ES462, "Emerging Technologies"

1. **Course Description:** Focuses on skills and toolsets for evaluation of new and emerging technologies using a sociotechnological development model. Includes discussions of basic science, state-of-the-art technologies and current research trends in a variety of emerging areas, including biotechnology, nanotechnology, cybernetics, etc.

2. **Course Objectives:**
   i) To develop an appreciation for the necessity of forward thinking in technology matters.
   ii) To build up a methodology for sound projection of emerging technologies.
   iii) To investigate a variety of important emerging technologies.
   iv) To develop an understanding of the modern environment for emerging technologies.
   v) To understand the roles of money, society and politics in technological development.
   vi) To tie projection and prediction of advanced technologies to life at the USNA and the military service.

3. **Textbook.** The textbooks for this course are:
   Required: 
   *Engines of Creation: The Coming Era of Nanotechnology*, K. Eric Drexler. PDF to be distributed to class electronically.
   
   Useful Supplemental References
   The Wonderful Future that Never Was, Gregory Benford et.al., Hearst Books, 2012
   Crossing the Chasm, Geoffrey A. Moore, Collins Business, 2002
   The Brain That Changes Itself, Norman Doidge, M. D., Viking, 2007
   Connections, James Burke, Simon & Schuster, 2007
   Freakonomics, Steven Levitt and Stephen Dubner, William Morrow, 2005