>	<b>Activity, Assignment, and/or Topic</b>	<b>Pages/ Due Dates/Tests</b>
<b>Week 1</b>	<b>Course Introduction/Basic Safety</b>	
<b>Week 2</b>	<b>Ch. 4 Mathematics &amp; Ch. 5 Hydraulics</b>	
<b>Week 3</b>	<b>Ch. 6 Print Reading and Sketching</b>	
<b>Week 4</b>	<b>Ch. 8 Building and Plumbing Codes</b>	
<b>Week 5</b>	<b>Ch. 9 Soldering, Brazing and Welding</b>	
<b>Week 6</b>	<b>Ch. 11 Water Supply Systems</b>	
<b>Week 7</b>	<b>Ch. 13 Plumbing Fixtures</b>	<b>Midterm</b>
<b>Week 8</b>	<b>Ch. 14 Plumbing Materials and Fittings</b>	
<b>Week 9</b>	<b>Ch. 15 Valves and Meters</b>	
<b>Week 10</b>	<b>Ch. 16 Water Heaters</b>	
<b>Week 11</b>	<b>Ch. 17 Designing Plumbing Systems</b>	
<b>Week 12</b>	<b>Ch. 18 Preparing for System Installation</b>	
<b>Week 13</b>	<b>Ch.19 DWV Pipe and Fitting Installation</b>	



<b>Week 14</b>	<b>Ch. 20 Installing Water Supply Piping</b>	
<b>Week 15</b>	<b>No classes</b>	<b>Nov 21 - Nov 26</b>
<b>Week 16</b>	<b>Ch. 21 Installing Fixtures, Faucets, and App.</b>	<b>Final Exam</b>

**\*\*\*Subject to change without prior notice\*\*\***