

EVSP421

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Course : EVSP421 **Title :** Water Resources Management

Length of Course : 8

Prerequisites : N/A **Credit Hours :** 3

Description

Course Description: This course is designed to review the practical application of watershed planning as a tool to manage land, water, and ecosystem resources. Students will explore the public policies and practices of watershed planning by examining case studies in water supply, water quality, drought, floodplain, and storm water management in the U.S. The watershed management curriculum will utilize a multi-disciplinary approach, involving the fields of geography, environmental science, geology, public policy, urban and regional land planning, geographic information systems (GIS) and engineering.

Course Scope:

Students of this course will focus on water history, surface and groundwater hydrology, water law, water use and development, economics, environmental issues, water management, policy, and more.

Objectives

After successfully completing this course, you will be able to:

- LO-1 Explain the historical context of both simple and complex water issues.
- LO-2 Explain the natural physical processes of water.
- LO-3 Define the primary components of water quality.
- LO-4 Examine the impacts, both positive and negative, that water projects such as dams and irrigation systems have on the surrounding area.
- LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.
- LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or water development projects.
- LO-7 Integrate knowledge of the roles that geography, climate, technology, and population growth play in all aspects of water use.
- LO-8 Evaluate how water conflicts are resolved around the world.

Outline

Week 1: Historical Perspective of Water Use and Development & The Hydrologic Cycle, Climate, and Weather

Learning Objectives

LO-1 Explain the historical context of both simple and complex water issues.

LO-2 Explain the natural physical processes of water.

LO-4 Examine the impacts, both positive and negative, that water projects such as dams and irrigation systems have on the surrounding area.

LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or water development projects.

Readings

Cech Chapters 1-2

Assignments

Forum 1

Quiz 1

Week 2: Surface Water Hydrology & Groundwater Hydrology

Learning Objectives

LO-1 Explain the historical context of both simple and complex water issues.

LO-2 Explain the natural physical processes of water.

LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or water development projects.

Readings

Cech Chapters 3-4

Assignments

Forum 2

Written Assignment #1

Week 3: Water Quality & Municipal and Irrigation Water Development

Learning Objectives

LO-1 Explain the historical context of both simple and complex water issues.

LO-2 Explain the natural physical processes of water.

LO-3 Define the primary components of water quality.

LO-4 Examine the impacts, both positive and negative, that water projects such as dams and irrigation systems have on the surrounding area.

LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.

LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or

water development projects.

Readings

Cech Chapters 5-6

Assignments

Forum 3

Quiz 2

Week 4: VII. Dams VIII. Water Allocation Law

Learning Objectives

LO-1 Explain the historical context of both simple and complex water issues.

LO-2 Explain the natural physical processes of water.

LO-3 Define the primary components of water quality.

LO-4 Examine the impacts, both positive and negative, that water projects such as dams and irrigation systems have on the surrounding area.

LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.

LO-7 Integrate knowledge of the roles that geography, climate, technology, and population growth play in all aspects of water use.

LO-8 Evaluate how water conflicts are resolved around the world.

Readings

Cech Chapters 7-8

Assignments

Forum 4

Written Assignment #2

Week 5: Federal Water Agencies & Local, Regional, State, and Multistate Water Management Agencies

Learning Objectives

LO-4 Examine the impacts, both positive and negative, that water projects such as dams and irrigation systems have on the surrounding area.

LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.

LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or water development projects.

LO-7 Integrate knowledge of the roles that geography, climate, technology, and population growth play in all aspects of water use.

LO-8 Evaluate how water conflicts are resolved around the world.

Readings

Cech Chapters 9-10

Assignments

Forum 5

Quiz 3

Week 6: Drinking Water and Wastewater Treatment & Water, Fish, and Wildlife

Learning Objectives

LO-1 Explain the historical context of both simple and complex water issues.

LO-2 Explain the natural physical processes of water.

LO-3 Define the primary components of water quality.

LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.

Readings

Cech Chapters 11-12

Assignments

Forum 6

Written Assignment #3

Week 7: The Economics of Water & Water Use Conflicts

Learning Objectives

LO-1 Explain the historical context of both simple and complex water issues.

LO-3 Define the primary components of water quality.

LO-4 Examine the impacts, both positive and negative, that water projects such as dams and irrigation systems have on the surrounding area.

LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.

LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or water development projects.

LO-7 Integrate knowledge of the roles that geography, climate, technology, and population growth play in all aspects of water use.

LO-8 Evaluate how water conflicts are resolved around the world.

Readings

Cech Chapters 13-14

Assignments

Forum 7

Quiz 4

Week 8: Emerging Water Issues

Learning Objectives

LO-5 Describe the water resources management responsibilities of such agencies that exist at the local, state, regional and federal levels.

LO-6 Analyze those aspects of the environment that are at risk from water shortages, poor water quality, or

water development projects.

LO-7 Integrate knowledge of the roles that geography, climate, technology, and population growth play in all aspects of water use.

LO-8 Evaluate how water conflicts are resolved around the world.

Readings

Cech Chapter 15

Assignments

Forum 8

Written Assignment #4

Final Assessment

Evaluation

Grading:

Name	Grade %
Forums	24.00 %
Forum 1	3.00 %
Forum 2	3.00 %
Forum 3	3.00 %
Forum 4	3.00 %
Forum 5	3.00 %
Forum 6	3.00 %
Forum 7	3.00 %
Forum 8	3.00 %
Quizzes	28.00 %
Quiz 1 (Week 1)	7.00 %
Quiz 2 (Week 3)	7.00 %
Quiz 3 (Week 5)	7.00 %
Quiz 4 (Week 7)	7.00 %
Assignments	28.00 %
Assignment 1 (Wk 2)	7.00 %
Assignment 2 (Wk 4)	7.00 %
Assignment 3 (Wk 6)	7.00 %
Assignment 4 (Wk 8)	7.00 %
Final Assessment	20.00 %
FINAL Assessment (Week 8)	20.00 %

Materials

Book Title: Principles of Water Resources, 3rd ed - The VitalSource e-book will be provided via the APUS Bookstore. The hard copy is not available from the APUS Bookstore, please try other sources.

Author: Cech

Publication Info: Wiley

ISBN: 9780470136317

Book Title: You must validate your cart to get access to your VitalSource e-book(s). If needed, instructions are available here - <http://apus.libguides.com/bookstore/undergraduate>

Author: N/A

Publication Info: N/A

ISBN: N/A

Required Readings

See the Lessons section of the classroom for additional readings and weekly lecture notes

Additional Resources: Please go to the program guides in the APUS Library for additional resources:

- Environmental Science: http://apus.libguides.com/environmental_science

Software Requirements

- Microsoft Office (MS Word, MS Excel, MS PowerPoint) - American Public University System provides Microsoft Office 365 to AMU/APU students and faculty at no cost
- Adobe Acrobat Reader

Assigned Weekly Readings along with e-text of the textbook are found in the Lessons tab of the course.

The references provided at the end of each chapter within your textbook are excellent sources of information. You will also want to visit the websites for the Environmental Protection Agency/Office of Water:

The EPA website: <http://www.epa.gov/ow>

The USGS website: <http://water.usgs.gov>

The Army Corps of Engineers website: <http://www.usace.army.mil/Missions/CivilWorks/ProjectPlanning.aspx>

The Tennessee Valley Authority (TVA) website: <http://www.tva.gov>

You will also want to research any state, county, or regional websites that deal with water resources management, such as your state Department of Environmental Protection (DEP), state Department of Conservation and Natural Resources (DCNR or DNR), and county Conservation Districts (they often have watershed managers/specialists and will know about any non-profit organizations and volunteers groups that collect data and conduct surveys on streams, rivers, lakes, etc).

Course Guidelines

Citation and Reference Style

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Tutoring

- [Tutor.com](https://www.tutor.com) offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 15% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- "Substantive" means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says "I agree" is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful

and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.

University Policies

[Student Handbook](#)

- [Drop/Withdrawal policy](#)
- [Extension Requests](#)
- [Academic Probation](#)
- [Appeals](#)
- [Disability Accommodations](#)

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.