

CHEM 300: Introduction to Industrial Chemistry
Department of Chemistry, University of Alberta
Fall Term 2016

Coordinator: Dr. Michael Serpe, Gunning Lemieux Chemistry Centre W4-19A, serpe@ualberta.ca

Office Hours: Flexible, by appointment only

Class Location: Variable from week to week. Locations of course activities are posted in eClass.

Course Description/Objective: CHEM 300 (Introduction to Industrial Chemistry) is a credit/no-credit course (**1.5 credits**) that introduces students to the practices, environment, concepts, and other issues associated with the industrial workplace. Course activities include seminars by professionals from the local chemical industry, industrial tours, and professional skills development such as resume writing and interviewing. Normally taken after completion of a minimum of 60 but not more than 90 units of course weight in a program in the Department of Chemistry. The course is offered for Chemistry Honors and Specialization students, and for General Science students with consent of the department.

Course Structure: CHEM 300 is a directed study course. There will be little (if any) traditional lectures in the course. Rather students will be directed to videos, seminars, tours and events that will introduce them to industrial chemistry and professional skills. The resources and events required for the assignments are detailed in the CHEM 300 eClass site. Students must refer to the eClass site for the times and locations of course activities. The eClass site also has other resources that students may use to prepare for informational interviews, seminars and tours.

Factors considered in assigning credit: Attendance and engagement; review of background videos; posting thoughtful student discussions; conducting and providing brief summaries of informational interviews; conducting yourself in a respectful and professional fashion; prepare an effective resume; and a successful mock interview.

Expectation: 3-4 hours per week total in-class and out-of-class activities.

ACADEMIC INTEGRITY: The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the *Code of Student Behaviour* (online at <http://www.governance.ualberta.ca/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx>) and avoid any behaviour that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts, and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All forms of dishonesty are unacceptable at the University. Cheating, plagiarism and misrepresentation of facts are serious offenses. Anyone who engages in these practices will receive at minimum a grade of zero for the exam or paper in question and no opportunity will be given to replace the grade or redistribute the weights. Any offense will be reported to the Senior Associate Dean of Science who will determine the disciplinary action to be taken. Typical sanctions for serious violations of the Code have included disciplinary grade reductions, disciplinary failing grades, suspension or permanent expulsion from the University.

PROFESSIONAL CONDUCT: During this course you will be interacting with off-campus professionals. As such you will be representing the University of Alberta and the Department of Chemistry. Students should familiarize themselves with the provisions of the *Code of Student Behaviour* related to professional conduct (Sec. 30.3.3) (www.governance.ualberta.ca/CodesofConductandResidenceCommunityStandards/CodeofStudentBehaviour.aspx) to avoid any behaviour which could be viewed as unprofessional.

Unprofessional conduct may result failure to receive credit in the course. Any offense will be reported to the Senior Associate Dean of Science who will determine the disciplinary action to be taken.

Audio or video recording of lectures:

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Disclaimer:

Any typographical errors in this Course Outline are subject to change and will be announced in class.

Policy about course outlines can be found in section "Course Requirements, Evaluation Procedures and Grading" in the University Calendar.

Tentative Course Schedule and Some Assignments

(Refer to eClass for updates to the course schedule and a complete list of assignments):

Week of Aug. 29: No class, but do preliminary exercises detailed in Section 1 of eClass site.

Week of Sept.5: No class, but do additional preliminary exercises detailed in Section 2 of eClass.

Mon. Sept. 12: Introductions, Discussion of course structure, and Informational Interview introduction, Chemistry room W4-44

Mon. Sept. 19: *CaPS Resume Workshop*, 4:00-5:00 pm, CCIS Career Centre, 1-031 CCIS.
Assignment 4.0: draft your resume prior to the CAPS workshop

Mon. Sept. 26: No class due to Sept. 28 events.

Wed. Sept. 28: Attend the [Careers Day](#), Butterdome, 10 AM – 4 PM. Talk to two or more exhibitors who have positions for chemists.
Assignment 6.1: write a short (<200 word) reflection about one of the chemistry employers at the Career Day and post in in the Student Discussion Forum on eClass by **Oct. 3.**

Wed. Sept. 28: Science Internship Program Information Session, CCIS 1-430, 5:00-6:30 PM. Chemistry break-out discussion to follow.
Assignment 6.2: do a 15 minute informational interview of one of the Chemistry SIP students. Post a reflection in the Student Discussion Forum (<100 words) on what most interested you and most surprised you during the interview by **Oct. 3.**

Mon. Oct 3: Jerry Hanna, President and CEO of Clearflow Group Inc., Sherwood Park, AB

Mon. Oct. 10 Thanksgiving. **No class.**
Assignment 8.1: conduct an informal informational interview with someone on campus who has industrial chemistry experience. A list of contacts is available in Section 8 in eClass. Post a reflection (< 300 words) in the Student Discussion Forum by **Oct. 17.**
Assignment 8.2 (optional): consider doing a Job Shadow during Reading Week. Dates for information session will be announced [here](#).

Mon. Oct. 17 Syncrude Tour and pizza discussion, 2:00-6:00 pm, meet at Lot E (just east of CCIS lecture rooms) at 2 pm. A field trip waiver must be submitted to Dr. Serpe (serpe@ualberta.ca or in room W4-19A) before the tour.

- Mon. Oct. 24 Tentative interview workshop
- Mon. Oct. 31: Conrad Siegers (Technology Management Officer - Health Sciences
TEC Edmonton) and Lauren Mercier (Business Development Specialist
Mitacs and TEC Edmonton)
- Mon. Nov. 7 **Fall Break. No class.**
Assignment 12.1: conduct an informational interview of an industrial chemist. A list of
off-campus contacts is in Section 12 of eClass. Post a <200 word reflection in the
Student Discussion Forum by **Nov. 16 Or**
Assignment 12.2: go on a Job Shadow organized by CaPS.
- Mon. Nov. 14 Gilead Pharmaceuticals Tour, 2:00-6:00 pm, meet bus at Lot E beside CCIS lecture hall.
A field trip waiver must be submitted to Dr. Serpe (serpe@ualberta.ca or in room W4-
19A) before the tour.
- Mon. Nov. 21 Deepika Parasuraman and Devin Sears of Gilead Alberta
- Mon. Nov. 28 Kim Kenny (Forensic Specialist, Trace Evidence Services, National Forensic Laboratory
- Edmonton)
- Mon. Dec. 5 **CHEM 300 Mock Interviews**, Networking session/wrap up meeting/evaluations

Gilead Pharmaceuticals, Matthew Verwey
Paracel Laboratories, Brenna Brown
Wilson Analytical, Ken Schmidt
HJC Consulting Inc., John Crabtree
Stream Technologies Inc., Craig Milne