# Syllabus

## MAP 6473 – Probability and Potential Theory II

Time and Location: M-W-F, Period 5 (11:45 AM - 12:35 PM), LIT 221
Instructor: Arnaud Marsiglietti
Office: 411 Little Hall
E-mail: a.marsiglietti@ufl.edu
course website: https://people.clas.ufl.edu/amarsiglietti/courses/course-spring19-1/

#### **Office Hours**

Monday 3pm – 4pm, Wednesday 3pm – 4pm, or by appointment

#### **Course Objectives**

Conditional expectation, Martingale, Stopping time, Equi-integrability, Continuous time stochastic processes (Brownian motion, Gaussian process, Markov process), Potentials and excessive functions

#### Textbook

There is no required text, but the following textbooks are suggested:

- D. Khoshnevisan, Probability, Graduate studies in mathematics vol. 80, 2007
- A. Gut, Probability: A Graduate Course, Springer, 2005

#### Prerequisites

Probability and Potential Theory I (MAP 6472)

#### Homework

Homework will be assigned on a regular basis, but will not be graded

#### Grading System

• 3 Take Home Exams (dates are tentative)

- $\rightarrow$  Wednesday, January 23 (Due On Wednesday, January 30)
- $\rightarrow$  Wednesday, February 20 (Due On Wednesday, February 27)
- $\rightarrow$ Wednesday, April 3 (Due On Wednesday, April 10)

• 1 Midterm Exam split in two parts (dates are tentative)

 $\rightarrow$  Monday, March 18 (Part 1), Wednesday, March 20 (Part 2)

#### • Final Exam Date

 $\rightarrow$  Tuesday, April 30 (4/30/2019) at 10:00 AM - 12:00 PM

### Grading (100 points)

#### Scale

Attendance/Participation	5pts	A = 90+	B- = 77-79
Take Home Exam	17pts each $(total = 51pts)$	A-=87-89	C + = 73-76
Midterm Exam	19pts	B+ = 83-86	C = 70-72
Final Exam	25pts	B = $80-82$	C - = 67-69

## **Course Policies:**

#### Absence from Exams

Missing an exam is permitted **ONLY** for the most compelling reasons. Please notify me **IN ADVANCE**, if possible, if an exam is to be missed. Otherwise you will be given a 0.

#### **Class Attendance**

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

#### Honor Code

UF students are bound by The Honor Pledge which states: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code". On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code, which can be found at:

https://sccr.dso.ufl.edu/process/student-conduct-code/

specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

#### Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center:

352-392-8565, https://disability.ufl.edu/

by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

## Students' Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at:

https://evaluations.ufl.edu

Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at:

https://evaluations.ufl.edu/results/