**ECS129: Computational Structural Bioinformatics**

**Winter 2024**

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**Information sheet**

**Class Web page**: <http://www.cs.ucdavis.edu/~koehl/Teaching/ECS129/index.html>

Check here for announcements, handouts (pdf and ppt), recommended readings, quizzes, assignments, etc.

**Lectures:** Tue-Thu, 9:00 am – 10:20 am, **Roessler Hall 55**

**Discussion**: Tue 8:00- 8:50 am, Art 217

**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**:

1. Introduction: top challenges in Bioinformatics
2. Bio-molecular structures
	* Nucleic acids
	* Proteins
3. Sequence comparison
4. RNA structure prediction
5. Protein structure prediction
6. Simulations in structural biology