

EE 218: Fundamentals of Nanoelectronics

Description

A unified approach to Nanoelectronics.

Intended audience: Senior Undergraduate & Graduate .

Textbook:

Quantum Transport: Atoms to Transistors
MATLAB by MathWorks

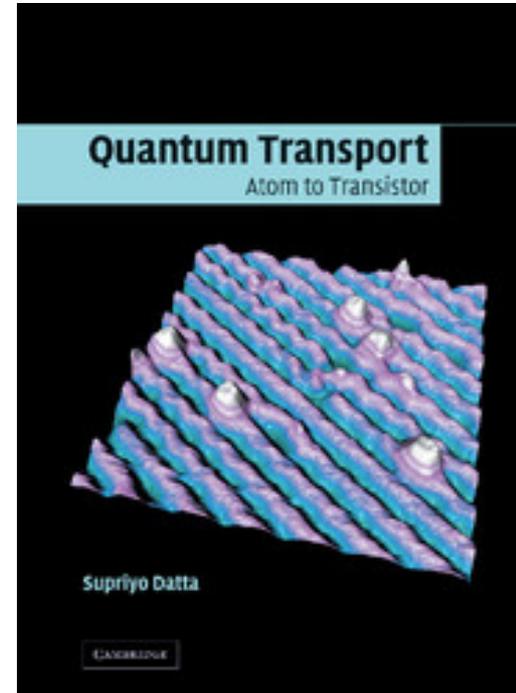
Time: TuTh 2:00-3:45 pm

Location: Baskin Engineering 156

Course Instructor: Ahmet Ali Yanik

E-mail: yanik@soe.ucsc.edu

Office hours: TuTh 3:45-4:45 pm (BE 257C)



Quantum Transport: Atoms to Transistor
by Supriyo Datta

Course Expectations

Learning occurs by the active involvement of the student. The student is expected to come to class prepared to think and learn. The lecture period will be used to establish fundamental concepts. During lecture time, you will be asked to participate in solving problems.

To get the most out of this class, you need to read the assigned sections in the textbook before coming to class.

Working Together

You are encouraged to work in groups and discuss about the homework assignments. However, each has to write his/her own solution/code and fully understand them.

Academic Dishonesty

Any confirmed academic dishonesty including but not limited to copying homeworks or cheating on exams, will result in a no-pass or failing grade. You are encouraged to read the campus policies regarding academic integrity. Examples of cheating include (but are not limited to):

- Sharing results or other information during an examination.
- Working on an exam before or after the official time allowed.
- Submitting homework that is not your own work.
- Reading another student's homework solution before it is due.
- Allowing someone else to read your homework solution before the assignment is due.
- If there is any question as to whether a given action might be construed as cheating, see me before you engage in any such action.

Homework Assignments

Homeworks will be assigned and collected during class sessions. Late homework will not be accepted or graded. Homework is graded in terms of it being complete, well organized, readable and showing evidence of thoughtful attention to the problem itself. Sloppy submissions will not be considered for grading.

Tentative Grading

Course Element	Percentage of Course Grade
Homeworks	20%
Midterm (Take Home)	25%
Participation	15%
Final (Simulation Project)	40%

Total= 100%

No in-class exams.