

CVEG 5273 OPEN CHANNEL FLOW

Open Channel Flow includes advanced open channel hydraulics, flow measurement techniques, a hydrology review, culvert and storm drainage design, natural channel classification (fluvial geomorphology) and rehabilitation, computer methods and environmental issues.

Pre-requisites: Undergraduate Hydraulics & Hydrology

Text: Access to Hydraulics & Hydrology texts & materials supplied by instructor

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Topics covered:

- Basic Hydrology Review
- Precipitation & Surface Runoff
- Hydrographs
- Rational Method & SCS Method
- Computer Methods (HEC – HMS, TR-55, misc)
- Open Channel Hydraulics Review
- Energy and Continuity
- Steady Uniform Open Channel Flow
- Gradually Varied Flow
- Rapidly Varied Flow
- Flow Measurement
- Surface Water Profiles
- Computer Methods (HEC–RAS)
- Culvert Design
- Computer Methods
- Natural Streams
- Classification & Characterization
- Channel Processes
- Sediment Transport
- Stability and Stabilization of Natural Channels
- Environmental Issues

Academic Integrity

As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that

promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail. Each University of Arkansas student is required to be familiar with and abide by the University's 'Academic Integrity Policy' at honesty.uark.edu. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.

Accommodations for Students with Disabilities

University of Arkansas Academic Policy Series 1520.10 requires that students with disabilities are provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please notify your instructor as soon as possible. Please note, you must first verify your eligibility for these through the Center for Educational Access (contact 479-575-3104 or visit <http://cea.uark.edu> for more information on registration procedures).

There are a number of technology tools that can be used to complete assignments, however not all them have the appropriate accessibility features. Please contact your instructor for assistance in selecting appropriate tools that meet any needs for accommodations.

Inclement Weather/Internet Outage Policy

Due dates will not be adjusted based on the inclement weather status of the University of Arkansas unless there are power outages or an extended loss of access to Blackboard. If you are experiencing power/Internet outages that are beyond your control for an extended period of time, please contact your instructor as soon as possible to make arrangements.

Syllabus Change

The instructor reserves the right to make changes as necessary to this syllabus and the course schedule. If changes are made, advance notification will be given to the class.