



Izmir University Of Economics

CS300 - Introduction to Computers and Information Technology

Instructor	Jens Allmer E-Mail: cs300@allmer.de Web: http://CS300.allmer.de	
Text Book	YOK, Lecture Notes	
Description	<p>Problems in Biology and related fields have been one of the driving forces for development of new algorithms in computer science. This strong connection can also be seen from the fact that Bioinformatics programs are being implemented at more and more Universities at present. Additionally, many graduates will most likely be challenged with scientific and specifically biological problems in their future. Therefore it would be helpful to, on the one hand get an introduction to problems in biology, and on the other hand learn how these problems have been tackled algorithmically.</p> <p>This course will provide basic knowledge about biology and thus enable students to talk to biologists on a higher level. It will also introduce how a number of problems have been solved by traditional computer science algorithms or by new algorithms specifically designed to the new challenges posed by the huge field of computational biology and bioinformatics.</p>	
Outline	12-Feb	Course introduction
	19-Feb	The Genome and its Representation
	26-Feb	Transcription and Translation
	4-Mar	Separation Methods and Sequencing
	11-Mar	Midterm 1
	18-Mar	Genes
	25-Mar	Proteins
	1-Apr	Multiple Sequence Alignment
	8-Apr	Midterm 2
	15-Apr	Pattern Discovery
	22-Apr	Biological Separation Methods
	29-Apr	Determining Protein Sequences
	6-May	Pipelines and Databases
	13-May	Student Presentations
GRADING	Quizzes	20
	Project	20
	Midterm 1	15
	Midterm 2	20
	Final	25
Office Hours	Office: 413 Hours: Fr: 9-11	