DESCRIPTION OF THE SUBJECT

FIELD OF STUDY	**Management**
SPECIALISATION	Business management
MODE OF STUDY	Full-time / Part-time
SEMESTER	2

Name of the subject	**Service management**	
Hourly dimension of particular forms of classes	Full-time studies – 40 Part-time studies - 24	
• **other forms**	Full-time studies – 40; Part-time studies - 24	
Learning objectives:	– to present the service process in a company in the context of implementing an investment strategy and in relation to optimising sources of financing, – to present the theoretical foundations and practical tools necessary for the application of the discounted cash flow (DCF) method and the relationships regarding the estimation of the cost of capital.	
Learning outcomes for the subject		

Number	**Learning outcomes, a student who has successfully completed the course will be able to:**	**Reference of learning outcomes for the programme**	**The reference to the learning outcomes for the area**
K_W01	Define the concept of time value of money, identify the rationale behind it, characterise the impact of the time value of money variable on cash flow evaluation.	K_W03	P7S_WG
K_W02	Know the concept of time line and percentage, define future value, present value, both for a single flow and a stream of flows (annuities).	K_W04	P7S_WG
K_W03	Explain what discounting methods are for assessing the effectiveness of investment projects.	K_W05	P7S_WG
K_W04	Characterise the sources of capital. Explain the concept of cost of capital for a single component and for a weighted cost.	K_W07	P7S_WG
K_U05	Apply tools to estimate future value and present value, using appropriate relationships.	K_U03	P7S_UW
K_U06	Carry out an analysis of an investment project using methods for evaluating their effectiveness (payback period, NPV, IRR).	K_U04	P7S_UW

K_U07	Plan how to finance an investment, using methods to estimate the cost of capital.	K_U07	P7S_UO
K_K08	Understand the relationship between the cost of capital and the efficiency of investments and responsibly apply methods for their evaluation	K_K04	P7S_KK

Content number	Educational/ curricular content	Reference to learning outcomes for the subject
	Lectures / Exercises	
TP_01	The essence of the time value of money; the psychological and economic reasons for the variable valuation of money over time; the time value of money in the context of household decisions; the enterprise as a cash flow generating system; the role and consequences of cash flow valuation in the enterprise; conventions for the presentation of cash flows over time.	K_W01
TP_02	Definition of future value; how to estimate future value at different periods and capitalisation rate; definition of present value; calculation of present value for an assumed discount rate; interpretation of discount rate.	K_W02 K_U05
TP_03	Concept of annuity; simple annuity (payable in arrears) and income annuity (payable in advance); future value of simple annuity and income annuity - definition and method of estimation; concept of present value of simple annuity and income annuity; relationships for calculating present value of annuity	K_W02 K_U05
TP_04	Perpetual annuity; definition; present value of perpetual annuity; how to estimate present value of perpetual annuity; credit with equal principal and interest payments; nominal and effective interest rate.	K_W02 K_U05
TP_05	Payback period; how to calculate; discounted payback period - definition, rationale and estimation algorithm; advantages and disadvantages of using payback period as a method to assess investment performance.	K_W02 K_W03 K_U05 K_U06 K_K08
TP_06	Assumptions of the NPV method of discounted net flows; definition and presentation of an investment project; stages of the NPV method; estimation of the present value of individual financial flows associated with an investment; determination of the net present value of the entire investment project; assessment of the NPV value and criterion for deciding whether to accept the project for implementation; advantages and disadvantages of the NPV method.	K_W02 K_W03 K_U05 K_U06 K_K08
TP_07	NPV curve as a graphical representation of the assessment of the investment project's efficiency depending on the adopted discount rate; Analysis of the discount rate for the valuation of financial flows; Interpretation of the discount rate equating the investment with the sum of the discounted effects of the investment; Internal rate of return IRR as a parameter determining the financial efficiency of an investment; Advantages and disadvantages of using IRR.	K_W02 K_W03 K_U05 K_U06 K_K08
TP_08	Sources of capital from the point of view of financing investment projects; sources of capital from owners (Equity); capital from debt (Debt); relationship between equity and debt.	K_W04 K_U07

TP_09	The cost of capital as a parameter affecting the assessment of investment efficiency; estimating the cost of capital from the issue of shares; the role of retained earnings in the financing of investment projects; credit and bonds as examples of debt financing of investment activities; estimating the cost of capital taking into account the share of its individual components in the total - the weighted cost of capital (WACC);	K_W04 K_U07 K_K08

Methods and forms of teaching	**Educational and curricular content**
Lecture with Multimedia presentation of selected issues	
Conversation lecture	
Problem-based lecture	
Informative lecture	T_01 - 09
Discussion	
Work with text	
Case study method	
Problem-based learning	
Didactic/simulation game	
Exercise method	T_01, T_03, T_04, T_08
Workshop method	
Project method	
Multimedia presentation	T_06, T_07
Audio and/or video demonstration	
Activating methods (e.g. brainstorming, SWOT analysis technique, decision tree technique, snowball method, constructing mind maps)	
Working in groups	
Inne (jakie?) – rozwiązywanie zadań	T_02, T_05, T_09
…	

Evaluation criteria in relation to particular learning outcomes				
Learning outcome	**For the assessment 2**	**For the assessment 3**	**For the assessment 4**	**For the assessment 5**
K_W01	The student is unable to define the concept of time value of money, to identify the rationale behind it and to characterise the effect of the time value of money on cash flow assessment.	Students will be able to define the concept of time value of money.	Students will be able to define the concept of time value of money, indicate the premises justifying it.	Students will be able to define the concept of time value of money, identify the rationale behind it and characterise the effect of the time value of money on cash flow assessment.
K_W02	The student is not familiar with the concepts of time line and percentage, cannot define future value, present value, both for a single flow	Student knows the concept of time line and percentage, can define future value, present value.	The student is familiar with the concept of time line and percentage, can define future value, present value, both for a single flow and	The student is familiar with the concept of time line and percentage, can define future value, present value, both for a single flow and a stream of flows (annuity). He/she can

	and a stream of flows (annuities).		a stream of flows (annuities).	discuss the practical application of the present value of an annuity.
K_W03	The student is unable to explain what the discounting methods of assessing the effectiveness of investment projects are.	The student is able to explain what discounting methods are used to assess the effectiveness of investment projects.	The student is not only able to explain what the discounting methods of assessing the effectiveness of investment projects are. He/she can also critically discuss their advantages and disadvantages.	The student is not only able to explain what the discounting methods of assessing the effectiveness of investment projects are. He/she can also critically discuss their advantages and disadvantages and indicate controversial areas in their application.
K_W04	The student is unable to characterise the source of capital and explain the concept of cost of capital.	The student is able to characterise the sources of capital and explain the concept of cost of capital.	The student is able to characterize the sources of capital. Explain the concept of cost of capital for a single component and know the weighted cost method.	The student is able to characterise the sources of capital. Explain the concept of the cost of capital for a single component, know the weighted cost method. Student is able to explain the relation between the cost of capital and the assessment of investment efficiency
K_U05	The student is not able to apply tools for estimating future value and present value.	The student is able to apply tools to estimate future value and present value, using basic definitions.	The student is able to apply tools to estimate future value and present value, both for individual flows and streams using basic definitions.	The student is able to apply tools for estimating future value and present value for both individual flows and streams, using basic definitions and general formulae for partial sums of a geometric series
K_U06	The student is not able to carry out an analysis of an investment project, using the methods of assessment of their effectiveness (payback period, NPV, IRR).	Students will be able to carry out an analysis of an investment project using methods of assessment of their effectiveness (payback period, NPV, IRR).	The student is able to analyse an investment project using the methods of assessment of their effectiveness (payback period, NPV, IRR) and relate the results of individual methods	The student is able to analyse an investment project using the methods of assessment of their effectiveness (payback period, NPV, IRR), critically refer to the results of individual methods finding a solution in case of contradictions.
K_U07	The student is unable to estimate the cost of capital	The student is able to estimate the cost of capital for its individual components	The student is able to estimate the cost of capital for its individual components and to calculate the weighted cost of capital	The student is able to estimate the cost of capital for its various components, calculate the weighted cost of capital and plan the optimal capital structure.
K_K08	The student is not able to make calculations in the field of investment efficiency analysis and	The student is able to make basic calculations in the field of investment efficiency testing and calculate the cost of	The student is able to make calculations in the field of investment efficiency testing and calculate	The student understands the relationship between the cost of capital and investment efficiency and is able to

	weighted cost of capital.	individual components of capital.	the weighted cost of capital	responsibly apply methods of their assessment, knows the principles governing the formation of the cost of capital and understands the process of formation of investment strategies.

Verification of learning outcomes	**EK symbols for the module/subject**							
	W01	W02	W03	W04	U05	U06	U07	K08
Written test	X	X	X	X	X	X	X	X
Oral exam								
Written credit								
Oral credit								
Written colloquium	X	X	X	X	X	X	X	X
Oral colloquium								
Test								
Project								
Written work								
Report								
Multimedia presentation	X	X	X	X	X	X		X
Other (which ones?) -								
Work during exercises								

Hourly teaching load and student workload	Full-time studies	Part-time studies
1. Lectures (joint participation of academics and students)	-	-
2. Other forms (joint participation of academic staff and students)	40	24
3. Consultation with the teacher	20	20
Total 1+2+3	**60**	**44**
4. Internships (carried out by students on their own)	—	—
5. Student's own work (including homework and project work, preparation for a credit/exam)	90	106
Total 4+5	**90**	**106**
SUMMARY 1+2+3+4+5	**150**	**150**
Total ECTS credits according to the study plan	**6**	

Reference literature	1. Brigham Eugene F., Houston Joel F., Podstawy zarządzania finansami, PWE 2005 2. D. Wieczorek, Wartość pieniądza w czasie, FENUS, Poznań 1993 3. Siegel J. Shim J. Harman S., Przewodnik po finansach, PWN Warszawa 1995

Complementary literature	1. J. Czekaj, Z. Dreszer, Podstawy zarządzania finansami firmy, PWN, Warszawa 1997 2. W. Bień, Management finansami przedsiębiorstwa, Difin, Warszawa 1993 3. D. Krzemińska, Finanse Przedsiębiorstw, WSB. Poznań 2000 4. W. Pluta, Strategiczne Management finansami, Ekspert, Warszawa 1996` 5. W. Gabrusewicz J. Samelak (red.), Rachunkowość finansowa Obszary problemowe, Wydawnictwo Akademii Ekonomicznej w Poznaniu 2006