

**CONS 61 Course Outline as of Fall 2002****CATALOG INFORMATION**

Dept and Nbr: CONS 61 Title: BLUEPRINTS: NON-RES

Full Title: Blueprint Reading: Non-Residential

Last Reviewed: 4/16/2007

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	2.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

Language of blueprints and specifications as applied to non-residential construction including: use of scales; drawing symbols and conventions in sketching; interpreting structural, electrical and mechanical documentation; role and work of consultants; drawing content interpretation; specification and code requirement interpretation.

**Prerequisites/Corequisites:**

Course Completion of CONS 60 ( or CONS 270 or CONS 370 or CONS 82)

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Language of blueprints and specifications as applied to non-residential construction including: use of scales, drawing symbols and conventions in sketching, work of consultants, drawing content interpretation, specification interpretation, and code requirement interpretation. (Grade Only)

Prerequisites/Corequisites: Course Completion of CONS 60 ( or CONS 270 or CONS 370 or

CONS 82)

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

### **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>			Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>			Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>			Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective:	Fall 2002	Inactive:	Summer 2012
<b>UC Transfer:</b>		Effective:		Inactive:	

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

### **COURSE CONTENT**

**Outcomes and Objectives:**

The student will:

1. Use the architectural scale to interpret drawings and to prepare sketch assignments.
2. Analyze architectural drawings and describe the relationships between them.
3. Retrieve information from architectural working drawings including: Site Plan, Floor Plan, Foundation and Floor Framing Plan, Roof Framing Plan, Sections, Details, Exterior and Interior Elevations and Utility Plans, and consultant drawings including: structural, electrical, mechanical and plumbing.
4. Identify architectural symbols used in construction drawings and use them to prepare sketch assignments.
5. Analyze working drawing information as it relates to Code requirements.
6. Evaluate working drawing information as it relates to specification requirements.
7. Synthesize working drawing content by preparing sketch solutions to problems.

**Topics and Scope:**

1. Introduction to the design process for non-residential buildings
  - a. Professional roles
  - b. Documentation (working drawings & specifications)
2. Review of scale use
  - a. Measuring components of working drawings

- b. Preparing sketches
- 3. Review of freehand sketching & lettering techniques
  - a. Use of tools
  - b. Professional Standards
- 4. Creating orthographic projections
  - a. 3-view drawings
  - b. Elevations
  - c. Sections
- 3. Symbols and conventions used in architectural working drawings
- 4. Working Drawing types and relationships
  - a. Site Plan
  - b. Floor Plan,
  - c. Foundation and Floor Framing Plan
  - d. Roof Framing Plan
  - e. Sections
  - f. Details
  - g. Exterior and Interior Elevations
  - h. Utility Plans
- 5. Working drawing content by drawing type, and consultant drawings
  - a. Structural
  - b. Electrical
  - c. Mechanical and plumbing
- 6. Common non-residential Code requirements
  - a. Relationship to plan check documents
  - b. relationship to drawings.
- 7. Common non-residential specification information and relationship to drawings
  - a. Organization
  - b. Division content
  - c. Description of materials
- 8. Coordination of architectural drawings with structural, electrical, mechanical and plumbing plans

**Assignment:**

- 1. Readings in text.
- 2. Completing exercises from text.
- 3. Sketching technique exercises.
- 4. Interpreting working drawings.
- 5. Interpreting common non-residential Code requirements.
- 6. Interpreting common non-residential specifications information.
- 7. Sketching solutions to problems.
- 8. Written assignments involving analysis and synthesis of course material.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework

Writing  
10 - 20%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Quizzes, Exams

Problem solving  
25 - 40%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams

Skill Demonstrations  
25 - 40%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion

Exams  
20 - 30%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

CLASS PARTICIPATION

Other Category  
5 - 10%

**Representative Textbooks and Materials:**

Del Pico, Wayne. Blueprint Reading. R.S Means, 1995.