Course Outline
Focused Ion Beam
Instrumentation and Applications

June 9-12, 2008

	Sunday, June 8 (*evening*)
5:00-8:00	Registration (Whitaker Lobby)

Day One	**Monday, June 9**
8:30-8:45	Welcome
8:45-10:00	Introduction to FIB Instrumentation
10:00-10:20	Break
10:20-12:00	Physics of Ion/Matter Interaction
12:00	Lunch
1:15-3:00	Lab 1: TRIM Ion Interaction Simulations
3:00-3:30	Break
3:30-5:00	Imaging with Ions
5:30	Dinner
7:15-9:00	Lab 2: Introduction to FIB Instruments and Imaging with Ions

Day Two	**Tuesday, June 10**
8:30-10:00	SEM, TEM, AES, AP, SIMS for the FIB Practitioner
10:00-10:20	Break
10:20-12:00	Micro- and Nano-Fabrication: Deposition in the FIB
12:00	Lunch
1:15-2:45	Lab 3: Optimizing Deposition Conditions
2:45-3:15	Break
3:15-4:00	Redeposition During Ion Milling
4:00-5:00	Critical Issues with High Resolution SEM
5:30	Dinner
7:00-8:15	SEM Sample Preparation in the FIB
8:30-9:30	Lab 4: Producing SEM Samples in the FIB

Note: All classes and labs will be held in Whitaker Lab.

Disclaimer: The organizers reserve the right to change the instrumentation or sequence of lecture topics and to cancel lectures or substitute lecturers if necessitated by circumstances beyond their control. Updated 9/10/07

Day Three	**Wednesday, June 11**
8:30-10:00	TEM Specimen Prep
10:00-12:20	Break
10:20-12:00	Lab 5: TEM Specimen Prep
12:00	Lunch
1:15-2:15	Lab 6: Sample Manipulation
2:15-3:15	Semiconductor Applications
3:15-3:40	Break
3:40-5:00	3D FIB Tomography
6:30	Course Cocktail hour and banquet

Day Four	**Thursday, June 12**
8:30-10:00	Case Studies/Applications
10:00-10:20	Break
10:20-11:30	Selection of FIB Tools
11:30-12:00	Summary
12:00	Lunch
1:15-3:00	Lab 7: Student Sample Time