

# Syllabus: PHY222 (Mathematical Physics I)

Eunil Won

May 16, 2006

- **Office Hour**

Thursdays 1:00 pm - 2:00 pm. In Asan Science building, Physics Cafe (4th floor)

- **Lecturer**

Eunil Won

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- **About the lecture**

The lecture will be given in English. **No high level English skill** is required in order to understand the contents (the lecturer does not have it either). The lecturer will try to speak slowly but clearly. In principle, **no language other than English** is expected during the class with an exception during office hours. We are planning to cover vector and tensor analysis, infinite series, functions of a complex variable, and differential equations.

- **Grading**

Total 300 = 100 (mid term) + 100 (final) + 50 (recitation) + 50 (attendance)

- **Textbook**

Arfken, *Mathematical Methods for Physicists*, 6th edition

- **References**

W. Parzynski, *Introduction to Mathematical Analysis*

R. Churchill and J. Brown, *Complex Variables and Applications*

- **Portal**

<http://particle.korea.ac.kr/> is the web site for the distribution of the lecture related information.

### Time Table for PHYS222 (2006)

| Week | Dates         | Chapter | Comments                    |
|------|---------------|---------|-----------------------------|
| 01   | 09/01 - 09/01 | Ch 1    |                             |
| 02   | 09/04 - 09/08 | Ch 1,2  |                             |
| 03   | 09/11 - 09/15 | Ch 3    |                             |
| 04   | 09/18 - 09/22 | Ch 5    | Korea-Yonsei friendly match |
| 05   | 09/25 - 09/29 | Ch 5    | Thanksgiving Holidays       |
| 06   | 10/02 - 10/06 | Ch 5    |                             |
| 07   | 10/09 - 10/13 | Ch 6    |                             |
| 08   | 10/16 - 10/20 | Ch 6    | Mid term                    |
| 09   | 10/23 - 10/27 | Ch 6    |                             |
| 10   | 10/30 - 11/03 | Ch 7    |                             |
| 11   | 11/06 - 11/10 | Ch 8    |                             |
| 12   | 11/13 - 11/17 | Ch 8    |                             |
| 13   | 11/20 - 11/24 | Ch 8    |                             |
| 14   | 11/27 - 12/01 | Ch 9    |                             |
| 15   | 12/04 - 12/08 | Ch 9    |                             |
| 16   | 12/11 - 12/15 |         | Final                       |