

Name of the Lecture	Tissue Regeneration Processing and Mimicking
Level of the Lecture	Graduate
Length of the Lecture	25 minutes
Type of the Lecture	Online
Lecturer	Assoc. Prof. Dr. Cem Bulent Ustundag
Lecturer Email	cbustundag@gmail.com
Aim of the Lecture	The objective of this course is to introduce students how to occur tissue regeneration and mimicking processes in tissue engineering applications, what natural ECM structure and its importance in tissue engineering are, which parameters and features should be considered when designing a scaffold and general information about biomaterials used to mimic the ECM.
Content of the lecture	Introduction to tissue regeneration and mimicking ECM structure and properties Scaffold design and features Biomimetic materials for tissue engineering Challenges for tissue engineered products
Recommended Sources	Principles of Tissue Engineering, 4th Edition, Editor: Robert Lanza, Academic Press Tissue Engineering, 2nd Edition, Editor: Clemens Van Blitterswijk, Academic Press Tissue Regeneration - From Basic Biology to Clinical Appln., J. Davies, Intech, 2012
Language of the lecture	English
Learning Outputs	To understand tissue regeneration and mimicking processes To learn about ECM structure and role in tissue engineering To be familiar with scaffold design and the features they should have To be familiar with biologically derived and biologically produced biomimetic materials used to mimic ECM To learn about the challenges occurred in tissue engineering