

COURSE SYNOPSIS
HONOLULU COMMUNITY COLLEGE
AEC 136
STRUCTURAL DRAWING

FALL 2012

INSTRUCTOR:	MICHAEL JENNINGS
CLASS LOCATION:	BUILDING 2, ROOM 614
CLASS HOURS:	8:30 – 11:45 AM TUESDAY AND THURSDAY
OFFICE LOCATION:	BUILDING 2, ROOM 615
OFFICE HOURS:	12:00 - 1:00 PM MONDAY-THURSDAY 9:30-10:30 AM FRIDAY
OFFICE PHONE:	845-9408
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- A. **PURPOSE:**
This course is an introduction to structural drawing for building construction including concrete, steel and wood plan and detail drawing with CAD software. Emphases are on roof framing, lintels and beams, as well as posts and columns. The goal of this course is to develop in students a "sense" and basic understanding of structure and structural detailing in building construction.
- B. **OBJECTIVES:**
1. Prepare floor framing plans for buildings with steel, concrete and wood structural systems.
 2. Prepare details and sections of buildings with steel, concrete and wood structural systems.
 3. Demonstrate the use of basic welding symbols.
 4. Demonstrate the preparation of detail drawings sheets using different scaled drawings.
 5. Use the Steel Manual to select the proper sectional characteristics for a given structural steel building component.
 6. Demonstrate oral and written communication, computation and problem-solving skills appropriate to the level of the coursework.
 7. Report to a workplace regularly and punctually, engage effectively and congenially with peers and supervisors, work from written as well as oral instructions, use assigned time efficiently for productive work and meet production deadlines.
- C. **COURSE STRUCTURE:** 1 hour lecture, 6 hours lab per week
- Unit 1. Overview of Structural Drafting and Preliminary Structural Design
 - Unit 2. Structural Wood Drafting
 - Unit 3. Structural Pre-cast Concrete Drafting
 - Unit 4. Structural Poured-In-Place Concrete Drafting
 - Unit 5. Structural Steel Drafting
- D. **TEXT BOOK:**
NONE

REFERENCE MATERIALS:
As provided or required by instructor

E. GRADING:

Quizzes, Homework:	=	20% of course grade
Drawing Assignments:	=	35% of course grade
Exams:	=	30% of course grade
Attendance AND Participation:	=	15% of course grade

Attendance will be graded as follows:

No absences:	A+
One absence:	A
Two absences:	B+
Three absences:	B
Four absences:	C+
Five absences:	C
Six absences:	D
Seven or more absences:	F

Absences for which a medical or court appearance excuse is provided (professional letterhead is required) will be recorded but not figured in the attendance grade. Any significant tardy or early departure from class will be figured as a half absence. Since this is a vocational education course, attendance is as important in class as it is in the professional workplace. Students may take ONE free absence for personal reasons without penalty if they notify the instructor before the beginning of the class period to be missed.

F. SUPPLIES:

- 18" or 24" wide roll of yellow or white tracing/sketch paper
- 1 USB Flash Drive (2 GB Recommended)
- 8 1/2" x 11" or 11" x 14" duplicating paper for use with inkjet printer (As needed)

G. CLASSROOM POLICIES:

1. Professional courtesy, respect and language toward the instructor and your fellow students is expected in the classroom at all times. Refer to the college catalog for college policies on nondiscrimination and affirmative action.
2. Plagiarism, cheating and copying of work done by others is not tolerated. Refer to the college catalog for college policies on student conduct.
3. Project deadlines: All projects are to be turned in at the end of the class period on the due day unless otherwise specified by the instructor. Project assignments that are turned in late will be evaluated then dropped one grade for each calendar day beyond the deadline.
4. Clean up: Keep your own area and common areas neat and clean.
5. Personal audio devices: The operation of personal audio devices is not permitted in class during lecture periods. The instructor may allow them during non-lecture periods only if headphones are used and only upon approval.
6. Food: Food and beverages shall not be consumed in the classroom.
7. Classroom Time: No drawing or other work is permitted during lecture or demonstration periods. Lab time shall be spent on work assigned in this class only.
8. Cellular Phones: During class, all cellular phones should be turned off, or alternately, ringers may be set to silent or discreet settings so as to not disturb your classmates or instructor. All calls are to be taken outside of the classroom area. Students whose ringers interrupt class will receive a warning on the first occurrence and will be asked to leave on the second occurrence. The student will receive an unexcused absence on the second occurrence.

H. FINAL EXAM DATE:

The final drawing will be due on Tuesday, December 11th, 2012 at 12:00 pm in room 616.

HAVE A GREAT SEMESTER!!!