

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



MASTER SYLLABUS

COURSE NUMBER – COURSE NAME

CONS 476 – Pre-Capstone Project

CIP Code: 15.0201

For assistance determining CIP Code, please refer to this webpage

<https://nces.ed.gov/ipeds/cipcode/browse.aspx?v=55>

or reach out to Sarah Todd at todds@canton.edu

Created by: Dr. Adrienne C. Rygel

Updated by: Dr. Adrienne C. Rygel

**Canino School of Engineering Technology
DEPARTMENT of Civil and Construction Technology
Fall 2023**

A. TITLE: Pre-Capstone Project

B. COURSE NUMBER: CONS 476

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

Credit Hours: 1

Lecture Hours ___ per Week

Lab Hours 2 per ___ Week

Other ___ per Week

Course Length (# of Weeks): 15

D. WRITING INTENSIVE COURSE: No

E. GER CATEGORY:

Does course satisfy more than one GER category? No If so, which one?

F. SEMESTER(S) OFFERED: (Fall, Spring, or Fall and Spring) Fall

G. COURSE DESCRIPTION:

This course provides a learning experience that allows a student to review technical literature and propose a related project. This could be a study of a problem and solution, a new project design, improvement of a design, testing and experimentation, assessment, or a number of other project concepts. Over the course of the semester students will work with faculty to propose a project that they will work on in the following semester as their capstone project. All projects must be approved by course faculty.

H. PRE-REQUISITES: Completion of at least 5 semesters or approval by the faculty member.

CO-REQUISITES: None

I. STUDENT LEARNING OUTCOMES:

<u>Course Student Learning Outcome [SLO]</u>	<u>PSLO</u>	<u>GER</u>	<u>ISLO</u>
a. Select and apply knowledge, techniques, skills, and modern tools in civil and environmental engineering technology to narrowly and broadly defined engineering technology activities.	2488: 1		5
b. Summarize and synthesize technical literature related to a topic.	2488: 2		5

c. Propose a project and present it in a formal, technical, industry standard style written document.	2488: 3		5
d. Have ability to identify narrowly or broadly defined engineering technology problems.	2488: 4		5
e. Have ability to function effectively as a member and/or leader of a technical team.	2488: 5		4 (T)
f. Be able to communicate effectively and professionally through proper use of verbal, written, and graphical techniques.	2488: 3		1 (O)(W)
g. Have the ability to engage in self-directed continuous professional development.	2488: 6		5
h. Have developed an understanding of and have a commitment to address professional, ethical, and diversity issues and responsibilities.	2488: 6		4
i. Have knowledge of the impact of engineering technology solutions in a societal and global context.	2488: 6		4
Have a commitment to quality, timeliness, and continuous improvement.	2488: 6		5

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

APPLIED LEARNING COMPONENT: **Yes_x_____** **No_____**

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

Classroom/Lab_x___
Internship_____
Clinical Practicum_____
Practicum_____
Service Learning_____
Community Service_____

Civic Engagement_____
Creative Works/Senior Project_____
Research_____
Entrepreneurship_____
(program, class, project)

K. TEXTS: N/A

L. REFERENCES: Project specific

M. EQUIPMENT: CEET laboratories are used. Students are responsible for materials or components that may be needed to complete an approved project if they cannot be provided by the department.

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

- Project proposal
- Oral presentation
- Other project deliverable specific to the project

P. DETAILED COURSE OUTLINE:

I. Review of possible projects with faculty

II. Selectin of Project

III. Literature Review

A. Conduct technical literature review on topic

B. Prepare properly cited technical literature review written summary, which will make up the Background section of the Project Proposal

IV. Project Proposal

A. Prepare written proposal for project

B. Proposal will have Full Report style

C. Content Sections

a. Background

b. Problem, Goal, Solution

c. Objective and Approach

d. Deliverables

e. Project management (work flow, communication plan, assignments – who leads what component)

f. Schedule

D. Draft report (minimum 1, possibly multiple) and Final report will be prepared and evaluated

V. Presentation of Project Proposal

Q. LABORATORY OUTLINE: