اعتماد
NCAAA

T4

2020

Course Specifications

Course Title:	**Financial Engineering**
Course Code:	**FIBA 487**
Program:	**Bachelor in Finance & Banking**
Department:	**Finance and Banking Department**
College:	**College of Business Administration**
Institution:	**Jazan University**

Table of Contents

A. Course Identification

1. Credit hours: 3 hrs / Week	

2. Course type

a. University ☐ College ☐ Department ☐ Others ☐

b. Required ☐ Elective ☐

3. Level/year at which this course is offered: Level 8/Year 4

4. Pre-requisites for this course (if any)**: None**

5. Co-requisites for this course (if any)**: None**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	45
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	45

B. Course Objectives and Learning Outcomes

1. Course Description

Financial engineering involves the creative use of financial products and strategies to solve important problems in corporate finance and investments. This course offers a comprehensive study of speculative market conditions and characteristics assessed in conjunction with a variety of financial innovations.

2. Course Main Objective

- Providing a detailed grounding in the theory and practice of financial engineering.
- Focus on the application of derivatives pricing and hedging methodology.
- Engage students in a comprehensive investigation of introductory risk management techniques, futures, forwards and options.
- Comprehensive study of speculative market's strategies

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	After going through with this course, the students are expected to identify the concepts and methods of Financial Engineering.	K1
1.2	Students should able to relate the impact of changes locally as well globally in the Derivative market.	K2
1.3		
2	**Skills :**	
2.1	Students should able to apply conceptual understanding of concepts and solve structured and unstructured issues related to different types of Derivative contracts.	S1
2.2	Students should formulate principles and theories to develop critical thinking necessary to solve problems related to financial engineering.	S2.
2.3	Students are able to evaluate data and evidence from various reliable sources which helps them to solve complex financial problems.	S4
3	**Values:**	
3.1	Students should be able to apply ethical practices in Derivative trading with highest level of commitment.	V1
3.2	Student should be able to demonstrate the ability to conduct research and use appropriate means of finding new information or techniques needed for completion of task and encourage continuous learning in the field of financial engineering.	V2
3.3		

C. Course Content

No	List of Topics	Contact Hours
1	**Unit 1: History of Financial Engineering**	09
2	**Unit 2: Derivatives**	15
3	**Unit 3: Interest Rates, Forward and Future contracts**	12
4	**Unit 4: Options**	09
5		
...		
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	After going through with this course, the students are expected to identify the concepts and methods of Financial Engineering.	Various teaching methods employed for this course which includes power point packed lectures. Apart from these, several internet search services from a number of major databases from Saudi Digital Library SDL for enriching student knowledge in class discussions.	Faculty driven evaluation, Peer group evaluation, Self-assessment by the student, written exams
1.2	Students should able to relate the impact of changes locally as well globally in the Derivative market.	Various teaching methods employed for this course which includes power point packed lectures. Apart from these, several internet search services from a number of major databases from Saudi Digital Library SDL for enriching student knowledge in class discussions.	Faculty driven evaluation, Peer group evaluation, Self-assessment by the student, written exams
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2.0	**Skills**		
2.1	Students should able to apply conceptual understanding of concepts and solve structured and unstructured issues related to different types of Derivative contracts.	Various teaching methods employed for this course which includes power point packed lectures. Apart from these, several internet search services from a number of major databases from Saudi Digital Library SDL for enriching student knowledge in class discussions.	Faculty driven evaluation, Peer group evaluation, Self-assessment by the student, written exams
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2.3	Students are able to evaluate data and evidence from various reliable sources	Various teaching methods employed for this course which includes power point packed lectures.	Faculty driven evaluation, Peer group evaluation, Self-

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	which helps them to solve complex financial problems.	Apart from these, several internet search services from a number of major databases from Saudi Digital Library SDL for enriching student knowledge in class discussions.	assessment by the student, written exams
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2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	1st Midterm exam	6	20 %
2	2st Midterm exam	12	20 %
3	Presentation /participation /Project/online &offline attendance	Continuos Assessment	10 %
4			
5			
6			
7			
8			

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

10 hours per week available to the students of this course by the instructor which is based on a declared and scheduled as office hours on all working days during 16 week long teaching.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	• Hull, John, Fundamentals of Futures and Options Markets, Pearson Prentice Hall, 8 th Edition, 2014. • Paul Glasserman, Monte Carlo Methods in Financial Engineering, 1st edition, Springer, 2004.
Essential References Materials	
Electronic Materials	• International Association of Financial Engineers: IAFE • Professional Risk Managers International Association: PRMIA • Global Association of Risk Professionals: GARP
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Updated list of Books and related items in the university Library
Technology Resources (AV, data show, Smart Board, software, etc.)	
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Use of PPTs during Lectures	Peer Evaluator	Direct
Group Discussions	Faculty	Direct
Presentations from students	Faculty	Direct
Upgrade of course portfolio	Program Leaders	Direct

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Quality committee
Reference No.	CS-FIBA487-20212
Date	8/01/2021