Course Syllabus

BUS224
POLITICAL & FINANCIAL RISK ANALYSIS

Number of ECTS credits: 6
Time and Place: Mondays 15:00 – 18:00

Contact Details for Professor
Name of Professor: Jordi Ballart
E-mail: jordi.ballart@vub.ac.be
Office hours: upon appointment

CONTENT OVERVIEW

<table>
<thead>
<tr>
<th>Syllabus Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Prerequisites and Course Description</td>
<td>2</td>
</tr>
<tr>
<td>Course Learning Objectives</td>
<td>2</td>
</tr>
<tr>
<td>Overview Table: Link between MLO, CLO, Teaching Methods, Assignments and Feedback</td>
<td>3</td>
</tr>
<tr>
<td>Main Course Material</td>
<td>4</td>
</tr>
<tr>
<td>Workload Calculation for this Course</td>
<td>5</td>
</tr>
<tr>
<td>Course Assessment: Assignments Overview and Grading Scale</td>
<td>5 &amp; 6</td>
</tr>
<tr>
<td>Description of Assignments, Activities and Deadlines</td>
<td>6</td>
</tr>
<tr>
<td>Rubrics: Transparent Criteria for Assessments</td>
<td>7 &amp; 8</td>
</tr>
<tr>
<td>Policies for Attendance, Late Work, Academic Honesty, Turnitin</td>
<td>8 &amp; 9</td>
</tr>
<tr>
<td>Course Schedule – Overview Table</td>
<td>10</td>
</tr>
</tbody>
</table>
Course Prerequisites (if any)
BUS 101G, MTH 140G or STA 101

Course Description
The contemporary forces of increased globalization create a peculiar global political and financial environment, giving rise to a new, interdisciplinary field of enquiry: Political and Financial risk analysis. Globalized markets create many risks and opportunities for companies seeking international business. This course teaches students how to examine, analyze and evaluate the portfolio of risks that a company is facing in an international environment. Students will be familiarized with the main tools, practices and theories needed to assess a broad spectrum of potential risks. In the first part of the course students will focus on different types of financial risks and principles of diversification such as hedging. In the second part of this course political aspects will be taken into consideration when analyzing financial risks.

In the era of globalization, companies must consider new political dynamics when investing in less predictable institutional environments, such as economies in transition or markets affected by different political and economic systems as well as different factors of instability. In addition, companies have to consider other risks on the international playing field. The students will gain insights on risk assessment in international economic relations such as exchange rate regimes, monetary policy and economic financial integration as well as elaborate on political factors that impact investments.

Further description
This is an introductory course in Risk Analysis. We will treat theories as simplifications of reality and will study some tools to apply these theories in order to find optimal solutions.

Course Learning Objectives (CLO)
At the end of this course, students should be able to:

In terms of knowledge:
➢ Know and to be able to apply common qualitative and quantitative research methods and to be able to apply these methods in the field of study

In terms of skills
➢ Apply the knowledge of different functional fields to the analysis of the given situations and solutions
➢ Be able to communicate clearly, fluently and accurately both in writer reports as well as oral

In terms of attitudes, students should develop in this course:
➢ Recognize the importance of “life-long learning”
➢ To have an open and academic attitude characterized by accuracy, critical reflection and academic curiosity
<table>
<thead>
<tr>
<th>Major Learning Objectives</th>
<th>Course Learning objectives addressing the Major Objectives (testable learning objectives)</th>
<th>Methods used to Teach Course Objectives</th>
<th>Methods (and numbers/types of assignments) used to test these learning objectives</th>
<th>Type, Timing and Instances of Feedback given to Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>To recognize the importance of life-long learning</td>
<td>Multidisciplinary perspectives in the analysis of the situations and cases</td>
<td>Different concepts will be revised during the course lectures to ensure a comprehensive knowledge base</td>
<td>There will be a final reflection paper due, for self-reflection and evaluation</td>
<td>Students will receive the proper feedback from the instructor</td>
</tr>
<tr>
<td>To apply knowledge of different functional fields to the analysis of the given situations and solutions</td>
<td>Demonstrate the ability to interpret outputs and results to take decisions</td>
<td>Lectures, problem solving exercises</td>
<td>Homework and in-class assignments</td>
<td>Feedback from the instructor within a week submission as well as after the assignments</td>
</tr>
<tr>
<td>To know and to be able to apply common qualitative and quantitative research methods and to be able to apply these methods in the field of study</td>
<td>To gain a better understanding and with the use of research methodology through the use of the research techniques and knowledge</td>
<td>Students will work together to establish and deliver a research project that illustrates the foundation at research knowledge and comprehension</td>
<td>Students will research their given topic to high standards, which include submission and presentation of the results</td>
<td>Students will receive the proper feedback from the instructor</td>
</tr>
<tr>
<td>To have an open and academic attitude characterized by accuracy, critical reflection and academic curiosity</td>
<td>Students will engage in understanding the need to critically evaluate the situations and their behavior. This will be reflected in critical thinking, inquiry and reflection</td>
<td>Different concepts will be revised during the course lectures to ensure a comprehensive knowledge base</td>
<td>There will be a final reflection paper due, for self-reflection and evaluation</td>
<td>Students will receive the proper feedback from the instructor</td>
</tr>
<tr>
<td>To be able to communicate clearly, fluently and accurately both in written reports as well as oral</td>
<td>How to structure and compose an academic essay based on alternative and theoretical approaches</td>
<td>Preparation of projects and presentations regarding the solution of the given situations and cases</td>
<td></td>
<td>Students will receive the proper feedback from the instructor</td>
</tr>
</tbody>
</table>
**Main Course Materials:**

The course material consists of PowerPoint presentations, readings and exercises. PowerPoint presentations will be made available after the respective classes have taken place.

The syllabus, PowerPoint presentations and other academic material, as well as important messages, will be uploaded to the Vesalius portal ‘Canvas’. Students are expected to visit this site regularly to keep abreast of course evolutions.

Course material marked as ‘suggested readings’ and ‘additional sources’ is helpful for research and to gain an increased understanding, but is not mandatory. This material can be found online or will be made available upon individual request.

**Reference Textbooks:**


*Additional material will be assigned on a weekly basis*

**Active Learning and Intensive ‘Reading around the Subject’:**

Learning should be an active and self-motivated experience. Students who passively listen to lectures, copy someone else’s notes, and limit their readings to required chapters are unlikely to develop their critical thinking and expand their personal knowledge system. At the exam, these students often fail to demonstrate a critical approach. Students are strongly recommended to have an updated understanding of developments related to this course and related to their wider Major. Active and engaged learning will turn out to be enriching to the overall course and class discussions. Students are invited to deepen their understanding of both theoretical
and current issues from a variety of sources. You are encouraged to read and browse in the leading journals of your discipline.

Work Load Calculation for this Course:

This course counts for 6 ECTS, which translates into 150 – 180 hours for the entire semester for this course. This means that you are expected to spend roughly 10 hours per week on this course. This includes 3 hours of lectures or seminars per week and 7 hours ‘out of class’ time spent on preparatory readings, time spent on preparing your assignments and homework as well as studying time for exams. Please see below the estimated breakdown of your work-load for this course.

- **Time spent in class**: 3 hours per week / 45 hours per semester
- **Time allocated for course readings**: 5 hours per week / 75 hours per semester
- **Time allocated for preparing Assignment 1**: 4 hours
- **Time allocated for preparing Assignment 2**: 4 hours
- **Time allocated for preparing Assignment 3**: 4 hours
- **Time allocated for preparing Assignment 4**: 4 hours
- **Time allocated for preparing/revising for written Mid-term Exam**: 10 hours
- **Time allocated preparing/revising for written Final Exam**: 10 hours

**Total hours for this Course**: 156 hours

Course Assessment: Assignments Overview

The students will be evaluated on the basis of their performance in the following assignments:

- Assignments (four, each carrying 10%) 40%
- Midterm examination 30%
- Final examination 30%
- TOTAL 100%

Grading Scale of Vesalius College

Vesalius College grading policy follows the American system of letter grades, which correspond to a point scale from 0 – 100. **All assignments (including exams) must be graded on the scale of 0-100.** To comply with the Flemish Educational norms, professors should on request also provide the conversion of the grade on the Flemish scale of 0-20. The conversion table below outlines the grade equivalents.
<table>
<thead>
<tr>
<th>Letter grade</th>
<th>Scale of 100 (VeCo Grading Scale)</th>
<th>Scale of 20 (Flemish System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>85-100</td>
<td>17.0-20.0</td>
</tr>
<tr>
<td>A-</td>
<td>81-84</td>
<td>16.1-16.9</td>
</tr>
<tr>
<td>B+</td>
<td>77-80</td>
<td>15.3-16.0</td>
</tr>
<tr>
<td>B</td>
<td>73-76</td>
<td>14.5-15.2</td>
</tr>
<tr>
<td>B-</td>
<td>69-72</td>
<td>13.7-14.4</td>
</tr>
<tr>
<td>C+</td>
<td>66-68</td>
<td>13.1-13.6</td>
</tr>
<tr>
<td>C</td>
<td>62-65</td>
<td>12.3-13.0</td>
</tr>
<tr>
<td>C-</td>
<td>58-61</td>
<td>11.5-12.2</td>
</tr>
<tr>
<td>D+</td>
<td>54-57</td>
<td>10.7-11.4</td>
</tr>
<tr>
<td>D</td>
<td>50-53</td>
<td>10.0-10.6</td>
</tr>
<tr>
<td>F</td>
<td>0-49</td>
<td>0-9.9</td>
</tr>
</tbody>
</table>

**Description of Activities, Grading Criteria and Deadlines:**

**Four Assignments (10% each):** Students will be required to complete four assignments during the course. The assignments are to be completed at home, and individually. These assignments will consist of: (1) exercises at the end of each chapter, and/or (2) a case proposed by the instructor.

**Mid-Term Exam and Final Exam (30% each):** The exams will consist on a set of short questions that will test the understanding of the concepts and 2-3 problems that will be similar to the problem sets assigned for homework assignments and the in-class exercises. Bring your student ID, a pen and a calculator. Some exercises will have to be done by Excel. The professor will indicate if and when a PC will be required. Makeup examinations will be allowed only in an extreme emergency, which must be documented by a physician or college official, in advance when possible.

**Rubrics: Transparent Grading Criteria For Each Assignment**

The following criteria will be applied in assessing your written work:
## Rubrics for Assignments

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Grade Range (e.g. FAIL (0-49%))</th>
<th>Grade Range</th>
<th>Grade Range: A/A- 81-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-25</td>
<td>25.5-40</td>
<td>40.5-50</td>
</tr>
<tr>
<td>1.</td>
<td>Ability to solve problems (50 points)</td>
<td>Student fails to understand the mechanics of solving the problem. Inadequate problem-solving capabilities.</td>
<td>A problem is partially solved, but incorrect assumptions are used or small mistakes occurred during computation</td>
</tr>
<tr>
<td></td>
<td>0-12.5</td>
<td>13-20</td>
<td>20.5-25</td>
</tr>
<tr>
<td>2.</td>
<td>Ability to use provided instruments and tools (25 points)</td>
<td>does not provide the file, uses incorrect syntax or Excel functions or formulas</td>
<td>The syntax or Excel commands are appropriate for the most part, but there are occasional mistakes, or annotations are missing</td>
</tr>
<tr>
<td></td>
<td>0-12.5</td>
<td>13-20</td>
<td>20.5-25</td>
</tr>
<tr>
<td>3.</td>
<td>Ability to interpret the results (25 points)</td>
<td>Cannot explain substantive meaning behind the results obtained</td>
<td>Explanation is correct for the larger part, but some language is imprecise</td>
</tr>
</tbody>
</table>
# Rubrics for the Mid-Term Exam and the Final Exam

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Grade Range (e.g. FAIL 0-49%)</th>
<th>Grade Range D-B 50-80%</th>
<th>Grade Range: A/A-81-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-25</td>
<td>25.5-40</td>
<td>40.5-50</td>
</tr>
<tr>
<td>1. Ability to solve problems (50 points)</td>
<td>Does not know how to get started on a problem</td>
<td>A problem is partially solved, but incorrect assumptions are used or mistakes occurred during computation</td>
<td>Solution is based on correct assumptions; all work is clearly presented and the logic is easy to follow</td>
</tr>
<tr>
<td></td>
<td>0-12.5</td>
<td>13-20</td>
<td>20.5-25</td>
</tr>
<tr>
<td>2. Knowledge of key concepts (25 points)</td>
<td>Provides wrong definition</td>
<td>Explanation is muddled, contains factual errors, uses imprecise language, provides wrong examples</td>
<td>Provides a precise definition of the concept, backed by examples as appropriate</td>
</tr>
<tr>
<td></td>
<td>0-12.5</td>
<td>13-20</td>
<td>20.5-25</td>
</tr>
<tr>
<td>3. Interpretation of results (25 points)</td>
<td>Cannot explain substantive meaning behind the results obtained</td>
<td>Explanation is correct for the larger part, but some language is imprecise</td>
<td>Provides accurate and precise interpretation of the results obtained</td>
</tr>
</tbody>
</table>

## Vesalius College Attendance Policy

Because the College is committed to providing students with high-quality classes and ample opportunity for teacher-student interaction, it is imperative that students regularly attend class. As such, Vesalius College has a strict attendance policy. Participation in class meetings is mandatory, except in case of a medical emergency (e.g. sickness). Students need to provide evidence for missing class (doctor’s note). If evidence is provided, the missed class is considered as an excused class. If no evidence is provided, the missed class is counted as an absence. If students are absent for two classes, the course instructor alerts the student’s advisor.

Participation implies that students are on time: as a general rule, the College advises that students should be punctual in this regard, but it is up to the professor to decide whether to count late arrivals as absences, or not.
Additional Course Policies

Preparation for class: Carefully read the materials indicated in the course schedule before coming to class. Statistics is a sequential subject: new topics build on concepts introduced before, so it is crucial to keep up with the material as we go along and to regularly review concepts. We will work on statistical problems in class. I expect you to actively work the problems, and be prepared to briefly present the results of your work to the other students. You should bring laptop to class for the sessions indicated in the course schedule.

Late assignments: Assignments are due on the indicated date and time. Late assignments will not be accepted unless there are serious legitimate reasons. Provision of a signed medical note is required, and notice must be given prior to the deadline.

Returning the originals of written work: During the semester, you should make photocopies of your graded written work (assignments and midterm exam) and return the originals to me (needed for inspection by the external examiners and the accreditation body).

Academic Honesty Statement
Academic dishonesty is NOT tolerated in this course.
Academic honesty is not only an ethical issue but also the foundation of scholarship. Cheating and plagiarism are therefore serious breaches of academic integrity.
Following the College policy, cheating and plagiarism cases will be communicated in writing to the Associate Dean and submitted to the Student Conduct Committee for disciplinary action.
If you refer to someone else’s work, appropriate references and citations must be provided. Grammar, spelling and punctuation count, so use the tools necessary to correct before handing in assignments.
Please consult the Section “Avoiding Plagiarism” in the College Catalogue for further guidance.

Turnitin
All written assignments that graded and count for more than 10% towards the final course grade need to be submitted via the anti-plagiarism software Turnitin. You will receive from your professor a unique password and access code for your Class.
## Course Schedule (Overview)

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Ago 26</td>
<td>Introduction to the Course, Overview of the Course and Requirements</td>
</tr>
<tr>
<td>Week 2</td>
<td>Sep 2</td>
<td>Risk, Political and Financial Risk</td>
</tr>
<tr>
<td>Week 3</td>
<td>Sep 9</td>
<td>Qualitative approach to the Risk Analysis</td>
</tr>
<tr>
<td>Week 4</td>
<td>Sep 16</td>
<td>Quantitative approach to the Risk Analysis</td>
</tr>
<tr>
<td>Week 5</td>
<td>Sep 23</td>
<td>Introduction to Game Theory</td>
</tr>
<tr>
<td>Week 6</td>
<td>Sep 30</td>
<td>Statistics for Management, Regression and Correlation Analysis</td>
</tr>
<tr>
<td>Week 7</td>
<td>Oct 7</td>
<td>MID-TERM EXAM</td>
</tr>
<tr>
<td>Week 8</td>
<td>Oct 14</td>
<td>Review of the midterm exam and results</td>
</tr>
<tr>
<td>Week 9</td>
<td>Oct 21</td>
<td>Models with little to no Risk, Modeling decisions in Low Uncertainty Settings</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Fall Recess – Oct 28 to Nov 3 2019 – NO CLASSES</strong></td>
</tr>
<tr>
<td>Week 10</td>
<td>Nov 4</td>
<td>Models with high Risk, Risk and Reward, Modeling High Uncertainty Settings</td>
</tr>
<tr>
<td>Week 11</td>
<td>Nov 11</td>
<td>bank holiday – NO CLASS -</td>
</tr>
<tr>
<td>Week 12</td>
<td>Nov 18</td>
<td>Forecasting</td>
</tr>
<tr>
<td>Week 13</td>
<td>Nov 25</td>
<td>Balancing risk and reward</td>
</tr>
<tr>
<td>Week 14</td>
<td>Dec 2</td>
<td>Revision and Summary of the Course</td>
</tr>
<tr>
<td>Week 15</td>
<td>Dec 9</td>
<td>FINAL EXAMS</td>
</tr>
</tbody>
</table>
Detailed Session-by-Session Course Outline

Session 1 (Monday, August 26th 2019)

Introduction to the Course and Overview of Core Requirements.

Required reading:

Content:
The concept of Risk

Session 2 (Monday, September 2nd 2019)

Political Risk and Financial Risk

Required reading:

Content:
What is political Risk
Political Risk Analysis
Political Risk Management
What is financial Risk
Financial Risk Situations
Managing Financial Risk Situations

Session 3 (Monday, September 9th 2019)

Qualitative approach to Risk Analysis

Required reading:

Content:
Reactive Risk management
Proactive Risk management
Benefits and inconveniences of a qualitative approach
Session 4 (Monday, September 16th 2019)

Quantitative approach to Risk Analysis

Required reading:

Content:
Objective numeric values
Identifying assets
Key factors within quantitative analysis
Benefits and inconveniences of a quantitative approach

Assignment 1 is assigned

Session 5 (Monday, September 23rd 2019)

Introduction to the Game Theory

Required reading:

Content:
What is the Game Theory?
Understanding the basic structure of the game
Analyzing dominant and dominated strategies
The Nash Equilibrium
Cooperative vs non-cooperative game theory
Sequential Game

Session 6 (Monday, September 30th 2019)

Statistics for Management. Regression and correlation analysis

Required reading:

Content:
Review of probability and distribution concepts
Raw scores, Z-scores and Z-distribution
Regression and correlation analysis as a forecast technique
Z-tests as a forecast technique with a level of feasibility

Assignment 2 is assigned

Session 7 (Monday, October 7th 2019)

Midterm exam
Covers all material covered to date. Bring your student ID, a mechanical pencil, an eraser, a pen, and a calculator.

Session 8 (Monday, October 14th 2019)

Review of the midterm exam and results

Session 9 (Monday, October 21th 2019)

Modeling decisions with low uncertainty

Required reading:
Hasson S. 2005. Decision Theory: A Brief Introduction: Chapters 1 to 7. Royal Institute of Technology (KTH)

Content:
Linear programming to maximize an objective function
Problem formulation
Maximization or minimization scenario
Formulating a model
Feasible and unfeasible solutions
Feasible and optimal solutions

Assignment 3 is assigned

Session 10 (Monday, November 4th 2019)

Modeling decisions with high uncertainty

Required reading:
Hasson S. 2005. Decision Theory: A Brief Introduction: Chapters 8 to 12. Royal Institute of Technology (KTH)
Content:
High uncertainty vs low uncertainty settings
Modeling future values
Uncertainty and risk
Reward and risk

Session 11 (Monday, November 11th 2019)

BANK HOLIDAY – NO CLASS -

Session 12 (Monday, November 18th 2019)

Balancing risk and reward

Required reading:

Content:
Balancing risk and reward using simulation
Connecting random inputs and random outputs
Analyzing and interpreting simulation outputs
Evaluating alternative decisions

Session 13 (Monday, November 25th 2019)

Forecasting

Required reading:

Content:
Estimating relationships
Modeling possibilities
Forecasting methods: extrapolation & econometric models
Seasonal models and estimation of seasonality

Assignment 4 is assigned
Session 14 (Monday, December 2\textsuperscript{nd} 2019)

Revision and summary of the course

Session 15 (Monday, December 9\textsuperscript{th} 2019)

Final exam

Covers all material covered since the midterm exam. Bring your student ID, a mechanical pencil, an eraser, a pen, and a calculator.