APPLIES TO ACADEMIC YEAR 2012/2013

# GRA 6547 Research Methodology in Finance

**Programme**
Master of Science in Business and Economics (Finance), Master of Science in Financial Economics

**Responsible for the course**
Kjell Jørgensen, Richard Priestley

**Department**
Department of Financial Economics

**Term**
According to study plan

**ECTS Credits**
6

**Language of instruction**
English

**Introduction**
Welcome to this mandatory and important research methodology course in finance. The importance of this course can be summarised in the following three questions:
1) What do I need in order to be able to identify the empirical predictions of a financial or economic theory?
2) What do I need in order to be able to test the empirical predictions of the theory?
3) What do I need in order to be able to critically evaluate the research methodology used in financial resarch? Answer: Research Methodology in Finance.

**Learning outcome**
The aim of this course is to introduce students to important econometric techniques that are used in empirical finance and to facilitate an awareness in students of how these techniques can be applied. You should after completing this course be able to employ and understand most of the research methodology used in today's published research in empirical finance. More specifically, you should:
* have an advanced knowledge of the principles and methods of modern financial econometrics
* have extended and deepened your understanding of Econometrics gained in your Basic Econometrics course and improved your critical judgement and discimination in the choice of techniques applicable to complex situations
* have extended your understanding of the application of econometric methods and interpretation of the results at an advanced level
* have further practiced problem solving skills at an advanced level and the use of econometric software.

In addition, you should also have developed further the following key skills:
* Written communication
* Oral communication
* Ethical awareness in conducting research
* Teamwork
* Problem solving and analysis
* Using initiative
* Computer Literacy

Broader understanding of advanced information search strategies:
- acquaintance with advanced methods for information ”harvesting”, search technique, evaluation of sources
- understand what a cited reference search is, know how to do it and be acquainted with how one can make use of it
- know what a critical literature review is and how this type of articles may be searched for and used

**Prerequisites**
A Bachelor's degree qualifying for admission to the Master programme. Students should have a clear understanding of basic statistics/econometrics equivalent to the first four chapters of the textbook. Students should also have basic knowledge in the use of library sources and search techniques.

**Compulsory reading**

**Books:**
Brooks, Chris. 2008. Introductory econometrics for finance. 2nd ed. Cambridge University Press

**Collection of articles:**
Saunders, Mark. 2012. Research methods for business students. 6th ed. Pearson Education, Essex. Chapter 3: Critically reviewing the literature, pp.70-124. Will be available electronically

**Other:**
During the course there may be hand-outs and other material on additional topics relevant for the course and the examination.

**Recommended reading**

**Course outline**
This course introduces students to modern econometric techniques that are relevant for empirical research in finance. The course starts with a session on data gathering in the library. Then univariate time series models and forecasting are covered before we move on to multivariate time series models and cointegration. The focus then switches to the modeling of volatility.

**Course Content**:
1. Data gathering
2. Univariate time series analysis
3. Multivariate time series analysis
4. Cointegration: Modeling long-run financial behaviour
5. Modelling Volatility: ARCH models
6. Panel data
7. Information search strategies

Each topic will be accompanied by a hands-on practical application of an empirical finance topic. The software package Eviews will be an integral part of the lectures and the coursework.

During the semester there will be thesis seminars to guide the students towards writing a thesis registration form. This is conducted outside the course.

**Computer-based tools**
The software package Eviews will be available on BI's computers. ISI web of science, Business Source Complete, Google Scholar, It's learning

**Learning process and workload**
A course of 6 ECTS credits corresponds to a workload of 160-180 hours.

Please note that while attendance is not compulsory in all courses, it is the student's own responsibility to obtain any information provided in class that is not included on the course homepage/It's learning or text book.

**Examination**
Thesis registration form (pass/fail).
Your course grade will be based on the following activities and weights:
50% of the course grade will be based on a final three- hours written exam. 40%of the course grade is based on written assignments and class participation, and a completed and approved work assignment given by the library accounts for 10% of the grade.

Specific information regarding student evaluation beyond the information given in the course description will be provided in class. This information may be relevant for requirements for termpapers or other hand-ins, and/or where class participation can be one of several elements of the overall evaluation.

This is a course with continuous assessment. Each exam element will be graded using points on a scale (e.g. 0-100). The elements will be weighted together according to the information in the course description in order to calculate the final letter grade for the course. You will find detailed information about the point system and the cut off points with reference to the letter grades on the course site in It's learning.

**Examination code(s)**
GRA65474 for the thesis registration form pass/fail
GRA65475 for the final letter grade counting for 100%

**Examination support materials**
BI approved exam calculator. Bilingual dictionary.

Exam aids at written examinations are explained under exam information in our web-based Student handbook. Please note use of calculator and dictionary.
http://www.bi.edu/studenthandbook/examaids

**Re-sit examination**
It is only possible to retake an examination when the course is next taught.
The assessment in some courses is based on more than one exam code.
Where this is the case, you may retake only the assessed components of one of these exam codes.
Where this is not the case, all of the assessed components of the course must be retaken.
All retaken examinations will incur an additional fee.

**Additional information**
**Honor Code**
Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honor code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honor code system, to which the faculty are also deeply committed.

Any violation of the honor code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honor code and academic integrity. If you have any questions about your responsibilities under the honor code, please ask.