

# BA 363 – Investment Science

## **COURSE SYLLABUS**

**Spring 2016** 

Instructor: Prof. Sergey Aityan, PhD, DSc Monday, 3:30 PM – 6:15 PM

**Credits:** 3 units (45 lecture hours)

**Office Hours:** Monday, Tuesday, Thursday, 11:15 AM – 12:15 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. **e-mail:** aityan@lincolnuca.edu

**1:** (510) 628-8016 Olesya Agafontseva

**Instructor:** e-mail: lesechkin@gmail.com

Textbook: 1. Textbook:

David G. Luenberger (2013).

Investment Science, 2<sup>nd</sup> Edition, Oxford University Press, 640 p.

ISBN-10: 0199740089 ISBN-13: 978-0199740086

\*\*\* previous editions of this book are okay too \*\*\*

**Last Revision:** January 9, 2016

# **CATALOG DESCRIPTION**

Assistant to the

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) Prerequisite: BA 241 or BA 360

#### **COURSE 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.

#### PROCEDURES AND METHODOLOGY

Lecture method is used in combination with a supervised exercises and business case study. 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 quizzes and exams.

#### **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 <u>dates due</u>. 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 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**

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

Grade	A	A-	B+	В	B-	C+	С	C-	D+	D	F
Points	94-100	90-93	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
Quizzes, home tasks, and	Every week	20%
classroom activities		
Course project		20%
Mid-term exam	In the middle of the course	30%
Final exam	Last week of the course	30%

If both grades for the midterm and final exams are "F" the term grade for the course is "F" regardless of the grades for the project and classroom activities.

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#### MAKE-UP WORK

Assignments are to be completed on time during the course. Late assignments will result in a reduced grade. Mid-term and final exams and group presentations cannot be made up if missed unless there is a documented emergency.

# COURSE SCHEDULE

Lectures		Topic	Chapters	
#	Date	_	Lectures	Textbook
1	25-Jan	(a) About the Course		
		(b) The Introduction	Ch. 1	Ch. 1
2	1-Feb	The Basic Theory of Interest	Ch. 2	Ch. 2
3	8-Feb	Fixed-Income Securities	Ch. 3	Ch. 3
	15-Feb	President's Day – No classes		
4	22-Feb	The Term Structure of Interest Rates	Ch. 4	Ch. 4
5	29-Feb	Applied Interest Rate Analysis	Ch. 5	Ch. 5
6	7-Mar	Mean-Variance Portfolio Theory (Part I)	Ch. 6	Ch. 6
7	14-Mar	Mean-Variance Portfolio Theory (Part II)	Ch. 6	Ch. 6
8	21-Mar	The Capital Asset Pricing Model	Ch. 7	Ch. 7
9	28-Mar	Other Pricing Models	Ch. 8	Ch. 8
10	4-Apr	Midterm Exam	Ch. 1-8	
11	11-Apr	Data and Statistics	Ch. 9	Ch. 9
12	18-Apr	Risk Measures	Ch. 10	Ch. 10
13	25-Apr	General Principles	Ch. 11	Ch. 11
14	2-May	Comprehensive Final Exam	Ch. 1-11	
15	9-May	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.

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