

# Common Course Outline

SURV 226

**Minor Engineering I – Zoning, Subdivision, and Road Design**

**3 Credits**

## Community College of Baltimore County

### Description

**SURV 226 – Minor Engineering I – Zoning, Subdivision, and Road Design** introduces principles of land development; includes boundary determination; zoning regulations; subdivision regulations; records research; development policies; producing topography; site design, road design and presenting results.

### **3 Credits**

**Prerequisites:** SURV 101, or permission of the program coordinator.

### Overall Course Objectives

Upon completion of this course students will be able to:

1. describe common elements involved in the subdivision of land;
2. perform site research and site analysis for proper site selection;
3. interpret the environmental considerations of land subdivision;
4. explain development patterns and principles;
5. design a subdivision for various land uses;
6. prepare the necessary drawings for subdivision approval;
7. explain the basic elements of wastewater, water supply, drainage, and street layout design as it relates to the overall subdivision design;
8. describe the subdivision plan submittal, review, and approval process;
9. profile urban and rural roads;
10. design urban and rural roads; and
11. describe wetlands and environmental issues.

### Major Topics

- I. Local Government, Planning, and Regulatory Functions
- II. Development Processing
- III. Site Analysis and Selection
- IV. Environmental Considerations
- V. Development Patterns and Principles
- VI. Project Design
- VII. Drawings and Specifications
  - A. Soils
  - B. Grading

- C. Wastewater
- D. Water Supply
- VIII. Storm Drainage and Management
- IX. Suburban Street Design and Soil Erosion
- X. Cost Estimates and Plan Submittal
- XI. Review and Approval Process

### **Course Requirements**

Grading procedures will be determined by the individual faculty member but will include the following:

### **Grading/exams**

1. A minimum, two tests or weekly quizzes will be required.
2. Comprehensive midterm exam.
3. Comprehensive final exam.
4. Homework assignments: Individual instructors will notify students of procedures, but as a minimum one graded assignment will be given.

Written Assignments: Students are required to use appropriate academic resources.

### **Other Course Information**

This course is a core course in the Survey Technology AAS and Certificate programs.

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