

## UNIVERSITY OF CALGARY FACULTY OF SCIENCE DEPARTMENT OF CHEMISTRY COURSE OUTLINE WINTER 2017

1. COURSE: CHEMISTRY 579 - Surface and Colloid Chemistry for Engineers

| LEC | DAYS | TIME        | ROOM    | INSTRUCTOR         | OFFICE  | PHONE    | EMAIL                | OFFICE<br>HOURS |
|-----|------|-------------|---------|--------------------|---------|----------|----------------------|-----------------|
| L01 | MWF  | 10:00-10:50 | ENA 103 | Dr. V. Thangadurai | ES 656D | 210 8649 | vthangad@ucalgary.ca | By appointment  |

Course website: Desire 2 Learn (D2L)

Departmental Office: Room SA 229, Tel: 403-220-5341, e-mail: uginfo@chem.ucalgary.ca

 Prerequisites: Chemistry 203, 357 and Chemical Engineering 427 http://www.ucalgary.ca/pubs/calendar/current/chemistry.html#6525

Note: The calendar description and the Faculty of Science policy on prerequisites and antirequisites is described in section 3.5 C. of the online University Calendar (<a href="http://www.ucalgary.ca/pubs/calendar/current/sc-3-5.html">http://www.ucalgary.ca/pubs/calendar/current/sc-3-5.html</a>). Students are responsible to ensure that they meet all prerequisite requirements for each course in which they are registered. Students who do not meet these requirements will be deleted from the course.

3. Grading: The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar (<a href="http://www.ucalgary.ca/pubs/calendar/current/f.html">http://www.ucalgary.ca/pubs/calendar/current/f.html</a>). In determining the overall grade in the course the following weights will be used:

| Midterm exam 1 (February 15, 2017)                   | 30%  |  |
|--|------|--|
| Midterm exam 2 (March 22, 2017)                      | 30%  |  |
| Final Examination (To be scheduled by the Registrar) | 40%  |  |
|  |      |  |
| Total  | 100% |  |

The marks for each of the course components will be recorded as a numerical score and combined as shown above to arrive at the total numerical score, which will then be converted to a letter grade to be reported to the Registrar.

## Proposed grading scale:

| A+         | Α         | A-        | B+        | В         | B-        |  |  |  |
|------------|-----------|-----------|-----------|-----------|-----------|--|--|--|
| 95% - 100% | 87% - 94% | 82% - 86% | 77% - 81% | 72% -76%  | 66% - 71% |  |  |  |
|            |           |           |           |           |           |  |  |  |
| C+         | С         | C-        | D+        | D         | F         |  |  |  |
| 62% - 65%  | 58% - 61% | 54% - 57% | 50% - 53% | 45% - 49% | < 44%     |  |  |  |

**4. Missed Components of Term Work:** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in Section 3.6. It is the student's responsibility to familiarize himself/herself with these regulations. See also Section E.6 of the University Calendar.

There are no deferred Midterm/ term test examinations [if applicable; otherwise state your policy on deferred exam]. In the event that a student misses the midterm or any course work due to illness then an official medical note will be required. Absences must be reported within 48 hrs. If a student misses the midterm for other reasons, then analogous documentation will be required. The course coordinator will need to see the original documentation (not electronic copy) for review / decision and keep it (or a copy) for their records. The documentation must be provided to the course coordinator within 15 days of the date of the midterm in order for an excused absence to be considered. If an excused absence is approved, then the percentage weight of a legitimately missed midterm examination will be pro-rated among the remaining components of the course OR will be transferred to the final examination (see Section E.3 of the University Calendar)

- 5. Scheduled out-of-class activities: Not applicable
- Course Materials: No textbook is required and materials will be provided in class and in Desire 2 Learn (D2L).
   Recommended reading text book is "Physics and Chemistry of Interfaces", by H.J. Butt, K. Graf and M. Kappl., Wiley-VCH, 2006. ISBN: 13:978-3-527-40629-6
- 7. Examination Policy: All examinations will be closed book and notes. Only non-programmable calculators (e.g., Casio FX260) are permitted for use during the exam components of the course. Students should also read the Calendar, Section G, on Examinations.
- 8. Approved Mandatory and Optional Course Supplemental Fees: Not applicable
- **9. Writing across the curriculum statement:** e.g. "In this course, the quality of the student's writing in exams will be a factor in the evaluation." See also Section E.2 of the University Calendar.
- **10.** Human studies statement: Not applicable. See also Section E.5 of the University Calendar.
- **11. Reappraisal of Grades:** Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section I.3 of the University Calendar.
  - (a) Term work: A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded, may have the work re-graded. The student shall discuss the work with the Instructor within 15 days of either being notified about the mark, or of the item's return to the class. If not satisfied, the student shall immediately submit the Reappraisal of Term work Grade form to the Associate Head of Chemistry, Dr. Farideh Jalilehvand (ahugchem@ucalgary.ca), who will arrange for a reassessment of the work if, and only if, the student's argument is valid. Note: Students should attempt to present their rational as effectively and as fully as possible. Mere dissatisfaction with a decision is not sufficient grounds for the appeal of a grade, or other academic decision. See sections 1.1 and 1.2 of the University Calendar.
  - **(b) Final Exam:** A student wishing a reappraisal of the final grade should contact the instructor. If not satisfied, the student shall submit the request to the Enrolment Services. See <u>Section I.3</u> of the University Calendar.

## 12. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) Misconduct: Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct include but not limited to: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's knowledge; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a lab report; copying materials from written or electronic resources; non-authorized recording of lectures. Please read the sections of the University Calendar under Section K.
- (b) Assembly Points: In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.
- (c) Academic Accommodation Policy: Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at <a href="http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities 0.pdf">http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities 0.pdf</a>. Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of Chemistry, Dr. Farideh Jalilehvand, by email <a href="mailto:ahugchem@ucalgary.ca">ahugchem@ucalgary.ca</a> or phone (403) 220-5353. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than 14 days prior to the date in question: <a href="mailto:http://www.ucalgary.ca/pubs/calendar/current/e-4.html">http://www.ucalgary.ca/pubs/calendar/current/e-4.html</a>
- (d) Safewalk: Campus Security will escort individuals day or night (<a href="http://www.ucalgary.ca/security/safewalk/">http://www.ucalgary.ca/security/safewalk/</a>). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

- (e) Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also <a href="http://www.ucalgary.ca/secretariat/privacy">http://www.ucalgary.ca/secretariat/privacy</a>.
- (f) Student Union Information: VP Academic Phone: 403 220-3911 Email: <a href="mailto:suvpaca@ucalgary.ca">suvpaca@ucalgary.ca</a>
  SU Faculty Rep. Phone: 403 220-3913 Email: <a href="mailto:science1@su.ucalgary.ca">science2@su.ucalgary.ca</a>
  and <a href="mailto:science3@su.ucalgary.ca">science3@su.ucalgary.ca</a>
  Student Ombuds Office: 403 220-6420 Email <a href="mailto:ombuds@ucalgary.ca">ombuds@ucalgary.ca</a>
  <a href="mailto:http://ucalgary.ca/provost/students/ombuds">http://ucalgary.ca/provost/students/ombuds</a>
- (g) Internet and Electronic Device Information: You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.
- (h) U.S.R.I.: At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference please participate in USRI Surveys.

Department Approval: Approved by Department Head Date: December 20, 2016