**Objectives/Goals:**
This course is mainly concerned with economic analysis for engineering and managerial decision making. It consists of techniques for evaluating the worth of prospective projects, investment opportunities and design choices.

**Course Topics:**
The course structure will resemble the structure of the textbook with some exceptions. Specifically the following topics will be covered:

- **Interest and Time Value of Money, Economic Equivalence**
  - Terminology and cash flow diagrams
  - Factors and their use
  - Nominal and effective rates
  - Continuous compounding

- **Methods for Evaluation of Alternatives**
  - Present worth and capitalized cost method
  - Annual equivalent cost method
  - Determination of rate of return and classification of investments
  - Benefit/cost ratio method and payback period method

- **Replacement Analysis**

- **Capital Rationing**

- **Inflation**

- **Index Numbers and Cost Estimation**

- **After Tax Economic Analysis and Methods of Financing**

- **Sensitivity and Risk Analysis**

**Textbook:**

**Reference books:**
NEWMAN, LAVELLE and ESCHENBACH, Engineering Economy Analysis, Engineering Press (8th edition)


**Grading:**
- Case Study
- Quizzes (Best 5 out of 6)
- Homeworks (5)
- Midterm (November 24, 2009)
- Final (January 20, 2010)