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

MASTER SYLLABUS

CIVL 476 – Pre-Capstone

CIP Code: 14.0801

Created by: Dr. Adrienne C. Rygel

Canino School of Engineering Technology
DEPARTMENT of Civil and Construction Technology
Fall 2026

A. TITLE: Pre-Capstone

B. COURSE NUMBER: CIVL 476

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

# Credit Hours per Week	**1**
# Lecture Hours per Week	
# Lab Hours per Week	**2**
Other per Week	

D. WRITING INTENSIVE COURSE:

Yes	
No	x

E. GER CATEGORY:

Does course satisfy a GER category(ies)? If so, please select all that apply.

[1-2] Communication	
[3] Diversity: Equity, Inclusion & Social Justice	
[4] Mathematics & Quantitative Reasoning	
[5] Natural Science & Scientific Reasoning	
[6] Humanities	
[7] Social Sciences	
[8] Arts	
[9] US History & Civic Engagement	
[10] World History & Global Awareness	
[11] World Languages	

F. SEMESTER(S) OFFERED:

Fall	x
Spring	
Fall and Spring	

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 in the Civil Engineering 4-yr program, or approval by the faculty member.
CO-REQUISITES:

I. STUDENT LEARNING OUTCOMES:

Course Student Learning Outcome [SLO]	***PSLO***	***GER***	***ISLO***
a. Identify and formulate a complex engineering problem by applying principles of engineering, science, and mathematics.	SO1		ISLO 5
b. Summarize and synthesize technical literature related to a topic.	SO3		ISLO 5
c. Propose a project and present it in a formal, technical, industry standard style written document.	SO3		ISLO 1(W)
d. Be able to communicate effectively and professionally through proper use of verbal, written, and graphical techniques.	SO3		ISLO 1 (O)(W)
e. Have an ability to recognize ethical and professional responsibilities in engineering situations and demonstrate consideration of global, social, economic, and/or environmental impacts that may be incorporated in the proposed project.	SO4		ISLO 4 (ER)
f. Have an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.	SO5		ISLO 4 (T)
g. Have an ability to develop an experiment to draw conclusions.	SO6		ISLO 5
h. Have an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	SO7		ISLO 5

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**

J. APPLIED LEARNING COMPONENT:

Yes	x
No	

If yes, select [X] one or more of the following categories:

Classroom / Lab	x	Community Service	
Internship		Civic Engagement	
Clinical Practicum		Creative Works/Senior Project	
Practicum		Research	
Service Learning		Entrepreneurship [program, class, project]	

K. TEXTS: N/A

L. REFERENCES: Project specific

M. EQUIPMENT: Civil 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:
- Literature review
- Project proposal
- Oral presentation
- Other project deliverables specific to the project

P. DETAILED COURSE OUTLINE:

I. Review of possible projects with faculty
II. Selection 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 (create a Gant chart)

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

V. Presentation of Project Proposal

Q. LABORATORY OUTLINE:

1. Conduct a technical literature review
2. Create a project schedule in a gant chart format
3. Determine project management/communication plan
4. Prepare a project proposal