COURSE OUTLINE
ELEC 545 Nanotechnology
Spring 2014

Instructor
Dr. Chris Papadopoulos
Phone: 721-8619
E-mail: papadop@ece.uvic.ca

Office Hours
Day: Tuesday     Time: 2:30PM – 5:00PM
(or by appointment)
Location: EOW 429

Lectures
Sections: A01/CRN 21144
Days: TWF
Time: 9:30AM – 10:20AM
Location: ECS 130

Website
http://moodle.uvic.ca (NetLink ID required)

Required Text
Readings will be provided.

References
Introduction to Nanoscience, Lindsay, Oxford (2010).

Topics
I Nanoscale Imaging and Fabrication
II Properties of Nanostructures
III Nanoelectronics
IV Nanophotonics
V Bionanotechnology

Assessment
Tests 15; 20% (Take home, due Feb. 18; Mar. 18)
Term Project Presentation 10%, Paper 30% (Due April 4)
Final Exam 25%

Submit all work directly to instructor (in-class or office by 5PM). Term papers will not be accepted after the due date.
The final grade obtained from the above marking scheme will be based on the following percentage-to-grade point conversion:

<table>
<thead>
<tr>
<th>Passing Grades</th>
<th>Grade Point Value</th>
<th>Percentage for Instructor Use Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>9</td>
<td>90 – 100</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>85 – 89</td>
</tr>
<tr>
<td>A-</td>
<td>7</td>
<td>80 – 84</td>
</tr>
<tr>
<td>B+</td>
<td>6</td>
<td>77 – 79</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>73 – 76</td>
</tr>
<tr>
<td>B-</td>
<td>4</td>
<td>70 – 72</td>
</tr>
<tr>
<td>C+</td>
<td>3</td>
<td>65 – 69</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>60 – 64</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>50 – 59</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Failing Grades</th>
<th>Grade Point Value</th>
<th>Percentage for Instructor Use Only</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>0</td>
<td>35 - 49</td>
<td>Fail, conditional supplemental exam. (For undergraduate courses only)*</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0 – 49</td>
<td>Fail, no supplemental.</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>0 – 49</td>
<td>Did not write examination, Lab or otherwise complete course requirements by the end of term or session; no supplemental exam.</td>
</tr>
</tbody>
</table>

*The rules for supplemental examinations are found on pages 80 of the current 2013/14 Undergraduate Calendar.

Deferred exams will normally be written at the start of the student’s next academic term; i.e., approximately 4 months following the deferral of the exam.

**Course Objectives and Learning Outcomes**

Understand properties of nanoscale materials and tools used to create/characterize them. Examine and apply this knowledge to applications based on nanostructures.

**Syllabus**


**Guidelines on Religious Observances**

See [http://web.uvic.ca/calendar2013/GI/GUPo.html](http://web.uvic.ca/calendar2013/GI/GUPo.html)

**Commitment to Inclusivity and Diversity**

See [http://web.uvic.ca/calendar2013/GI/GUPo.html](http://web.uvic.ca/calendar2013/GI/GUPo.html)

**Standards of Professional Behaviour**

You are advised to read the Faculty of Engineering document Standards for Professional Behaviour at [http://www.uvic.ca/engineering/current/undergrad/index.php#section0-25](http://www.uvic.ca/engineering/current/undergrad/index.php#section0-25) which contains important information regarding conduct in courses, labs, and in the general use of facilities.

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 ECE Chair by email or the ECE Chair’s secretary to set up an appointment.

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult [http://web.uvic.ca/calendar2013/FACS/UnIn/UARe/PoAcI.html](http://web.uvic.ca/calendar2013/FACS/UnIn/UARe/PoAcI.html) for the UVic policy on academic integrity. Plagiarism detection software may be used to aid the instructor and/or TA’s in the review and grading of some or all of the work you submit.