# ECS129: Computational Structural Bioinformatics Winter 2026

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### **Information sheet**

Class Web page: <a href="http://www.cs.ucdavis.edu/~koehl/Teaching/ECS129/index.html">http://www.cs.ucdavis.edu/~koehl/Teaching/ECS129/index.html</a>
Check here for announcements, handouts (pdf and ppt), recommended readings, quizzes, assignments, etc.

**Lectures:** MWF, 12:10 pm – 1:00 pm, **Wellman Hall 126** 

Discussion: M 10:00- 10:50 am, Wellman Hall 106

Office hours: Wed 4-6 pm Kemper Hall, Room 3059; also by appointment (send me an

e-mail)

Contacts: koehl@cs.ucdavis.edu

I answer to ALL e-mails. I do NOT guarantee however that I answer PROMPTLY...

#### Attendance:

- You are expected to attend lectures, and you are responsible for the material discussed in class.
- Discussions are optional. I will be there, to discuss class materials and papers.

#### **Exams:**

There will be one midterm, three projects, and one final.

**Grading:** 20% midterm, 50% projects (project 1 10%, projects 2 and 3 each 20%) 30% final.

### **Course Description:**

- I. Introduction: top challenges in Bioinformatics
- II. Bio-molecular structures
  - Nucleic acids
  - Proteins
- III. Fluctuations in biology
- IV. Sequence comparison
- V. Protein structure prediction
- VI. Simulations in structural biology