ETM 515

Fossil Fuel Technologies

Fall 2020-2021 Course Syllabus October 28nd, 2020, v2

Instructor

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Course Policies

- Attendance (physical or online) is mandatory and will be recorded.
- Lecture slide sets will be available at SuCourse+.

Evaluation Policy

- Course grading will be based in-class contribution, quiz and assignments.
- Assignments will be posted to SuCourse+.
- Grades will be announced via SuCourse+.

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Course Material and References

There is no required textbook for the course. Instead, we will use various reading material including book chapters, papers and reports. Some useful references follow:

- Giuliano, F.A. (Ed.) (1981) *Introduction to oil and gas technology*, Second edition. Intercomp. Resource Development and Engineering, Inc. Houston, Texas.
- Clark, N. J. (1969), Elements of Petroleum Reservoirs, Society of Petroleum Engineers, Richardson, TX.
- Selley, R.C. (1997), *Elements of Petroleum Geology*, Academic Press, London.
- Petroleum Resource Management System (2018), Society of Petroleum Engineers.
- Guidelines for Application of the Petroleum Resources Management System, (2011), Society of Petroleum Engineers.
- Tester, J.W. et al., (2006), The future of geothermal energy, Impact of Enhanced Geothermal Systems on the United States in the 21st century, MIT report.
- Kural, O., (Ed.) (1994), Coal Resource, Properties, Utilization, Pollution, İstanbul Turkey.
- Stober, I., Bucher, K., (2013), **Geothermal Energy: From Theoretical Models to Exploration and Development**, Heidelberg: Springer.

Course Schedule

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Fossil Fuel Technologies				
Date and Time				
(Sat. 13.00-15.45,			Topic	Instructor
Tue 19.00-21.45)				
Week-1	28 th Oct.	Saturday	Introduction to fossil fuels	Murat Çınar
	1 st Dec.	Tuesday	Petroleum: Origin and Exploration	Murat Çınar
Week-2	5 th Dec.	Saturday	Petroleum: Drilling and Production	Murat Çınar
	8 th Dec.	Tuesday	Enhanced oil recovery and unconventional resources	Murat Çınar
Week-3	12 th Dec.	Saturday	Coal Technologies	Murat Çınar
	15 th Dec.	Tuesday	Unconventional Coal Technologies: gasification, CBM	Murat Çınar
Week-4	19 th Dec.	Saturday	Geothermal energy	Murat Çınar