

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: INTRODUCTION TO SCAFFOLDING I

CODE NO. : CTT 132 **SEMESTER:** 2

PROGRAM: CONSTRUCTION TRADES TECHNIQUES

AUTHOR: SAM SPADAFORA

DATE: JAN. 12, **PREVIOUS OUTLINE DATED:**
2009

APPROVED: **“Corey Meunier”**
CHAIR _____
DATE

TOTAL CREDITS: 1

PREREQUISITE(S): NONE

HOURS/WEEK: 3

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I. COURSE DESCRIPTION:

This course focuses on the methods and procedures used in scaffold erection and dismantlement. Students will learn how to interpret scaffolding requirements from blueprint, layout and sketches. The use of scaffold inspection procedures will be covered as well as methods and processes in base preparation, placement of scaffold mudsill and components. They will also learn to install three scaffolding system types including standard frame, tube and clamp, as well as stick built.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. *Interpret scaffolding requirements from blueprints, layout and sketches according to industry standards of practice.*

Potential Elements of the Performance:

- Identify relevant symbols and notation
- Interpret scaffold location requirements from blueprint
- Interpret scaffolding material requirements from blueprint and schedule
- Interpret scaffolding layout
- Interpret work sketches
- Interpret industry standards of practice

2. *Describe methods and procedures required for scaffold inspection prior to installation according to company and occupational health and safety standards.*

Potential Elements of the Performance:

- List required personal protective equipment
- Read blueprints and work sketches
- Interpret material list requirements
- Identify scaffolding system and components
- Describe pre-installation inspection procedures for a scaffolding system and components
- Describe tagging of components
- Demonstrate scaffold inspection procedures
- Illustrate related company policy
- Interpret related occupational health and safety legislation

3. Describe methods and procedures required for scaffold base preparation according to company and occupational health and safety standards.

Potential Elements of the Performance:

- List required personal protective equipment
- Identify base preparation tools including:
 - Shovels
 - Chains
 - Tapes
- Describe surveying methods in relation to the scaffold base
- Describe area layout procedures for the scaffold base
- Describe the use of stated base preparation tools
- Interpret work coordination activities in relation to heavy equipment, including:
 - Bulldozers
 - Excavators
- Describe procedures for the excavation of the base area
- Demonstrate the use to base preparation tools
- Illustrate related company policy
- Interpret related occupational health and safety legislation

4. Describe methods and procedures required for the placement of scaffold mudsill and components according to site and occupational health and safety standards.

Potential Elements of the Performance:

- List required personal protective equipment
- Read required blueprints
- Identify mud sill component materials, including:
 - Planks
 - Concrete
 - Blocking
- Describe layout procedures for the location of the mudsill
- Describe procedures to check the base level
- Describe procedures to check soil compaction
- Describe procedures to place stated mudsill component materials
- Demonstrate the installation of mudsill components
- Interpret job site specifications
- Interpret related occupational health and safety Legislation

5. Describe the methods and procedures required to install three scaffolding system types (standard frame, tube and clamp, stick built) according to manufacturer, engineering, blueprint and occupational health and safety standards

Potential Elements of the Performance:

- List required personal protective equipment
- Read related blueprints;
- Identify three scaffolding systems and respective components, including: standard frame, tube and clamp and stick built
- Identify hand and power tools used in the erection and dismantlement of each scaffolding system type, including:
 - (1) transits and levels
 - (2) String line
 - (3) Plumb bob
 - (4) Wrenches
 - (5) Impact tools
- Describe the installation procedures associated with the placement of a screw leg
- Describe the use of stated hand and power tools in the erection of each scaffolding system type
- Describe the procedures to check alignment during Installation
- Demonstrate basic installation procedures for selected scaffolding system
- Describe manufacturer specifications
- Interpret engineering specifications
- Interpret occupational health and safety legislation

III. TOPICS:

1. Interpret scaffolding requirements from blueprints, layout and sketches
2. Scaffold inspection prior to installation
3. Scaffold base preparation
4. Placement of scaffold mudsill and components
5. Installation of three scaffolding system types (standard frame, tube and clamp, stick built)

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- T.B.A.
- Various handouts provided by the instructor

V. EVALUATION PROCESS/GRADING SYSTEM:

You will be assigned a final grade on the successful completion of assignments, quizzes, field work and tests, weighed as follows:

Theory Testing	40%
Application Exercises	50%
Final Assessment	<u>10%</u>
TOTAL	100%

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

VI. SPECIAL NOTES:

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.