CHEM-E2150 Interfacial Phenomena in Biobased Systems, 2022

Considering the current situation with the coronavirus outbreak, the lectures and exercise classes of this course will be eventually held online via Zoom. Nevertheless, some hands-on practice is very valuable to support the learning of the course contents and, therefore, a lab work is intended to be arranged on campus.

Teachers in charge

Prof. Monika Österberg, room 323 (Puu I), monika.osterberg@aalto.fi (some lectures, exam, course organization)

Juan José Valle-Delgado, room 321 (Puu I), juanjose.valledelgado@aalto.fi (most of the lectures, calculus exercises, lab work, exam)

Quizzes and home assignments

Some quizzes and home assignments will be available in MyCourses. They are **optional** tasks. Quizzes and home assignments should be submitted to MyCourses before the corresponding deadline (usually few days after the corresponding lecture). Altogether, quizzes and home assignments will add up to 25% of the final grade.

Calculus exercises

Three calculus and problem solving exercises will be offered during the course. Calculus exercises and attendance to exercise classes are **optional**. The answers can be submitted to MyCourses before or after the corresponding class. Double number of points will be given to the right answers submitted before the classes. The calculus exercises will contribute 10% to the final grade.

Laboratory work

A lab work will be arranged at the campus in small groups and using face masks. The participation in the lab work is **compulsory**, but contact the course teacher (juanjose.valledelgado@aalto.fi) in case you have a justified reason that prevents you attending. A lab report must be submitted after the lab work. Both performance in the lab and report will be evaluated, and it will account for 15% of the final grade.

Study material

The book *"Barnes & Gentle, **Interfacial Science** (Oxford University Press)"*, and other material given in the course. Other recommended books: *"Kronberg, Holmberg & Lindman, **Surface Chemistry of Surfactants and Polymers** (Whiley)"*; *"Hunter, **Foundations of Colloid Science** (Oxford University Press)"*.

Exam

The exam will contribute 50% to the final grade. **The exam must be passed** in order to pass the course.

Course assessment

Grading scale: 0-5
Exam (50%) + quizzes and home assignments (25%) + laboratory works (15%) + calculus exercises (10%).