STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK

MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
CONS151 – Building Trades Blueprint Reading/Drafting

Created by: Stan Skowronek

Updated by: Paul Todd

Canino School of Engineering Technology

Department: Civil and Construction Technology Department

Semester/Year: Fall 2018

A. **TITLE**: Building Trades Blueprint Reading/Drafting

B. **COURSE NUMBER:** CONS151

C. **CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)**

 # Credit Hours: 2
 # Lecture Hours: 1 **per week**
 # Lab Hours: 2 **per week**
Other: **per week**

Course Length: 15 **Weeks**

D. **WRITING INTENSIVE COURSE**: Yes ☐ No ☒

E. **GER CATEGORY: None:** ☒ **Yes:** GER
***If course satisfies more than one*:** GER

F. **SEMESTER(S) OFFERED: Fall** ☒ **Spring** ☐ **Fall & Spring** ☐

G. **COURSE DESCRIPTION:**

Instruction includes understanding the fundamental concepts in freehand sketching and instrument drawing needed for communication in the construction industry. Orthographic projection, pictorials and perspective drawing techniques will be introduced. A variety of drawings will be studied in order to become familiar with information contained on them and how they are interpreted. CERTIFICATE/AAS ELECTIVE CREDIT ONLY. One hour lecture, two hours laboratory per week.

H. **PRE-REQUISITES: None** ☒ **Yes** ☐ **If yes, list below:**

CO-REQUISITES: None ☒ **Yes** ☐ **If yes, list below:**

I. STUDENT LEARNING OUTCOMES: (*see key below*)

By the end of this course, the student will be able to:

Course Student Learning Outcome [SLO]	***Program Student Learning Outcome [PSLO]***	***GER*** *[If Applicable]*	***ISLO & SUBSETS***	
A.To develop an understanding of sketching as it relates to the building construction field		N/A	1-Comm Skills ISLO ISLO	W Subsets Subsets Subsets
B. Utilize measurement systems for linear, area, and volumetric measurement		N/A	5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets
C. Navigate building prints and understand the information on them		N/A	2-Crit Think 5-Ind, Prof, Disc, Know Skills ISLO	IA None Subsets Subsets
D. Understand HVAC system prints and perform takeoffs for materials		N/A	2-Crit Think ISLO ISLO	IA Subsets Subsets Subsets
E. Understand plumbing prints and perform takeoffs for materials		N/A	2-Crit Think ISLO ISLO	IA Subsets Subsets Subsets
F. Navigate supplier catalogs to source components		N/A	5-Ind, Prof, Disc, Know Skills ISLO ISLO	None Subsets Subsets Subsets

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KEY	**Institutional Student Learning Outcomes [ISLO 1 – 5]**
ISLO #	**ISLO & Subsets**
1	**Communication Skills** Oral [O], Written [W]
2	**Critical Thinking** *Critical Analysis [CA] , Inquiry & Analysis [IA] , Problem Solving [PS]*
3	**Foundational Skills** *Information Management [IM], Quantitative Lit,/Reasoning [QTR]*
4	**Social Responsibility** *Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]*
5	**Industry, Professional, Discipline Specific Knowledge and Skills**

*Include program objectives if applicable. Please consult with Program Coordinator

J. APPLIED LEARNING COMPONENT: Yes ☒ No ☐

If YES, select one or more of the following categories:

- ☒ Classroom/Lab
- ☐ Internship
- ☐ Clinical Placement
- ☐ Practicum
- ☐ Service Learning
- ☐ Community Service
- ☐ Civic Engagement
- ☐ Creative Works/Senior Project
- ☐ Research
- ☐ Entrepreneurship (program, class, project)

K. TEXTS:

Brown, Dorfmueller, Print reading For Construction, 6th ed ,Goodheart- Willcox

L. REFERENCES:

N/A

M. EQUIPMENT: None ☐ **Needed:** Basic sketching equipment (architectural 3 sided scale, mechanical pencil)

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

Exams, Quizzes, and Assignments

P. DETAILED COURSE OUTLINE:

I. Introduction
A. Math review
B. Measurement systems
C. Orthographic projection
D. Sketching
II. Architectural plans
A. Plot plans
B. Floor plans
C. Elevations
D. Details
E. Schedules
III. Equipment plans
A. Electrical
B. Plumbing
C. HVAC
D. Material takeoffs
IV. Sourcing
A. Takeoffs & schedules

B. **Manufacturer data**
C. **Supplier resources**

Q. **<u>LABORATORY OUTLINE</u>: None ☒ Yes ☐**