

**Course 3**  
**Senior Thesis Symposium Schedule**  
**Thursday, May 8, 2008**

<b>Name</b>	<b>Title</b>	<b>Advisor</b>	<b>26-204</b>	<b>26-302</b>	<b>26-328</b>	<b>Chipman Room 6-104</b>
Bruce, Chris	Experimental Determination of Cell Adhesion and Proliferation Response to Thin Gel Film Thickness Using Polyacrylamide Hydrogels	Van Vliet			3:30-3:45	
Brunini, Victor	Percolation Behavior of Diffusionally Evolved Two-Phase Systems Simulated Using Phase Field Methods	Schuh & Carter			4:45-5:00	
Buchok, Aaron	Design, Construction, and use of Economically Friendly Injection Molds	Roylance				3:45-4:00
Delgadillo, Maricela	Study of Effect of Mechanical Stiffness Substrata, Assembled with Polyelectrolyte Multilayer Thin Films, on Biofilm Forming Staphylococcus Epidermis' Initial Adhesion Mechanism	Rubner	4:45-5:00			
Fabian, Omar	Synthetic Routes to Monodisperse Gold Nanoparticles Stabilized by Different-Length Alkanethiols	Stellacci		4:00-4:15		
Gortikov, Bryan	Effects of Processing on Microstructure and Properties in Ti-Ta Alloys	Allen		3:15-3:30		
Hofmeister, Grant	Materials Selection for the Automotive Body: A Process-Based Cost Model Approach with Manufacturing Flexibility	Kirchain	3:45-4:00			
Kunz, Allison	Characterization of New Surface Morphologies in a Hydrogen-Bonded Multilayer System	Rubner	4:30-4:45			
Larsson, Annika	Characterizing Uncertainty in Material Selection Decisions: Robustness of Life Cycle Assessment using various End-of-Life Allocation Methods	Kirchain	3:30-3:45			
Mehra, Saahil	Using First-Principles Methods to Model the Thermoelectric Properties in Bulk Silicon	Ceder				4:30-4:45

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Morton, Sean	High-Temperature Stability of T91/12Cr-2Si-Fe Functionally Graded Composite	Ballinger				4:45-5:00
Park, Albert	Inhibition of Biofilm Growth through Biocidal Polyelectrolyte Multilayers	Rubner	4:00-4:15			
Pellegrino, Jason	Synthesis of pH-Responsive Core-Shell Nanoparticles of Different Sizes and with Different Shell Compositions	Irvine			4:00-4:15	
Rabideau, Dustin*	Characterization of Resin Encapsulated Flex (REX) Technology for Flip Chip Interconnects in Electronic Devices	Powell		3:45-4:00		
Rogosic, John	Solvent Filtration through the use of Monolayer-protected Gold Nanoparticles	Stellacci		4:15-4:30		
Rowehl, Jill	Organic Multilayer Photoconductors Utilizing a Spacer Layer	Bulovic		3:30-3:45		
Russo, Analisa	Variation of Electrical Resistance in Superelastic NiTi for Sensor Applications	Maes			4:30-4:45	
Shah, Mirat	pH-sensitive Resist Materials for Combined Photolithographic Patterning of Proteins and Fluid Phospholipid Bilayers	Irvine			4:15-4:30	
Simson, Jake	Physical Analysis of Collagen-GAG Composite Scaffolds for Nucleus Pulposus Tissue Regeneration	Spector			3:45-4:00	
Stefanescu, Cristina	Exploration of Catalysis Activation Energy as a Function of Gold Nanoparticle Surface Morphology	Stellacci		4:30-4:45		
Sundareshan, Shashank	Influence of Counter-ions on Antifogging Coatings	Rubner	4:15-4:30			
Tarasov, Vladimir	Control of the Self-Assembly of Alkanethiol-Coated Gold Nanoparticles in the Solid State	Stellacci		4:45-5:00		

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Wheeler, Kevin	The Brittle-compliant Conjunction and Fracture of the Shell from a Deep-sea Hydrothermal Vent Gastropod	Ortiz				4:15-4:30
Wolf, Violetta	Use of Uranium Decay Series for Dating an Archaeological Smelting Site	Hosler				3:30-3:45
Yazzie, Kyle	Block Copolymer-Templated Iron Oxide Nanoparticles for Bimodal Growth of Multi-walled Carbon Nanotubes	Cohen				4:00-4:15

\* *internship presentation*