



## Nanchang University FINM431: Financial Derivatives

**Credit:** 4

### ***Contact Hours***

This course is composed of 24 lecture sessions, 3 tutorial sessions and 9 office contact hours. Each lecture session takes 2 contact hours in length; each tutorial session takes 3 contact hours in length; There will be a Q-A review session(3 contact hours) and Final Exam (3 contact hours) at the end of this term. This course has 72 contact hours in total.

### ***Course Description***

This course is an introduction to the world of financial derivatives, and in particular explores the interaction between an elegant mathematical theory and real-world application. We will examine the use of forwards, futures, swaps, options, and related financial derivatives for hedging, arbitrage.

### ***Required Textbook***

Textbook: *Pricing and Hedging Financial Derivatives: A Guide for Practitioners*

Author: Leonardo Marroni, Irene Perdomo

Publisher: Wiley; 1

ISBN: 1119953715

### ***Grading***

- Class Attendance 10%
- Papers 15%
- Presentation 15%
- Mid-term Exam 25%
- Final Exam 35%

A+ 96-100	A 90-95	A- 85-89
B+ 82-84	B 78-81	B- 75-77
C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	



## ***Course Schedule***

The course has 24 class sessions in total. All sessions are 2 contact hours in length. At the end of this term, there will be a Q-A review session(3 contact hours) and Final Exam (3 contact hours).

Note: the course outline and required readings are subject to change.

Class 1:Introduction to Financial Derivatives

Class 2:Asset Classes and Financial Instruments

Class 3:How Securities are Traded

Class 4:Arbitrage Pricing Theory and Multifactor Models of Risk and Return

Class 5:Bond Prices and Yields

Class 6:The Term Structure of Interest Rates

Class 7:Equities and Equity Options

Class 8:Forward Contracts

Class 9:Futures Contracts

Class 10:Hedging of Futures

Class 11:Interest Rate Swaps

Class 12:Mid-term Exam

Class 13:Credit Default and Currency Swaps

Class 14:Call Options

Class 15:Put Options

Class 16:Boundary Conditions for Call and Put Options Prices

Class 17:Put - Call Parity

Class 18:Swaptions

Class 19:Options Strategies

Class 20:Binomial Option Pricing I

Class 21:Binomial Option Pricing II

Class 22:The Fundamentals of Option Pricing I

Class 23:The Fundamentals of Option Pricing II

Class 24:Final Review



## ***Attending Policy***

Regular and prompt attendance is required. Under ordinary circumstances, you may miss two times without penalty. Each absence over this number will lower your course grade by a third of a letter and missing more than five classes may lead to a failing grade in the course. Arriving late and/or leaving before the end of the class period are equivalent to absences.

## ***Policy on "Late Withdrawals"***

In accordance with university policy, appeals for late withdrawal will be approved ONLY in case of medical emergency and similar crises.

## ***Academic Honesty***

Nanchang University expects all students to do their own work. Instructors will fail assignments that show evidence of plagiarism or other forms of cheating, and will also report the student's name to the University administration. A student reported to the University for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

## ***General Expectations:***

Students are expected to:

- Attend all classes and be responsible for all materials covered in class and otherwise assigned;
- Complete the day's required reading and assignments before class;
- Review the previous day's notes before class and make notes about questions you have about the previous class or the day's reading;
- Participate in class discussions and complete required written work on time;
- Refrain from texting, phoning or engaging in computer activities unrelated to class during the class period;
- While class participation is welcome, even required, you are expected to refrain from private conversations during the class period.

## ***Special Needs or Assistance***

Please contact the Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material. Our goal is to help you learn, not to penalize you for issues which mask your learning.