

Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı
Açık Ders Malzemeleri

Syllabus

Course Title and Code	CELL RECEPTORS BIO473
Instructors	Fadime KIRAN, Assoc. Prof.
Course Level	Bachelor's Degree
Course Credit	2.0
Course Type	Elective
Course Content	Structural and functional properties of receptors and their classification, cell surface receptors, endocytotic pathway and intracellular movement, classification of ligands, receptor ligand interactions and signal transduction mechanism, intracellular membrane receptors, nuclear receptors, molecular mechanism of signal transduction with nuclear receptors, receptor regulation, disorders, recent methodological developments.
Course Goals	Understanding the structure and functions of receptors that play a role in the flow of information in cells, giving information about signaling pathways and mechanisms, and demonstrating the cellular importance of receptor regulation.
Learning Outcomes	<ol style="list-style-type: none">1) Distinguishes molecules that carry signals and transmit signals in biological systems.2) Explains the cell surface, intracellular membrane receptors, nuclear receptors and their ligands.3) Distinguishes the ways in which signal transduction regulates cellular functions; relates the signal transmission to the molecular mechanism.4) Interprets the balance between endocytotic path and intracellular movement.5) Associates immunoreceptors with regulation of the immune response.6) Explains the functioning of the cell cycle, using growth factors and growth factor receptors, and associates it with the control of the cell cycle.7) Keeps up-to-date with receptor regulatory, receptor-dependent disorders and recent methodological developments.
Course Time	2+0
Language of Instruction	ENGLISH
Prerequisites	None
Recommended Sources	Handbook of Cell Signalling, 2003, Elsevier. Stanford C, Horton R. Receptors: Structure and Function. Second edition. Oxford University Press, 2002.