



# Bioinformatics (Computational Biology)

Fall 2018

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**Instructor:** Sadegh Sulaimany

**Class:** Room No. 401, Eng. Building No. 4, University of Kurdistan

**Class Hours:** Saturday 4:00 PM – 7:00 PM

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**Main Textbook:**

An Introduction to Bioinformatics Algorithms by Neil C. Jones and Pavel A. Pevzner, MIT Press, 2004.

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**Syllabus:**

<b>Introduction to Molecular Biology</b>
<b>DNA Sequence Alignment</b>
<b>Clustering (Microarray Analysis)</b>
<b>Graphs in Biology (DNA Sequencing)</b>
<b>Molecular Evolution and Phylogeny</b>
<b>Motif Finding</b>
<b>Genome Rearrangement</b>
<b>Pattern Matching (Suffix Tree,...)</b>
<b>Biological Networks</b>

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**Assessment:**

- Homework: 10-15%
- Midterm: 25% (٢١ آبان ٩٧)
- Final Exam: 40%

- Project: 25% (Presentation: ۱۰ و ۱۷ دی ۹۷)
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### **Project:**

- Everyone should present a hot topic in computational biology (deadline to determine the title is ???), otherwise a title will be assigned
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### **Cheating:**

Cheating includes and is not limited to looking at a neighbor's answer sheet during an in class exams, copying the solution of assignment. You are encouraged to discuss homework problems with you class mates but every students is expected to solve problems by themselves.