Lecture Contact Hours: 16-18; Outside-of-Class Hours: 32-36; Total Student Learning Hours: 48-54

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

Environmental Health and Safety Management 223 – Stormwater Runoff Management Construction Inspections

1 hour lecture, 1 unit

Catalog Description
Stormwater Runoff Management Construction Inspections provides applicable skills in stormwater management to inspectors in construction and municipal enforcement. Coursework covers a review of stormwater rules and regulations and applying Best Management Practices (BMPs) in field settings. The Stormwater Runoff Management Construction Inspections course provides knowledge and skills to inspect to Construction BMPs for erosion, sedimentation and construction materials and wastes.

Prerequisite
"C" grade or higher or "Pass" in EHSM 220 or equivalent

Entrance Skills
1) General knowledge of stormwater permits (industrial, construction, municipal), the hydrologic cycle, and common water quality pollutants (e.g., metals, nutrients, sediment).
2) Understand the purpose of BMPs, be able to reference factsheets, and apply fundamental safety and inspection practices.

Course Content
1) Municipal Separate Storm Sewer System (MS4) Permit
2) Construction General Permit (CGP)
3) Best Management Practices (BMPs) and Field Inspections
4) Post Construction BMPs
5) Construction Field Inspections
6) Municipal Field Inspections
7) SWPPP Inspection/Monitoring Program Review

Course Objectives
Students will be able to:
1) Apply California and Federal regulations to inspect for construction stormwater compliance programs.
2) Identify and interpret construction stormwater BMPs inspection details and SWPPP documentation.
3) Assess and find errors during on-site construction stormwater inspections.

Method of Evaluation
A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in a subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.
1) Quizzes and exams that measure students' ability to identify, describe and apply California and Federal stormwater permits required inspection forms.

2) Exercises that measure students' ability to perform stormwater inspections in compliance with California and Federal stormwater regulations and standards.
3) Video presentations/projects measuring the student's ability to create or apply stormwater management.

Special Materials Required of Student
None

Minimum Instructional Facilities
Smart Classroom

Method of Instruction
1) Lecture and discussion
2) Field trips, guest lecturers
3) Projects, hands-on exercises

Out-of-Class Assignments
1) **Reading:** Lecture notes, review of CGP, review of CGP QSP Prerequisites, review City/MS4 inspection requirements, review inspection narrative in SWPPPs (from SMARTS) review of Caltrans inspection requirements.
2) **Writing:** Review inspection site scenarios and complete a typical inspection form, review and assess available inspections forms and describe shortcomings and improvements for inspection forms, summarize the role inspections play in protecting the receiving waterbody.
3) **Other**: Inspect a site from a publicly observable site or occupation related, review inspection procedures describe in SWPPPs (publicly available in SMARTS).

Texts and References
1) Required (representative example): California State Water Resources Control Board. (n.d.). *NPDES 2022 Construction Stormwater General Permit.* Retrieved September 24, 2025, from https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html
2) Supplemental: California Department of Transportation. (2024, March). *Construction site best management practices (BMP) manual* (Report No. CTSW-RT-24-425.11.1). Division of Environmental Analysis, Stormwater Program. Brown and Caldwell. https://dot.ca.gov/programs/environmental-analysis/stormwater-management-program

Student Learning Outcomes
Upon successful completion of this course, students will be able to:
1) Analyze construction projects BMPs for inspections that maintain stormwater permit compliance and identify effective and implementable corrective actions.
2) Analyze the roles of construction BMPs and demands of the specific stormwater compliance programs including runoff, water quality, and watershed management.