

Course Outline

Winter 2005

Division: Business, Engineering & Information Technology	
Program/Dept: Architectural Engineering Drafting	
Course Number: TDR 124	Credits: 5.0 Variable:
Course Title: Materials and Methods of Construction	
Inst. Intent: 21 Vocational Preparatory	CIP: 15.1304
Fee: None Type:	

Degree/Certificate Requirement:	Yes		
Name of Degree/	Architectural Engineering Drafting		
Certificate Requirements:	Associate of Applied Science Degree		
Distribution Requirement for AA/AAS:	Yes		
Transfer Status to 4-year institution:	No		
If yes, please describe:			
Course Length:	Based on 11 wks/qtr.	Class Size:	24
Course Contact Hours:	55 hrs.		
Lecture:	55	Lab:	Clinical: Other:
Prerequisite:	None	If yes, please describe:	
Required Placement Tests:	No	If yes, please describe:	
Comments:			

Course Description: Introduces the basic materials used in construction, with discussion of manufacturing, fabrication, design and assembly processes for large and small buildings. Focus on Steel, concrete wood and masonry construction.
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Course Outcomes/Learning Objectives:

1. To introduce the student to the basic materials used in the construction of buildings in the Northwest.
2. To provide the student with a working vocabulary and a knowledge of construction methods.
3. To develop in the student the ability to describe materials and construction methods using notes and hand drawn sketches.

NSCC General Education Outcomes and/or Related Instructional Outcomes (for technical courses) Met by Course: (list each outcome):

- Outcome 4. Demonstrate the ability to access, evaluate and apply information from a variety of sources and a variety of contexts.
- Outcome 10. Identify and understand fundamental concept of the physical and life sciences and the effect that the uses of these concepts and resulting technologies have on the individual, on society and on the biosphere.

Topical Outline and/or Major Divisions:

- I Introduction-to TDR 124**
 - A. Course content
 - B. Class procedures
 - C. Course objectives
- II Introduction to Construction/design Industry**
- III. Site Report Requirements**
 - A. Construction site organization
 - B. Written format and sketches
 - C. Construction site etiquette
- IV. Introduction to Construction Materials**
 - A. Concrete and reinforcing steel
 - B. Masonry
 - C. Steel and other metals
 - D. Wood and manufactured materials
 - E. Finish materials
- V. Introduction to Construction Methods**
 - A. Site work and foundations
 - B. Forming and placing of concrete
 - C. Masonry methods
 - D. Framing and assembly
 - E. Closing-in process
- VI. Identifying Future Employment Possibilities**
 - A. Workplace expectations
 - B. Professional ethics
- VII. Evaluations**

