

**MAT1856S/ APM466S — Mathematical Theory of Finance - 2010**

**Location: SS 2135**

**Times: Wednesdays 9-12 pm**

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## Index

- **Jan 6: Introduction to Fixed Income Mathematics**
  - **Jan 13: Bond Pricing; yield rates. Bootstrapping**
  - **Jan 20: Forward curves**
- **No-arbitrage pricing**
  - **Jan 27: One period models**
  - **Feb 3: Multi-period models: swing options**
  - **Feb 10: Continuous models:**
  - **Feb 24: the Black-Scholes theory**
- **March 3: MIDTERM TEST 1**
  - **Contents: Up to -including- One period models**
- **March 10. Introduction to credit risk**
- **March 17: MIDTERM TEST 2**
  - **Contents: Up to -including- Black-Scholes theory**
- **March 24: CreditMetrics and the Merton model**
- **March 31: Introduction to portfolio theory and investing**
- **April 7 Hedge funds**

**Assignments: Two, valued equally.**

**Course evaluation: The final mark is a combination of assignment marks (25% each) and a the midterm tests (25% each).**

**Office hours: By appointment.**