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| <b>Course title</b>        | Financial Econometrics  |
| <b>Course code</b>         |   |
| <b>Type of course</b>      | Compulsory  |
| <b>Level of course</b>     | Undergraduate   |
| <b>Year of study</b>       | Fourth (4 <sup>d</sup> )  |
| <b>Semester</b>            | Seventh (7 <sup>th</sup> )  |
| <b>ECTS credits</b>        | 5   |
| <b>Name of lecturer(s)</b> | Professor Costas Siriopoulos  |
| <b>Aim of the Course</b>   | The purpose of the course is to enable students understand financial phenomena and their characteristics, model financial phenomena, testing hypothesis of financial theory (Efficiency), apply econometric techniques and forecasting.   |
| <b>Learning outcomes</b>   | At the end of this course the students should be able to: <ol style="list-style-type: none"> <li>1. Understand financial phenomena and their modeling characteristics.</li> <li>2. Discuss if financial theory's equilibrium models hold in capital and money markets.</li> <li>3. Evaluate econometric models.</li> <li>4. Use time series techniques in studying financial series.</li> </ol> |
| <b>Competences</b>         | At the end of the course the student will have further developed the following skills/competences: <ol style="list-style-type: none"> <li>1. Estimate and evaluate econometric models and time series techniques in finance.</li> <li>2. Forecasting.</li> <li>3. Use of E-Views in financial econometrics.</li> </ol>  |
| <b>Prerequisites</b>       | There are no prerequisite courses. It is, however, recommended that students have knowledge of Statistics Mathematics and Corporate Finance.  |

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| <b>Course contents</b>                | <ol style="list-style-type: none"> <li>1. Linear Regression Model and assumptions.</li> <li>2. Modeling long run relationships in finance.</li> <li>3. Multicollinearity, autocorrelation, heteroskedasticity.</li> <li>4. Dummy variables.</li> </ol> |
|                                       | <ol style="list-style-type: none"> <li>5. Time series.</li> <li>6. ARCH/GARCH models.</li> <li>7. Model volatility and correlation.</li> <li>8. Forecasting.</li> </ol>  |
| <b>Recommended reading</b>            | <ol style="list-style-type: none"> <li>1. Brooks C. (2002) “Introductory econometrics for finance”, Cambridge</li> <li>2. Maddala G.S. (2003). “Introduction to econometrics” J. Willey.</li> </ol>  |
| <b>Teaching and learning methods</b>  | Lectures – Tutorials – Laboratory sessions   |
| <b>Assessment and grading methods</b> | The grade is calculated as the weighted average of the final written exam and weekly exercises.<br>Minimum passing grade: 5  |
| <b>Language of instruction</b>        | ENGLISH  |