

Faculty of Engineering

COURSE OUTLINE

ELEC549A – Selected Topics in Electronics: Materials for Enhanced Energy Technologies Term – Summer 2017 (201705)

Instructor Dr. Reuven Gordon

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Office Hours

Days: by appointment Time: Location:

Course Objectives

- To obtain broad training in materials for enhanced energy technologies.

Learning Outcomes

- The primary learning outcome is to obtain a broad perspective of materials in relation to energy technologies, recognizing common elements for greater employability in multiple evolving sectors; not focusing on a single energy area.
- Secondary learning outcomes relate to knowledge and know-how on state-of-the-art research equipment, professional skills, and industrial perspective on R&D.

Syllabus

The following online sessions are scheduled for answering questions. Please review online videos before attending sessions: <u>https://onlineacademiccommunity.uvic.ca/meet/meet-graduate-courses/</u>

May 3 - Intro Class (Gordon)

- 10 Sinton (Global Energy/Micro-Nanofluidics)
- 17 Sargent (Nano-opto-elctronics)
- 24 Gordon (Light-matter at nanoscale)
- 31 Goldthorpe (Nanomaterials)
- June 7 Tiedje (Photovoltaics re-record of second half)

- 21 Brolo (Electrochemistry and Batteries)
- 28 Djilali (Transport)

July 5 - Bahrami (Energy Conversion and Heat Transfer)

- 12 Fagan/Sirk (Professional/IP)
- 19 Humphrey (Nano-tools)
- 26 Free

14 - Free

To join the online session, use: <u>https://bluejeans.com/165778089</u> or contact <u>meet@uvic.ca</u> for other methods.

 A-Section(s):
 A01 / CRN 30370

 Days:
 TWF

 Time:
 11:30-12:20

 Location:
 ECS 130

*** Note: on Wednesdays, online sessions will occur in DTB A144, not usual classroom.

Assessment:

Assignments: 10 × 10% Due Dates: Friday at 5 pm PST directly after online session. Email assignments to meet@uvic.ca Late assignments will have 50% reduced marks. Any cheating/copying will result in 0% for that assignment.

Note: (sample notes for instructors)

Failure to complete all laboratory requirements will result in a grade of N being awarded for the course.

Failure to pass the final exam will result in a failing grade for the course.

The final grade obtained from the above marking scheme for the purpose of GPA calculation will be based on the percentage-to-grade point conversion table as listed in the current Graduate Calendar.

http://web.uvic.ca/calendar2017-05/grad/academic-regulations/grading.html

Note to Students: Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the Chair of the Department by email or the Chair's Secretary to set up an appointment.

Accommodation of Religious Observance: <u>http://web.uvic.ca/calendar2017-05/general/policies.html</u>

Policy on Inclusivity and Diversity: http://web.uvic.ca/calendar2017-05/general/policies.html

Standards of Professional Behaviour: You are advised to read the Faculty of Engineering document Standards for Professional Behaviour, which contains important information regarding conduct in courses, labs, and in the general use of facilities.

http://www.uvic.ca/engineering/assets/docs/professional-behaviour.pdf

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult the entry in the current Graduate Calendar for the UVic policy on academic integrity.

http://web.uvic.ca/calendar2017-05/grad/academic-regulations/academic-integrity.html#

Equality: This course aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of the class and its curriculum and to meet the syllabus requirements. Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of the course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way. It is not necessary for you to reveal your disability and/or confidential medical information to the course instructor. If you believe that you may require accommodation, the course instructor can provide you with information about confidential resources on campus that can assist you in arranging for appropriate accommodation. Alternatively, you may want to contact the Resource Centre for Students with a Disability located in the Campus Services Building.

The University of Victoria is committed to promoting, providing, and protecting a positive, and supportive and safe learning and working environment for all its members.

Course Lecture Notes

Unless otherwise noted, all course materials supplied to students in this course have been prepared by the instructor and are intended for use in this course only. These materials are NOT to be re-circulated digitally, whether by email or by uploading or copying to websites, or to others not enrolled in this course. Violation of this policy may in some cases constitute a breach of academic integrity as defined in the UVic Calendar.