Course Information	
Subject	**Technical Analysis and Behavioral Finance**
Degree	**Master in Finance**
Course	**First course**
Term	**Second Term**
ECTS – Credits	2 Credits
Type of Course	Elective
Department	ICADE Business School
Area	Finance

Professor	
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COURSE SPECIFICS

Context of the Course
Contribution to the professional profile of the master degree.
The subject of Technical Analysis provide the student with a basic knowledge and the main pillars for a better understanding of the financial markets, studying the markets themselves, more than the companies that are traded in them or the factors that could influence demand. New instruments will be introduced that allow students to react properly to singular market conditions, with the aim that they are able to make their own investment decisions.

The Behavioral Finance explanations are intended to show the psychological factors involved in making financial decisions in a context of uncertainty. Faced with a common event, making decisions, human beings are influenced by a series of factors that will condition both their current and future decisions and investments**.**

Class Aims

Technical Analysis_: The main objective is to be able to understand and / or correctly use the methods and techniques of Technical Analysis. Specifically, it is intended to offer in this subject:

        Overview of how the markets work, including ordinary vocabulary and trading mechanics,
        Dow theory
        Understanding that markets are influenced by psychological elements, and how to measure sentiment,
        Market Strength measurement methods,
        Temporal trends,
        Trend analysis techniques.

The objectives to be achieved with Behavioral Finance are:

        Understand how investors behave when making financial decisions
        Apply prospect theory and understand how risk aversion and loss aversion work in financial decision making.
        Practice how a set of heuristics and cognitive biases affect financial decision making
        How to use the principles of Behavioral Finance to make better financial decisions

CONTENTS

Contents: Technical Analysis
Lesson 1: Introduction to Technical Analysis
• Introduction to Technical Analysis
Lesson 2: Markets and its indicators
• Markets • Dow Theory • Sentiment • Strength • Movement, trends, emporal patterns and cycles • Cash flow
Lesson 3: Trend analysis
• Basic concepts. Trend lines, moving averages • Breakouts, stops and corrections. Fibonacci • Risk management
Lesson 4: Trading System
• Trading System

Contents: Behavioral Finance
Lesson 1: Behavioral finance topics
• **rationality, irrationality, feeling, emotions**
Lesson 2: Risk aversion and risk seeking
• **Framing effect**
Lesson 3: Prospect theory.
• Heuristics and cognitive biases
Lesson 4: Behavioral finance applications
• **Nudge.**

Competences
General competences
CGB 1. Capacity for analysis and synthesis
CGB 2. Problem solving and decision making
CGB 3. Capacity for organization and planning
CGB 4. Ability to manage information from different sources
CGB 5. Advanced computer skills related to field of study
CGB 6. Interpersonal skills: listen, argue and debate
CGB 7. Leadership and teamwork
CGB 8. Critical and self-criticism capacity
CGB 14. Ability to process and transmit ideas, projects, reports, problems and solutions
Specific competences
CE 2. Find and analyse public information from markets and companies for decision-making processes of investment and financing.
CE 3 To understand and to apply the principles and models of business valuation, asset portfolio management, the fundamentals of analysis of investment projects and theories that support the construction of efficient portfolios.

CE 5. To know how to integrate and implement the policy of indebtedness and dividends policy in a company.		

TEACHING AND LEARNING

General methodology characteristics of the course	
Classroom methodology: Activities	**Competences**
It combines lectures with case presentations and readings by students. During the course of each session will review basic concepts contained in the documentation that students have available before each class, and that they must read in depth to ask the arising doubts during the class session. These concepts should be applied by resolving case studies by the students. During the class session the case studies solutions will be debated, allowing delve into the nature of the problem. It is mandatory active participation of students in both the normal development of the class, and in the discussion of the case study, or the exercises if there to be. The driver shaft of the methodology to be used is the practicality of the concepts and skills covered in the sessions. The usual methodological sequence is as follows: 1. Statement of the general framework of the subject by the monitor / teacher. 2. Discussion of the conceptual doubts that students have about the subject, and resolving them 3. Practical use of concepts through the analysis of real or fictitious case studies, and / or exercises. 4. Summary of worked concepts and summary of the main conclusions	
Methodology - Not in the class: Activities	**Competences**
The previous study of the documentation for each session, which will be made available to students with sufficient time is required. Analysis and resolution of practical cases, when assigned, which allow the student to make a decision-making exercise like a professional at a financial department of a company. The resolution of the case studies is mandatory and prior to the corresponding session and must be delivered in writing. The resolution of the exercises proposed by the teacher shall be delivered in writing.	

EVALUATION AND GRADING CRITERIA

The final grade of the subject will be weighted as follows:
75% Technical Analysis
25% Behavioral Finance

Types	Evaluation activities	Weight	Criteria
Exam, public defence, practical cases and Final Presentation (SE1)	Final Exam	30%	**To pass the subject, the weighted average of both tests (exam and final case) must be at least 4,90.** Right answers. Organization of information. Synthesis.
Test (SE2)	All Quizzes, Test & Kahoots	15%	Right answers
Public, individual or group presentations (SE3)	Final Case Presentation	15%	Apply instructions and criteria. Organization of information. Clarity in presentation.

			Means of support used. Synthesis.
Individual Assignments/Practices/Works (SE4)	Individual Assignments/Practices/Works, same weight each	10%	Apply instructions and criteria. Appropriateness in the statement of the questions. Right answers. Organization of information. Clarity in presentation. Means of support used. Synthesis.
Group Assignments/Practices/Works (SE5)	Group Assignments/Practices/Works same weight per each	15%	Apply instructions and criteria. Appropriateness to the statement of the questions. Right answers. Organization of information. Clarity in presentation. Means of support used. Synthesis **Distribution and organization of work. Everyone must participate**
Participation (SE6)	Participation, achievement of objectives, and commitment throughout the classes	15%	To achieve the pass mark, the student is required to help/push into the dynamics of the classes, provide evidence of achievement of objectives, predisposition, commitment and initiative.

Notes to the evaluation criteria:

1. All students must meet a minimum of 75% attendance in the whole subject.
2. For the exercises, to be taken into account, they must be delivered through Moodle in time and format.
3. If, when combining the criteria, the final grade is equal to or higher than 5, but the minimum grade for the exams or final tests has not been achieved, the final grade will be reduced to a maximum of 4,0 points.
4. In case a student does not obtain a grade of 5,0, the student may take an extraordinary exam. In that case if the student pass the retake exam, his/her final grade in the subject must be a 5,00.
5. If the student does not comply with 70% of the evaluation activities, the weightings of the evaluation system table will not be applied, and the maximum final grade will be 4,0.

Evaluation criteria to apply at second enrolment:

Types	Criteria	Weight
Individual assignments	To pass the course, the student must deliver all the tasks assigned by the teacher	15%
Taking written exams, multiple choice tests, concept tests and solving practical cases as an exam	At least 5,00 points on the final exam, or at least an average of 5,00 on all examination activities.	70%
Participation	To achieve the pass mark, the student is required to help/push into the dynamics of the classes, provide evidence of the achievement of objectives, predisposition, commitment and initiative.	15%

Evaluation criteria to be applied in the case of school waiver/exemption:
In cases of exemption/dispensing from schooling, provided that the student duly justifies it, the grading criteria will be 70% for the exam (if the subject allows it, two exams will be taken, 35% each) and 30% for individual works. The individual works will serve to control the evolution of the student's learning. Only in cases in which the student is not able to answer in writing, and provide evidence that justifies it, the exam may be oral and the content of the student's answers will be transcribed.

Criteria in health alert:
The student must be permanently identified, with an identification in the classroom and with their full name remotely. Students should not change the spaces they occupy in the classroom, unless directed by a teacher or the program management.
Failure to comply with any of the health recommendations during the class sessions may imply failure in the subject.

SUMMARY OF STUDENT WORK HOURS							
ATTENDANCE HOURS							
Lectures (AF1)	Content presentation (AF2)	Homework presentation (AF3)	Exercises and assessment (AF4)	Class discussion (AF5)	Seminars, workshops, case studies (AF6)	Interdisciplinary activities (AF7)	Simulations (AF8)
4	5	3	2	2	2	1	1
NON-ATTENDANCE HOURS							
Study and analysis of documentation (AF9)		Performing assignment and case studies (AF10)		Tutorial sessions (AF11)		Conducting collaborative work (AF12)	
15		15		2		5	
ECTS CREDITS:3 ECTS							

BIBLIOGRAPHY

Recommended Bibliography

Textbooks

Technical Analysis

- **Charles D. Kirkpatrick II, Julie R.** Dahlquist (2010) Technical Analysis. The Complete Resource for Financial Market Technitian

Behavioral Finance

- Akerlof, G. A., & Shiller, R. J. (2010). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton university press.

- Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. *Handbook of the Economics of Finance*, *1*, 1053-1128.

- Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. *American economic review*, *93*(5), 1449-1475.
- Shiller, R. J. (2015). *Irrational exuberance: Revised and expanded third edition*. Princeton university press.

- Thaler, R. H., & Ganser, L. J. (2015). *Misbehaving: The making of behavioral economics*. New York: WW Norton.

- Thaler, R. H., & Sunstein, C. (2008). R. Nudge: Improving Decisions about Health, Wealth, and Happiness.

- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, *185*(4157), 1124-1131.

- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive psychology, 5*(2), 207-232.

Additional Readings

Technical Analysis

- Robert D. Edwards and John Magee (1948) *Technical Analysis of Stock Trends*
- John J. Murphy (1990) *Technical Analysis of the Futures Markets*
- John J. Murphy (1996) *The Visisual Investor*
- Richard Thaler (2016): *Misbehaving: the making of behavioral economics*

Behavioral Finance

- Barber, B. M., Huang, X., & Odean, T. (2016). Which factors matter to investors? Evidence from mutual fund flows. *The Review of Financial Studies, 29*(10), 2600-2642.

- Barber, B. M., & Odean, T. (2013). The behavior of individual investors. In *Handbook of the Economics of Finance* (Vol. 2, pp. 1533-1570). Elsevier.

- Barber, B. M., Odean, T., & Zheng, L. (2005). Out of sight, out of mind: The effects of expenses on mutual fund flows. *The Journal of Business, 78*(6), 2095-2120.

- Barber, B. M., & Odean, T. (2002). Online investors: do the slow die first?. *The Review of financial studies, 15*(2), 455-488.

- Benartzi, S., & Thaler, R. H. (1995). Myopic loss aversion and the equity premium puzzle. *The quarterly journal of Economics, 110*(1), 73-92.
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- Benartzi, S., & Thaler, R. (2007). Heuristics and biases in retirement savings behavior. *Journal of Economic perspectives, 21*(3), 81-104.

- Camerer, C. F. (2014). Behavioral economics. *Current biology, 24*(18), R867-R871.

- Camerer, C., Babcock, L., Loewenstein, G., & Thaler, R. (1997). Labor supply of New York City cabdrivers: One day at a time. *The Quarterly Journal of Economics, 112*(2), 407-441.

- De Bondt, W. F., & Thaler, R. (1985). Does the stock market overreact?. *The Journal of finance, 40*(3), 793-805.

- Hausman, D. M., & Welch, B. (2010). Debate: To nudge or not to nudge. *Journal of Political Philosophy, 18*(1), 123-136.

- Kahneman, D., & Tversky, A. (2013). Choices, values, and frames. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 269-278).

- Kahneman, D. (2011). *Thinking, fast and slow*. Macmillan.

- Kahneman, D., Krueger, A. B., Schkade, D., Schwarz, N., & Stone, A. A. (2006). Would you be happier if you were richer? A focusing illusion. *science*, *312*(5782), 1908-1910.

- Kahneman, D. (2003). A perspective on judgment and choice: mapping bounded rationality. *American psychologist*, *58*(9), 697.

- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. *Heuristics and biases: The psychology of intuitive judgment*, *49*, 81.

- Kahneman, D. (2002). Maps of bounded rationality: A perspective on intuitive judgment and choice. *Nobel prize lecture*, *8*, 351-401.

- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and status quo bias. *Journal of Economic perspectives*, *5*(1), 193-206.

- Mullainathan, S., & Thaler, R. H. (2000). Behavioral economics.

- Shefrin, H., & Statman, M. (2003). The contributions of Daniel kahneman and Amos tversky. *The Journal of Behavioral Finance*, *4*(2), 54-58.

- Shiller, R. J. (2003). From efficient markets theory to behavioral finance. *Journal of economic perspectives*, *17*(1), 83-104.

- Thaler, R. H. (2018). Behavioral economics: Past, present, and future. *Revista de Economia Institucional*, *20*(38).

- Thaler, R. H. (2000). From homo economicus to homo sapiens. *Journal of economic perspectives*, *14*(1), 133-141.

- Thaler, R. H., & Shefrin, H. M. (1981). An economic theory of self-control. *Journal of political Economy*, *89*(2), 392-406.

- Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of economic behavior & organization*, *1*(1), 39-60.

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