EE4070 數值分析

Numerical Analysis

February 24, 2015

Numerical Analysis

- Class time: T34, R2: lectures and discussions.
- Class room: 台達館 201.
- Text book
  - *Numerical Mathematics*, by A. Quarteroni, R. Sacco, F. Saleri, 2nd edition, Springer, 2007.
- Reference books
  - *Introduction to Numerical Analysis*, J. Stoer, R. Bulirsch, 3rd edition, Springer, 2002.
  - *Introduction to Numerical Analysis*, E.B. Hildebrand, 2nd edition, Dover, 1987.
  - *Numerical Recipes in C*, W.H. Press, B.P. Flannery, S.A. Teukolsky, W.T. Vetterling, Cambridge University Press, 1988.
- Evaluation
  - Homework: 50%,
    - Could be a significant loading.
  - Mid-term exam: 20%,
    - Apr. 21.
  - Final exam or project: 30%,
    - Jun. 23.
- TA: 吳亞桓 (yahuan0303@yahoo.com.tw)
- Office hours: Thursday 10 - 11:30 AM.
  - Or by appointment (michang@ee.nthu.edu.tw).

Homework

- Homework is designed for you to practice what you have learned in class.
- Grading criteria:
  - Ontime submission (20%),
    - Due on 11:59 PM of the day specified on the announcement.
  - Solution correctness (50%),
  - Program and report writing (30%),
    - Legibility and efficiency,
    - Clearness and logic,
    - Solution approach and comments.
- Download and submit on EE workstations.
- Discussions with classmates encouraged but no plagiarism.
  - Write your own programs.

Handouts and Homework

- Class handouts can be found on EE workstation.
  - Download (ftp) through daisy (140.114.24.31).
  - directory: ~ee407002/notes
    - lec00.pdf,
    - lec10.pdf,
    - lec21.pdf, ...
- Homework can be found in each homework directory.
  - ~ee407002/hw01,
  - ~ee407002/hw02, ….
- Homework should be turned in on EE workstations.
- Submission command:

```
$ ~ee407002/bin/submit hw01 hw01.cpp hw01a.pdf
```

- To check homework or exam grades:

```
$ ~ee407002/bin/score
```

A Few Suggestions

- Be an active learner.
  - "Stay Hungry. Stay Foolish."
  - Make it a life long habit.
- Ask questions.
  - It is an important tool.
  - Make the most out of the time you spent.
- Practice makes it perfect.
  - "The devil is in the details."
  - You really learn the subject if you can put it in use.
  - Apply to your study, research or work.
  - Understand the assumptions and limitations.