



Course Name:

Water Resources Planning and Management (WRPM)

Course Number: 20-892	Credit: 3
Program: Graduate	Course Type: General Selective
Prerequisite: -	Corequisite: -

Course Description (Objectives):

The goal of this course is to familiarize students with the principles and challenges of Integrated Water Resources Management (IWRM) and to provide the tools and approaches needed for sustainable water resource planning and management. It also explores the interactions between human and natural systems, the impacts of climate change, and the role of legal and economic frameworks in water resource management.

Course Content (outline):

- Chapter 1: Introduction to WRPM
- Chapter 2: - Key IWRM change areas and wise water governance
- Chapter 3: Some IWRM Issues
- Chapter 4: Water Resources Planning and Management: An Overview
- Chapter 5: Water resource systems modelling: It's role in Planning and Management
- Chapter 6: Modelling methods for evaluating alternatives
- Chapter 7: River basin planning models
- Chapter 8: Project planning and analysis
- Chapter 9: Discussion of journal papers and project discussions

References:

- Loucks, Daniel P., and Eelco Van Beek. *Water Resource Systems Planning and Management: An Introduction to Methods, Models, and Applications*. Springer, 2017.