# PUB 151: STREET CONSTRUCTION AND MAINTENANCE

#### **Citrus College Course Outline of Record**

Heading	Value
Effective Term:	Fall 2021
Credits:	3
Total Contact Hours:	54
Lecture Hours :	54
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	108
Strongly Recommended:	ENGL 101.
Transferable to CSU:	No
Transferable to UC:	No
Grading Method:	Standard Letter, Pass/No Pass

#### **Catalog Course Description**

A course in street maintenance covering materials and methods, with emphasis on preventive maintenance of Asphaltic and Portland Cement concrete pavements. Specifications, records and cost accounting systems, as well as revenue sources and budget preparation, will be reviewed. Other subjects include safety, drainage, equipment records and specifications, review of watershed management, and public relations. Codes which pertain to improvements and repair will be reviewed. 54 lecture hours.

#### **Course Objectives**

- Demonstrate knowledge of the various materials used for the maintenance of pavements
- · Examine and understand the latest street maintenance technologies
- Demonstrate knowledge of construction means, methods and equipment employed in asphalt and concrete pavement construction.
- Understand the basic requirements for temporary vehicular and pedestrian traffic control.
- · Understand fundamental maintenance record keeping
- · Examine ethical issues in construction and maintenance.

#### **Major Course Content**

- 1. Introduction / Overview
- 2. Street Construction & Maintenance Terminology
- 3. Review of Maintenance Practices
- 4. Pavements
- 5. Existing Surface Improvements
- 6. Existing Subsurface Improvements
- 7. Joint and crack sealing
- 8. Spalling and scaling repair methods and materials
- 9. Drainage Systems Methods of calculating runoff
- 10. Review of Storm Water Pollution Prevention Programs (SWPPP)
- 11. Maintenance Construction Means, Methods & Equipment

- 12. Maintenance Record keeping
- Applicable Governing Documents (Ordinances, Codes and Regulations)
- 14. Plans & Specifications
- 15. Basic Maintenance Budget Preparation
- 16. Public Convenience and Safety
- 17. Stakeholder Relations
- 18. Customer service
- 19. Maintenance Work Order Systems
- 20. Ethics in Construction & Maintenance

### Suggested Reading Other Than Required Textbook

Instructor supplied articles and case studies.

## Examples of Required Writing Assignments

Students will prepare a preventative maintenance plan on asphalt roadway repairs. This would include cost analysis, safety aspects, public relations, and an action plan.

#### **Examples of Outside Assignments**

Students will develop an action plan on re-constructing a section of roadway. Students will incorporate types of asphalt, equipment, safety supplies, budget, and any additional subjects in order to calculate overall cost and supply for the project.

#### **Instruction Type(s)**

Lecture, Online Education Lecture