

ChBE 4803B/8803B: Chemical Engineering in Nanoscale Systems: Syllabus

Date	Topic
<i>Aug 22, Aug 24</i>	Overview and introduction
<i>Aug 29, Aug 31, Sep 5</i>	Nano “Building Blocks”: Biological Nanotubes and Nanopores
<i>Sep 7, Sep 12, Sep 14</i>	Nano “Building Blocks”: Synthetic Nanotubes
<i>Sep 19, Sep 21</i>	Nanoparticles for heat transport applications: Nanofluids
<i>Sep 26, Sep 28, Oct 3</i> <i>HW #1 due Oct 3</i>	Nanoparticles and nanostructured materials for catalysis
<i>Oct 5, Oct 10, Oct 12</i>	Directed assembly of nanostructured materials in solutions
<i>Oct 19</i>	Guest Lecture : Dr. Ravi Doraiswami, School of ME Topic: Nano/Micro Integration
<i>Oct 24, Oct 26, Oct 31</i>	Nanostructured and Nanocomposite Thin Films
<i>Nov 2</i> <i>HW #2 due Nov 2</i>	Building organic nanostructures from polymers
<i>Nov 7</i>	Building and operating nanomachines
<i>Nov 9</i>	Nanosystem Design Project: Preliminary review discussions
<i>Nov 21</i>	Nanomanufacturing for our energy future
<i>Nov 28, Nov 30, Dec 5, Dec 7</i>	Nanosystem Design Project Presentations and Discussion