

Faculty of Science Course Syllabus
Department of Chemistry
Chemistry 6356
Advanced Materials Science
Fall 2018

Instructor: Dr. Mark Obrovac email: Mark.Obrovac@dal.ca office: Chemistry 315

Lectures: three 55 minute lectures/week, days/time/room TBD

Laboratories: None

Tutorials: None

Course Description

This course will explore advanced topics in materials science.

Course Prerequisites

CHEM 5303.03 or permission of the instructor.

Course Objectives/Learning Outcomes

Specialized topics in advanced materials science will be covered "in-depth". Students are expected to gain a detailed working knowledge of each topic: including the theoretical background and the current applications and advancements of the topic of study. The ability to effectively plan and deliver a series of lectures on the topic of study is also expected.

Course Materials

Lecture slides and other materials will be provided on the course Brightspace website.

Course Assessment

<i>Component</i>	<i>Weight (% of final grade)</i>	<i>Date</i>
Proposal paper	15%	due 4:25 pm, Monday Sept. 17, 2018s
Student lectures	35%	during regular classes
Quizzes	10%	during regular classes
Term paper	40%	due 4:25 pm, Tuesday Dec. 4, 2018

Other Course Requirements

A topic must be proposed by students and approved by the instructor by 4:25pm, Dec. 10, 2018.
The lectures and term paper components must both be passed (>69%) to pass the course.

Conversion of numerical grades to Final Letter Grades follows the Faculty of Graduate Studies official grading scale:

A+ (90-100)	B+ (77-79)	F (0-69)
A (85-89)	B (73-76)	
A- (80-84)	B- (70-72)	

Course Policies

All assignments must be handed in on time and all in-class lectures must be provided by students on time. Late work will not be accepted and will receive zero marks. Any missed in-class lectures will be rescheduled, if another time that fits the professor's and students' schedule can be found. If such a time cannot be found, then zero marks will be awarded for that lecture. Any missed quizzes will receive zero marks. There are no make-up or supplemental examinations in this class. If you are too ill to write a quiz or examination or complete an assignment in this class, please provide a Student Declaration of Absence form, as per the regulations in the University Calendar. Up to one lecture or quiz may be excused from the final mark. In the case of an excused quiz or lecture, the others will be weighted more heavily.

Independent work is expected on all course components.

It is each student's responsibility to read her/his Dalhousie email and the Brightspace website.

In the case of a weather-related closure of the University, notification will be provided on Dal Alert, the Dalhousie website and on local radio stations. If a class needs to be cancelled in another emergency, every attempt will be made to contact students via email and/or Brightspace.

No cell phone use (including no texting) in class, please.

Course Content

Specific topics in materials science will be chosen based on students' interest. Lectures on specific topics in advanced materials science will include:

- an introduction to the topic
- theoretical background
- current applications
- current advances in the field

**Faculty of Science Course Syllabus (Section B)
Chemistry 6356**

University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus_life/academic-support/accessibility.html

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

Code: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness

Statement: <http://www.dal.ca/cultureofrespect.html>

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit or e-mail the Indigenous Student Centre (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus_life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

https://www.dal.ca/academics/important_dates.html

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

Missed or Late Academic Requirements due to Student Absence (policy)

https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html

Student Resources and Support

Advising

General Advising: https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: <https://www.dal.ca/faculty/science/current-students/academic-advising.html>

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: <https://libraries.dal.ca/>

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Fair Dealing Guidelines: <https://libraries.dal.ca/services/copyright-office/fair-dealing.html>

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness/services-support/student-health-and-wellness.html

Student Advocacy: <https://dsu.ca/dsas>

Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html

Safety

Biosafety: <https://www.dal.ca/dept/safety/programs-services/biosafety.html>

Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>

Radiation Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety.html>

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>