

CHEM-E2150 Interfacial Phenomena in Biobased Systems, 2021

This course is given mainly remotely due to COVID-19 restrictions. Lectures will be offered online via Zoom. Assignments and exercises can be submitted to MyCourses. Nevertheless, some hands-on practice will be very valuable to support the learning of the course contents and, therefore, a lab work will be arranged at the campus.

Teacher in charge	Prof. Monika Österberg, room 323 (Puu I), monika.osterberg@aalto.fi (most of lectures, exam, course organization)
Other teacher	Juan José Valle-Delgado, room 321 (Puu I), juanjose.valledelgado@aalto.fi (some lectures, calculus exercises, lab work)
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. They will be solved in online classes via Zoom. 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 teachers 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. Lab work evaluation will account for 15% of the final grade.
Study material	The book “Barnes & Gentle, <i>Interfacial Science</i> (Oxford University Press)”, and other material given in the course. Other recommended books: “Kronberg, Holmberg & Lindman, <i>Surface Chemistry of Surfactants and Polymers</i> (Wiley)”; “Hunter, <i>Foundations of Colloid Science</i> (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%).