Department: Petroleum Engineering **Division**: Reservoir **Level and Major:** Undergraduate

Course Title: Reservoir Management **Number of Credits:** 2
Prerequisite: Oil & Gas Reservoir Engineering (II)

Lecturer: Jalal Fahimpour

Course Description:
Introduction into fundamentals of sustainable production from oil and gas reservoirs from a technical and managing perspective

Course Goals and Objectives:
This course tends to extend the general knowledge of petroleum engineering students about reservoir management and sustainable production of hydrocarbon resources from both technical and management perspectives and show them how different disciplines involved in the field development process should collaborate to each other to reach this goal.

Course Topics:
- Process of decision making in reservoir management
- The role of contracts in oil and gas industry
- The role of advanced modern technologies in reservoir management
- Simulation of oil and gas reservoirs
- Determination of reservoir properties
- Field development plans
- Reservoir economics
- Best reservoir management practices
- Integrated reservoir management

The course aims to
Give students a general overview of different components involved in development of hydrocarbon resources and make them familiar with the role and importance of each discipline. The course also intends to create a platform for students to learn how to function in a multi-disciplinary team as an effective member to reach a sustainable production target during the life of a reservoir.

Reading Resources:
Integrated Reservoir Asset Management, Principles and Best Practices (John R. Fanchi)
Computer-Assisted Reservoir Management (Abdus Satter)

Evaluation:
Mid: 30%
Quiz: 10%
Project: 10%
Final Exam: 50%