

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title; QUANTITY SURVEYING II
Code No. : SUR 243-3
Program: CIVIL/CONSTRUCTION
Semester: THREE
Date: MAY, 1983
Author: W. R. DAVIES

New:

Revision:

APPROVED:

^{JA}
Chairperson

*J. Davies**

Date

QUANTITY SURVEYING II

Course Name

SUR 243-3

Course Number

PHILOSOPHY/GOALS:

1. Continuing from SUR 242, to further the understanding of mode of measurement of heavy civil engineering and architectural works.
2. To develop accuracy and form of presentation for a complete engineering and building project.

MOD OF ASSESSMENT:

Course Work	20
Final Civil Project	40
Final Architectural Project	40
	100%

TEXTBOOK:

C.I.Q.S. Method of Measurement

TEXT:

Method of Measurement of Construction Works - C.I.Q.S.
SI Edition
Highway Materials Semester - Atkins

Topic No.	Suggested Periods	Topic Description	Reference
1	20	<u>CONCRETE</u> A detailed study of a number of reinforced and prestressed concrete structures	
2	4	<u>MASONRY</u> General, unit masonry and stone	
3	7	METALS Structural Decking Ornamental	
4	4	<u>CARPENTRY</u> Rough Finish Custom	
5	3	<u>MOISTURE PROTECTION</u> Waterproofing Damp-Proofing Insulation Roofing	
6	2	<u>DOORS AND WINDOWS</u> Metal/Wood doors Metal/Wood windows Fittings Glass and glazing	
7	3	<u>FINISHES</u> Plaster, Drywall Tiling Terrazo Accoustic Wood Flooring Fire Resistance Painting	
8	2	<u>GENERAL</u> Record Keeping	

QUANTITY SURVEYING II

SUR 243-3

GENERAL OBJECTIVES;

1. Continuing on from SUR 242-3 to explore and gain an understanding of the mode of construction and measurement of all the civil and architectural aspects of construction.
2. To develop an excellence in both accuracy and form of presentation of building quantities.

SPECIFIC OBJECTIVES:

Unit 1 - Concrete (5.3)

1. Prepare a take-off and bill of all quantities for a reinforced concrete industrial structure.
2. Prepare a take-off and bill of all quantities for a reinforced concrete multi-span bridge.
3. Prepare a schedule of all cables and anchorage requirement for a prestressed concrete structure.

Unit 2 - Masonry (5.4)

1. Prepare a take-off and bill of all masonry including workmanship, cleaning and mortar quantities for a typical residence.
2. Prepare a unit masonry take-off for both brick and blockwork for a typical residence.

Unit 3 - Structural Metal (5.5)

1. Prepare a take-off of all structural steel in a light industrial building.
2. Prepare a take-off of all metal decking in a light industrial building.
3. Prepare a take-off of all miscellaneous and ornamental ironwork for a typical factory building.

Unit 4 - Carpentry (5.6)

1. Prepare a take-off of all the rough carpentry for a typical residence.
2. Prepare a take-off of all the finish carpentry for a typical residence.

3. Prepare a take-off of all custom woodwork in a school or college.

Unit 5 - Moisture Protection (5.7)

1. Prepare a take-off for the waterproofing of a typical industrial basement.
2. Prepare a take-off of the roofing and insulation for a large industrial building.

Unit 6 - Doors, Glass and Windows

1. Prepare a take-off of doors, frames, windows, and glassing for a typical institutional building.
2. Prepare a take-off of all metal curtain walling for a typical office building.

Unit 7 - Finishes

1. Prepare a take-off for the wall finish of a building employing either lath or plaster or dry-walling.
2. Prepare the take-off for a floor area finished in either tile or terrazo.
3. Prepare the take-off for finish of a building imparting either fire resistance or accoustical properties.
4. Prepare the take-off for all painting and wall decoration to a typical residence.

Unit 8 - General

1. Maintain a complete continuous and indexed record of all take-off sheets and resulting bills of quantities.

QUANTITY SURVEYING II

SUR 243-3

Criteria for assessing work. The proportions of a student's total will be allocated as follows:

<u>UNIT</u>	<u>GRADE ALLOCATION</u>
1. Concrete - assignment A	15
- assignment B	20
2. Masonry	10
3. Metals	15
4. Carpentry	10
5. Moisture protection	5
6. Doors and Windows	5
7. Finishes	5
8. General	15
	100%