

Calendar and Topics

<u>Date</u>	<u>Topic</u>
Aug. 25	Course outline and general introduction to nanotechnology
Aug 30, Sept 1	Practical utilization of information science Electronic properties of quantum confined systems
Sept. 6,8	Electronic properties of quantum confined systems Intro to band diagrams, electronic defects and molecular orbitals
Sept. 13,15	Physical chemistry of surfaces
Sept. 20,22	Nucleation and growth theory
Sept. 27,29	Zero dimensional systems: Nanoparticle synthesis
Oct. 4,6	Nanoparticle synthesis One dimensional systems: Nanowires and nanorods
Oct. 11,13	Nanowires and nanorods (Mid-Term Exam , Oct. 13)
Oct. 18,20	Nanowires and nanorods Two dimensional systems: Thin film processes
Oct. 25,27	Two dimensional systems: Thin film processes
Nov. 3	(Nov. 2 Election day no class) Carbon Nanotubes
Nov. 8,10	NanoLithography and directed self-assembly
Nov. 15,17	Characterization
Nov. 22	Characterization (Thanksgiving Vacation, 25th)
Nov. 29, Dec 1	Nano-scale mechanical processes Applications
Dec. 6,8	Research proposal presentations

Final Exam
Thurs, Dec. 15, 8:00am

Grading Policy:

- 20% Homework
- 20% In-class participation
- 15% Mid-Term Exam
- 25% Research proposal and presentation
- 20% Final Exam

A= above 90% B= 80-90% C= 70-80% D= 60-70% E= below 60%

- Total score for each assignment (i.e. 100%) will be the highest mark for each assignment. An 'A' will have to be within 10% of this mark. The instructor reserves the right to set a higher total score if the entire class performance is substandard.
- Any form of cheating or plagiarism will result in a failing grade for the course. If you have any questions about what constitutes plagiarism, please see me immediately. It is particularly easy to 'cut and paste' material directly from the web (It is also particularly easy for me to find it from web searches). It is required that you properly notate material sources.
- In class participation is a significant portion of the class. Examples of activities include solving in-class sample problems, 2 minute reports on assigned reading, role playing, group brainstorming on explanations of literature precedence, discussion of following-up on topics from previous lectures. These activities will **REQUIRE THE TIMELY READING OF COURSE MATERIAL!!!**