



**SYLLABUS**

<b>COURSE DESCRIPTION</b>		
Type of the course: ( x ) Normal ( ) Teaching Assistant (TA) ( ) Thesis/Dissertation		
Course Title: Quantitative Methods Applied to Accounting		
Periodicity: ( x ) Annual ( ) Semestral ( ) Sporadic		
Academic term: Trimester		
<b>WORKLOAD</b>		
Workload: 60-hour course		Credits: 4
Theoretical: (1 credit = WL 15)	Research: (1 credit = WL 15)	Theoretical-empirical: (2 credits = WL 30)
Academic Degree: ( ) Master ( x ) PhD ( ) Master and PhD		
Course Type:		
Master: ( ) Elective - ( ) Compulsory		Doctorate: ( ) Elective - ( x ) Compulsory
<b>COURSE INSTRUCTOR</b>		
<b>AREA OF CONCENTRATION / LINE OF RESEARCH</b>		
<b>Research Area:</b> Controllershship and Governance		
<b>Research Line:</b> Management Control and Performance Evaluation Financial Accounting and Governance		
<b>COURSE PURPOSE</b>		
<p>a) Knowledge – provide the student with knowledge about the multivariate quantitative methods applied in scientific studies of Accounting;</p> <p>b) Skills – develop student skills to use quantitative methods applied in research in the Accounting area; and</p> <p>c) Attitudes – motivate the student to develop research in the Accounting area using statistical methods.</p>		
<b>COURSE DESCRIPTION</b>		
Linear regression and its assumptions. Binary and multinomial logistic regression. Regression with panel data. Cluster analysis. Correspondence analysis and homogeneity analysis. Time series. Exploratory and confirmatory factorial analysis. Structural equation modeling.		
<b>COURSE CONTENT</b>		
<ol style="list-style-type: none"> <li>1. Linear regression.</li> <li>2. Logistic regression.</li> <li>3. Regression with panel data.</li> <li>4. Cluster analysis.</li> <li>5. Correspondence and homogeneity analysis.</li> <li>6. Time series.</li> <li>7. Factor analysis.</li> <li>8. Structural equation modeling</li> </ol>		
<b>METHODOLOGY</b>		
Lectures with theoretical explanation of the themes of the program. Presentation of empirical data, with resolution of exercises and practical cases applied. Use of statistical software, such as Stata, SPSS, Gretl. Lists of exercises to fix knowledge.		
<b>GRADING POLICY</b>		
Lists of exercises (20%), applications with accounting databases, statistical packages (30%),		



validation tests of published scientific research data (20%), proof (30%).

#### MAIN REFERENCES

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- EVERITT, B.; HOTHORN, T. **An introduction to applied multivariate analysis with R**. London: Springer, 2011.
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- HAIR JR, J. F.; ANDERSON, R. E.; TATHAM, R. L.; BLACK, W. **Análise multivariada de dados**. 6 ed. Porto Alegre: Bookman, 2009.
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- HYNDMAN, R. J.; ATHANASOPOULOS, G. **Forecasting: principles and practice. Advanced forecasting methods**. Available from: <https://www.otexts.org/fpp>.
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- MOORE, D. S.; McCABE, G. P; DUCKWORTH, W. M.; SCLOVE, S. L. **A prática da estatística empresarial**. Rio de Janeiro: LTC, 2006.
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#### OTHER REFERENCES

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- BATES, D. M. **lme4: mixed-effects modeling, with R**. USA: Springer, 2010.
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