SEMICONDUCTOR DEVICE PROCESSING COURSE SCHEDULE / SUMMER 2013

Wk	Day	Date	Reading / Reference	Lecture Topics, Due dates, etc.
1	M		DOE and Statistics Handouts	Intro to processing, statistics and probability, Schewhart tests, statistical process control, and DOE
1	Tu		Wolf Ch. 1, 2, Sze Ch. 11	Crystal Growth
1	W		Wolf Ch. 8 and Sze 12.1	SiO_2 Thermal Oxidation
1	Th		Wolf. Ch. 9. Sze Ch. 14	Defects and Impurities, Diffusion
1	F		Wolf Ch. 13 / Sze Ch. 13.1-13.2	Lithography I – Optics
2	M		Wolf Ch. 12	Lithography II - Photoresist Materials
2	Tu		Wolf Ch. 3, 4, and 6	Vacuum Technology and Physics, Review Midterm
2	W			**Midterm Exam:** closed book, no notes
2	Th		**VCVD DUE** Sze 12.5, Wolf Ch. 11	Discuss Midterm, VCVD Presentations, Thin Films
2	F		Wolf. Ch. 7, Sze Ch. 12.2/12.3	CVD, MOCVD, MBE
3	M		Wolf Ch. 6	Grove's Model for CVD, start PVD
3	Tu		Wolf Ch. 7 and Wolf Ch. 10	PVD - Sputtering and Evaporation, Ion Implantation
3	W		Sze 13.3 -13.4 Wolf Ch. 14 (dry etching)	Wet and Dry Etch
3	Th		Wolf Ch. 15	Integration / Catch-up / Review
3	F			**Final Exam**

Homework due dates will be determined upon assignment of the problem set.