



FINANCIAL STATEMENT MODELLING

Syllabus

Basic information

Field of study Finance and Accounting for Business		Didactic cycle 2024/25	
Speciality -		Subject code EKOFABS.L10.0178.24	
Organizational unit School of Undergraduate and Graduate Studies		Lecture languages English	
Study level undergraduate studies		Mandatory Elective	
Study form full-time		Block Free choice electives	
Education profile general academic		Department responsible for the subject Department of Accounting	
		Subject related to scientific research No	
		Subject shaping practical skills No	
Coordinator	Andrzej Piosik		
Teacher	Andrzej Piosik		
Period Semester 5	Form of teaching, number of hours and method of examination • lecture: 15, Credit with grade		Number of ECTS points 3

Goals

Code	Goal
C1	Familiarizing students with analysis of business ventures based on innovative solutions (new technologies, new products, inventions, research results)
C2	Acquisition of skills of developin an interactive financial model of the enterprise in a spreadsheet by students
C3	Developing by students the skill of interdisciplinary approach - the use of knowledge in the field of accounting, finance, management, investment.

Recommended requirements

Accounting for Business
Corporate finance

Subject's learning outcomes

Code	Outcomes in terms of	Major learning outcomes for the subject	Examination methods
Knowledge:			
W1	Student knows the scope of information needed for building a model of financial statements, the subject of the real sphere	FAB.L_W01	End-of-course assessment - group project, Participation - involvement in team activities
W2	Student can correctly - in accordance with accounting principles - identify, interpret and qualify planned economic events and transactions;	FAB.L_W01	End-of-course assessment - group project, Participation - involvement in team activities
W3	Student knows the rules of financial modelling	FAB.L_W01	End-of-course assessment - group project, Participation - involvement in team activities
Skills:			
U1	Student can use the acquired knowledge to formulation of individual elements the business entity's financial statements model	FAB.L_U01	End-of-course assessment - group project, Participation - involvement in team activities
U2	Student can use IT tools (spreadsheet) to build a complete, interactive model of financial projection of financial statements taking into account various management needs;	FAB.L_U01, FAB.L_U02, FAB.L_U05, FAB.L_U06	End-of-course assessment - group project, Participation - involvement in team activities
U3	Can use English at B2 level in the projection area of financial statements and their modeling	FAB.L_U02, FAB.L_U04	End-of-course assessment - group project, Participation - involvement in team activities

Code	Outcomes in terms of	Major learning outcomes for the subject	Examination methods
Social competences:			
K1	Student is able to critically evaluate the obtained information in terms of its completeness and correctness for application in construction of financial statement model	FAB.L_K01, FAB.L_K02	End-of-course assessment - group project, Participation - involvement in team activities

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	Introduction to the course: - Review of the conceptual frame for financial reporting and accounting principles with emphasis on the presentation of accounting information - financial statements and their interrelationships; - Introduction of the fundamental rules of development of financial model (3-statement model) with the use of introductory case studies	W1, W2, W3, U1, U2, U3	lecture

No.	Course content	Subject's learning outcomes	Activities
2.	<p>1. Student (or students in small groups) on the basis of the received description of planned economic activity based on an innovative idea / new technology will be to build an interactive financial model of the venture; specific "rehearsed" cases of technological start-ups for which this will be used.</p> <p>2. In the first part of the workshop, the course instructor will assume the role of the originator / investor (usually ordering this type analysis), who will provide the student with all information and will consult with him on the "matter" of the project - the student's task is to collect the necessary information (prices, unit costs, employment, salaries, interest rates, exchange rates, business scale, growth rate, etc. etc.); .</p> <p>3. Then the student - after identifying the key drivers of revenues and costs of the planned project - constructs the way of reflecting the business model in the spreadsheet (the way of presenting assumptions, variables, selection worksheet functions, construction of formulas); the role of the lecturer - presentation of the possibilities of a spreadsheet, consulting with student of the choice and how to apply sheet tools.</p> <p>4. The next step is to choose by the student the way of presenting the planned events, taking into account the rules accounting (including the selection of accounting policies in various scopes), e.g. recognition of the settlement of tangible investments, recognition of research and development costs, revenue and cost recognition, amortization schedule, etc.</p> <p>5. The end result of the student's work will be an interactive financial model containing:</p> <p>a. Projection of the company's financial statements prepared in accordance with the accounting principles and taking into account the principles taxation with CIT and VAT taxes:</p> <ul style="list-style-type: none"> · profit and loss account. · the cash flow statement; · balance sheet; · budgets of revenues and costs; · capital expenditure plan; · fixed assets depreciation plan; · credit service plan banking <p>b. additional project-specific analyzes, such as:</p> <p>i. income and cost budgets;</p> <p>ii. calculation selected financial analysis indicators;</p> <p>iii. calculation of investment effectiveness assessment measures (NPV, IRR);</p> <p>iv. supporting analyzes building pricing and cost strategies</p>	U1, U2, U3, K1	lecture

Additional information

Activities	Methods of conducting classes
lecture	Lecture using case studies, Lecture using activating techniques, Working on a project

Activities	Examination method	Percentage
lecture	End-of-course assessment - group project	80%
lecture	Participation - involvement in team activities	20%

Activities	Credit conditions
lecture	Students are required to build - for a defined investment undertaking - a 3-statement financial model in computer spreadsheet, and also prepare the report for decision makers

Literature

Obligatory

1. Conceptual Framework for Financial Reporting was issued by the International Accounting Standards Board in September 2010. It was revised in March 2018.
<https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/conceptual-framework-for-financial-reporting.pdf> (or equivalent)
2. Financial Modeling Guide Step-by-Step Guide to Understanding Financial Modeling in Excel. The Wall Street Prep (<https://www.wallstreetprep.com/knowledge/financial-modeling/#how-to-integrate-scenario-and-sensitivity-analysis>)
3. 3-Statement Model Step-by-Step Guide to Understanding How to Build an 3-Statement Financial Model. The Wall Street Prep (<https://www.wallstreetprep.com/knowledge/build-integrated-3-statement-financial-model/>)

Optional

1. Brigham E.F., Houston J.F.: Fundamentals of Financial Management . Wyd. South-Western/Thomson, International Edition, 2009 (or equivalent)
2. Horngren C.T., Foster G. , Datar S. : Cost accounting : A Managerial Emphasis with cd rom. Prentice Hall Int , 2003. (or equivalent)
3. Walkenbach J. Excel 2013 Bible. John Wiley & Sons
(<https://ia801304.us.archive.org/29/items/Excel2013Bible/Excel%202013%20Bible.pdf>) or equivalent

Calculation of ECTS points

Activity form	Activity hours*
lecture	15
Analysis and interpretation of source materials - statistic data	10
Preparation of the end-of-course assessment - group project	40
Preparation of the end-of-course assessment - group report	10
Student workload	Hours 75
Number of ECTS points	ECTS 3

* hour means 45 minutes

Major learning outcomes for the subject

Code	Content
FAB.L_K01	Is ready to critically assess the obtained information and the knowledge in finance and accounting.
FAB.L_K02	Recognizes the importance of knowledge in finance and accounting when solving cognitive and practical problems and is ready to consult experts in case of difficulties in solving them independently.
FAB.L_U01	Uses knowledge of finance and accounting to formulate and solve complex and atypical problems and to perform tasks under conditions of uncertainty, using advanced information and communication techniques for this purpose by: – proper selection of sources of information on the operation of enterprises in the market, including their financial situation, and then making an assessment, critical analysis and synthesis of said information, – selection and application of appropriate methods and tools typical of finance and accounting, including the principles of providing information on the property and financial situation of economic units in the financial reporting system.
FAB.L_U02	Communicates with the environment using specialized terminology in finance and accounting.
FAB.L_U04	Is proficient in a foreign language at B2 level of the Common European Framework of Reference for Languages.
FAB.L_U05	Can plan and organize individual and team tasks while cooperating in a group conducting work in finance and accounting, including those of an interdisciplinary nature.
FAB.L_U06	Can independently plan and implement their own lifelong learning, enhancing and enriching their knowledge of finance and accounting, especially in relation to business.
FAB.L_W01	Knows and understands to an advanced degree selected facts, phenomena and processes affecting the activities of real and financial entities, as well as the methods and theories explaining the complex interrelationships between them, including the principles of incorporating the effects of economic activity into accounting systems, constituting basic general knowledge of the disciplines of economics and finance, and selected issues of management and quality sciences.