

Syrian Arab Republic	 الجامعة الافتراضية السورية SYRIAN VIRTUAL UNIVERSITY	الجمهورية العربية السورية
Ministry of Higher Education and scientific research		وزارة التعليم العالي والبحث العلمي
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Course Description: Management of Credit Risk

1- Basic Information:

Course Name	Management of Credit Risk
Course ID	BFB610
Contact Hours (Registered Sessions)	24
Contact Hours (Synchronized Sessions)	24
Mid Term Exam	-
Exam	75 min
Registered Sessions Work Load	48
Synchronized Session Work Load	18
Credit Hours	5
Course Level	6

2- Pre-Requisites:

Course	ID
Banking	BFB607

3- Course General Objectives:

This course aims to:

- 1- Introduce the student to the dimensions of the credit process associated with the traditional and Islamic banking industry, as well as the sources of credit information and the types of risks to which banks are exposed with a focus on credit risk.
- 2- The student's familiarity with credit compliance and its concept, and methods of analyzing, measuring and controlling credit risks.
- 3- Introduce the student to aspects of credit risk analysis and how to manage the risks arising from loans and use the means that limit their risks in banks.
- 4- Explaining ways to measure financial default, what are its causes, and how to confront and remedy it.
- 5- Addressing the Basel decisions regarding credit risk

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4- Intended Learning Outcomes (ILO):

Code	Intended Learning Outcomes
ILO1	Differentiating between the concepts of risk and uncertainty, describing the relationship between them and explaining the causes of risk and their measures, as well as identifying types of investors according to their ability to face risks while measuring the degree of aversion (hate) of risks. And address the principles and stages of risk management and the methods and techniques used in this.
ILO2	Remember the basics of bank credit and loan management, by talking about bank credit, credit policy, types of loans and facilities, foundations of bank inquiry, and measuring borrower cash flows. Summarize the elements of creditworthiness and measure them digitally. And determining the mechanism for pricing loans in banks.
ILO3	Defining the concept of non-performing loans, their causes and sources, as well as diagnosing the non-performing loan and the steps to remedy it. And then outline the nature of credit risk and the basic principles for managing it, while touching on the main objectives of credit risk management and what business you do. Mentioning the matters to be considered when determining, measuring and monitoring credit risks.
ILO4	Remember the concept and definition of a credit portfolio, how it is formed and managed, and how it can be diversified. We also talk about the concentration of the credit portfolio and its risks, as well as the forms and measures of credit concentration and controlling its risks.
ILO5	Discussing the principle of trade-off between the return and the risk in banking credit operations, by explaining and measuring the return on credit (loan), as well as the various risks and methods that lead to their measurement.
ILO6	The models used to measure credit risk, where non-quantitative (qualitative) and quantitative models are mentioned
ILO7	Other methods of credit risk management are mentioned in banks, such as a complete system, credit rating agencies and the requirements of the Basel Committee and their role in credit risk management. As well as an indication of the role of sensitivity analysis (stress or endurance tests) in credit risk management. And clarify the role of the institution to guarantee the risks of loans and joint loans, along with mentioning credit risk mitigators (simple and comprehensive method).
ILO8	Mentioning the concept and definition of liquidity risk and its causes, and stating the effect of liquidity risk on equity. Also, methods of measuring bank liquidity exposure are discussed. Then clarify the sensitivity tests for liquidity risks.

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ILO9	A description of the market risks in the bank and the methods of their performance, where the methods of managing interest rate risk, as well as currency exchange rate risks, and finally pricing risk are described.
ILO10	Define the concept and tasks of managing operational risks, methods and indicators for measuring them and how to conduct sensitivity analysis tests (stress or endurance tests) for operational risks.
ILO11	Notice and explain the Basel agreements for banking supervision, what are the main objectives of the Basel Committee 1, 2 and 3, and then explain how to calculate the capital needed to meet different risks, while examining scenarios tests and their impact on capital in the bank

5- Course Syllabus (24 hours of total Recorded Sessions, 24 hours of total synchronized sessions)

- **RS:** Recorded Sessions; **SS:** Synchronized Sessions;

ILO	Course Syllabus	RS	S S	Type	Additional Notes
ILO1	Risks and uncertainty <ul style="list-style-type: none"> ✓ Concept and definition of risks and uncertainty ✓ The relationship between the concept of risk and the concept of uncertainty ✓ The origin and causes of risks ✓ Risk Metrics ✓ Types of investors according to their ability to face risks ✓ Aversion (aversion) of risk and its measurement ✓ Risk management (principles - stages - process) 			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session.

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	<ul style="list-style-type: none"> ✓ Risk management techniques and Methods ✓ Types of risks 				
ILO2	Fundamentals of bank credit and loan management <ul style="list-style-type: none"> ✓ Bank credit and credit policy ✓ Types of loans and facilities ✓ Inquiry and credit information management ✓ Documentary credit course ✓ Borrower's cash flow ✓ The elements of creditworthiness ✓ numerical assessment of creditworthiness and credit analysis ✓ Pricing bank loans ✓ Management, credit measurement and control 			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session.
ILO3	Bad loans <ul style="list-style-type: none"> ✓ The concept of bad loans ✓ Causes and sources of default ✓ Bad loan diagnosis and treatment steps ✓ The nature of credit risk ✓ Basic principles of credit risk management ✓ The main objectives of credit risk management ✓ Credit risk management business 			<input type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Viewing the reports of the financial statements of the published banks in accordance with the requirements of disclosure before the session.

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	<ul style="list-style-type: none"> ✓ Matters to consider when identifying, measuring and monitoring credit risks. 				
ILO4	Credit Portfolio <ul style="list-style-type: none"> ✓ The concept and definition of a credit portfolio ✓ Methods of forming and managing the credit portfolio ✓ Credit portfolio diversification ✓ Credit portfolio concentration and risk ✓ Credit concentration forms and measures ✓ Control the risk of credit concentration 			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session
ILO5	The Trade-off between yield and risk in banking credit operations <ul style="list-style-type: none"> ✓ Return on credit (loan) ✓ ROA Return Method ✓ Risk Return on Capital Form (RAROC) ✓ Credit risk ✓ Credit risk components ✓ Expected losses ✓ Unexpected losses ✓ At-risk value and its measurement methods Distribution of value at risk between expected and unexpected losses			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session
ILO6	Models used to measure credit risk			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments	Review the exercises before the session

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	Non-quantitative (qualitative) models ✓ Quantitative models Credit Points Form Linear Probability Model Financial Failure Prediction Models A non-payment possibility model for debts due within one time period (one year) A non-paymentable multi-period debt model Historical Deficit Rate Model ✓ RAROC Form ✓ A financial options model for measuring credit risk ✓ KMV credit risk measurement model			<input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	
ILO7	Advanced models for managing credit risk in banks ✓ CAMELS system, credit rating agencies and Basel Committee requirements and their role in credit risk management - Kamels system and credit risk Credit Rating Agencies - Basel Committee requirements for credit risk management and prudential rules ✓ Sensitivity analysis tests (stress or stress tests) for credit risk ✓ Loan Guarantee Corporation ✓ Syndicated Loans			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session

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	✓ Credit Risk mitigation (Simple and general) -Guarantees - Third party guarantees -NETTING method (offset between counterparty rights and obligations: net worth) -Credit derivatives				
ILO8	Liquidity risk management ✓ The concept and definition of liquidity risk ✓ Liquidity risk factors - Internal factors - External factors ✓ Impact of liquidity risk on equity - Buying liquidity -Liquidity maintained and managed ✓ Measuring the degree of bank exposure -Sources and uses of liquidity (net) -Liquidity Index -Liquidity Gap -Maturity analysis -The role of regulatory and supervisory agencies in reducing liquidity risk -Basel Committee decisions regarding liquidity risk management ✓ Sensitivity analysis tests (stress or stress tests) for liquidity risk.			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session
ILO9	Managing the market risks in the bank			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars	Review the exercises before the session

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	<ul style="list-style-type: none"> ✓ Managing interest rate risk - Interest rate risk management tasks - Methods for measuring and managing interest rate risk Gap analysis Term Analysis • Value-at-risk analysis • Simulation <ul style="list-style-type: none"> ✓ Management and risk of exchange rates Concept and tasks Factors affecting the exchange rate Factors affecting in the short term Factors affecting the long term Types of exchange rate risk Centers management and measurement Indicators for measuring exchange rate risk The purchasing power parity theory of exchange rates <ul style="list-style-type: none"> ✓ Pricing risk management ✓ Sensitivity analysis tests (stress or stress tests) for market risks. 			<input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	
ILO10	<p>Operational risk management</p> <ul style="list-style-type: none"> ✓ The concept and functions of operational risk management ✓ Methods of measuring operational risks <p>-The basic indicator approach</p> <p>-The standard curriculum</p> <p>-Advanced measurement method</p> <p>Indicators for measuring operational risks in banks</p>			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session

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	✓ Sensitivity analysis tests (stress or endurance tests) for operational risks				
ILO11	Basel agreements for banking supervision Introduction <ul style="list-style-type: none"> ✓ Basel Committee main objectives ✓ Basel Committee 1, 2 and 3 ✓ Calculating the capital needed to meet different risks ✓ Scenario tests and their impact on capital in the bank -The current reality scenario -The overall scenario is of medium severity -The most severe macro scenario			<input checked="" type="checkbox"/> Exercises <input checked="" type="checkbox"/> Assignments <input type="checkbox"/> Seminars <input type="checkbox"/> Projects <input type="checkbox"/> Practices <input type="checkbox"/> Others	Review the exercises before the session

6- Assessment Criteria (Related to ILOs)

ISC	Interactive Synchronized Collaboration	Ex	Exams	Rpt	Reports
PF2F	Presentations and Face-to-Face Assessments	PW	Practice Work		

ILO Code	ILO	Intended Results	Assessment Type				
			ISC	PW	Ex	PF2F	Rpt
ILO1	Differentiating between the concepts of risk and uncertainty, describing the relationship between them and explaining the causes of risk and their measures, as well as identifying types of investors according to their ability to face risks while measuring the degree of aversion (hate) of risks.		X	X	X		

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	And address the principles and stages of risk management and the methods and techniques used in this.						
ILO2	Remember the basics of bank credit and loan management, by talking about bank credit, credit policy, types of loans and facilities, foundations of bank inquiry, and measuring borrower cash flows. Summarize the elements of creditworthiness and measure them digitally. And determining the mechanism for pricing loans in banks.		X	X	X		
ILO3	Defining the concept of non-performing loans, their causes and sources, as well as diagnosing the non-performing loan and the steps to remedy it. And then outline the nature of credit risk and the basic principles for managing it, while touching on the main objectives of credit risk management and what business you do. Mentioning the matters to be considered when determining, measuring and monitoring credit risks.		X	X	X		
ILO4	Remember the concept and definition of a credit portfolio, how it is formed and managed, and how it can be diversified. We also talk about the concentration of the credit portfolio and its risks, as well as the forms and measures of credit concentration and controlling its risks.		X	X	X		

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ILO5	Discussing the principle of trade-off between the return and the risk in banking credit operations, by explaining and measuring the return on credit (loan), as well as the various risks and methods that lead to their measurement.		X	X	X		
ILO6	The models used to measure credit risk, where non-quantitative (qualitative) and quantitative models are mentioned		X	X	X		
ILO7	Other methods of credit risk management are mentioned in banks, such as a complete system, credit rating agencies and the requirements of the Basel Committee and their role in credit risk management. As well as an indication of the role of sensitivity analysis (stress or endurance tests) in credit risk management. And clarify the role of the institution to guarantee the risks of loans and joint loans, along with mentioning credit risk mitigators (simple and comprehensive method).		X	X	X		
ILO8	Mentioning the concept and definition of liquidity risk and its causes, and stating the effect of liquidity risk on equity. Also, methods of measuring bank liquidity exposure are discussed. Then clarify the sensitivity tests for liquidity risks.		X	X	X		
ILO9	A description of the market risks in the bank and the methods of their		X	X	X		

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	performance, where the methods of managing interest rate risk, as well as currency exchange rate risks, and finally pricing risk are described.						
ILO10	Define the concept and tasks of managing operational risks, methods and indicators for measuring them and how to conduct sensitivity analysis tests (stress or endurance tests) for operational risks.		X	X	X		
ILO11	Notice and explain the Basel agreements for banking supervision, what are the main objectives of the Basel Committee 1, 2 and 3, and then explain how to calculate the capital needed to meet different risks, while examining scenarios tests and their impact on capital in the bank		X	X	X		

7- Practice Tools:

Tool Name	Description
-	-

8- Main References

- 1- SKOGLUND. Jimmy., CHEN. Wei, (2015), Financial Risk Management; John Wiley & Sons., Hoboken, New Jersey.
- 2- John. C. Hull., (2018), Options, Futures and other derivatives, 10th edition, Pearson
- 3- Ciby. Joseph, (2013), Advanced Credit Risk Analysis and Management, Wiley India Pvt. Ltd
- 4- Bolder. David Jamieson (2018), Credit-Risk Modelling, Springer International Publishing.

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- 5- Gestel, Tony Van., Baesens, Bart (2009)., Credit Risk Management, Oxford University Press.
 6- بن علي بلعزو وآخرون، (2013)، إدارة المخاطر، الوراق للنشر والتوزيع. عمان.

9- Additional References

- 1- KOULAFETIS. Panayiota. (2017), Modern Credit Risk Management; Theory and Practice. Springer; 1 st ed.
 2- الشماع. خليل (2007). أساسيات العمليات المصرفية (الأجزاء الثلاثة) ، الأكاديمية العربية للعلوم المالية والمصرفية، دمشق.
 3- حشاد، نبيل (2004)، دليلك إلى بازل2، موسوعة بازل.
 4- مقالات ومراجع إضافية أخرى تعطي للطلبة في نهاية كل محاضرة حسب موضوع المحاضرة واهتمام الطلبة.