Rough lecture outline (subject to change)

EECS 277C Winter 2017

Professor Burke

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| Week | Tuesday | Thursday |
| 1 | L1: Intro  Length/energy scales, Moore’s law | L2: Fabrication and characterization techniques  Lithogrpaphies  TEM, SEM, AFM, SPM, tunneling |
| 2 | L3: Quantum mechanics, density of states for free electrons (Fermi gas) | L3: QM |
| 3 | L3: QM | L4: Tunneling |
| 4 | L5: Coulomb blockade | Midterm #1 |
| 5 | \*\*\* | L6: Island |
| 6 | L7: Double tunnel jn. | L8: SET |
| 7 | \*\*\* | Midterm #2 |
| 8 | L9: 2DEG (prelude to EECS 277B!) | L10: Nanowire (QPC) w/demo |
| 9 | L11: Landauer/Buttiker, QD, QPC | L12: Mol Electronics |
| 10 | L13: Carbon electronics | L13: Carbon electronics |

\*\*\* TBD