Course Title: 金金融商品設計與評價 (Financial product design and pricing)

Lecture Hours: F2F3F4

Classroom: Room 905, TSMC BLG
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Office Hours: TBD.
Syllabus:

This course aims to introduce features and functionalities of derivatives and structure products in finance. Their pricing schemes will be discussed. Regarding recent local and global trend in finance, two case studies are given below.

1. TRF credit crisis in Taiwan: introduction to the product structure, its generalizations,
   and relevant issues on mitigating counterpart risk.

2. Financial Technology - Fin Tech in the globe: spotlight of future financial services. We discuss features of fin tech and their risk assessment.

Contents:
- Risks, Markets, Products, and Evaluation:
  - Exotic options
  - Pricing models
  - Computational Schemes
- Case Study I: Credit Crisis
  - TRF/PIVOT
  - Counterpart Risk
- Case Study II: Fin Tech
  - future financial services
  - risk assessment

Textbook:
韓傳祥. 金融隨機計算. 新路書局. 2012.

References:
- J. Hull. Options, Futures, and other Derivatives. Ninth Edition. 2014.
- J. Hull, Risk Management and Financial Institution. Third Edition. Wiley, 2012.
- Lecture Notes provided.

Grading Policies: Homework (20%), Exams (60 %), Final Project (20%)