

Subject:				
Credit Institution Management				
ECTS code	Semester	Faculty: Finance		
	1	Major: Finance and Accounting		
		Corporate Finance and Accounting		
Faculty:				
Lecture:				
Classes:				
System of studies:				
full time, second degree				
Subject status	Pass requirement	Number of contact hours		ECTS points
		Lectures	Classes	
Course in the concentration	Written exam	30	15	5
Teaching language				
English				
Subject provisions and objectives (including the expected can-do of students on completion of the course)				
<p>Students have basic knowledge of economics, banking and finance and are ready for more advanced course on the special nature of credit institutions. The aim of this course is to make them familiar with:</p> <ul style="list-style-type: none"><li>- banking risk, methods of its assessment and instruments of its limitation,</li><li>- banks performance, traditional and risk-adjusted methods of its estimation,</li><li>- EU and national capital adequacy regulations.</li></ul> <p>After this course students should be able to distinguish credit institution from financial institution, identify basic areas of risks in the credit institutions, apply basic hedge instruments protecting against liquidity, credit, interest rate and exchange rate risks, understand the importance of capital adequacy and its influence on the stability of the financial system.</p>				
Teaching curriculum ( in case of prescribed subjects, compliance with the standards, maximum 15 topics)				

I. Institutional and legal aspects of the credit institution activities under domestic jurisdiction and EU directives.

II. The structure of balance sheet and income statement of credit institutions (banks and quasi-banks), the main groups of risk in those institutions, considering:

- passive operations,
- active operations,
- off-balance sheet agreements,
- costs and revenues sources,
- types of risks.

III. Liquidity risk.

- definition of the liquidity risk,
- legal regulations on the liquidity in banks – EU directives, the Banking Law Act, executive acts, supervisory recommendations,
- methods of liquidity risk measurement- liquidity ratios analysis, gap method (traditional and revised), LaR, LVaR, simulation methods,
- hedging instruments.

IV. Credit risk.

- definition and sources of credit risk,
- the concept and principles of loan and off-balance provisioning,
- the structure of irregular balance and off-balance expositions.

V. Interest Rate Risk.

- definition of interest rate risk,
- methods of its measurement - the gap (traditional and standardized) method, the relative indicators of the interest rate changes, the indicators of bonds price flexibility, duration and convexity analysis,
- the impact of interest rate changes on the institution present net worth,
- hedging instruments - FRA, IRS, IRF, IRO (with an emphasis on the FRA and IRS).

VI. Exchange rate risk.

- the definition of exchange rate risk and the types of exchange rates,
- foreign exchange market operations,
- hedging instruments - FX forward, swaps, futures and options (with an emphasis on deliverable and non-deliverable forward and swap).

VII. Capital Planning.

- the definition and structure of: equity, economic capital and regulatory capital,
- capital functions in credit institutions,
- capital requirements for specified types of risk and the total capital requirement,
- methods of capital requirement assessment (basic, mixed and internal models (VaR)),
- the indicators of financial performance (ROE, EVA, SVA, RAROC, RORAC, ABC, DEA, SHV).

**Class topics** (maximum 15 topics)

<p>I. Institutional and legal aspects of the credit institution activities under domestic jurisdiction and EU directives.</p> <ul style="list-style-type: none"> <li>• the analysis of basic differences in the definition of the credit institutions according to domestic and EU regulations.</li> </ul> <p>II. The structure of balance sheet and income statement of credit institutions (banks and quasi-banks), the main groups of risk in these institutions:</p> <ul style="list-style-type: none"> <li>• the analysis of balance sheet and income statement using financial statements of particular institutions.</li> </ul> <p>III. Liquidity risk:</p> <ul style="list-style-type: none"> <li>• traditional and revised gap analysis,</li> <li>• applying of particular money market instruments to close the estimated gap.</li> </ul> <p>IV. Credit risk:</p> <ul style="list-style-type: none"> <li>• the example of credit risk write-offs mechanism,</li> <li>• the example of the creditworthiness assessment and the usefulness of credit scoring models.</li> </ul> <p>V. Interest rate risk:</p> <ul style="list-style-type: none"> <li>• traditional and revised gap analysis,</li> <li>• bond duration and convexity estimation,</li> <li>• portfolio immunization in assets management,</li> <li>• using FRA and IRS in interest rate risk management.</li> </ul> <p>VI. Exchange rate risk:</p> <ul style="list-style-type: none"> <li>• the assessment of the Total, Net and Gross Global Position,</li> <li>• the estimation of forward exchange rate,</li> <li>• the use of FX forward and cross-currency swaps in the exchange rate risk management.</li> </ul> <p>VII. Capital planning:</p> <ul style="list-style-type: none"> <li>• the assessment of the capital profitability using traditional and modern indicators,</li> <li>• the estimation of CAR according to Basel III recommendations.</li> </ul>
<b>Introductory topics</b>
Finance, Financial Mathematics, Banking, Corporate Finance, Financial Accounting, Financial Analysis, Modern Banking
<b>Teaching methods</b>
interactive multimedia presentation (lectures), worksheets and projects (classes)
<b>Basic literature and Rother sources</b>
<ol style="list-style-type: none"> <li>1. A. Saunders, <i>Financial Institutions Management: A Modern Perspective</i>, McGraw-Hill Education (ISE Editions) 1999.</li> <li>2. J.C. Hull, <i>Risk Management and Financial Institutions</i> (2<sup>nd</sup> edition), Prentice Hall 2009.</li> <li>3. D. Bucham, J. Wahl, S. Rose, <i>Executive's Guide to Solvency II</i>, Willey &amp; Sas Business 2010.</li> <li>4. R. Abdelal, <i>Capital Rules: The Construction of Global Finance</i>, Harvard University Press 2007.</li> <li>5. G.H. Hempel, D.G. Simonson, <i>Bank Management: Text and Cases, 5th Edition</i>, New Jersey: Wiley, 2008.</li> <li>6. B.E. Gup, J.W. Kolari, <i>Commercial banking: The Management of Risk, 3rd Edition</i>, New Jersey: Wiley, 2005.</li> <li>7. M. Choudhry, <i>Bank Asset and Liability management: Strategy, Trading, Analysis</i>, Wiley Finance 2007.</li> <li>8. J. Dermine, <i>Bank Valuation and Value – Based Management: Deposit and Loan Pricing, Performance Evaluation and Risk Management</i>, Wiley 2009.</li> </ol>
<b>Pass requirements for signature/examination</b>
Written test/written exam

### Examples of questions for tests and examinations

- 1) The term „interest rate speculation” means:
  - a) long balance or off-balance sheet positions waiting for interest rates decrease
  - b) short balance or off-balance position waiting for interest rates increase
  - c) short balance or off-balance position waiting for interest rates decrease
  
- 2) If the time-horizon equals 1 day, the present value (PV) equals 5000 PLN, confidence level equals 99%, and VaR equals 200 then:
  - a) there is a 99% probability that in the next day the PV won't be less than 200
  - b) there is a 1% probability that in the next day the PV won't be less than 4800
  - c) there is a 99% probability that in the next day the PV won't be less than 4800
  
- 3) The major parts of banks assets are:
  - a) household & corporate loans
  - b) receivables from financial sector
  - c) cash & balances with Central Bank
  
- 4) The most important sources of funds in Polish banking sector are:
  - a) household deposits
  - b) liabilities towards Central Bank
  - c) liabilities from securities
  
- 6) In Poland, global financial crisis:
  - a) led to insolvency of cooperative banks
  - b) caused the changes of banks balance sheets structure
  - c) led to liquidity problems.
  
- 7) If the discount rate equals 10% and PVs of banking assets and liabilities are as follows:

<i>Balance position</i>	<i>PV</i>	<i>duration (in years)</i>
<b>ASSETS</b>		
Securities:		
• liquid	150,0	0,75
• long-term	100,0	3,0
loans		
• fix-rate	400,0	0,0
• floating rate	350,0	2,5
<i>Total</i>	<i>1000,0</i>	
<b>LIABILITIES AND PRESENT NET WORTH</b>		
a vista	400,0	0,0
term-deposits and CDs		
• short-term	350,0	0,5
• long-term	150,0	2,0
Present Net Worth	100,0	5,0
<i>Total</i>	<i>1000,0</i>	

How big is the Duration Gap and what will happen with the Present Net Worth if the market interest rates go up by 200 b.p.? What would happen with the Present Net Worth if the market interest rate went down?