The University Of Toledo
New Graduate Course Proposal

* denotes required fields

1. College*: Coll Nat Sci and Mathematics
Department*: Mathematics

2. Contact Person*: Paul Hewitt Phone: 530-2138 (xxx - xxxx) Email: paul.hewitt@utoledo.edu

3. Alpha/Numeric Code (Subject area - number)*: MATH 8870

4. Proposed title*: Measure Theoretic Probability
Proposed effective term*: 201310 (e.g. 201140 for 2011 Fall)

5. Is the course cross-listed with another academic unit? ○ Yes ○ No
Approval of other academic unit (signature and title)
Is the course offered at more than one level? ○ Yes ○ No
If yes, an undergraduate course proposal form must also be submitted. If the undergraduate course is new, complete the New Undergraduate Course Proposal; if the undergraduate course is existing, submit an Undergraduate Course Modification Proposal.

6. Credit hours*: Fixed: 3 or Variable: 

7. Delivery Mode: Primary* Secondary Tertiary
   a. Activity Type * --SelectType--
   b. Minimum Credit Hours * 3

   Maximum Credit Hours * 3

Date Added: 12-20-13
Council Approved: 1-21-14
To Provost: 2-7-14
8. Terms offered:  
☐ Fall  ☑ Spring  ☐ Summer  

Years offered:  
☐ Every Year  ☐ Alternate Years  

9. Are students permitted to register for more than one section during a term?  
☐ No  ☑ Yes  

May the courses be repeated for credit?  
☐ No  ☐ Yes  

Maximum Hours  

10. Grading System*:  
☐ Normal Grading (A-F, PS/NC, PR, I)  
☐ Passing Grade/No Credit (A-C, NC)  
☐ Credit/No Credit  
☐ Grade Only (A-F, PR, I)  
☐ Audit Only  
☐ No Grade  

11. Prerequisites (must be taken before): i.e. C or higher in (BIOE 4500 or BIOE 5500) and C or higher in MATH 4200  

MATH 5680, MATH 6860/8860  

☐ PIN (Permission From Instructor)  ☐ PDP (Permission From Department)  

Co-requisites (must be taken together):  

MATH 6800 recommended  

12. Catalog Description* (75 words Maximum)  

Focus on stochastic processes. Conditional expectations, martingales, random walks, markov chains, ergodic theorem, brownian motion.  

13. Attach a syllabus and an electronic copy of a complete outline of the major topics covered. Click here for template.
Course Approval:

Department Curriculum Authority: Alessandro Arsie  Date: 2012/12/06

Department Chairperson: Paul Hewitt  Date: 2012/12/07

College Curriculum Authority or Chair: Anthony Quinn  Date: 2013/03/04

College Dean: Brian P. Ashburner  Date: 2013/10/24

Graduate Council:  Date: 1-21-2014

Dean of Graduate Studies:  Date: 1-21-2014

Office of the Provost:

Administrative Use Only

Effective Date:  (YYYY/MM/DD)

CIP Code:

Subsidy Taxonomy:

Program Code:

Instructional Level:

https://curriculumtracking.utoledo.edu/GradNewCourse.aspx?Mode=View&ID=MATH8870
University of Toledo
Math 6860/8860 Measure Theoretic Probability II
Spring 2013

SYLLABUS

Instructor:
Faculty Office:
Faculty/Department web site:
Office Hours:
Phone:
E-Mail:
Class Meetings Location:

*Required for new course approval

*Course Description including course pre-requisites or co-requisites
Prerequisite: MATH 5680, MATH 6860/8860 Corequisite: MATH 6800 recommended

*Texts (Required and Recommended, Reserve Materials, etc.)

Course Requirements: Expectations of students in course

*Grading policy or criteria
The final grade is based on weekly homework assignments, the midterm exam (s) and the final exam.

*Assessment of Learning: Identification of methods used to assess student learning in the course
Weekly homework assignments, the midterm exam (s) and the final exam

Classroom Procedures: Expectations of classroom behaviors including UT policies

*Tentative Class Schedule/Activities/List of Topics Covered
- Characteristic Functions and the Central Limit Theorem
- Conditional Expectations
- Martingales
- Random Walks
- Markov Chains
- Ergodic Theorem
- Brownian Motion