

Master Syllabus

EGV 2551 - Hydrology

Division: Science, Mathematics and Engineering

Department: Engineering Technology Design

Credit Hour Total: 3.0

Lecture Hrs: 2.0 **Lab Hrs:** 2.0

Prerequisite(s): EGV 1551

Date Revised: October 2012

Course Description:

Hydrology and the distribution and availability of water resources; natural and anthropogenic processes that influence flood and water quality. Two classroom, two lab hours per week.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Information Literacy Competency

Course Outcomes:

Hydrologic cycle

Identify and describe the four parts of the hydrologic cycle.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses

Statistical storm characteristics

Identify the expected frequency and duration of statistical storms for a given location.

Assessment Method: Portfolios

Performance Criteria: 70% or higher of available points

Calculating runoff

Calculate runoff and peak runoff.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher of available points

Routing and storage design

Design required routing and storage systems.

Assessment Method: Portfolios

Performance Criteria: 70% or higher of available points

Outline:

The hydrologic cycle of precipitation, evaporation, infiltration, and transpiration

Statistical storm characteristics including frequency and duration

Watershed characteristics

Methods for calculating runoff and peak runoff

Design of routing and storage