

Tompkins Cortland Community College
Master Course Syllabus

Course Discipline and Number: CONT 202

Year: 2021-2022

Course Title: Surveying

Credit Hours: 3

Attendance Policy: *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

Services for appropriate academic adjustments for Students with Disabilities: *It is the College's policy to provide, on an individual basis, reasonable accommodation to students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

Course Description

This course, intended principally for construction technologists, focuses on surveying theory, use of instruments, and computation methods with emphasis on construction applications. Instruction includes both lectures and field practice. Prerequisites: MATH 122; RDNG 116 if required by placement testing. 3 Cr. (2 Lec., 2 Lab.) Fall semester.

Course Context/Audience

This is a required course for students in the Construction Technology degree and the Building Construction certificate programs. It may also be of interest to extramural students working in construction and related industries.

Basic Skills/Entry Level Expectations

- Writing:** W0 Course requires very limited or no writing.
- Math:** MC College level math skills – Course requires college level math skills. See course description for co-requisite and/or prerequisite requirement(s).
- Reading:** R4 Before taking this course, students must satisfactorily complete RDNG 116 or have assessment indicating that no reading course was required.

Course Goals

By successfully completing this course, the student will learn about basic surveying methods, particularly those methods related to construction applications. He/she will be able to use common surveying instruments and methods to collect, record and interpret field data.

Course Objectives/Topics

Objective/Topic	% Course
Taping	10%
Leveling, Elevations	20%
Horizontal Angles/ Theodolites	10%
Traverse Surveys/ Calculations	15%
Topography	15%
Horizontal Curves	10%

Vertical Curves	10%
Cross-sections	10%

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
Students will be able to <ul style="list-style-type: none"> ➤ develop meaningful questions to address problems or issues. ➤ gather, interpret, and evaluate relevant sources of information. ➤ reach informed conclusions and solutions. ➤ consider analytically the viewpoints of self and others. 	NA
SOCIAL/GLOBAL AWARENESS OUTCOMES	HOW DOES THE COURSE ADDRESS THE OUTCOMES (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
<ul style="list-style-type: none"> ➤ Students will begin to understand how their lives are shaped by the complex world in which they live. ➤ Students will understand that their actions have social, economic and environmental consequences. 	NA

Instructional Methods

Three lab hours/week: use of instruments, field work, computation of field data. Two lecture/recitation hours/week: theory and problem solving

Methods of Assessment/Evaluation

Method	% Course Grade
Exams and quizzes	70%
Field work	20%
Final exam	10%

Text(s)

Surveying with Construction Applications, Kavenagh, Barry F., 4th Edition, © 2001 Prentice Hall.

Bibliography)**Other Learning Resources****Audiovisual**

No resources specified

Electronic

Larch Site Engineering; CD ROM; Prentice Hall, 2003

Other

No resources specified