

Imperial Valley College  
Industrial Technology Division  
BLDC 185 Concrete Footings, Flatwork, and Detail  
Fall 2012

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**Office:** 2100 BLDG

**Office Hours**

Monday 10:00am- 11:30am  
Tuesday 10:00am- 11:30am  
Wednesday 4:00pm- 5:00pm  
Thursday 10:00am- 11:30am  
Friday 10:00am- 11:30am

**By appointments only**

Monday 5:00pm- 6:00pm  
Tuesday 3:00pm- 6:00pm  
Wednesday 1:00pm- 2:00pm  
Thursday 3:00pm- 6:00pm  
Friday 1:00pm- 5:00pm

Division Office: 10

Division Coordinator: Jose Lopez (760) 355-6361 Fax: (760) 355-6552

Units: 4

Semester: Fall 2012 August 20- December 7

Class: Saturday 7:00am- 2:05am Lecture Room 1402

Saturday 2:15pm – 4:20pm Laboratory Room 1402

**I. Course Description**

This course is the study of concrete construction to include the skills and understanding necessary for the entry-level cement mason to locate, layout, and complete the formwork for footings. Included will be elements of flatwork concrete construction and decorative non- traditional detail work.

**II. Course Objectives**

Upon successful completion of this course, the students will:

Demonstrate safe work practices.

Explain the advantages /disadvantages to the different types of forms and formwork techniques.

Describe the three fundamental types of footings.

Calculate concrete volume (cubic yards) to flatwork (square footage).

Detail the location of joints, expansion joints, control joints, and edging.

Explain the differences in finishing techniques between decorative concrete and conventional.

**Student Learning Outcome (SLO)**

**Critical Thinking Skills**

Students will identify and describe the various steps of pouring and finishing concrete.

**Information Literacy**

Students will be able to compare the typical concrete mix proportions in relation to the amount of water used to mix the concrete, as evidenced by research on the effects of excessive water in concrete.

### **III. Course instructional schedule**

<b>Week 1.</b>		<b>Introduction/Safety</b>
	<b>Laboratory</b>	
<b>Week 2</b>		<b>Concrete materials</b>
	<b>Laboratory</b>	
<b>Week3</b>		<b>Reinforcing concrete</b>
	<b>Laboratory</b>	
<b>Week 4</b>		<b>Estimating for concrete &amp; materials</b>
	<b>Laboratory</b>	
<b>Week 5</b>		<b>Form Safety&amp; Types of Formwork</b>
	<b>Laboratory</b>	
<b>Week 6</b>		<b>Foundations</b>
	<b>Laboratory</b>	
<b>Week 7</b>		<b>Midterm</b>
	<b>Laboratory</b>	<b>Flatwork</b>
<b>Week 8</b>		<b>College closed for spring recess. No Classes</b>
		<b>College closed for spring recess. No Classes</b>
<b>Week 9</b>		<b>Concrete Finishing</b>
	<b>Laboratory</b>	
<b>Week10</b>		<b>Detail Finishing (joints &amp;edging)</b>
	<b>Laboratory</b>	
<b>Week 11</b>		<b>Special types of concrete</b>
	<b>Laboratory</b>	
<b>Week 12</b>		<b>Types of Footings</b>
	<b>Laboratory</b>	
<b>Week13</b>		<b>Releases and Color concrete</b>
	<b>Laboratory</b>	
<b>Week 14</b>		<b>Concrete Stamping</b>
	<b>Laboratory</b>	
<b>Week 15</b>		<b>Decorative concrete</b>
	<b>Laboratory</b>	

## Week 16

## 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%

### 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:

- Lily Tomlin

**“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)

