The final exam in “Algorithms in Bioinformatics - Sequences” (AiBS) is an individual oral exam (20 minutes without preparation time) where you give a presentation of an exam question related to one of the mandatory projects. The question is chosen randomly among the questions below. For each question you should prepare a 10-12 minutes presentation covering the topics you find relevant related to question. The official curriculum for the exam is also listed below.

The exam takes place on **Monday, October 28**, in **Lecture Room 1111-100** (in the BiRC-building). The exam starts at 09:00, the final schedule will be available on the class www-page one week before the exam.

**Exam questions**

**Question 1: Pairwise alignment - gap costs**
- Computing the optimal score of a pairwise alignment.
- Computing an optimal pairwise alignment in quadratic space.
- Handling different types of gap costs (general, affine).

**Question 2: Pairwise alignment - space consumption**
- Computing the optimal score of a pairwise alignment.
- Computing an optimal alignment (with linear gap cost) in linear space.

**Question 3: Multiple alignment**
- Computing an optimal multiple alignment using SP score.
- Approximating an optimal multiple alignment using SP score.

**Exam curriculum**

- Every reference listed under “Reading material:” on the weekly schedule for Week 1-7, see http://www.cs.au.dk/~cstorm/courses/AiBS_e13/schedule.html.
- The descriptions of the mandatory projects.