Course information for KFK032 BIOPHYSICAL CHEMISTRY, ht2 2016

Instructors	Bertil Halle	(coordinator)	222 9516	bertil.halle@bpc.lu.se

Sara Linse 222 8246 sara.linse@ biochemistry.lu.se Kristofer Modig 222 8173 kristofer.modig@bpc.lu.se

Ingemar André 222 4470 ingemar.andre@biochemistry.lu.se
Tinna Pálmadóttir 222 8252 tinna.palmadottir@biochemistry.lu.se
Soumendranath Bhakat 222 3485 soumendranath.bhakat@bpc.lu.se

Lectures In most cases, the time and place for the lectures are as follows:

Monday 10^{15} – 12^{00} room A:B (in the Architecture building)

Tuesday $08^{15}-10^{00}$ room KC:F Wednesday $10^{15}-12^{00}$ room KC:F Thursday $10^{15}-12^{00}$ room KC:F

However, a few of the lectures will be at a different time or place, as highlighted by boldface font in the course schedule.

You are encouraged to read (at least casually) the relevant text before each lecture. This will help you to actively respond to the information provided by the instructor and to participate in discussions.

Literature

The 2016 edition of the course compendium with 12 text chapters can be obtained at the first lecture (Oct 31) or from Bertil Halle at Biophysical Chemistry (building II, floor +2, SW corner). Price: 250 kr.

Some paragraphs in the text are indented, printed in smaller font and marked with the symbol . This material is required reading only for any PhD students taking this course. For the rest of you: skip the small text if time is short!

Assignments

A set of problems ("inlämningsuppgifter") will be handed out on the Wednesday lecture in course weeks 1, 2, 3, 5 and 6. Your solutions must be given to the instructor on Wednesday at 10^{15} (BEFORE the lecture starts) the following week. (As indicated in the course schedule, the last set of problems should be handed in Tuesday 13 Dec). Your solutions will be returned the following day with feedback and the possibility to ask questions.

Solving problems is the best way to learn. The assignments are therefore an important part of this course and this is reflected in the grading (see below). You may discuss and work on the problems with your fellow students, but the solution that you hand in must reflect your own thinking. Plagiarism is self-defeating (and obvious). As a last resort, consult the instructor for hints!

Lab sessions

Manuals for the three laboratory excercises will be handed out at the first lecture (Oct 31). All lab sessions start at 13^{15} and should be completed by 17^{00} . Each lab exercise is given on two or four occasions. Please sign up on the booking sheets for the dates that suit you best. The instructor and place for each lab exercise are as follows:

Protein databases SB computer room KC: Hydrargyrum, floor 0, building I Optical spectroscopy TP biophysical chemistry lab, floor +2, building II NMR KM NMR lab at eastern end of "NMR corridor" (floor 0)

The lab exercises are problem oriented. You should therefore have read and understood the theory (as covered in the lectures) before you come to the lab. The 'lab report' should be completed during the lab session and will be approved by the instructor before you leave.

Presentations

Each student will make an oral presentation of a research topic chosen from a list. These presentations take place on regular lecture time at the end of the course, as indicated in the course schedule. Two students collaborate on each presentation. For details, see the information sheets on student presentations.

Examination

There is *no* final exam, but 2/3 through the lecture course, on Thursday Nov 24, there will be a 120-minute "midterm" exam (starting at 08⁰⁰), designed to test conceptual understanding rather than memorization of facts. During the midterm exam, you can make use of the course compendium, any other textbooks, your notes and your calculator, but no device that communicates with the outside world (such as smartphones, iPads and laptops).

Grading

To pass the course, you must have

- completed all three lab exercises;
- made an oral presentation and prepared questions for another presentation;
- obtained at least 10 points out of 30 on each of the five assignment sets;
- obtained a total assignment score (AS) of at least 50%;
- obtained a midterm score (MS) of at least 30%;
- obtained a course score (CS) of at least 50%.

AS is the percentage of the maximum number of points received on the assignments and MS is the percentage of the maximum number of points received on the midterm exam. The course score is the average of the assignment and midterm scores: CS = (AS + MS)/2.

Your course grade is determined by CS according to:

grade	requirement		
3	50 ≤ CS < 65		
4	65 ≤ CS < 80		
5	$80 \le CS \le 100$		

Welcome to KFK032 Biophysical Chemistry!

We are looking forward to making this an enjoyable and rewarding course!