**Engineering Mathematics II**

**Prof. Do Heui Kim (dohkim@snu.ac.kr)**

**Schedule of 2015 Fall semester**

|  |  |
| --- | --- |
| **Date** | **Contents** |
| **Sept. 2** | **Introduction** |
| **7 9** | **Review (Chap 9/10)** |
| **14 16** | **Chap 11** |
| **21 23** | **Chap 11** |
| **Sep. ~~28~~ 30 (choosok)** | **Chap 11** |
| **Oct. 5 7** | **Chap 11** |
| **12 14** | **Chap 12** |
| **19 21** | **Chap 12** |
| **26 ~~28~~ (travel)** | **Chap 12** |
| **Nov 2 4** | **Chap 12** |
| **9 ~~11~~ Mid term Nov. 9 (9-11 am)** |  |
| **16 18** | **Chap 13** |
| **23 25** | **Chap 14** |
| **Nov 30 Dec. 2** | **Chap 15** |
| **Dec. 7 9** | **Chap 16** |
| **14 Final Dec. 16 (9-11 am)** | **Chap 16** |

**Evaluation**

* **Mid term: Chap 11 – 12 (45%): Fourier Series. Partial Differential Equations**
* **Final: Chap 13 – 16 (45%): Complex Analysis**
* **Attendance and attitude (5%)**
* **HW (5%)**

**Attendance Rule**

1. One absence (kind of wild card) will not be counted.
2. Please report to me in advance before you are absent.
3. **4 late show-ups = 1 absence**.

**HW rule**

1. Please submit your homework before class begins, otherwise, points will be deducted.
2. About 20-30% of the problems in the exam come from the homework or example problem in the textbook.
3. Please do not pay attention to the evaluation of hw.

**Class rule**

1. **No cell phone use during the class.**
2. **No in-and-out during the class.**

**Office: 817 (880-1633)**

**Office hour by appointment**

**TA**

**임태환, 송인학 (880-1881): Lab (302-809)**

**Evaluation Test**

**Student No.: Name:**

1. **Let a = [4,7,0] and b = [3, -1, 5]**
2. **a · b (inner product)**
3. **a x b (cross product)**
4. **Define divergence and curl for v = [v1, v2, v3] where v1, v2 and v3 are the components of vector v (x,y,z).**
5. **Obtain for n ≠ m.**
6. **Find the solution of the following 2nd ODE, x2y” + 2xy’ – n(n+1)y=0.**
7. **Find the Taylor series of cos z2.**
8. **Let z1 = -2 + 5i, z2 = 3- i. Find (z1/z2) and in the form of x + yi.**
9. **Write down the Euler formula.**