Course Information Form (CIF)

Course Code: SRV 239

Course Title: Land Development Design

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 15.1102
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 2-3-3
Credit Hour Distribution:

Lecture: 2	Lab: 3	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Concepts and processes for land development. Discussion of subdivision laws and municipal codes. Covenants and design restrictions for protection of the public. Design of roads, storm drainage, and sanitary sewer extensions related to residential, commercial, industrial, and recreational areas.

General Course Objectives

- Students will demonstrate understanding of basic design concepts, methods, and applications as they relate to site development with land surveying applications.
- Students will use computational processes and CADD software for site development.

Minimum Placement Levels

English	Reading	Math
None	None	None

Prerequisites

Credit in SRV 134
Credit or concurrent enrollment in SRV 211

Methods of Evaluation

Students will be given a minimum of 1 objective exam, 6 homework assignments, and 2 class projects with various completion milestones.

Instructional Materials and Additional Supplies

Land Development Handbook, 978-1260440751
Scientific calculator, Casio fx-115MS or equivalent

Course Content

General Learning Outcomes (GLOs)

- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Roadway Design	1. Utilize the basic elements of roadway design including various types, materials, processes, environmental factors, and local/municipal requirements.	4	6	0
Storm and Sanitary Sewer Design	1. Implement the basic design elements of storm and sanitary sewer design including routes, sizing, environmental factors, materials, and installation.	5	8	0
Water and Sanitary Sewer Design	1. Explain the basic design elements of water distribution system design including routes, sizing, environmental factors, materials, and installation.	4	6	0
Subdivision Design	1. Recognize and apply the various design patterns, municipal controls, environmental factors, processes, and requirements for subdivisions.	6	12	0
Site Plans	1. Interpret and describe site plans as they relate to building construction and site development, including alignments, plan/profile sheets, and symbology.	6	11	0
Residential Developments	1. Describe the design and construction considerations for residential buildings including materials, development, and limitations.	5	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	45	0