THE OHIO STATE UNIVERSITY

Mathematics 5632
Financial Economics
Autumn, Spring, Summer
3 credits

Catalog Description:
Introduction to the evaluation of options, futures, and other derivatives, interest models and risk management techniques. Includes material from examinations by the Society of Actuaries and the Casualty Actuarial Society.

Prerequisite:
{C- or better in 3618, or credit for 618, or permission of department} –and– {C- or better in 4530 or Stat 4201 or credit for 530 or Stat 420}.

Exclusions:
Restricted to actuarial science majors, math majors, and students with graduate standing.

Text:
Derivatives Markets, 2nd edition, by McDonald, published by Addison-Wesley, ISBN: 9780321280305

Topics List:
1. Option relationships.
2. Binomial option pricing.
3. Black-Scholes formula.
4. Market making and delta hedging.
5. Exotic options.
6. Brownian motions and Ito's Lemma.
7. Interest rate models.