# **QF600: Asset Pricing**

**Course Outline** 

#### **Course Overview**

- QF 600 covers financial asset allocation and asset pricing at post-graduate-level
- Lectures will focus on theories and concepts relating to asset allocation and asset pricing
- Homework assignments will focus on numerical applications and programming
- Gradual increase in sophistication of numerical applications and programming

## **Lecture Topics**

	Topic		Topic
1	Expected Utility Theory	6	Stochastic Discount Factor
2	Efficient Frontier	7	Multi-Period Asset Pricing
3	Capital Asset Pricing Model	8	Behavioural Finance
4	Linear Factor Models	9	State Prices
5	Efficient Frontier Revisited	10	Stock Valuation

#### Reference Textbooks

- Primary reference will be lecture notes; homework and exam will only test on topics and material covered in lecture notes
- Lecture notes are mainly based on Theory of Asset Pricing (2008), by George Pennacchi
- Financial Decisions and Markets (2018), by John Campbell provides more recent and comprehensive coverage of asset pricing

#### **Assessment Methods**

Class Participation	10%
Homework	30%
Final Exam	60%
Total	100%

### Class Participation

- SMU encourages interactive learning, where students participate actively during lectures
- Feel free to interrupt me at any time with relevant questions or comments
- TA will track frequency of participation, while instructor will track quality of input
- Marked using logarithmic scale, so less marks for each additional instance of participation

#### Homework

- Homework assignments for topics highlighted in red, focusing on numerical applications
- You may use any programming language, although Python is recommended for students with no prior experience in other languages
- You may discuss assignments with classmates, but each student must submit individual completed assignment to eLearn

### Final Exam

- Two-hour online exam on Friday, 10 Nov 2023
- Exam will focus on numerical applications and programming, just like homework
- Exam will be "open laptop": you will have access to all programming tools and reference materials stored on your laptop computer
- You are free to solve numerical problems in any programming language of your choice