#### Imperial Valley College Industrial Technology Division BLDC 165 Concrete Materials, Methods, and Tools Fall 2013

Instructor: Mr. Velasquez Email- jose.velasquez@imperial.edu Phone (760) 355-6758 IVC EXT # 6758 Office: 2100BLDG.

## **Office Hours**

Monday – Wednesday & Friday 11:00am- 12:00pm Thursday 3:00pm- 5:00pm By appointments only Monday 5:00pm- 6:00pm 3:00pm- 6:00pm Tuesday Wednesday 1:00pm- 2:00pm 1:00pm- 2:00pm Thursday 8:30am-11:00am Friday **Division Office: 10** Division Coordinator: Jose Lopez (760) 355-6361 Fax: (760) 355-6552 Units: 4 Semester: Fall 2013 August 19- December 7 (

Class: Saturday 7:00am- 9:05pm	Lecture	Room 1402
Saturday 9:15pm- 3:40pm	Lab	Room 1402

## I. Fall 2013 Important Dates

1	
August 19- Septermber 4	Late Registration
September 2	Holiday-Labor Day; no classes
-	Deadline to Drop full –term classes without
	owing fees and/ or be eligible for refund.
	Deadline to select CR/NC grading option for
	coursed with that option
	▲

November 11	Holiday- Veterans' Day
November 28-30	Holiday- Thanksgiving- No classes Thursday, Friday, Saturday
December 2-7	Last week of classes including final
December 9-13	No classes ( College closed December 16-31)

# **II.** Course Description

This course will continue to prepare the student in the occupational field of cement mason by including learning activities in cement manufacturing, portland

cement types, aggregates, admixtures, reinforcement, material handling, placing, compacting, finishing, hand tooling, and mechanical tools.

## **III.** Course Objectives

Upon successful completion of this course, the students will:

- A. Explain the manufacturing process of cement.
- B. List the five types of Portland cement and explain their differences
- C. Demonstrate a working knowledge of aggregate types and sizes.
- D. Describe the types of reinforcement for concrete.
- E. Discuss the mixing, pouring, and placing of concrete.
- F. Explain the processes and stages of concrete finishing and detailing.
- G. List the essential tools of a cement mason.
- H. Demonstrate safe work practices.

# **Student Learning Outcomes**

- 1. Understand and explain the process of Hydration. (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. Differentiate between the five types of Portland cement. (critical thinking skills)
- 4. Accurately measure and be able to estimate concrete quantities using cubic yards. (critical thinking skills)

# **Course Instructional Calendar**

Week 1	August 24	Intro	duction/Safety
Week 2	August 31	Laboratory ( Laboratory	Concrete materials
Week3	September 7	Laboratory	Reinforcing concrete
Week 4	September 14	Laboratory	Estimating for concrete & materials
Week 5	September 21	Laboratory	Form Safety& Types of Formwork
Week 6	September 28	Laboratory	Foundations
Week 7	October5	Laboratory	Flatwork
Week 8	October 12		Midterm
Week 9	October19	Laboratory	Concrete Finishing

Week10	October26	Detail Finishing (joints &edging) Laboratory
Week 11	November 2	Special types of concrete Laboratory
Week 12	November 9	Types of Footings Laboratory
Week13	November 16	Releases and Color concrete
Week 14	November 23	Concrete Stamping Laboratory
Week 15	November30	Holiday Thanksgiving Laboratory
Week 16	December 7	Final Exams

## Grading System:

A= 90%-100% B= 80%-89% C= 70%-79% D= 60%- 69% F= 59% & Below

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

Class Participation	25%
Laboratory	25%
Midterm	25%
Final Exam	25%

# SAFETY: STUDENTS ARE EXPECTED TO WEAR THEIR OWN SAFETY GLASSES DURING LAB SESSIONS. FAILURE TO WEAR SAFETY GLASSES DURING LAB SESSIONS WILL RESULT IN DISSMISAL OF STUDENT FROM CLASS AND EACH DISSMISAL WILL BE CONSIDERED AN ABSENSE.

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!

#### 1.Tardiness: 3 tardies = 1 absence. (I.V.C. Gen Catalog p.27) 2005-2006 2.Absences: 3 absences = automatic drop. (I.V.C.Gen. Catalog p. 27-28)2005-2006

Quote: - <u>Lily Tomlin</u> "The road to success is always under Construction"

### **Course Text**

**Modern Carpentry.** Essential Skills for the Building Trades, 11<sup>th</sup> Edition. Willis H. Wagner & Howard Bud Smith. G-W Publisher

### **IV.** Students with Disabilities

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Program & Services (DSP&S) office for assistance as soon as possible.

DSP&S Room 2117 Health Sciences Building (760) 355-6312 (syllabus and assignment dates subject to change)