

Fall 2021

PTE 502 Advanced Reservoir Characterization

Dr. I. Ershaghi

ershaghi@usc.edu Phone: 310 9911337 Thursdays 2:00-4:40 PM PT RTH 217

Date	
26-Aug	Opportunities in Subsurface Engineering
2 Sept.	The Subsurface Rock Systems
9-Sep	Major Petroleum Geothermal and Saline Aquifer Systems of The World
16, Sept.	Tools of Reservoir Characterization
23, Sept.	Depositional Environments and Models-Facies Modeling-Sequence
30. Sept.	Geologic Control on Reservoir Quality-Petrophysics
7-Oct	First Exam
14-Oct	Recess
21-Oct	Basin Modeling, 3D Mapping. #D Mapping
28-Oct	Carbonates and Evaporite Systems -Diagenesis
4 Nov.	Production Geology-Flow Units
11 Nov.	Rock Mechanics-Gophysical and Geochemical Methods
18 Nov.	Characterization and Flow Systems in Fractured and Faulted Structures
25 Nov.	Thanksgivingg
2 Dec.	Unconventional Reservoirs. Project Presentation
9- Dec.	Final Exam 2-4 PM

HW	20%
First Exam	30%
Final Exam	40%
Project	10%
Toal	100%

Reference Books: available from USC elibrary

Fundamentals of basin and petroleum system modeling

Seismic stratigraphy and depositional facies models

Stratigraphic reservoir characterization for petroleum geologists

