



**COURSE OUTLINE
and
SET OF COURSE**

Course : RISK MANAGEMENT

Code/credits : EM 464 / 3 SKS

**MANAGEMENT DEPARTMENT
FACULTY OF ECONOMICS
DIPONEGORO UNIVERSITY
SEMARANG**

COURSE OUTLINE

Course Title : Risk Management

Course Code : EM364

Description : This course discusses the concept of risk and its implementation in business management especially in financial institutions. In detail the course discusses the meaning of risk and risk management, risk management and insurance; institution risk management; and using value at risk in risk management.

Course Objective : This course is designed to help the students achieve good knowledge in risk management. Specially, the course will help the students enhance their understanding about risk and risk management, insurance and risk retention, and implementation of risk management in business.

No	Subject Objectives	Subject	Sub-subject	Duration (minute)	Reference
1	<p>After studying this subject the students should be understood about:</p> <ol style="list-style-type: none"> 1. The different meaning of the term risk. 2. The major types of business and personal risk. 3. Comparing pure risk and other types of risk. 4. Outline the risk management process and describe major risk management methods. 5. The organization of the risk management functions within business. 	<i>The Concept of Risk and Risk Management</i>	<ol style="list-style-type: none"> 1. Risk and types of risk 2. Risk Management 3. The Need for a Risk Management Objective 4. Understanding the Cost of Risk and Firm value maximization 5. Individual Risk Management and The Cost of Risk 	150	<p>A. Harrington, Scott E., & Niehaus, Gregory R., <i>Risk Management and Insurance</i>, McGraw Hill, 2003, Chapter 1, 2</p> <p>B. Hull, J., C., <i>Risk Management and Financial Institutions</i>, Prentice Hall, 2007, Chapter 1</p> <p>C. Jorion, P., <i>Value at Risk</i>, McGraw Hill, 2002, Chapter</p>

	<p>6. The overall objective of risk management.</p> <p>7. The cost of risk concept.</p> <p>8. The explanation how minimizing the cost of risk maximizes business value:</p> <p>9. Possible conflicts between business and societal objectives.</p>				1
2	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Describe frameworks for identifying business and individual risk exposures. 2. Explain the concepts of probability from statistics. 3. Apply mathematical concept to understand the frequency and severity of losses. 4. Explain the concepts of maximum probable loss and value at risk. 5. Show how pooling of independent loss exposures reduces risk. 6. Explain how pooling arrangements provide the foundation for insurance. 	<p><i>Risk Identification, Risk Measurement, Pooling Arrangements, and Diversification of Risk</i></p>	<ol style="list-style-type: none"> 1. Risk Identification 2. Basic concept from Probability and Statistics 3. Frequency and Severity of Losses 4. Risk Reduction through Pooling Independent Losses 5. Insurers as managers of Risk Pooling Arrangements 	150	<ul style="list-style-type: none"> • A: Chapter 3, 4
3	<p>After studying this subject the students should be able to:</p>	<p><i>Insurer Ownership, Insurer Insolvencies, and</i></p>	<ol style="list-style-type: none"> 1. Insurer Capital 2. Ownership and Sources 	150	<ul style="list-style-type: none"> • A: Chapter 5, 6, and 7

	<ol style="list-style-type: none"> 1. Describe different types of insurance company ownership. 2. Explain the role of insurer capital and factors that affect insurer capital decisions. 3. Briefly describe state insurance regulation and summarize major activities that are regulated. 4. Summarize the historical record of insurance company insolvencies and solvency rating. 5. Introduce the main features and functions of solvency regulation. 	<i>Insurance Regulation</i>	<ol style="list-style-type: none"> 3. Insurer Operations, Reinsurance, and Insolvency Risk structure 4. Insurance regulation 5. Insolvency and Insolvency Regulation 		
4	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Explain the fundamental determinants of insurance premiums. 2. Explain why and how insurers classify buyers into different groups based on estimates of expected claim cost. 3. Explain how insurance premium may be affected by shock to insurer capital. 	<i>Insurance Pricing, Demand for Insurance, and Insurability of Risk</i>	<ol style="list-style-type: none"> 1. Insurance cost and Fair Premium 2. Expected Claim Cost 3. Profit Loading 4. Price Regulation 5. Risk Aversion and Demand for Insurance 6. Business Risk Management and Demand for Risk 7. Factors that Limit Insurability of Risk 8. Legal Doctrines 	150	<ul style="list-style-type: none"> • A: Chapter 8, 9& 10

	<p>4. Describe what it means to be risk averse and why risk-averse individuals buy insurance.</p> <p>5. Explain the main factors affecting individual and business' demand for insurance.</p> <p>6. Identify and explain factors that can limit the insurability of risk.</p> <p>7. Explain the fundamental legal doctrines underlying insurance contracts.</p>				
5	<p>After studying this subject the students should be able to:</p> <p>1. Describe basic legal liability rules and procedures.</p> <p>2. Describe the economic functions of the legal liability system</p> <p>3. Describe personal exposures to loss arising out of automobile ownership and use.</p> <p>4. Explain major features of personal auto insurance pricing and underwriting.</p> <p>5. Describe homeowner's insurance and personal</p>	<p><i>Legal Liability, Automobile Insurance, and Homeowners Insurance</i></p>	<p>1. Tort Liability and Liability Rules</p> <p>2. Limited Wealth and Limited Liability</p> <p>3. Tort Liability and Safety Regulation</p> <p>4. Auto Loss Exposures and Auto Insurance Pricing</p> <p>5. Homeowners Insurance</p> <p>6. Coverage of High Risk and its' Impact on Property Insurance</p>	150	<ul style="list-style-type: none"> A: Chapter 12, 13&14

	<p>umbrella liability insurance policies.</p> <p>6. Describe property insurance arrangements for catastrophic perils.</p>				
6	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Describe major types of life insurance and annuity products. 1. Describe major features of life insurance and annuity products. 2. Analyze the pricing of basic life insurance policies and annuities. 3. Explain the major types of employee benefits and why firms provide employee benefits. 4. Describe and analyze group medical expense coverage, including traditional fee for service arrangements, health maintenance organization. 5. Describe the major types and features of employment-related retirement plans. 6. Explain the major features 	<p><i>Life Insurance, Health Insurance, Workers' compensation, and Pensions</i></p>	<ol style="list-style-type: none"> 1. Life Insurance Products 2. Life Insurance pricing 3. Health Insurance 4. Major Types of Employee Benefits 5. Overview of Group Medical Expense Coverage. 6. Retirement Plans 7. Workers' Compensation and Employee Injuries 8. Social Security 	150	<ul style="list-style-type: none"> • A: Chapter-15,16, 17, 18, & 19

	<p>of workers' compensation and employers' liability insurance.</p> <p>7. Describe social security retirement, survivor, and disability benefits and the financing of these benefits.</p>				
7	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Define loss control. 2. Describe the various types of loss control. 3. Derive the optimal amount of loss control using information on the costs and benefits. 4. Identify firm characteristics that influence firm decision about risk retention/reduction. 5. Identify the variables on which a firm should focus its risk reduction activities. 	<p><i>Loss Control and Risk Retention/ Reduction Decisions</i></p>	<ol style="list-style-type: none"> 1. Types of Loss Control 2. Optimal Loss Control When Cost and Benefits are Know. 3. Government Safety Programs 4. Firm Characteristics Affecting Risk Retention (Reduction) Decision. 5. Evidence on Business Risk Reduction Decision. 6. Aggregates or Disaggregated Risk Management. 	150	<ul style="list-style-type: none"> • A: Chapter 11& 22
8	<p>After studying this subject the students should be able to about:</p> <ol style="list-style-type: none"> 1. Describe the definition of financial risk. 2. Explain the concepts and features of derivatives and risk management. 	<p><i>Financial Risk</i></p>	<ol style="list-style-type: none"> 1. Definition of Financial Risk 2. Derivatives and Risk Management 3. Types Of Financial Risk 	150	<p>C: Chapter 1</p>

	3. Explain the types and features of financial risk				
9	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Explain the reason for regulation bank capital 2. Explain the contents and features of Basel II 3. Explain the implementation of Basel II on credit risk capital and operational risk. 	<i>Bank Regulation and Basel II</i>	<ol style="list-style-type: none"> 1. Reason for Regulation Bank Capital 2. Basel II 3. Credit Risk Capital Under Basel II 4. Operational Risk Under Basel II 	150	B: Chapter 7 C: Chapter 3
10	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Explain the concept of VaR and its implementation for risk management. 2. Explain the properties of risk measures. 3. Explain the features and types VaR. 4. Explain back testing and stress testing for VaR. 	<i>The VaR Measure</i>	<ol style="list-style-type: none"> 1. Definition of VaR 2. VaR vs. Expected Shortfall 3. Properties of Risk Measures 4. Choice of Parameters for VaR 5. Marginal VaR, Incremental VaR, and Component VaR 6. Back Testing and Stress testing 	150	B: Chapter 6,8 C: Chapter 21
11	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Explain the concepts of market risk. 2. Calculate Market Risk VaR based on historical simulation approach 3. Calculate Market Risk VaR 	<i>Market Risk</i>	<ol style="list-style-type: none"> 1. Market Risk 2. Market Risk VaR: Historical Simulation Approach 3. Market Risk VaR: Model Building Approach 	150	B: Chapter 9,10 C: Chapter 4

	Based on model building approach				
12	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Describe credit ratings and credit rating process. 2. Calculate default probabilities and recovery rates. 3. Estimate credit losses and credit VaR. 4. Explain others credit risk model such as Vasicek Model, Credit Risk Plus, and Credit Metrics. 5. Explain the concept of liquidity risk. 6. Calculate Liquidity Black Holes. 7. Compare Liquidity vs. probability. 	<i>Credit Risk and Liquidity</i>	<ol style="list-style-type: none"> 1. Credit ratings 2. Historical Default Probabilities and Recovery Rates 3. Estimating Credit Losses 4. Credit VaR 5. Credit Risk Models: Vasicek, Credit Risk Plus, Credit Metrics 6. Traditional View of Liquidity Risk 7. Liquidity Black Holes 8. Liquidity vs. Probability 	150	B: Chapter 11, 12, 15 C: Chapter 13, 14
13	<p>After studying this subject the students should be able to:</p> <ol style="list-style-type: none"> 1. Explain the concept of operational risk. 2. Describe the category of operational risk. 3. Explain severity and loss frequency. 4. Understand forward looking approach of 	<i>Operational Risk</i>	<ol style="list-style-type: none"> 1. What is operational risk? 2. Determination of Regulatory Capital. 3. Categorization of Operational Risk 4. Loss Severity and Loss Frequency 5. Forward Looking Approach 	150	B: Chapter 14 C: Chapter 19

	operational risk. 5. Explain the allocation of operational risk capital.		6. Allocation of Operational Risk Capital		
14	After studying this subject the students should be able to: 1. Explain the galaxy of risk. 2. Explain the event risks. 3. Explain integrated risk management. 4. Understand the rules of risk management.	<i>Integrated Risk Management</i>	1. The Galaxy of Risk 2. Event Risks 3. Integrated Risk Management 4. Why Risk Management	150	C: Chapter 20

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 1

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about risk and risk management, insurance and risk retention, and implementation of risk management in business especially in financial institution

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be understood about:

- a. The different meaning of the term risk.
- b. The major types of business and personal risk.
- c. Comparing pure risk and other types of risk.
- d. Outline the risk management process and describe major risk management methods.
- e. The organization of the risk management functions within business.

B. MAIN TOPIC

The Concept of Risk and Risk Management

C. SUB TOPICS

- Risk and types of risk
- Risk Management
- The Need for a Risk Management Objective
- Understanding the Cost of Risk and Firm value maximization
- Individual Risk Management and The Cost of Risk

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 1, 2
- Hull, J., C., *Risk Management and Financial Institutions*, Prentice Hall, 2007, Chapter 1
- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 1

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 2

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about Risk Identification, Risk Measurement, Pooling Arrangements, and Diversification of Risk

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to:

- a. Describe frameworks for identifying business and individual risk exposures.
- b. Explain the concepts of probability from statistics.
- c. Apply mathematical concept to understand the frequency and severity of losses.
- d. Explain the concepts of maximum probable loss and value at risk.
- e. Show how pooling of independent loss exposures reduces risk.
- f. Explain how pooling arrangements provide the foundation for insurance.

B. MAIN TOPIC

Risk Identification, Risk Measurement, Pooling Arrangements, and Diversification of Risk

C. SUB TOPICS

- Risk and types of risk
- Risk Management
- The Need for a Risk Management Objective
- Understanding the Cost of Risk and Firm value maximization
- Individual Risk Management and The Cost of Risk

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 3 and 4

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 3

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about Insurer Ownership, Insurer Insolvencies, and Insurance Regulation.

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to:

3. Describe different types of insurance company ownership.
4. Explain the role of insurer capital and factors that affect insurer capital decisions.
5. Briefly describe state insurance regulation and summarize major activities that are regulated.
6. Summarize the historical record of insurance company insolvencies and solvency rating.
7. Introduce the main features and functions of solvency regulation.

B. MAIN TOPIC

Risk Identification, Risk Measurement, Pooling Arrangements, and Diversification of Risk

C. SUB TOPICS

1. Insurer Capital
2. Ownership and Sources of Capital
3. Insurer Operations, Reinsurance, and Insolvency Risk structure
4. Insurance regulation
5. Insolvency and Insolvency Regulation

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	4. Explaining the range of course 5. Explaining the benefit of course 6. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	4. Summarizing the material 5. Giving questions 6. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 12, 13, and 13

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 4

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about Insurance Pricing, Demand for Insurance, and Insurability of Risk

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to:

- a. Explain the fundamental determinants of insurance premiums.
- b. Explain why and how insurers classify buyers into different groups based on estimates of expected claim cost.
- c. Explain how insurance premium may be affected by shock to insurer capital.
- d. Describe what it means to be risk averse and why risk-averse individuals buy insurance.
- e. Explain the main factors affecting individual and business' demand for insurance.
- f. Identify and explain factors that can limit the insurability of risk.
Explain the fundamental legal doctrines underlying insurance contracts.

B. MAIN TOPIC

Insurance Pricing, Demand for Insurance, and Insurability of Risk

C. SUB TOPICS

1. Insurance cost and Fair Premium
2. Expected Claim Cost and Profit Loading
3. Price Regulation
4. Risk Aversion and Demand for Insurance
5. Business Risk Management and Demand for Risk

6. Factors that Limit Insurability of Risk
7. Legal Doctrines

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none"> 1. Explaining the range of course 2. Explaining the benefit of course 3. Explaining the competency of GO and SO 	<ul style="list-style-type: none"> • Pay attention • Ask question 	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none"> 1. Summarizing the material 2. Giving questions 3. Giving general description for upcoming course 	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 8, 9, and 10

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 5

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about Legal Liability, Automobile Insurance, and Homeowners Insurance

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to:

- a. Explain the fundamental determinants of insurance premiums.
- b. Explain why and how insurers classify buyers into different groups based on estimates of expected claim cost.
- c. Explain how insurance premium may be affected by shock to insurer capital.
- d. Describe what it means to be risk averse and why risk-averse individuals buy insurance.
- e. Explain the main factors affecting individual and business' demand for insurance.
- f. Identify and explain factors that can limit the insurability of risk.
- g. Explain the fundamental legal doctrines underlying insurance contracts.

B. MAIN TOPIC

Legal Liability, Automobile Insurance, and Homeowners Insurance

C. SUB TOPICS

1. Tort Liability and Liability Rules
2. Limited Wealth and Limited Liability
3. Tort Liability and Safety Regulation
4. Auto Loss Exposures and Auto Insurance Pricing
5. Homeowners Insurance

6. Coverage of High Risk and its' Impact on Property Insurance

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	A. Explaining the range of course B. Explaining the benefit of course C. Explaining the competency of GO and SO	<ul style="list-style-type: none"> • Pay attention • Ask question 	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none"> 1. Summarizing the material 2. Giving questions 3. Giving general description for upcoming course 	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 11, 12, and 13

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 6

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about Life Insurance, Health Insurance, Workers' compensation, and Pensions

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to:

- a. Explain the fundamental determinants of insurance premiums.
- b. Explain why and how insurers classify buyers into different groups based on estimates of expected claim cost.
- c. Explain how insurance premium may be affected by shock to insurer capital.
- d. Describe what it means to be risk averse and why risk-averse individuals buy insurance.
- e. Explain the main factors affecting individual and business' demand for insurance.
- f. Identify and explain factors that can limit the insurability of risk.
- g. Explain the fundamental legal doctrines underlying insurance contracts.

B. MAIN TOPIC

Life Insurance, Health Insurance, Workers' compensation, and Pensions

C. SUB TOPICS

1. Life Insurance Products
2. Life Insurance pricing
3. Health Insurance
4. Major Types of Employee Benefits
5. Overview of Group Medical Expense Coverage.

6. Retirement Plans
7. Workers' Compensation and Employee Injuries
8. Social Security

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none"> 1. Explaining the range of course 2. Explaining the benefit of course 3. Explaining the competency of GO and SO 	<ul style="list-style-type: none"> • Pay attention • Ask question 	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none"> 1. Summarizing the material 2. Giving questions 3. Giving general description for up-coming course 	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 15, 16, 17, 18, and 19

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 7

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Loss Control and Risk Retention/ Reduction Decision*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be understood about:

- a. The different meaning of the term risk.
- b. The major types of business and personal risk.
- c. Comparing pure risk and other types of risk.
- d. Outline the risk management process and describe major risk management methods.
- e. The organization of the risk management functions within business.

B. MAIN TOPIC

Loss Control and Risk Retention/ Reduction Decision

C. SUB TOPICS

1. Types of Loss Control
2. Optimal Loss Control When Cost and Benefits are Know.
3. Government Safety Programs
4. Firm Characteristics Affecting Risk Retention (Reduction) Decision.
5. Evidence on Business Risk Reduction Decision.
6. Aggregates or Disaggregated Risk Management.

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Harrington, Scott E., & Niehaus, Gregory R., *Risk Management and Insurance*, McGraw Hill, 2003, Chapter 11, 22

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 8

B. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Financial Risk*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Describe the definition of financial risk.
2. Explain the concepts and features of derivatives and risk management.
3. Explain the types and features of financial risk

B. MAIN TOPIC

Financial Risk

C. SUB TOPICS

1. Definition of Financial Risk
2. Derivatives and Risk Management
3. Types Of Financial Risk

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 1

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 9

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Bank Regulation and Basel II*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Explain the reason for regulation bank capital
2. Explain the contents and features of Basel II
3. Explain the implementation of Basel II on credit risk capital and operational risk.

C. MAIN TOPIC

Bank Regulation and Basel II

D. SUB TOPICS

1. Reason for Regulation Bank Capital
2. Basel II
3. Credit Risk Capital Under Basel II
4. Operational Risk Under Basel II

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Hull, J., C., *Risk Management and Financial Institutions*, Prentice Hall, 2007, Chapter 7
- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 3

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 10

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

The main objectives of this course is giving understanding to students about *The VaR Measure*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Explain the concept of VaR and its implementation for risk management.
2. Explain the properties of risk measures.
3. Explain the features and types VaR.
4. Explain back testing and stress testing for VaR.

B. MAIN TOPIC

The VaR Measure

C. SUB TOPICS

1. Definition of VaR
2. VaR vs. Expected Shortfall
3. Properties of Risk Measures
4. Choice of Parameters for VaR
5. Marginal VaR, Incremental VaR, and Component VaR
6. Back Testing and Stress testing

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	4. Explaining the range of course 5. Explaining the benefit of course 6. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	4. Summarizing the material 5. Giving questions 6. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Hull, J., C., *Risk Management and Financial Institutions*, Prentice Hall, 2007, Chapter 6, 8
- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 21

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 11

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Market Risk*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Explain the concepts of market risk.
2. Calculate Market Risk VaR based on historical simulation approach
3. Calculate Market Risk VaR Based on model building approach *

B. MAIN TOPIC

Market Risk

C. SUB TOPICS

1. Market Risk
2. Market Risk VaR: Historical Simulation Approach
3. Market Risk VaR: Model Building Approach

G. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

H. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

I. REQUIRED REFERENCES

- Hull, J., C., *Risk Management and Financial Institutions*, Prentice Hall, 2007, Chapter 9, 10
- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 4

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 12

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Credit Risk and Liquidity*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Describe credit ratings and credit rating process.
2. Calculate default probabilities and recovery rates.
3. Estimate credit losses and credit VaR.
4. Explain others credit risk model such as Vasicek Model, Credit Risk Plus, and Credit Metrics.
5. Explain the concept of liquidity risk.
6. Calculate Liquidity Black Holes.
7. Compare Liquidity vs. probability.

B. MAIN TOPIC

Credit Risk and Liquidity

C. SUB TOPICS

1. Credit ratings
2. Historical Default Probabilities and Recovery Rates
3. Estimating Credit Losses
4. Credit VaR
5. Credit Risk Models: Vasicek, Credit Risk Plus, Credit Metrics
6. Traditional View of Liquidity Risk

7. Liquidity Black Holes
8. Liquidity vs. Probability

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none"> 1. Explaining the range of course 2. Explaining the benefit of course 3. Explaining the competency of GO and SO 	<ul style="list-style-type: none"> • Pay attention • Ask question 	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none"> 1. Summarizing the material 2. Giving questions 3. Giving general description for up-coming course 	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Hull, J., C., *Risk Management and Financial Institutions*, Prentice Hall, 2007, Chapter 11, 12, 15
- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 13, 14

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 13

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Operational Risk*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Explain the concept of operational risk.
2. Describe the category of operational risk.
3. Explain severity and loss frequency.
4. Understand forward looking approach of operational risk.
Explain the allocation of operational risk capital.

B. MAIN TOPIC

Operational Risk

C. SUB TOPICS

1. What is operational risk?
2. Determination of Regulatory Capital.
3. Categorization of Operational Risk
4. Loss Severity and Loss Frequency
5. Forward Looking Approach

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for upcoming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Hull, J., C., *Risk Management and Financial Institutions*, Prentice Hall, 2007, Chapter 14
- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 19

SET OF COURSE

COURSE TITLE : RISK MANAGEMENT
COURSE CODE/CREDIT : EM364
CREDIT HOURS : 150 minutes
NUMBER OF MEETING : 14

A. OBJECTIVE

1. GENERAL OBJECTIVE (GO)

This session is designed to help the students achieve good knowledge about *Integrated Risk Management*

2. SPECIFIC OBJECTIVE (SO)

After studying this subject the students should be able to about:

1. Explain the galaxy of risk.
2. Explain the event risks.
3. Explain integrated risk management.
4. Understand the rules of risk management.

B. MAIN TOPIC

Integrated Risk Management

C. SUB TOPICS

1. The Galaxy of Risk
2. Event Risks
3. Integrated Risk Management
4. Why Risk Management

D. COURSE ACTIVITIES

Phase	Teaching Activities	Student Activities	Media
Introduction	<ol style="list-style-type: none">1. Explaining the range of course2. Explaining the benefit of course3. Explaining the competency of GO and SO	<ul style="list-style-type: none">• Pay attention• Ask question	LCD, Whiteboard
Content	Explaining and discussing each sub-topics in detail	Pay attention and discussion	LCD, Whiteboard
Summary	<ol style="list-style-type: none">1. Summarizing the material2. Giving questions3. Giving general description for up-coming course	Pay attention and discussion	LCD, Whiteboard

E. EVALUATION

Giving questions or case study for small groups discussion and class discussion to evaluate understandability of student concerning the course material.

F. REQUIRED REFERENCES

- Jorion, P., *Value at Risk*, McGraw Hill, 2002, Chapter 20