

## 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

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### 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