Course Outline for *Engineering Mathematics, II*

February 20th, 2012

**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 Monday, 12:10-13:00 Wednesday;

**Schedule**:

First week (2/20, 2/22): Introduction (Course outline and gradings);

Chapter 8 (Matrices)

Second to fourth weeks (2/27~3/14): Chapter 9 (Vector Calculus);

*Homework # 1 due on 3/14*

**The first examination on 3/19**;

Fifth and sixth week (3/21 ~ 3/28): Chapter 10 (Systems of Linear Differential Equations);

Seventh week (4/2, 4/4): no class,

Eighth and ninth weeks (4/9~4/18): Chapter 12 (Orthogonal Functions and Fourier Series);

*Homework # 2 due on 4/18*

**The second examination on 4/23**;

Tenth to twelfth weeks (4/25~5/9): Chapter 13 (PDE in Cartesian Coordinates);

Thirteenth and fourteenth weeks (5/14~5/23): Chapter 14 (PDE in Curved Coordinates);

*Homework # 3 due on 5/23*

**The third examination on 5/28**;

Fifteenth and sixteenth weeks (5/28~6/7): Chapters 15 (Integral Transform Method);

*Homework # 4 due on 6/13*

Seventeenth and eighteenth weeks (6/11 ~ 6/18): Chapter 16 (Numerical Solutions for PDE);

*Final examination on 6/20.*

**Gradings**: Homework: 20%;

Examination: 80%.