

**COURSE DATA****DATA SUBJECT****Code:** 35913**Name:** Instruments and operations for financial markets**Cycle:** Undergraduate Studies**ECTS Credits:** 6**Academic year:** 2025-26**STUDY (S)**

Degree	Center	Acad. year	Period
1314 - Degree in International Business	Facultat d'Economia	3	Second quarter
1314 - Degree in International Business	Facultat d'Economia	4	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1314 - Degree in International Business	Financial instruments and risk management	ELECTIVES
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COORDINATION

VERDU HENARES MANUEL

SUMMARY

Financial Market Instruments is an optional course taught during the second semester of the third year in the International Business degree. This course belongs to the subject *Financial Instruments and Risk Management*, which is included in the *Advanced Finance* module. Even though its optional feature, it has a compulsory character for those students taking the Finance and Accounting pathway.

The aim of the course is to provide knowledge for understanding modern finance together with practice in financial instruments. The course could be considered as a first step to get into financial markets. At the end of the course it is expected the students being able to use different tools in order to make financial decisions in different environments. The units will cover basically fixed income securities and derivatives valuation.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**



There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

No prior knowledge is required. Nevertheless, it is advisable for the student to have passed the subjects Financial Mathematics (code 35883) in the first year of this degree and Financial Management (code 35893) during the second year of this degree.

Please note that Finance is a quantitative subject that can only be understood by solving concrete problems, even though mostly elementary mathematics is used. Students are expected to have basic skills in the use of the Excel © Worksheet.

COMPETENCES / LEARNING OUTCOMES

1314 - Degree in International Business

Be able to generate ideas and detect business opportunities in international markets.

Be able to work in multidisciplinary and intercultural teams.

Know how international financial markets work.

Know how to use the statistical methods and software to manage the company's operations.

Know the basic elements of the legislation regulating international economic, financial and fiscal operations.

DESCRIPTION OF CONTENTS

Topic 0. Basic Concepts.

0.1. Financial Market Concepts.

0.2. Financial Mathematics Concepts

0.3. Financial Derivatives

Topic 1. Valuation of Fixed Income Assets

1.1. Short-Term Fixed Income Assets



1.1.1. Corporate Promissory Notes

1.1.2. Treasury bills

1.2. Long-Term Fixed-Income Assets

1.2.1. Bonds and Debentures

1.2.2. Treasury Bonds and Obligations

1.3. Public auctions

1.4. Financial Analysis

1.4.1. Mathematical Addition

1.4.2. Market Value

1.4.3. Effective Interest Rates

1.5. The Term Structure of Interest Rates

Topic 2. Interest Rate Derivatives

2.1. Forward Rate Agreement

2.2. SWAPS

2.3. OTC Options

Topic 3. Derivatives Market Mechanisms: Futures and Forwards

3.1. Basic Characteristics of Futures and Forwards

3.1.1. Convergence to Spot Prices



3.2. Mechanisms of Futures Markets

3.2.1. Standardisation

3.2.2. Open Interest and Trading Volume

3.2.3. Daily P&L Settlement

3.3. Futures/Forwards Prices

3.3.1. Futures/Forwards on Investment Assets

3.3.2. Futures/Forwards on Consumption Assets

Topic 4. Mechanisms of Derivatives Markets: Options

4.1. Basic Characteristics of Options

4.1.1. Payoffs, Types, Intrinsic and Time Values

4.1.2. Options Markets

Factors affecting the price of options

4.1.4. Upper and lower limits for options

4.1.5. Put-Call Parity

4.2. Valuation of options: The Binomial Model

4.3. Option Pricing: The Black-Scholes-Merton Model

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Classroom practices	30,00
Total hours	60,00

**NON PRESENCIAL ACTIVITIES**

Activity	Hours
Attendance at other activities	0,00
Individual or group project	20,00
Independent study and work	50,00
Preparation of lessons	0,00
Preparation for assessment activities	10,00
Resolution of case studies	10,00
Total hours	90,00

TEACHING METHODOLOGY

There will be a two-hour lecture plus a two-hour practice session per week, thus totalling four classroom hours per week.

Practice sessions will mainly consist of solving exercises, but they may also consist of working on case studies, developing workshops, presentations and discussions, etc. Lecture slides and practice sessions guidelines and relevant materials will be uploaded onto the course's virtual classroom (www.aulavirtual.uv.es).

Students are encouraged to participate actively in all classes, including lectures. Students are also expected to arrive to lectures on time, and mobile phones must be switched off at all times, and texting is not allowed - it is disruptive and disrespectful to the lecturer and to fellow classmates. no taking photos or videos during the class. Should the students have any course-related queries, questions or feedback, or should they need any guidance or advice on practice assignments, they are encouraged to take advantage of the (voluntary) office tutorials during the lecturer's office hours.

Methodology in this subject is both self-study and working-in-groups oriented in lectures and, especially, in practice sessions (example classes). Specifically, the methodology to be used is as follows:

For the lectures, students should previously read the notes available in the course's virtual classroom (www.aulavirtual.uv.es) and the required text included in the bibliography. After the reading, students should write down the main doubts/questions arisen in the interpretation of the material. The teacher will combine during the lecture his explanations with the active participation of the students (they should raise their doubts, try to help their classmates, and participate in discussions in group about the most controversial concepts). The objective is to improve the autonomous capacity of the students (individual work at home previous to the lecture) as well as their ability to work in groups, to argue and defend ideas (debate groups), and their oral and written communication skills.

Practice classes, in turn, will be carried out combining two different strategies. On the one hand, the lecturer will solve standard problems in the classroom for students to learn to identify the key aspects of the corresponding approach in each unit. On the other hand, students will have to solve analogous problems, sometimes in the classroom, and usually as a part of their homework. Occasionally some solved problems will have to be handed in, and this will be part of the continuous assessment.

Moreover, there will be some tests for every unit of the subject, to motivate the students to keep



up to date in the subject, and to control the learning of the concepts that the students are obtaining.

EVALUATION

Evaluation system

Final grades will be based on:

- 1) A final written exam (up to 70% of the final grade) and it will include questions and problems regarding both theory and practice (exercises).
- 2) The remaining 30% of the final grade can be obtained through activities developed by the student during the term, such as: problem solving, periodic assessment tests, and any other type of continuous assessment tasks.

Regarding the tests, in case of absence, they may only be held on an alternative date when such absence is due to duly justified reasons, and the decision to accept the justification is always at the teacher's discretion. In case the justification is accepted, the alternative test will be held in the last weeks of the school term, and the date, place and conditions will be informed well in advance. The final grade will be given by the sum of the previous concepts. Nonetheless, in order to get a passing grade at the end of the term, the student must get in the final exam an score equal or higher than 4 points out of 10, which is compulsory. In case of not achieving this score in the exam, the maximum grade that the student can obtain as the sum of all components will be 4.5 points..Second call evaluation system

For the second examination call, the same evaluation and weighting criteria as for the first call will be used. Those students who are evaluated on the second call will maintain the grade obtained in section 2 above, and they will not be allowed to complete any tasks or homework that had not been previously considered for the first call.

In no case shall it be permitted to substitute activities already completed or the final examination by any other type of delivery.

Changes in final examination timetables

Any possible change of date and / or time of the final exam will be governed by the procedure and the terms established in article 9.2 of the "Reglament d'avaluació i qualificació de la Universitat de València per a títols de grau i màster, ACGUV 108/2017".

In particular, in the event of a date and time coincidence between two final exams of the same degree in which the student has enrolled, if it is up to this subject to make the change, a written request must be submitted to the address of the responsible department at least one month in advance from the start of the official examination period. You can send your request electronically to: dep.economia.financera@uv.es



from your email address alumni.uv.es. An email sent from a private address will not be accepted, only emails sent from the institutional address (alumni.uv.es) will be accepted.

To be allowed to take the additional exam, the student must justify that he / she has taken the coincident exam previously. In the case that the alternative test was held on a date and at a time prior to the official test, sitting the alternative test will waive the right to sit the official test.

Academic fraud

Exams will be regulated by Article 13 on examination fraud of the "Reglament d'avaluació i qualificació de la Universitat de València per a títols de grau i màster, ACGUV 108/2017". Additionally, all the assessment tasks and homework will be subject to the regulation on plagiarism detailed in Article 15.2 of the same regulation.

Furthermore, students are reminded that the completion of assignments and assessment tests will also be subject to the new "Action protocol for fraudulent practices at the University of Valencia" (ACGUV 123/2020). In particular, according to this regulation:

1. Fraudulent practices are considered, among others: refusing to be identified or introducing unauthorized material during a test, as well as plagiarizing works (that is, copying, even partially, other people's works without citing their origin). 2. At the beginning of an exam, the teaching staff will inform about the material and objects that it is strictly forbidden to use. In any case, students are not allowed to have at their disposal, during an evaluation test, any electronic device unless expressly authorized by the teaching staff.

3. Students must follow the instructions given by the teaching staff and collaborate with them. In the event of any incident, the teaching staff is considered an authority, and their testimony is a privileged means of proof.

In the event of any evidence of fraud, the teacher may expel the student from the classroom, and his/her test will be graded 0 points, without prejudice to any other measures that the University may consider appropriate.

If calculators are required in the examination, they must not be capable of storing and displaying materials. If in doubt, the teacher responsible for invigilating the test may remove the calculator. It is also forbidden to open a backpack, to handle objects other than those permitted, or to share material between students, unless expressly authorised by the teacher.

Examination regulations

The regulations of the University of Valencia cited above can be consulted at:

<https://www.uv.es/uvweb/universidad/es/estudios-grado/informacion-academicaadministrativa/normativas/normativas-universidad-valencia-1285850677111.html>



REFERENCES

- Hull, J. (2012): Options, Futures and Other Derivatives, 8th Edition. Prentice Hall.
- Wilmott, P. (2007): Paul Wilmott introduces Quantitative Finance. Second Edition. Wiley.
- Fabozzi, F.; Modigliani, F. and Ferri, M. (1994): Foundations of Financial Markets and Institutions. Prentice Hall.
- Bodie, Z. and Merton, R. (1998): Finance. Prentice Hall.
- Hull, J. (2014): Fundamentals of Futures and Options Markets. Eighth edition. Pearson.
- Berk, J. and P. DeMarzo (2011): Corporate Finance. Ed. Pearson.
- Dalton, B. (2008): Financial products: an introduction using mathematics and Excel, Cambridge University Press.
- Fabozzi, F.J. (2016). Bond markets, analysis, and strategies. 9th Edition. Ed. Pearson.
- Fabozzi, F.J. (2007). Fixed Income Analysis (CFA Institute Investment Series). 2nd Edition. John Wiley & Sons.
- Jarrow, R. and S. Turnbull (2000): Derivative Securities. Second ed. South-Western College Pub. Library id: 336.76 JAR.