

## SYLLABUS 354016001 PROBABILITY Fall 2012

- Instructor: Tzee-Ming Huang
  - Email: tmhuang@nccu.edu.tw
  - Office Hours: To be arranged
  - Class Hours: Thursday 9:10 a.m. – 12:00 p.m.
  - Classroom: College of Commerce Building 260310
- Course Description. Topics covered in this course include collections of sets (e.g.  $\sigma$ -fields, monotone classes), measures and their properties, measurable functions, integration of measurable functions,  $L^p$  spaces, Radon Nikodym theorem, modes of convergence, Fubini's theorem, conditional probability and conditional expectation. These topics are in Sections 2,3,4,5,10,11,13,15,16,18–21, 32–34 in Billingsley's text.
- Grading policy. Homework: 100%.
- Textbook: Billingsley, P., Probability and Measure, 3rd Edition, Wiley
- References
  - Breiman, L., Probability, Addison-Wesley
  - Chung, Kai Lai, A course in Probability Theory, Second Edition, Academic Press
  - Feller, W., An Introduction to Probability Theory and Its Applications.
  - Royen, H., Real Analysis, Macmillan