



## Announcement WiSe 2015/2016 Lecture in Mathematical Finance

### Discrete Time Finance

Prof. Dr. Matthias Scherer

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| <b>Area: / Modulnr.:</b> | Mathematical Finance/ MA 3701   |
| <b>Course Structure:</b> | Lecture: 2h    Exercises: 1h    Programming: 1h   |
| <b>Content:</b>          | Single-Period Financial Markets, Multi-Period Financial Markets, Absence of Arbitrage and Completeness, The Binomial or Cox-Ross-Rubinstein Model, Pricing of Contingent Claims   |
| <b>Audience:</b>         | BSc Mathematik, MSc Mathematik, Mathematical Finance and Actuarial Science, OR  |
| <b>Prerequisite:</b>     | MA1401 (Introduction to Probability Theory), MA2409 (Probability Theory)  |
| <b>Literature:</b>       | <b>S.R. Pliska (2000):</b> Introduction to Mathematical Finance: Discrete Time Models, Blackwell Publishers Inc.<br><b>S.E. Shreve (2004):</b> Stochastic calculus for Finance I: The Binomial Asset Pricing Model, Springer Finance<br><b>N.H. Bingham and R. Kiesel (2004):</b> Risk-Neutral Valuation: Pricing and Hedging Financial Derivatives, Springer Finance<br><b>J.C. Hull (2006):</b> Optionen, Futures und andere Derivative, Pearson Studium<br><b>J.C. Hull (2006):</b> Options, Futures and Other Derivatives, Prentice-Hall<br><b>P. Wilmott (2001):</b> Quantitative Finance, John Wiley & Sons |
| <b>Certificate:</b>      | Exam, 6 CP  |
| <b>Location:</b>         | TBA   |
| <b>Lecture:</b>          | TBA   |
| <b>Exercises:</b>        | TBA.  |