1. Interlayer dielectrics: Low k dielectrics for high speed devices.
2. Planarization: Chemical Mechanical Polishing. Basics and applications (insulators and metals)
3. Photolithography.
   a. Basic optics
   b. optical systems
   c. resist technology, CAR
   d. EUV lithography
   e. e-beam and x-ray sources

Mid-term

4. Wet processing
   a. Wet etch
   b. wafer cleaning issues
5. Plasma processing
   a. Basis of dc, ac , and HD plasmas
   b. plasma etching
   c. plasma induced damage
6. Device packaging
7. Yield and reliability
8. Statistical process control

Final Exam
Silvaco final project due at the end of the quarter