

Checklist for EE243 Final Exam S2008

All topics included in Midterm Exam

Emphasis will be on :

Thin Film Deposition

Vacuum basics – units
Evaporation

CVD

Grove Model
Stagnant layer problems
Processing issues (uniformity, mass depletion)

Plasma Processing

Plasma Characteristics
Sputtering Deposition
Reactive Ion Etching (selectivity, anisotropy, loading effects)
PECVD-qualitative

Multilevel Metallization

Interconnects
Contacts
Interlevel Dielectrics
Electromigration and Stress Migration (qualitative)
Various planarization methods
CMP (Preston Model, dishing, pads)

SPC and DOE

*Use Required reading and homework problems as guideline)
Use of statistical distributions (normal, t, chi, and F)
Simple hypothesis testing
How to design 2-level factorial experiments
SPC and ANOVA(qualitative only)