



# Lincoln University

## BA 363 – Investment Science

### COURSE SYLLABUS

Spring 2020

- Instructor:** Professor Themis D. Pantos, Ph.D.,  
**Lecture Schedule:** Thursday, 3:30 PM – 6:15 PM  
**Credits:** 3 units / 45 hours of lectures  
**Level:** Mastery 2 (M2)  
**Office Hours:** Monday, 1:00 PM - 4:00 PM, Students are advised to schedule appointments by signing their names on the appointment list which is located on the information board next to the professor's office that will ensure exact appointment time without waiting. Additional office hours by appointment  
**E-mail:** [tpantos@lincolnuca.edu](mailto:tpantos@lincolnuca.edu)  
**Phone:** (510) 250-6113  
**Textbook:** David G. Luenberger (2013). Investment Science, 2nd Edition, Oxford University Press, 640 p. ISBN-10: 0199740089  
ISBN-13: 978-0199740086  
\*\*\* previous editions of this book are also suitable \*\*\*  
**Prerequisite:** BA 241 or BA 360  
**Last Revision:** January 9, 2020

#### CATALOG DESCRIPTION:

The course introduces students to the basic tools used by investment professionals. It deals with different kinds of securities, their pricing, and methods to optimize a choice of an investment portfolio. (3 units)

#### EDUCATIONAL OBJECTIVES:

To introduce students to major principles of investment and asset allocation particularly in securities markets. Students will learn how to identify and select the most optimal investment, do industry and company valuation, identify expected return, and manage risk.

**COURSE LEARNING OUTCOMES<sup>1</sup>**

<b>CLOs</b>	<b>PLOs</b>	<b>ILOs</b>	<b>Assessment Activities</b>
Understand and be able to apply the major methods of interest rate analysis. Be able to select and apply appropriate pricing models in line with organization's strategic priorities.	PLO 3	ILO 1b, 6b	Course Project, Assignments, Midterm/Final Examinations
Be able to design and implement studies on topics within investment science discipline.	PLO 4	ILO 1b, 5b	Course Project
Be able to effectively and professionally communicate the nature and properties of risks to relevant stakeholders as well as to propose the strategies of risk minimization.	PLO 5	ILO 2b	Course Project, Assignments, Midterm/Final Examinations

**PROCEDURES AND METHODOLOGY**

Lecture method is used in combination with a supervised in class exercises and assignments. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity, must complete home tasks and course projects, and take the midterm and final examinations.

Assignments and projects require students to actively use resources of the library. Detailed guide to business *resources of the library* as well as the description of Lincoln University approach to *information literacy* are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

**COURSE PROJECT**

Every student must complete and submit a course project.

**REQUIREMENTS**

All students are required to attend classes. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Reading, writing, home tasks, and “business case study” assignments will be made throughout the course. Students must complete all assignments and take all quizzes, mid-term exam and final exam on the dates due. Plagiarism will result in the grade “F” and a report to the administration.

**ATTENDANCE**

Students are expected to attend each class session. If you cannot attend a class due to a valid reason, please notify the instructor prior to the class.

**EXAMS**

Both, midterm and final exams are structured as written essay to answer the given questions. The essay must be written structurally with clear logical presentation of the

<sup>1</sup> Detailed description of learning outcomes and information about the assessment procedure are available at the [Center for Teaching and Learning](http://ctl.lincolnuca.edu) website (ctl.lincolnuca.edu).

answers. Graphs, charts, tables, and other supporting illustrations are required if needed. Examples to illustrate the answers are required. Exams will cover all assigned chapters, any additional readings or supplementary materials covered in class. The exams are neither “open book” nor “open notes.”

### GRADING AND SCORING POLICY

All activities will be graded according to the points as shown below.

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F
Points	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	60-66	0-59

In exams, every answer is graded by points from 0 to 100 and the total points for an exam are calculated as the average of the points received for all answers in the exam. The final grade for the course will be given as the total weighted score for all activities according to the percentage shown in the table below.

Activity	Time	Percent
Assignments	Every week	10%
Course project		10%
Mid-term exam	In the middle of the course	30%
Final exam	Last week of the course	50%
<b>Total</b>		<b>100%</b>

If both grades for the midterm and final exams are “F” the term grade for the course is “F” regardless of the grades for other activities.

### WEEKLY CLASS SCHEDULE

Date	Topics	Chapters	
		Lectures	Textbook
Week 1	(a) About the Course (b) The Introduction	Ch. 1	Ch. 1
Week 2	The Basic Theory of Interest	Ch. 2	Ch. 2
Week 3	Fixed-Income Securities	Ch. 3	Ch. 3
Week 4	The Term Structure of Interest Rates	Ch. 4	Ch. 4
Week 5	Applied Interest Rate Analysis	Ch. 5	Ch. 5
Week 6	Mean-Variance Portfolio Theory (Part I)	Ch. 6	Ch. 6
Week 7	Mean-Variance Portfolio Theory (Part II)	Ch. 6	Ch. 6
<b>Week 8</b>	<b>No Class – Spring Recess</b>		
Week 9	The Capital Asset Pricing Model	Ch. 7	Ch. 7
Week 10	Other Risk Pricing Models	Ch. 8	Ch. 8
<b>Week 11</b>	<b>Midterm Exam</b>	<b>Ch. 1-8</b>	
Week 12	Derivative Securities	Ch. 9	Ch. 9
Week 13	The Greeks of the Options	Ch. 10	Ch. 10
Week 14	Futures and Forwards	Ch. 11	Ch. 11
<b>Week 15</b>	<b>Comprehensive Final Exam</b>	<b>Ch. 1-11</b>	
Week 16	Course Project Presentations		

### **OTHER COMMENTS**

- Please participate. What you put into the class will determine what you get out of it – and what others get out of it.
- Please come on time. Late arrivals disturb everyone else.
- If you miss a class, you are responsible for getting notes/slide printouts on the material covered from a classmate or the instructor.
  
- To avoid distracting noise in class, cellular phones must be turned off or the ringing mode silenced.
- Questions and comments during the class are welcome. Do not hesitate to ask questions – do not leave anything unclear for you.

### **MODIFICATION OF THE SYLLABUS**

The instructor reserves the right to modify this syllabus at any time during the semester. Announcements of any changes will be made in a classroom.