

## Course Outline

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Engineering Design and Drafting Technology  
School of Advanced Technologies and Mathematics

ARET 2400 – 3  
Sustainable Site Planning and Development (3,0,2)  
Winter, 2021

<b>Instructor:</b>	<b>Karri Loadman</b>	karriloadman@gmail.com	250-571-9412
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### Calendar Description

This course will provide an introduction to site planning and the land development process and will focus specifically on issues related to site planning, organization and circulation. The connection between land use, regulation and transportation will be explored. The course will include planning concepts, site planning principles, sustainable site design principles, an application study of the Kamloops Zoning Bylaw, site organization and layout, parking layout, site amenities and landscaping.

### Educational Objectives/Outcomes

During this course, the successful student will understand the basic theory of planning as applied to site design, the regulatory environment under which site planning occurs, describe the elements for various land use and development control tools; layout on-site parking and circulation for a development site and apply C.P.T.E.D. principles when designing site amenities and landscaping features. The student will also have used Autodesk Civil 3D software to complete a site plan, which will include lot grading, access and egress, parking layout and amenities for a multi-unit development.

### Prerequisites

ARET 1400

### Texts/Materials

- Lecture materials, assignments (to be distributed in-class)
- Reference articles (to be distributed in-class)

### Student Evaluation

Lab Assignments .....	20%
Assignments, Site Plan .....	20%
Mid-term exam .....	30%
Final exam .....	30%

## Course Topics

### Development Regulation

- Definitions
- Key Zone types
- Application of zoning elements
- Land Development Process

### Planning Concepts

- Introduction to Planning Theory
- Introduction to Site Planning
- Scales of land use in development
- Conditions for diversity
- Development trends
- Master development agreements

### Planning Principles

- Land use requirements
- Density and space
- Charrettes

### Site Planning Process

- Tools of the Trade
- Introduction to the land development process
- Site plans

### Sustainable Design

- Theory of Sustainability
- Factors to consider in sustainable site design
- Six Principles of Sustainable Design
- Site access
- Site layout
- Amenities and Landscaping

### Crime Prevention Through Environmental Design

- Planning for Safety
- Planning for seniors, children

### Transportation

- Sustainability
- Traffic Implications
- Safety
- Impacts of site design
- Active transportation
- Alternative Design Standards
- Paving treatments
- Future site planning