Course Outline for *Engineering Mathematics, II*

February 18th, 2013

**Class Hours:** 9:10-11:00, Monday and 9:10-10:00, Wednesday.


**Instructor:** Yee-Lin Wu; Phone number: 238-6764; E-mail: ylwu@mail.ncku.edu.tw

**Office Hours:** 12:10-13:00 Wednesday;

**Schedule:**
- First week (2/18, 2/20): Introduction (Course outline and gradings);
  
  Chapter 8 (Matrics)
- Second to fourth weeks (2/25~3/13): Chapter 9 (Vector Calculus);
  
  *Homework # 1 due on 3/18*
  
  **The first examination on 3/18;**

  Fifth and sixth week (3/20 ~ 3/27): Chapter 10 (Systems of Linear Differential Equations);

  Seventh week (4/1, 4/3): no class,

  Eighth and ninth weeks (4/8~4/17): Chapter 12 (Orthogonal Functions and Fourier Series);
  
  *Homework # 2 due on 4/22*
  
  **The second examination on 4/22;**

  Tenth to twelfth weeks (4/24~5/8): Chapter 13 (PDE in Cartesian Coordinates);

  Thirteenth and fourteenth weeks (5/13~5/22): Chapter 14 (PDE in Curved Coordinates);

  *Homework # 3 due on 5/27*
  
  **The third examination on 5/27;**

  Fifteenth and sixteenth weeks (5/29~6/5): Chapters 15 (Integral Transform Method);

  *Homework # 4 due on 6/10*

  Seventeenth and eighteenth weeks (6/10 ~ 6/19): Chapter 16 (Numerical Solutions for PDE);

  **Final examination on 6/19.**

**Gradings:** Homework: 20%;

Examination: 80%.