RESEARCH METHODOLOGY

Course code	*GRAE001*
Study program	*MSc in Financial Economics*
Course title	*Research Methodology*
Type of course	*Compulsory*
Level of course	*Graduate*
Department in charge	*Graduate school*
Year of study	*1st*
Semester	*1st*
Number of credits	*6 ECTS; 36 hours of class work, 124 hours of self-study, 2 hours of consultations (distant or direct form)*
Lecturer	*Dr. Ujjal Chatterjee*
Prerequisites	*Undergraduate studies in social science, fundamentals in statistics and econometrics*
Form of studies	*Evening*
Teaching language	*English*

AIMS OF THE COURSE

The course provides an advanced introduction to research methodology and techniques in applied economics and finance. It covers an introduction to research and science; main issues related to research design; quantitative and qualitative research approaches and related methods; selected number of research techniques in finance, integrated with appropriate financial theory and evidence. The course is designed to provide students a solid foundation for designing and conducting their own research and to enable them to become knowledgeable consumers of prior academic research results.

LEARNING OUTCOMES

On completion of this course successful students will:

Course learning outcomes (CLO)	Study methods	Assessment methods
CLO1. Appreciate the methodology of positive economics as applied to research in the fields of finance and financial economics.	Lectures, seminars, self-study, home assignments	Assessment of analytical report, research proposal, final exam.
CLO2. Have a critical awareness of research issues, methodologies, and methods in finance and financial economics; obtain a systematic knowledge and understanding of issues at the forefront of empirical research in finance; have a knowledge and understanding of research skills in finance.	Lectures, seminars, self-study, home assignments	Assessment of analytical report, research proposal, final exam.
CLO3. Understand the fundamental concepts of research design.	Lectures, seminars, self-study, home assignments	Assessment of analytical report, research proposal, final exam.
CLO4. Obtain skills and experience in conducting problem-based empirical research and interpreting empirical results.	Lectures, seminars, self-study, home assignments	Assessment of analytical report, research proposal, final exam.

QUALITY ASSURANCE MEASURES

The lecturer will apply multiple teaching methods to keep the students engaged in the topic (case studies). Continuous student feedback will be encouraged and accommodated to continuously improve class experience.

CHEATING PREVENTION
Course will apply zero tolerance policy towards plagiarism, following the rules of the University.

COURSE CONTENT

	Date	TOPIC	IN-CLASS HOURS Lectures, seminars
1	29 May	**Introduction: The Nature of Finance Research** Introduction to the course. Nature of financial economics research: e.g., Macro-economic, Corporate Finance and Asset Pricing Research.	4
Assigned readings: selected articles			
2	30 May	**Quantitative research: main concepts** Quantitative methodology. Forming an econometric model. Data and measurement. Econometrics GRETL software package.	4
Assigned readings: selected articles			
3	31 May	**Mini-Research Project Discussion** **Mini-research #1: in Gretl using OLS. Test some of the basic finance models, such as the CAPM, using publicly available data.**	4
Assigned readings: selected articles			
4	3 June	**Mini-Research Project Discussion** **Mini-research #2: Testing of multifactor models, using publicly available data. Seasonal effects, such as January effect, on asset prices.**	4
Assigned readings: selected articles			
5	5 June	**Mini-Research Project Discussion** **Mini-research #3: Create stock and bond portfolios; investigate portfolio performance using multifactor models.**	4
Assigned readings: selected articles			
6	7 June	**Mini-Research Project Discussion** **Mini-research #4 on Probit/Logistic models to forecast economic growth and its usage on portfolio rebalancing.**	4
Assigned readings: selected articles			
7	10 June	**Mini-Research Project Discussion** **Mini-research #5 on ARCH/GARCH.**	4
Assigned readings: selected articles			
8	12 June	**Introduction to Fama-French Type of Cross-sectional Regressions and its application in corporate finance/asset pricing.** **Mini-research #6 on vector auto regression.**	4
Assigned readings: selected articles			
9	14 June	**Presentations of final project**	4
	21 June	**FINAL EXAM**	
		Total:	36

READING LIST
1. Brooks, C. (2008). Introductory econometrics for Finance. Cambridge: Cambridge University Press, 2nd ed.
2. Quantitative Investment Analysis, DeFusco, McLeavy, Pinto, Runkle (2nd Edition).
3. Ethridge, D. (2004). Research Methodology in Applied Economics. Blackwell Publishing.
4. Jonker, J., Pennink, B. (2010). The Essence of Research Methodology: A Concise Guide for Master and Phd Students in Management Science. Springer.
5. Ryan, B., Scapens, R. W., Theobald, M. (2002). Research method and methodology in finance and accounting. 2nd ed. London: Thomson Learning.
6. Studenmund, A. H. (2011). Using econometrics: a practical guide. 6th ed. Boston: Addison Wesley Longman.

Additional journal articles will be assigned as appropriate.

TEACHING METHODS
Lectures, in-class discussions, student presentations, individual and group assignments, self-study.

ASSESSMENT METHODS

TASK TYPE	FINAL GRADE, %
6 Research Projects (7X6)	42
Participation and Presentation	18
Final exam	40
Total:	**100**

Research Projects (42%)

There are 6 research projects: 1) 6 projects to make students familiar with research methodologies/econometric models; Research projects should be submitted as written reports (max 5 pages including charts and tables).

Participation and Presentation (18%)

In groups of 3 (maximum), students will be required to prepare a short presentation of the projects. Each group member needs to be in class and present his/her work in a collaborative manner). Project presentation is on **June 15, 2018, and attendance is mandatory**.

Final Exam (40%)

The final exam is closed book and closed note. Calculators may be used provided they cannot store text. The exam will take place in class on **June 21, 2018**. It will aim to assess students' conceptual and analytical skills.

ADDITIONAL NOTES

In case of a negative final grade, students are allowed a re-sit exam. It will cover all course material. The weight of a re-sit is **40% of the final cumulative grade**. Analytical report and research project cannot be rewritten but their evaluation (if positive) is not annulled.

Students have to adhere to deadlines, as **no extensions will be granted**. If students fail to meet deadlines for their assignments (e.g., analytical report or research proposal), their assignments will not be graded.

Students are required to have a computer with GRETL installed. GRETL is an open source software package for econometric analysis and is available for both PC and MAC. It is recommended to use the latest release. However, any version should be fine for this course.