HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF ECONOMICS AND BUSINESS

CURRICULUM AND SYLLABI

FOR THE DEGREE OF
INTERNATIONAL BACHELOR OF BUSINESS ADMINISTRATION (BBA)

IN BUSINESS ANALYTICS

Hanoi, 2019

CONTENTS

iii

CURRICULUM

FOR THE DEGREE OF
INTERNATIONAL BACHELOR OF BUSINESS ADMINISTRATION (BBA)
IN BUSINESS ANALYTICS

The Business Analytics Minor is designed to provide HUST students the opportunity to complement their primary major with advanced business analytics skills, allowing them to better integrate data insights into their analyses and decision-making.

This curriculum applies to applicants admitted to the first year of study of the 4-year curriculum in the academic year 2019-2020 and thereafter.

Degree Requirements

1. School of Economics and Business students pursuing a BA degree must complete a minimum of 132 credits, including the Foundation requirements, core requirements, business major requirements, and selected course. In addition, the 132 credits of courses should be completed in the following manner:

- Foundation requirements	27 credits
- Core requirements	32 credits
- Concentrations	47 credits
- Business Selective Courses	18 credits
- Graduation Internship and Thesis	8 credits
Total credits for degree programme	**132 credits**

2. To fulfill the graduation requirement of this degree as specified by the Board of the School of Business and Economics, students must satisfactorily complete the credits of all courses.

3. Students must complete a total of 97 credits in Vietnam within three academic years and complete the remainings in abroad (at least 18 credits).

General Admission Requirements for the Program

1. Submission of application to the admission office with a non-refundable application fee;

2. Provide official test score that meet at least minimum score requirements established by academic departments;

3. English Test Score:

    Priority will be given in the admissions process to applicants who have at least the following English scores:

TOEFL: Paper-based exam	550
Internet-based exam	80
IELTS:	6.5
TOEIC:	800

    (No other English test score is accepted)

    English scores must be taken *within the first three-year* of the enrollment

Career Possibilities

This program enhances students' career possibilities in their primary major and allows them to also pursue careers in consultation, business analysis, or corporate information technology. The business analytics curriculum provides an excellent background for pursuing graduate work in a variety of fields including business administration, supply chain and operations management, or information systems.

COURSE LIST

The courses listed in the syllabus will not necessarily be offered every year, from time to time, depending on the exigencies of staffing, additional courses may be offered.

For courses offered by the School of Economics and Business, the final examination is normally 1.5 hours in length. Final grading will normally be determined by performance in the final examination (60%) and an assessment of coursework (40%) except for final project/final papers which will be assessed by 100% coursework.

Foundation Requirements

Foundation Requirements (27 credits)	*Credits*
Report and Thesis Writings	3
Introduction to Management	2
Social and Behavioral Sciences	4
English and Other Required Courses	18

Core Requirements

Sciences (26 credits)	*Credits*
Mathematics Preparation for Business Major	18
Physics	4
Information Technology and Computing	4
Economics (6 credits)	*Credits*
Principles of Macroeconomics	3
Principles of Microeconomics	3

Concentrations

Core Major (47 credits)	*Credits*
Introduction to the Major of Business Analytics	2
Business Process Management	3
Organizational Behavior	2
Principles of Marketing	3
Business Legal Environment	2
Applied Statistics for Business and Economics	3
Business Ethics	2
Operations Management	3
Principles of Accounting	3
Corporate Finance	3

Core Major (47 credits)	Credits
Corporate Performance Management	3
Management Information Systems	3
Human Resource Management	3
Strategy Management	3
Managerial Accounting	3
Mathematics for Business Analytics	3
Database	3

Selective Courses

Business Analytics Minor (18 credits)	Credits
Marketing Research	3
Decision Support Systems	3
Prescriptive Business Analytics	3
Financial Investment	3
Risk Management	3
Business Forecasting	3
Financial Analysis	3
Marketing Analytics	3
Applied Data Science for Business	3
Big Data and Business Intelligence	3

COURSE CATALOG

INTRODUCTION TO MANAGEMENT

EM1010   Introduction to Management

Credit Hours: 2

Previous Courses: none

COURSE DESCRIPTION

This introductory course in management offers a broad perspective on modern management in the business, public and voluntary sectors, and examines key issues likely to face managers in the future. Students are required to understand basic knowledge of management and apply this knowledge to the management of an enterprise.

LEARNING OUTCOMES

After this course, learners will be able to:

- Describe and apply a selection of key concepts/theory/frameworks relevant to management;
- Understand some of the interrelations between the disciplines within management;
- Understand the management functions of planning, organizing, leading (coordination), and controlling;
- Recognise ethical and social responsibility issues in a business context;
- Recognise, support and display leadership in a group setting;
- Build and develop skills at communication, presentation, teamwork, planning, time management, analysis, and making decision, …

COURSE CONTENTS

CHAPTER 1: INTRODUCTION TO MANAGEMENT

1.1. The Evolution of Management Thinking

1.2. Basic Functions of Management

1.3. Managers and the Role of Managers

1.4. Types of Organizations

1.5. The Environment of Management

1.6. Principles of Managing an Organization

CHAPTER 2: PLANNING

2.1. Goal Setting and Planning Overview

2.2. Types of Plans

2.3. Planning Process

2.4. Factors Shaping Plans

CHAPTER 3: ORGANIZING

3.1. The Concepts and Roles of Organizing

3.2. Designing Organization Structures

3.3. Managing Change and Innovation

3.4. Managing Human Resources

CHAPTER 4: LEADING

4.1. The Nature of Leadership

4.2. Leadership's Contents and Roles

4.3. Leadership's Styles

CHAPTER 5: CONTROLLING

5.1. Control Objectives

5.2. The Control Process

5.3. Types of Control

5.4. The Control Techniques

5.5. Characteristics of Effective Control Systems

EXPECTED WORKLOADS

A total of 105 hours of work is expected from students in this course. This consists of 15 hours of classes, five hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours observing organizations' real activities. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Class participations: 10%

Mid-term exam: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Daniel G. Schermerhorn John R. (2015). Introduction to Management, 13th Edition International Student Version. John Wiley & Sons, USA

EM1100   Principles of Microeconomics

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course will provide students with knowledge of microeconomic analysis that helps explain market successes, market failures, and how government intervention might improve outcomes. In addition to an investigation of firm behavior and consumer behavior, attention will be paid to: Game Theory, Behavioral Economics, Economics of Time and Risk, Economics of Information, Experimental Economics, and Auctions and Market Design.

LEARNING OUTCOMES

After this course, learners will be able to:

- Explain the role of scarcity, specialization, opportunity cost and cost/benefit analysis in economic decision-making.
- Identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output.
- Summarize the law of diminishing marginal utility; describe the process of utility maximization.
- Calculate supply and demand elasticities, identify the determinants of price elasticity of demand and supply, and demonstrate the relationship between elasticity and total revenue.
- Describe the production function and the Law of Diminishing Marginal Productivity; calculate and graph short-run and long-run costs of production.
- Identify the four market structures by characteristics; calculate and graph the profit maximizing price and quantity in the output markets by use of marginal analysis.
- Determine the profit maximizing price and quantity of resources in factor markets under perfect and imperfect competition by use of marginal analysis.
- Describe governmental efforts to address market failure such as monopoly power, externalities, and public goods.
- Identify the benefits of free trade using the concept of comparative advantage.

COURSE CONTENTS

Chapter 1: INTRODUCTION OF ECONOMICS

What is economics?

Resource limits, alternatives and choices

Operational mechanism of economic system

Positive and normative economics

Microeconomics & macroeconomics

Chapter 2: MARKET, DEMAND AND SUPPLY

2.1 Market

2.2 Demand

2.3 Supply

2.4 Demand – supply relationship, market equilibrium

2.5 Market forces of demand

2.6 Market forces of supply

2.7 Free market and price control

Chapter 3: THEORY OF CONSUMER'S BEHAVIOR

3.1 Price elasticity of demand

3.2 Income elasticity of demand

3.3 Cross elasticity of demand

3.4 Consumer's choices

3.5 Individual demand and market demand

3.6 Demand predictions by experience

Chapter 4: PRODUCTION THEORY

4.1 Firms and firm's organisation

4.2 Production function

4.3 Revenues, costs and profits of firms

4.4 Firms' decision on supplied quantity

Chapter 5: MARKET STRUCTURES

5.1 Market structures and causes of market structures

5.2 Perfect competition

5.3 Monopoly

5.4 Monopolistic competition

5.5 Oligopoly

Chapter 6: MARKET OF PRODUCTION FACTORS – LABOUR, CAPITAL, AND LAND

6.1 Labour market

6.2 Capital market

6.3 Land market

Chapter 7: GOVERNMENT'S ROLES IN THE MARKET ECONOMY

7.1 General equilibrium and effectiveness of competition

7.2 Market failures

7.3 Government's roles in the market economy

7.4 Public polices and social welfare

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hour per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

The final course grade is assessed through the learning process, including two main scores: process score (30%) and final exam score (70%); as follows:

Class participations: 10%

Assignments: 10%

Mid-term exam: 10%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbooks

- Nguyen Dai Thang, (2011). *Microeconomics Teaching Book, 2nd Edition*, Scientific and Technical Publishing House of Hanoi

- Nguyen Dai Thang, (2011). *Microeconomics Exercise Book*, 3rd Edition, Vietnam's Educational Publishing House.

Reference books

- Begg, D, R. Dornbusch and S. Fischer, (2007). *Economics*, Statistic Publishing House

- N. Gregory Mankiw, (2008), *Principles of Microeconomics, 5rd ed*. Thomson Learning

- Michael Melvin and William Boyes, (2005). *Microeconomics, 6th ed.* Houghton-Mifflin

- David C. Colander, (2004). *Microeconomics, 5th ed.* McGraw-Hill

EM1110   Principles of Macroeconomics

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course aims to equip students with knowledge of macroeconomics, basic models, reflecting the relationship between basic macroeconomic factors and other factors, to help the students understand the movement of economy and the way to regulate the economy of government. On that basic, this course indicates the possibility to influence the economy to get the best benefit to society.

LEARNING OUTCOMES

After this course, learners will be able to:

- Explain the role of scarcity, specialization, opportunity cost and cost/benefit analysis in economic decision-making.
- Identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output.
- Define and measure national income and rates of unemployment and inflation
- Identify the phases of the business cycle and the problems caused by cyclical fluctuations in the market economy.
- Define money and the money supply; describe the process of money creation by the banking system and the role of the central bank
- Construct the aggregate demand and aggregate supply model of the macro economy and use it to illustrate macroeconomic problems and potential monetary and fiscal policy solutions.
- Explain the mechanics and institutions of international trade and their impact on the macro economy.
- Define economic growth and identify sources of economic growth.

COURSE CONTENTS

Chapter 1. INTRODUCTION TO MACROECONOMICS

Chapter 2. MARKET, DEMAND, SUPPLY AND GOVERNMENT POLICIES

2.1. Market

2.2. Demand

2.3. Supply

2.4. Market Equilibrium

2.5. Market Mechanism and Government Policies

Chapter 3. THE DATA OF MACROECONOMICS

3.1. Measuring a Nation's Income

3.2. Measuring the Cost of Living

3.3. Measuring Joblessness

Chapter 4. AGGREGATE DEMAND AND BASIC KEYNESIAN MODEL

4.1. Overview of Basic Keynesian Model

4.2. Determination of National Income in a Two-sector Economy

4.3. Determination of National Income in a Closed Economy

4.4. Determination of National Income in an Open Economy

4.5. Factors affecting Aggregate Demand

Chapter 5. MONEY, BANKING AND MONEYTARY POLICY

5.1. Money and Interest Rates

5.2. Players in the Money Supply Process

5.3. Central Banks and Monetary Base

5.4. Commercials Banks and Money creation

5.5. How Central Banks Control the Supply of Money

5.6. Demand for Money

5.7. The Model of Money Market

5.8. Impacts of Monetary Policy

Chapter 6. IS-LM MODEL

6.1. Introduction to IS-LM Model

6.2. Goods Market Equilibrium: The IS Curve

6.3. Money Market Equilibrium: The LM Curve

6.4. IS-LM Analysis

6.5. Monetary and Fiscal Policy in the IS-LM Model

Chapter 7. AD-AS MODEL

7.1. Aggregate Demand Curve

7.2. Labor Market and Natural Unemployment Rate

7.3. Short-term Aggregate Supply Curve

7.4. Long-term Aggregate Supply Curve and the Relation with Short-term Aggregate Supply Curve

7.5. Shifts in Aggregate Supply

7.6. AD-AS Analysis

7.7. Government Intervention in the AD-AS Model

Chapter 8: UNEMPLOYMENT AND INFLATION

8.1. Unemployment: Definition and Classifications

8.2. Consequences of Unemployment

8.3. Inflation: Definition and Consequences

8.4. Money Supply and Inflation

8.5. The Relationship between Unemployment and Inflation: The Phillips Curve

8.6. Supply Shocks and Stagflation

8.7. What Causes Monetary Inflation?

8.8. Methods to Control Inflation

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, six hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours observing organizations' real activities. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Class participations: 10%

Assignments: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Mankiw N. Gregory, (2012). *Macroeconomics*, 8th Edition. Worth Publishers

References

- Paul Krugman, Robin Wells, (2015). *Macroeconomics*, 4th Edition. W.H.Freeman & Co Ltd.

INTRODUCTION TO THE MAJOR OF BUSINESS ANALYTICS

EM1800   Introduction to the Major of Business Analytics

Credit Hours: 2

Previous Courses: none

COURSE DESCRIPTION

This course aims to assist students in preparing for studying business analytics' courses. During the course, students will be discussed various minors and provided information about careers and jobs in the field of business analytics.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understand major functions of business analytics to an organization.
- Understand the various majors, their role in business and potential career opportunities of each.
- Understand the school culture and resources.
- Understand the process to fulfill major's curriculum.

COURSE CONTENTS

(1) Introduction to School of Economics and Management
(2) Business Analytics - Program description and purpose, etc.
(3) Basic concepts of Business Analytics, Organizations
(4) Resume, Interviewing, and Networking

EXPECTED WORKLOADS

A total of 105 hours of work is expected from students in this course. This consists of 15 hours of classes, five hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours observing organizations' real activities. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

    Class participations: 10%

    Assignments: 20%

    Final exam: 70%

More information regarding assignment and exam will be provided in class.

EM2800   Business Process Management

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course introduces a process-oriented view of the flows of materials, information, products and services through and across organizational functions. All organizations must carefully analyze and document their business processes and must continuously assess the efficiency and effectiveness of these processes to minimize cost and maximize value creation. The course helps students identify information-bearing events, assess and improve process efficiency, learn to model and analyze business processes, and understand the interactions between human behavior and process design. Furthermore, case studies provided in class allow students to practice some of the principles addressed.

LEARNING OUTCOMES

After this course, learners will be able to:

- model simple business processes in terms of people, and activity sequences involved, the data and materials flowing through those sequences;

- assess the documented business processes using their key performance indicator such as efficiency, intended service quality, process flexibility and costs associated with occurred failures;

- diagnose problems and formulate improvements as well as estimate the effects of these improvements in terms of the above process metrics;

- explain the concept of business process management and its relationships with other modern management solutions such as Total Quality Management, Lean and Six Sigma, Enterprise Resource Planning, and Business Process Reengineering

COURSE CONTENTS

CHAPTER 1: INTRODUCTION TO BUSINESS PROCESS MANAGEMENT
1.1   Definition of Business Process
1.2   Typology of Business Process
1.3   Concepts and roles of Business Process Management
1.4   Principles of Business Process Management
1.5   Business Process Management System
1.6   Information Technology in Business Process Management

CHAPTER 2: BUSINESS PROCESS DESIGN, MODELLING, AND SIMULATION
2.1   Concepts and roles of Business Process Design
2.2   Business Process Models
2.3   Steps to design Business Process
2.4   UML language in Business Process Design

2.5   Definition and classification of Business Process Modeling

2.6   Steps to Business Process Modeling

2.7   Application of @Risk and SimQuick in Business Process Modeling

CHAPTER 3: BUSINESS PROCESS ANALYSIS

3.1   Definitions and content of Business Process Analysis

3.2   Criteria for measuring Business Process Performance

3.3   Business Process Analysis Models (Balance Scorecard, Cost of Quality, DEA)

3.4   Practice Business Process Analysis with Excel Add-ins

CHAPTER 4: BUSINESS PROCESS IMPROVEMENT

4.1   Definitions and Importance of Business Process Improvement

4.2   Tools for Business Process Improvement (7 QC tools, Lean, 6 Sigma)

4.3   Steps for Business Process Improvement Programme

4.4   Change Management during Business Process Improvement

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Class participations: 10%

Assignments: 30%

Final exam: 60%

TEXTBOOK & REFERENCES

Textbook

1. Dumas, Marlon, et al. (2018) Fundamentals of business process management. Heidelberg: Springer.

2. Boutros, T., & Purdie, T. (2014). The process improvement handbook: A blueprint for managing change and increasing organizational performance. McGraw-Hill Education.

3. Laguna, M., & Marklund, J. (2013). Business process modeling, simulation and design. CRC Press.

References

1. Brocke, Jan vom, and Michael Rosemann (2015). Handbook on Business Process Management 1: Introduction, Methods, and Information Systems. Springer Publishing Company, Incorporated.

2. Brocke, Jan vom, and Michael Rosemann (2015). Handbook on Business Process Management 2: Strategic Alignment, Governance, People and Culture. Springer Publishing Company, Incorporated

EM3190   Organizational Behavior

Credit Hours: 3

Previous Courses: EM1010 (Introduction to Management Science)

COURSE DESCRIPTION

This course is an introduction to the basic concepts and topics in organizational behavior (OB) and management. The course focuses on OB at three levels: individual, interpersonal, and collective. The course will start at the individual level, covering decision-making, motivation, and personality. The course will then turn to the interpersonal level, covering power, influence, and negotiations. Finally, the course will move up to the collective level, covering leadership and organizational context.

LEARNING OUTCOMES

After completing the course, the students will be able to

- Understand the knowledge of Organizational Behavior (OB) concepts so that thay can understand and analyze how organizations and the people within them work.

- Apply OB concepts to real-world problems faced by managers

- Develop the leadership and management potential. Effective leaders often manage people and information to accomplish organizational goals under conditions not entirely in their control. Leaders must successfully be able to diagnose problems, communicate clearly, make effective decisions, motivate and influence others, manage diversity, and drive organizational change.

COURSE CONTENTS

CHAPTER 1: OVERVIEW OF ORGANIZATIONAL BEHAVIOR

1.1 Concept of Organizational Behavior

1.2 Roles of of Organizational Behavior

1.3 Management and Organizational Behavior

1.4 Functions of Organizational Behavior

1.5 Challenges and Opportunities for Organizational Behavior

1.6 Disciplines that Contribute to Organizational Behavior

CHAPTER 2: PERSONAL INVENTORY

2.1   Diversities

2.2   Biographical Characteristics

2.3 Ability

2.4   Implications for Managers

CHAPTER 3: ATTITUDES AND JOB SATISFACTIONS

3.1. Perceptions

3.2. Values

3.3. Attitudes

3.4. Job Satisfactions

CHAPTER 4: MOTIVATIONS

4.1 Concept and Roles of Motivations

4.2 Motivation Theories

4.3 Applications of Motivations

CHAPTER 5: FOUNDATIONS OF GROUP BEHAVIOR

5.1 Defining and Classifying Group

5.2 Stages of Group Development

5.3 Different between Groups and Teams

5.4 Creating Effective Teams

5.5 Group Decision Techniques

CHAPTER 6: COMMUNICATION

6.1 Concepts and Functions of Communication

6.2 Communication Process

6.3. Types of Communication

6.4 Modes of Communication

6.5 Barriers to Effective Communication

CHAPTER 7: LEADERSHIP AND POWER

7.1 Leadership Concepts

7.2 Human Resource in Organizations

7.3 Leadership Styles

7.4 Base of Power

7.5 Conflict in Organizations

CHAPTER 8: ORGANIZATIONAL CULTURE

8.1 Organizational Culture Concepts

8.2 Components of Organizational Culture

8.3. Influencing an Organizational Culture

8.4 Creating and Sustaining Culture

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Mid-term Exam: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Christopher P. Neck, Jeffery D. Houghton, Emma L. Murray, (2016). *Organizational Behavior: A Critical-Thinking Approach,* SAGE, ISBN: 978-1506314402

Stephen P. Robbins and Timothy A. Judge, (2018). *Organizational Behavior, Student Value Edition 18th Edition*, Pearson, ISBN: 978-0134729664

EM3211   Principles of Marketing

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

As consumers, we each experience what marketing case studies could be everyday. We are exposed to thousands of advertising messages. This course is designed to serve as an introduction to the basic principles of marketing, practices, and the application of these practices. Subjects covered include customers, market research and target markets, the environmental factors which influence consumer and organizational decision-making processes, marketing mix components, feasibility outline a marketing plan and interpret marketing research data to forecast industry trends and meet customer demands. Most of the class time will be spent in lecture discussing the various solutions to marketing cases by the application of marketing principles.

LEARNING OUTCOMES

After this course, learners will be able to:
- Define the term marketing and explain its role and importance in an individual firm and the overall economy.
- Understand the importance of strategic marketing and know the basic outline for a marketing plan:
    - Analyze the external environment to identify opportunities or challenges to a business.
    - Analyze customer behavior (consumer and business)
    - Identify and classify marketing segments and targets, demonstrating the use of marketing research techniques.
- Describe the elements of the marketing mix (4Ps of marketing):
    - Product: Explain the use of product mix and life cycle in a marketing strategy
    - Pricing: List and explain a variety of pricing objectives.
    - Place / Marketing Channels: Identify different marketing channels and develop distribution strategies.
    - Promotion / Advertising: Describe the role of advertising and public relations in marketing a product or service.
- Create and present the components of a working marketing plan

COURSE CONTENTS

CHAPTER 1: OVERVIEW OF MARKETING

1.1 Marketing as a Driver of Business

1.2 Marketing as a Management Philosophy

1.3 Marketing's Concepts

1.4 Role of Marketing

CHAPTER 2: MARKETING INFORMATION SYSTEM AND MARKET RESEARCH

2.1 Information and Marketing Decision

2.2 Collecting Internal Marketing Data

2.3 Collecting Environment Marketing Data

2.4 Market Research

CHAPTER 3: MARKETING ENVIRONMENT

3.1 Marketing Macro-environment

3.2 Marketing Micro-environment

CHAPTER 4: Customer Behavior

4.1 Roles of Customer Behavior Study

4.2 Individual Customer Behavior

4.3 Manufacturing Enterprise's Purchasing Behavior

4.4 Not-for-profit Organization's Purchasing Behavior

CHAPTER 5: MARKET SEGMENTATION, TARGETING, AND POSITIONING

5.1 Overview

5.2 Segmentation

5.3 Targeting

5.4 Positioning

5.5 Differentiation

CHAPTER 6: PRODUCT DECISIONS (P1)

6.1 Introduction to P1

6.2 Product Development

6.3 Product Brand

6.4 Packaging Decision

6.5 Service Decision

6.6 Product List

6.7 Product Life-cycle

CHAPTER 7: PRICING (P2)

7.1 Introduction to P2

7.2 Pricing Methods

7.3 Pricing Policies

7.4 Pricing Mobility

CHAPTER 8: DISTRIBUTION (P3)

8.1 Introduction to P3

8.2 Distribution Design

8.3 Middleman

8.4 Wholesaler and Retailor

8.5 Logistics in Distribution

CHAPTER 9: MARKETING COMMUNICATION (P4)

9.1 Introduction to P4

9.2 Integrated Marketing Communication (IMC)

9.3 Advertising

9.4 Promotion

9.5 Public Relationship (PR)

9.6 Direct Marketing

9.7 Personal Selling

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Group assignment: 30%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Philip Kotler & Gary Amstrong (2017), *Principles of Marketing,* 17th edition, Pearson Publisher. ISBN-13: 978-0134492513.

References

- Nguyễn Tiến Dũng (2012), *Giáo trình Marketing căn bản,* NXB Giáo dục Việt Nam.
- Trần Minh Đạo, chủ biên (2013), *Giáo trình Marketing căn bản,* NXB ĐH Kinh tế Quốc dân.
- William D. Perreault Jr., Joseph P. Cannon, E. Jerome McCarthy (2013), *Basic Marketing: A Marketing Strategy Planning Approach, 19th edition,* McGraw-Hill Education. ISBN-13: 978-0078028984.

EM3222 Business Legal Environment

Credit Hours: 3

Previous Courses: EM1170 (Introduction to the Legal Environment)

COURSE DESCRIPTION

The purpose of this course is to provide the student with a basic understanding of the legal system and its effect on our day-to-day activities. The primary emphasis will be in the area of business and business-related transactions. However, since individual rights and duties are the foundation of the rule of law, consideration will also be given to the impact of the law in other areas as well. The course will be taught in primarily a lecture/class discussion format.

LEARNING OUTCOMES

After this course, students will be able to: (1) have general understanding of state and law, specially business law; (2) distinguish types of enterprise, know the process of establishing an enterprise; (3) understand the rules of contract law, know how to draft common contracts in business; (4) firmly grasp regulations on competition law; (5) know how to resolve business disputes, the advantages and disadvantages of each mode of settlement in order to choose the most effective way to resolve disputes; and (6) understand how businesses can withdraw from the marketplace through bankruptcy or dissolution.

COURSE CONTENTS

CHAPTER 1: OVERVIEW OF BUSINESS LAW

1.1 Concepts and Roles of Business Law

1.2 Business Legal Framework in Vietnam

1.3 Sources of Business Law

1.4 Chủ thể kinh doanh – Thương nhân

1.5 Trách nhiệm hữu hạn và trách nhiệm vô hạn

CHAPTER 2: TYPES OF ORGANIZATION

2.1. Private and public sector

2.2. Starting a business

2.3. Profit-based organisations - legal structure

2.4. Incorporated organisations

2.5. Other types of private sector organisations

2.6. Non-profit organisations

CHAPTER 3: CONTRACT LAW IN BUSINESS ENVIRONMENT

3.1. Overview and Formation of Contracts

3.2. Sources of Contract Law

3.3. Contracts Enforceability and Performance

3.4. Contracts of Sales

3.5. Torts and Products

Chapter 4: COMPETITION LAW

4.1 Definition, characteristics, role of competition

4.2 Overview of the competition law.

4.3 Law against unfair competition

4.4 The law controls competition restriction behavior.

Chapter 5: BUSINESS DISPUTE RESOLUTION

5.1 Concept, classifying disputes in business

5.2 Dispute resolution and requirements for business dispute resolution

5.3 Business dispute resolution methods

Chapter 6. LAW ON BANKRUPTCY OF BUSINESSES AND COOPERATIVES

6.1 Overview of bankruptcy of enterprises and cooperatives

6.2 Law on settlement of bankruptcy of enterprises and cooperatives

6.3 Legal consequences of bankruptcy settlement

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Mid-term Exam: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Vũ Quang (2012). *Luật Kinh doanh.* NXB CTQG Hà Nội
- Phạm Duy Nghĩa (2011). *Luật Kinh tế.* NXB Công An Nhân Dân Hà Nội
- Trường Đại Học Luật HN. (2009). *Luật Thương Mại, 2 tập.* NXB CAND Hà Nội
- Phạm Duy Nghĩa (2006). *Luật Doanh Nghiệp: Tình huống- Phân tích – Bình luận.* NXB ĐHQGHN
- Lê Minh Toàn, Vũ Quang và những người khác (2004). *Luật Kinh tế Việt Nam.* NXB CTQG.

References

- Cross, Frank B. and Miller, Roger LeRoy, (2014). *The Legal Environment of Business: Text and Cases* 9th Edition, Cengage Learning, ISBN: 978-1285428949
- Henry R. Cheeseman, (2015). *Legal Environment of Business: Online Commerce, Ethics, and Global Issues* (8th Edition)
- O. Lee Reed, Marisa Pagnattaro, Daniel Cahoy, Peter Shedd, Jere Morehead, (). *The Legal and Regulatory Environment of Business* 16th Edition, Mc-Graw Hill Education, ISBN: 978-0073524993

APPLIED STATISTICS FOR BUSINESS AND ECONOMICS

EM3230   Applied Statitics for Business and Economics

Credit Hours: 3

Previous Courses: MI2020 (Probability and Statistics)

COURSE DESCRIPTION

This course introduces students to basic statistical concepts and methods that are widely used in economics, finance, accountancy, marketing and, more generally, business. Emphasis is placed on applying statistical methods to draw inferences from sample data as an aid to informed decision-making. Course topics include: descriptive statistics, probability distributions, point and interval estimation of parameters, hypothesis testing, and regression models. Students will learn to solve statistical problems in an Excel spreadsheet environment.

LEARNING OUTCOMES

After this course, learners will be able to:

- explain the importance of statistics to business;

- explain the differences between quantitative and qualitative data, and identify examples of each type of data;

- define and apply the following terms: data sets, mean, median, mode, standard deviation, and variance;

- summarize and interpret data in a tabular format using frequency distributions and visually with histograms;

- define and apply the concept of a probability distribution, and explain the properties of different distributions;

- differentiate between discrete and continuous probability distributions;

- define and apply the concept of a random variable, and differentiate the population from a sample;

- describe and identify the different sampling methods, including simple random, systematic, stratified random, cluster, convenience, panel, and quota sampling, and identify examples of each;

- use a point estimator from a sample to estimate the entire population;

- estimate intervals over which the population parameter could exist using sample data;

- apply hypothesis testing for testing population parameters using one or two samples;

- identify the dependent and independent variables in the linear regression model;

- plot a regression line, and explain how the regression coefficient shapes that line; and

- work with statistical data in a spreadsheet environment.

COURSE CONTENTS

(1) Data and Statistics

(2) Descriptive Statistics: Tabular and Graphical Presentations

(3) Descriptive Statistics: Numerical Measures

(4) Introduction to Probability

(5) Discrete Probability Distributions

(6) Continuous Probability Distributions

(7) Sampling and Sampling Distributions

(8) Interval Estimation

(9) Hypothesis Tests

(10) Inferences about Population Means

(11) Inferences about Population Variances

(12) Comparing Multiple Proportions, Test of Independence and Goodness of Fit

(13) Experimental Design and Analysis of Variance (ANOVA)

(14) Simple Linear Regression

(15) Multiple Regression

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Quiz:	10%
Assignments:	30%
Final exam:	60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

Anderson, David R., Dennis J. Sweeney, Thomas A. Williams, Jeffrey D. Camm, James J. Cochran (2014), Statistics for Business and Economics 12th, South-Western Cengage Learning, USA.

References

Newbold, Paul, William L. Carlson & Betty M. Thorne (2013), Statistics for Business and Economics, 8th edition, Pearson Education, USA.

BUSINESS ETHICS

EM3301   Business Ethics

Credit Hours: 2

Previous Courses: none

COURSE DESCRIPTION

The course is a basic introduction to most prominent concepts, problems, discussions and theories in the field of business ethics. Although this class is primarily theoretical, attention will be paid to practical moral problems related to business. Students will be expected to engage in independent moral reasoning. Students are encouraged to bring their own experiences and ideas to bear on issues discussed in class. Three main purposes of the course include: (1) To provide students with theoretical knowledge concerning the concepts, problems and theories that are discussed in the relevant literature; (2) To help students develop identify ethical problems in the field of business ethics, and reflect on the source and nature of the problems; (3) To help them apply the relevant concepts and theories to the problems identified in order to obtain an evaluation of the problem and a solution.

LEARNING OUTCOMES

On successful completion of this course, student should be able to:

- Understand the basic concepts and argue the importance of ethics in business and business communication;
- Understand Kantian approach to business ethics, utilitarianism and business ethics, ethical relativism and how it affects business ethics;
- Analyze varieties of corporate social responsibility CSR, philosophical grounding for constructing CSR as well as universal norms;
- Define corporate culture and the role of corporate culture in ethical decision making.
- Identify stakeholders, social responsibility and ethics;
- Understand civil liberties and the workplace-related issues such as discipline and discharge, labor unions and working conditions;
- Know about protecting the consumers from deception and unfairness business activities;
- Have perspectives on environmental protection and achieving environmental goals of a business;
- Discuss global business practices: consumerism, human rights, healthcare and sustainable developments;

COURSE CONTENTS

Chapter 1: BUSINESS ETHICS AND BUSINESS ETHICS ISSUES

1.1. Perspectives on morality

1.2. Business ethics

1.3. The emergence of ethical issues in business

Chapter 2: THE PHILOSOPHY OF BUSINESS ETHICS AND CORPORATE SOCIAL RESPONSIBILITY

2.1. The moral philosophy is primarily in business

2.2 Corporate social responsibility

2.3 Business ethics and corporate social responsibility

Chapter 3: METHODS AND TOOLS FOR ANALYZING ETHICAL BEHAVIOR IN BUSINESS

3.1. Making decisions on ethical issues in business

3.2. Factors affecting business ethics

3.3. Behavior analysis: Algorithm, ethics and problem analysis methods - solutions

Chapter 4: ASPECTS OF BUSINESS ETHICS IN THE OPERATION OF A BUSINESS

4.1. Human resource management activities

4.2. Marketing activities

4.3. Financial activities

4.4. Sales activities

Chapter 5: THE RELATIONSHIP BETWEEN BUSINESS ETHICS AND CORPORATE CULTURE

5.1. Types of corporate culture

5.2. Creating corporate cultural identity

5.3. Complete the organizational system

5.4. Develop ethical orientation management style

5.5. Establish a system to implement business ethics and corporate culture

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Class Participation: 10%

Mid-term Exam: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- William H. Shaw (2017). *Business Ethics: A Textbook with Cases.* 9th Edition. Wadsworth/Cengage Publishers. ISBN 978-1-305-58208-8

References

- Bowie, N. E. (2013). *Business ethics in the 21st Century*. Springer.

- Collins, D. (2009). *Essentials of business ethics: Creating an organization of high integrity and superior performance*. John Wiley & Sons.

- Jennings, M. M (2008). Business Ethics - Case Studies and Selected Readings. 6th Edition. South-Western College - West.

OPERATIONS MANAGEMENT

EM3417   Operations Management

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course is aimed at providing students the subject of production and operations management (POM) and discusses its importance to the overall strategy and competitiveness of a firm. In addition, this course focuses on specific tools used to manage and enhance a firm's operations and production, such as facility layout, product design, aggregate planning, inventory management, and forecasting.

LEARNING OUTCOMES

The objectives of the course are as follows:

- To increase understanding of the problems and opportunities faced by the operations manager in manufacturing and service operations.
- To develop an ability to apply operations management concepts in a variety of settings.
- To develop an understanding of operations management techniques in order to be able to evaluate recommendations made by technical specialist in the field

COURSE CONTENTS

CHAPTER 1: OVERVIEW OF PRODUCTION AND MANAGEMENT PRODUCTION

1.1   Concept of production

1.2   Classification of Production

1.3   Content and objectives of production management

1.4   The relationship between production management and other management functions in the enterprise

1.5. Production system structure

1.6. Manufacturing strategy

1.7   Indicators to evaluate production efficiency

CHAPTER 2: CAPACITY MANAGEMENT

 Concept of capacity

 Classification of capacity

 Indicators to evaluate the efficiency of capacity utilization

 Strategic capacity planning

CHAPTER 3: PRODUCTION CYCLE

3.1. Concept of production cycle

3.2. Calculate the production cycle for a simple production process

3.3. Calculate the production cycle for complex production processes

3.4. Solutions to reduce production cycles for production processes

CHAPTER 4: ORGANIZATION OF PRODUCTION LINE

4.1. Concept of production line

4.2. Classification of production lines

4.3. Organize continuous production lines

4.4. Organize interrupted production lines

4.5. The direction to ensure the efficiency for the operation of the production line

CHAPTER 5: PRODUCTION PLANNING

5.1. Concept and importance of planning in production management

5.2. General process of production planning

5.3. Integrated plan (medium-term production plan)

5.4. Short-term production plan and operational plan

CHAPTER 6: PRODUCTION PLANNING BY PROJECT

6.1. Concept of the project

6.2. Planning methods for production by project

6.3. Reduce project cycle time (PERT / COST)

6.4. Adjust plan when resources are limited

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

      Class Participation: 10%

      Assignments: 30%

      Final exam: 60%

More information regarding assignment and exam will be provided in class.

Important note

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and audit purposes. The findings may be used to inform changes aimed at improving the quality of training program. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

TEXTBOOK & REFERENCES

Textbook

- Jacobs, F.R., & Chase, R.B., (2014). *Operations and supply management* (14th ed.). New York: McGraw-Hill/Irwin. ISBN: 978-0-07-802402-3

References

- Nguyen Van Nghien. (2009). Production and operation management. Vietnam Education publishing house.

- Truong Duc Luc & Nguyen Dinh Trung. (2010). Operation Administration Curriculum. Publishing House of the National Economics University

- William J. Stevenson. (2011). Production/ Operation Management. McGraw-Hill Companies.

PRINCIPLES OF ACCOUNTING

EM3500   Principles of Accounting

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

All businesses must keep adequate records to show the progress the business has achieved. This course is designed to introduce accounting concepts and financial reports. The students are provided fundamental knowledge of how accounting measures, records, and reports economic activities for corporations in compliance with generally accepted accounting principles. In addition, the course also focuses on how decision makers analyze, interpret, and use accounting information.

LEARNING OUTCOMES

After this course, learners will be able to:

- Apply the fundamental concepts and assumptions that underlie financial accounting principles

- Demonstrate an understanding of the steps of the accounting cycle and of the basic elements of the four financial statements

- Identify, record, and report transactions in accordance with Generally Accepted Accounting Principles

- Understand what the basic financial reports communicate to readers and how basic financial reports are prepared and used in business

COURSE CONTENTS

Chapter 1. ACCOUNTING IN ACTION

1.1. Activities and users associated with accounting

1.2 Building blocks of accounting: ethics, principles, and assumptions

1.3 State the accounting equation, and define its components

1.4 Analyze the effects of business transactions on the accounting equation

1.5 Financial statements and preparation

Chapter 2. RECORDING PROCESS

2.1. Accounts, debits, and credits and business transactions recording

2.2. Journal

2.3. ledger and posting

2.4 A trial balance

Chapter 3. ADJUSTING THE ACCOUNTS

10.2. Accounting for the issuance of common and preferred stock

10.3. Accounting for treasury stock

10.4. Prepare a stockholders' equity section

Chapter 11. CORPORATIONS: DIVIDENDS, RETAINED EARNINGS, AND INCOME REPORTING

11.1. Accounting for cash dividends

11.2. Accounting for stock dividends and splits

11.3. Prepare and analyze a comprehensive stockholders' equity section

11.4. Describe the form and content of corporation income statements

Chapter 12. LONG-TERM LIABILITIES

12.1. Characteristics of bonds

12.2. Accounting for bond transactions

12.3. Accounting for long-term notes payable

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Mid-term Exam: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Jacobs, F.R., & Chase, R.B., (2014). *Operations and supply management* (14th ed.). New York: McGraw-Hill/Irwin. ISBN: 978-0-07-802402-3

References

- CPA Australia, 2012, Accounting concepts and Principles, BPP Learning Media Ltd, ISBN 978-1-445-38009-4

EM3519   Corporate Finance

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course is designed to introduce financial concepts and financial management in corporations. The students are provided fundamental knowledge of corporate decision making process related to financial fields such as decisions on (1) where to invest the resources or funds that the business has raised (the investment decisions), (2) where and how to raise funds to finance these investments (the financing decisions) and (3) how much and in what form to return funds back to the owners (the dividend decisions). In addition, the course also focuses on how to assess financial performance of the firms and relationship between financial decisions, financial performance and firm value.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understand the basic financial principles and concepts

- Understand the techniques of investment analysis, portfolio management and be able to apply them to solve problems and make decisions on investment

- Understand the techniques of fund raising and be able to utilize financing sources and make decisions on financing

- Understand the techniques of financial distribution and be able to analyze and make decisions on dividend distribution.

- Understand overall context of corporate finance and interrelations of financial decisions

- Be able to analyze impacts of financial decisions on financial performance of the firms

COURSE CONTENTS

Chapter 1: THE FOUNDATIONS OF CORPORATE FINANCE

1.1. The firm: structural setup

1.2. First principles

1.3. Corporate financial decisions, firm value, and equity value

1.4. Fundamental propositions about corporate finance

Chapter 2: THE BASICS OF RISK

2.1. Exceptive in analyzing risk

2.2. Equity risk and expected returns, cost of equity

2.3. The risk in borrowing: default risk and the cost of debt

Chapter 3: MEASURING RETURN ON INVESTMENTS

3.1. What is a project?

3.2. Hurdle rates for firms versus hurdle rates for projects

3.3. Measuring returns: the choices

3.4. Investment decision rules

3.5. Probabilistic approaches to investment analysis

Chapter 4: CAPITAL STRUCTURE AND OPTIMAL CAPITAL STRUCTURE

4.1. The choices: types of financing

4.2. Financing behavior

4.3. The process of raising capital

4.4. The trade-off of debt

4.5. Cost of capital approach

4.6. Selecting the optimal debt ratio

4.7. Choosing the right financing instruments

Chapter 5: THE DETERMINANTS OF DIVIDEND POLICY

5.1. Background on dividend policy

5.2. Managerial interests and dividend policy

5.3. Cash returned to stockholders

5.4. A cash flow approach to analyzing dividend policy

5.5. A comparable-firm approach to analyzing dividend policy

5.6. Managing changes in dividend policy

Chapter 6: CORPORATE FINANCE AND VALUATION

6.1. Discounted cash flow valuation

6.2. Relative valuation

6.3. Reconciling different valuations

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Mid-term Exam: 20%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK& REFERENCES

Textbook

- Aswath Damodaran, (2014). *Applied Corporate Finance, 4th Edition*, John Wiley & Sons Inc., ISBN: 978-1-118-80893-1

References

- Ross, Westerfield and Jordan, (2015). *Fundamentals of Corporate Finance* − 11th Edition, McGraw_Hill, ISBN 0-07-338239-5.

EM3810   Corporate Performance Management

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course provides training and implementation on the concepts and techniques relating to Performance Management, and the benefits these will bring to an organisation. The course tackles two key questions at the intersection of strategy analytics: (1) How can we use data to make better strategy decisions? (2) How can we make sure the conclusions we can draw from available data answer the question? To answer the questions, the course will introduce a framework for spotting seemingly sophisticated analytics that are ultimately misleading about underlying causes. Students will learn data-driven thinking through hands-on experience with performing advanced regression analyses and interpreting their results.

LEARNING OUTCOMES

After this course, students will be able to:

- Understand the relevance of performance management for strategic decision-making

- Develop skill to interpret, evaluate and recommend strategies for decision making to have competitive advantage

- Apply Information Technology (IT) – based and Econometric tools for performance management

- Evaluate the risks associated with strategies of an organization

COURSE CONTENTS

Application of IT and Econometric tools in Performance Management

CHAPTER 1: OVERVIEW OF CORPORATE PERFORMANCE MANAGEMENT

1.1. Definition and Purpose of Performance Management

1.2. Conceptual Framework of Performance Management

1.3. Performance Management Methodologies

1.4. Performance Evaluation Parameters

1.5. Management Control and Operational Control

CHAPTER 2. MEASURING SBU LEVEL PERFORMANCE

2.1. Financial Performance Indicators (FPIs)

2.2. Non-financial Performance Indicators (NFPIs) for Profitability

2.3. Performance Evaluation Parameters for Capital Expenditure Control

2.4. Performance Evaluation Parameters for Retail

2.5. Performance Evaluation Parameters for Quality Control

2.6. Performance Evaluation Parameters for Human Resource Management

CHAPTER 3. LINKING PERFORMANCE MANAGEMENT TO STRATEGIC PLANNING

3.1. Strategic Reasoning and Decision Analysis

3.2. Vision and Mission Statements

3.3. PESTEL Analysis

3.4. SWOT Analysis

3.5. Goals and Objectives

3.6. Long and Short Run Performance Measurement

3.7. The Balanced Scorecard

CHAPTER 4. BUILDING A STRATEGY-CENTRIC CULTURE

4.1. Economic efficiency of the firm – impact analysis on performance

4.2. Monitoring Performance

4.3. Using ICT Techniques to Manage Performance

4.4. Audit Function as a Performance Management Tool

CHAPTER 5. PERFORMANCE EVALUATION AND CORPORATE FAILURE

5.1. Risk and Uncertainty

5.2. Enterprise Risk Management

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Assignments: 30%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK& REFERENCES

Textbook

- Aswath Damodaran, (2014). *Applied Corporate Finance, 4th Edition*, John Wiley & Sons Inc., ISBN: 978-1-118-80893-1

References

- Jack Alexander, (2018). *Financial Planning & Analysis and Performance*

Management (Wiley Finance) 1st Edition. Wiley, ISBN: 978-1119491484

- Mike Bourne and Pippa Bourne, (2011). *Handbook of Corporate Performance Management.* Wiley, ISBN: 978-0470669365

EM3820   Prescriptive Business Analytics

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

Analytics is the process of transforming data into insight for making better decisions (INFORMS). There are three primary types of analytics: "Descriptive," which examines historical data and identifies and reports historical patterns and trends; "Predictive," which predicts outcomes and future trends from existing data to help discover new relationships; "Prescriptive," which formulates and evaluates new ways for a business to operate. This course focuses on the science of better, i.e., applying analytical tools to make better decisions and improve the efficiency of a system. Topics to be covered include linear programming, integer programming, network models, time series forecasting, queuing theory, decision analysis, and project management. The primary goal is to acquaint students in business and relevant disciplines with useful concepts, theories, and solution methods in predictive analytics. Much emphasis will be placed on practical applications of the models discussed in class.

LEARNING OUTCOMES

After this course, learners will be able to:

- Use Analytic Solver Platform proficiently;

- Formulate real-world problems as analytical or optimization models;

- Identify appropriate program(s) in Analytic Solver Platform for solving models formulated;

- Apply programs identified to solve problems manually or by computer;

- Interpret results obtained and implement them in practice.

COURSE CONTENTS

Chapter 1. INTRODUCTION TO PRESCRIPTIVE BUSINESS ANALYTICS

1.1. Overview of Prescriptive Business Analytics

1.2. Prescriptive Business Analytics Approach to Problem Solving

1.3. Modeling Techniques

1.4. Computer Solution

Chapter 2. LINEAR PROGRAMMING

2.1. Model Formulation

2.2. Graphical Solutions of Linear Programming Models

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Class participations: 10%

Assignments: 15%

Group Projects: 15%

Final exam: 60%

More information regarding the requirements and evaluation criteria for the individual assignments will be provided in a separate handout.

EM4218   Management Information Systems

Credit Hours: 3

Previous Courses: IT1130 (Introduction to Information Technology)

COURSE DESCRIPTION

This course aims to equip students with basic concepts relating to building and adminstrating the management information system, methods to analyze factors and develop decision support system for enterprises.

LEARNING OUTCOMES

After this course, students will be able to:

- Design and manage organizations with the help of information technology;

- Identify and access the latest information technology;

- Manage changes in the organization due to changes in information technology;

- Identify and master market opportunities driven by information technology to develop existing organizations and create new ones.

COURSE CONTENTS

CHAPTER 1: OVERVIEW OF THE MANAGEMENT INFORMATION SYSTEM

1.1. Data, Information, and Information Systems

1.2. Components of Management Information System

1.3. Types of Management Information Systems

1.4. Roles of Management Information System

1.5. Global Business and Information Systems

CHAPTER 2: COMPONENTS OF THE INFORMATION SYSTEM: HARDWARE, SOFTWARE, COMMUNICATION SYSTEMS

2.1. Hardware Platforms

2.2. Software Platforms

2.3. Communication Systems

2.4. Emerging Technologies

CHAPTER 3: COMPONENTS OF THE INFORMATION SYSTEM: DATABASE

3.1. Database Management Systems

3.2. Database Models

3.3. Data Warehouse

3.4. Tools and Technologies for Accessing Information from Database

3.5. Information Policies, Data Administration, and Data Quality Assurance

CHAPTER 4: BUILDING AND DEVELOPING INFORMATION SYSTEMS

4.1. Management Information System Development Cycles

4.2. Methodologies for Modeling and Designing Systems

4.3. New Approaches for Developing Information Systems

4.4. Managing Information System Project

CHAPTER 5: DECISION SUPPORT SYSTEM

5.1. Decision Support Systems

5.2. Expert Systems

5.3. Group Decision Support Systems

5.4. Geographic Information Systems

5.5. Business Intelligence and Knowledge Management

CHAPTER 6: INTEGRATED INFORMATION SYSTEM

6.1. Enterprise Applications

6.2. Interorganizational Systems

6.3. ERP, SCM, and CRM

6.4. E-commerce

CHAPTER 7: SECURING INFORMATION SYSTEM

7.1. Business Values of Security and Control

7.2. Risks to Information Systems

7.3. Controls

7.4. Security Measures

7.5. Securities and Disaster Recovery

CHAPTER 8: MANAGEMENT OF INFORMATION SYSTEM APPLICATIONS IN CHANGING BUSINESS ENVIRONMENTS

8.1. Managing Knowledge

8.2. Enhancing Decision Making

8.3. Managing Global Systems

8.4. Creating and Maintaining Strategic Information Systems

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Assignments: 30%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Pham Thi Thanh Hong (2012). *Hệ thống thông tin quản lý.* Bachkhoa Publishing House

- Ken J. Sousa and Effy Oz, (2014). *Management Information Systems* (*7th Edition*), Cengage Learning, ISBN: 978-1285186139

References

- Kenneth C. Laudon and Jane P. Laudon, (2015). *Management Information Systems: Managing the Digital Firm (14th Edition).* Pearson, ISBN: 978-0133898163

- Keri E. Pearlson, Carol S. Saunders, and Dennis F. Galletta, (2016). *Managing and Using Information Systems, Binder Ready Version: A Strategic Approach (6th Edition).* Wiley, ISBN: 978-1119244288

EM4315   Marketing Research

Credit Hours: 3

Previous Courses: EM3211 (Principles of Marketing), EM3230 (Applied Statistics)

COURSE DESCRIPTION

The task of marketing is to facilitate exchanges that satisfy both consumer needs and organizational objectives. In today's complex market environment, the success of marketing activities is affected by a number of environmental factors and this reality creates uncertainty and difficulty for marketing decision makers. As a result, there is an urgent need for organizations to obtain quality information to assist them in designing the optimal marketing strategy, which can be achieved through marketing research.

Marketing research is the systematic process of planning, collection and analysis of data to improve marketing decisions within an organization. This course provides you with an overview of marketing research process and methods. The chief objective is to acquaint you with the skills and techniques required to conduct solid marketing research. You will gain an understanding of marketing research through this course as well as develop the necessary skills such as designing questionnaires, collecting primary and secondary data, analyzing data and writing a research report.

LEARNING OUTCOMES

After this course, learners will be able to:

- Write a management decision problem and a marketing research problem.
- Collect secondary data to refine a marketing research problem.
- Plan and conduct a focus groups, survey to collect promary data.
- Recommend the best sampling technique for different situations.
- Be able to make effective use of the SPSS statistical software package to conduct statistical analyses and interpret the relevant output.
- Write a marketing research report.

COURSE CONTENTS

Chapter 1: INTRODUCTION TO MARKETING RESEARCH AND THE RESEARCH PROCESS

1.1. Marketing Research Definition

1.2. Applied and Basic Marketing Research

1.3. Market Research and Strategic Management Orientation

1.4. Planning and Implementing Marketing Mix

Chapter 2: MARKETING RESEARCH PROCESS

2.1. Decision Making and Marketing Research

2.2 Types of Marketing Research

2.3. Stages in the Research Process

2.4. The Research Progress Strategy

Chapter 3: QUALITATIVE RESEARCH TOOLS

3.1. Describing Qualitative Research

3.2. Qualitative vs. Quantitative Research

3.3. Research Design

3.4. Qualitative Research Orientations

3.5. Common Techniques Used in Qualitative Research

Chapter 4: SECONDARY AND SYNDICATED DATA SOURCES

4.1. Typical Objectives for Secondary-Data Research Designs

4.2. Sources of Internal Secondary-Data

4.3. Single-Source and Global Research in the Big Data Era

Chapter 5: SURVEY RESEARCH

5.1. Types of Information Gathered Using Survey

5.2. Conduct Survey Interview

5.3. Survey Using Self-Administrated Questionnaires

5.4. Pretesting Survey Instruments

Chapter 6: DATA ANALYSIS AND REPORTING

6.1. The Nature of Descriptive Analysis

6.2. Coding Qualitative Responses

6.3. Data Transformation

6.4. Hypothesis Testing

6.5. Testing for Differences between Groups

6.6. Communicating Research Results

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Assignments: 40%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Barry J. Babin and William G. Zikmund, (2015). *Essentials of Marketing Research (6th Edition).* South-Western College Pub, ISBN: 978-1305263475

References

- Alvin C. Burns, Ann Veeck, and Ronald F. Bush, (2016). *Marketing Research (8th Edition)*, Pearson, ISBN: 978-0134167404

- Carl McDaniel Jr. and Roger Gates, (2014). *Marketing Research 10th Edition*. Wiley, ISBN: 978-1118808849

MARKETING ANALYTICS

EM4334   Marketing Analytics

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

In the age of Big Data, marketing analytics increasingly plays a fundamental role in business decision making. Marketing analytics enhance the quality of business decision making by helping organizations better understand customers and competitors. The unprecedented growth and availability of customer data, both structured and unstructured, has engendered many challenges that include data acquisition, management, visualization, and analysis.

Marketing Analytics is an application of data science to marketing decision problems. The course explores customer data analysis techniques and their theoretical foundations to help students acquire analytic skills that can be applied to real world marketing problems.

LEARNING OUTCOMES

After this course, learners will be able to:
- Gain an overview of marketing analytics
- Use advanced analytical tools to analyze a variety of data collected.
- Translate the output from analyses into managerial insights that is understandable to marketing managers.

COURSE CONTENTS

(1) Introduction to marketing analytics, predictive analytics, and Big Data

(2) Statistical Foundations of Marketing and basics of a statistical software package: How to import, clean, and manipulate data for analysis

(3) Segmentation, targeting and positioning analysis

(4) Customer choice model and Customer lifetime value (CLV)

(5) Product analytics

(6) Pricing analytics and optimization

(7) Distribution Analytics and optimization

(8) Promotion analytics

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Assignments: 30%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook
- Sorger, S. (2013). *Marketing Analytics: Strategic Models and Metrics*. Admiral Press.
- Winston, W. L. (2014). *Marketing analytics: Data-driven techniques with Microsoft Excel*. John Wiley & Sons.

References
- Palmatier, R. W., & Sridhar, S. (2017). *Marketing strategy: Based on first principles and data analytics*. Macmillan International Higher Education.
- Chapman, C., & Feit, E. M. (2015). *R for marketing research and analytics*. New York, NY: Springer.

EM4413   Human Resource Management

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

The course helps students understand the role of human resource management in production and business in order to improve the operational efficiency of enterprises, describe and apply human resource planning process and HR arranging techniques in different enterprises, work performance evaluation methods assessing work performance, applying rules in building compensation systems in various organizations, applying techniques in solve problems arising in labor relations, able to evaluate and propose improvements to improve the efficiency of human resource management at enterprises. The course includes (1) Introduction to Human Resource Management; (2) Human resources planning and human resources arrangement; (3) Training and development; (4) Work performance evaluation; (5) Compensation; (6) Labor relations; (7) Current issues and trends of Human Resource Management

LEARNING OUTCOMES

After this course, learners will be able to:

- Evaluate balance sheet, income statement, and statement of cash flows relationships.
- Build simple models for financial statement analysis and forecasting.
- Create working capital, depreciation and capital expenditure schedules.
- Perform sensitivity analysis to match expected financial performance.
- Utilize strategies for creating a reliable financial model.
- Build a quick discounted cash flow (DCF) analysis and Firm valuation

COURSE CONTENTS

Chapter 1: Introduction to Human Resource Management

1.1. Concept, role and meaning of Human Resource Management

1.2. The formation and development process of human resource management

1.3. Main activities of Human Resource Management

1.4. The role of the functional division to Human Resource

1.5. Operation environment of Human Resource Management

Chapter 2: Human resource planning and arrangement

2.1. Job design and analysis

2.2. HR planning

2.3. HR recruitment and selection of the organization

Chapter 3: Training and Development

3.1. Career orientation and development for new person

3.2. Human resources training and development

      3.2.1. The purpose of training and development activities

      3.2.2. The relationship between training, development and careers

      3.2.3. Methods of training and development

      3.2.4. Identify training and development needs

      3.2.5. Organize the implementation of training and development activities

      3.2.6. Evaluate the effectiveness of training activities

Chapter 4: Work performance evaluation

4.1. The concept, purpose and importance of the work performance evaluation

4.2. Implementation content and process

4.3. Work performance evaluation methods

4.4. Evaluation activities development and implementation

Chapter 5: Remuneration system

5.1. Basis for building remuneration system

      5.1.1. Concepts and objectives of remuneration system

      5.1.2. Importance of remuneration system

      5.1.3. Factors affecting the remuneration system

      5.1.4. Criteria for building a remuneration system

5.2. Setting up and Managing wages and salaries

      5.2.1. The importance of wage and salary management

      5.2.2. Payroll scale system of the State

      5.2.3. Building the payment system of the enterprise

5.3. Forms of payment

5.4. Financial incentives

5.5. The benefits for employee

Chapter 6: Labor relations

6.1. Concept, content of labor relations

6.2. Labor disputes and labor dispute resolution

6.3. Labor contract and collective labor agreement

6.4. Grievances of employees

6.5. Labor discipline

Chapter 7: Current issues and trends of Human Resource Management

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation: 5%

Assignments: 10%

Midterm Exam: 25%

Final Exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Nguyen Van Diem – Nguyen Ngoc Quan (2010). *Human Resource Management Curriculum.* Publishing House of the National Economics University

References

Vietnamese references

- Tran Thi Kim Dung (2011). *Human Resource Management.* Ho Chi Minh City General Publishing House

English references

- Dessler, Gary (2013). *Fundamentals of human resource management*. Pearson Higher Ed

EM4416   Strategy Management

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course is aimed at providing students with a broad understanding of strategic management concepts and theories, and their importance for the organization, industry and society. This course also assists students in developing strategic decision-making skills and conducting case analysis; provides knowledge on strategic planning, its formulation and its factors related to the business decision-making process; and then integrate the knowledge gained from other management courses to form business strategy for companies.

LEARNING OUTCOMES

After this course, learners will be able to:

- To demonstrate the importance of strategic harmony for a successful company

- To evaluate action alternatives, and making sound strategic decisions

- To understand the roles and responsibilities of the key managers in strategic management positions related to decision-making

- To develop capacity and skills in strategic planning to gain sustainable competitive advantage in a global market environment

- To be aware of the importance of ethical principles, personal and company values, and socially responsible management

COURSE CONTENTS

(1) Basic concepts of strategic management
(2) Corporate governance and social responsibility
(3) Environmental scanning and industry analysis
(4) Internal scanning: Organizational analysis and competitive analysis
(5) Preparing for crisis management
(6) Strategy formulation: Situation analysis and business strategy
(7) Strategy formulation: Corporate strategy
(8) Strategy formulation: Functional strategy and strategic choices
(9) Strategy implementation: Organizing for action
(10) Strategy implementation: Staffing and directing
(11) Evaluation and control
(12) Crisis management

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and

study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Assignments:　　　30%

Final exam:　　　　60%

More information regarding assignment and exam will be provided in class.

EM4526   Financial Investment

Credit Hours: 3

Previous Courses: EM3519

COURSE DESCRIPTION

This course involves the functioning of securities market, study of two decisions: analyzing and selecting securities within the asset class and setting the optimal asset allocation mix (using modern portfolio theory). Although it focuses primarily on the first of these decision processes with providing security analysis models/ techniques, the capital markets, and their historic risk/return aspects and also presents techniques for quantifying expected risk and expected return and valuing for individual asset classes. The theory and practice of identifying the optimal allocation of wealth among the various asset classes is also presented. The course deals with answer the questions like: (1) When to invest, (2) Where to invest and (3) How much to invest and lastly it gives the overview of the various investing options available to the investor and how they are best suited to them.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understanding the concepts, role, organizational structure and performance of financial market,

- Understanding financial investments, risk and returns of financial investments

- Understanding, analyzing and valuating financial investments such as stock, bond and derivatives, proposing investment options.

- Understanding and forming investment portfolio, evaluating portfolio performance.

COURSE CONTENTS

Part 1. Fundamentals of Financial Investment

CHAPTER 1 – INTRODUCTION OF FINANCIAL INVESTMENT

1.1.   Concepts and investment principles

1.2.   Risk and risk classification

1.3.   Expected return

CHAPTER 2 – FINANCIAL INSTRUMENTS AND VALUATION MODELS

2.1.   Stock

2.2.   Bond

2.3.   Derivatives

CHAPTER 3 – FINANCIAL MARKET: INDICE AND PERFORMANCE

3.1.   Investment decision making process

3.2.   Financial market: organization and functions

3.3.   Operation mechanism

Part 2. Stock analysis and valuation

CHAPTER 4 – FUNDAMENTAL ANALYSIS AND VALUATION METHOD

4.1.   Definition

4.2.   Valuation process

4.3.   Business environment analysis

4.4.   Investment cash flow analysis

4.5.   Cost of capital and Discount rate estimation

4.6.   Free cash flow for equity estimation

4.7.   Stock valuation

CHAPTER 5 – RELATIVE ANALYSIS AND VALUATION METHOD

5.1.   Financial planning

5.2.   Investors' preference and expected relative ratios (P/E; P/B and P/S)

5.3.   Stock valuation

CHAPTER 6 – TECHNICAL ANALYSIS METHOD

6.1.   Concepts

6.2.   Diagrams and figures

6.3.   Technical analyzing indicators

6.4.   Analyzing process

Part 3. Investment portfolio management

CHAPTER 7 – INVESTMENT PORTFOLIO MANAGEMENT

7.1.   Markowitz model

7.2.   CAPM model

7.3.   Investment portfolio's performance indicators

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

> Assignments: 30%
>
> Midterm Exam: 10%
>
> Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK& REFERENCES

Textbook

- Frank K. Reilly, Keith C Brown, Stanford J. Leeds (2018). "*Investment analysis and portfolio management*", 11th Edition, Dryden Publishing house

References

<u>Vietnamese references</u>

- Vũ Việt Hùng (2003). *Đầu tư Tài chính*, NXB Thống kê

<u>English references</u>

- Corado & Jordan (2005). Fundamental of Investments – Valuation and Management, 3rd edition, Mc Graw Hill

EM4533   Risk Management

Credit Hours: 2

Previous Courses: EM3519 (Corporate Finance)

COURSE DESCRIPTION

This elective course covers one of the core functions of finance, namely risk management. This course is directed toward students interested in understanding how large-scale complex risk can be quantified, needs to be managed and architected. The students will learn why firms should or should not manage risk, whether they do manage risk, and how to measure and manage risk.

LEARNING OUTCOMES

After this course, learners will be able to:

- Identify and categorize the various risks face by an organization;
- Explain the various risk control measures available;
- Understanding risk management program for a business organization.
- Suggest ways to reduce risk.
- Apply the insurance mechanism in risk management.

COURSE CONTENTS

Chapter 1: INTRODUCTION TO RISK AND RISK MANAGEMENT

1.1 Risk definition

1.2 Risk classification

1.3 Definition of risk management

1.4 Contents of risk management

Chapter 2: BASIC RISK RAISED FROM MACRO ENVIRONMENT

2.1 Risk from political environment

2.2 Risk from legal environment

2.3 Risk from business environment

Chapter 3: RISK MANAGEMENT IN FOREIGN EXCHANGE TRANSACTIONS

3.1 Risk of foreign exchange transactions

3.2 Risk evaluation methods

3.3 Risk management tools

Chapter 4: RISK MANAGEMENT IN CREDIT TRANSACTIONS

4.1 Risk of credit transactions

4.2 Risk evaluation methods

4.3 Risk management tools

Chapter 5: RISK MANAGEMENT IN SECURITIES EXCHANGE TRANSACTIONS

5.1 Risk of security exchange transactions

5.2 Risk evaluation models

5.3 Risk management tools

5.4 Combined risk management strategies

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

Course assessment will be based on the following assignments:

Assignments:	10%
Midterm Exam:	30%
Final Exam:	60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK& REFERENCES

Textbook

- Michel Crouhy, Dan Galai, Robert Mark (2014). *The Essentials of Risk Management,* Second Edition, McGraw-Hill Education.

References

Vietnamese references

- Đoàn Thị Hồng Vân (2009). *Quản trị rủi ro và khủng hoảng*, Nhà xuất bản Lao động – Xã hội

- Nguyễn Văn Tiến chủ biên (2005). *Quản trị rủi ro*, xuất bản lần 2, Nhà xuất bản thống kê,

English references

- Anthony Tarantino, Deborah Cernauskas (2011). *Essentials of Risk Management in Finance*, John Wiley & Sons, Inc.

EM4535   Financial Analysis

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

The objective of this class is to provide you with a framework for analyzing a firm's past performance. The course integrates key concepts from accounting, finance, economics, and business strategy and applies them to understand the firm's financial decisions and financial performance.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understanding the financial statements, financial decisions of the firm

- Understanding and explaining investment decisions which are executed and its efficiency and risk; and calculating financial ratios which reflect asset operation of the firm.

- Understanding and explaining fund mobilization decisions which are executed and its cost, efficiency and risk; and calculating financial ratios which reflect fund mobilization of the firm.

- Understanding and explaining profit distribution decisions which are executed and its consequences and impacts on the firm's investor; and calculating financial ratios which reflect profit distribution done by the firm.

- Determining impacts of financial decisions on the firm financial performance, and what should do to improve the firm's financial performance.

COURSE CONTENTS

Chapter 1. OVERVIEW OF FINANCIAL ANALYSIS
1.1.Concepts
1.1.1. Corporate finance: concepts and Financial decisions
1.1.2. Financial analysis
1.2. Introduction of Financial analysis
1.2.1. Objectives
1.2.2. Analyzing principles
1.2.3. Analyzing methods
1.2.4. Data
1.2.5. Analyzing contents
1.2.6. Analyzing process

Chapter 2. Understanding financial statements

2.1.Financial statements

2.1.1. Income statement

2.1.2. Cash flow statement

2.1.3. Balance sheet

2.1.4. Notes of Financial statements

2.2. Financial statements' interrelationship

2.3. Financial statements of specialized firms

Chapter 3. Asset operation analysis

3.1.Asset operation

3.2.Analyzing process

3.3. Analyzing contents

3.3.1. General analyzing of asset investment and operation

3.3.2. Asset operation ratios

3.3.3. Applying Dupont method for asset operation analysis

Chapter 4. Fund mobilization analysis

4.1.Fund Mobilization concept

4.2.Analyzing process

4.3. Analyzing contents

4.3.1. General analyzing of fund mobilization and cost of capital

4.3.2. Fund mobilization ratios

4.3.3. Applying Dupont method for fund mobilization analysis

Chapter 5. Profit distribution analysis

5.1.Concepts of Profit distribution

5.2.Analyzing process

5.3.Analyzing contents

5.3.1. General analyzing of profit distribution and dividend payment

5.3.2. Dividend payment ratios

Chapter 6. Overall analysis of financial performance

6.1.Applying Dupont method for financial performance analysis

6.2.Impacts of financial decisions on ROE

6.3. Reasoning of financial performance status

6.4. Proposing solutions' directions

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Assignments: 30%

Midterm Exam: 10%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK& REFERENCES

Textbook

- K.R. Subramanyam, John Wild , *Financial Statement Analysis* (2013). Eleventh Edition, Mc Graw Hill Publising house.

References

Vietnamese references

- Nguyễn Năng Phúc (2008). *Phân tích báo cáo tài chính*, Trường ĐH Kinh tế Quốc dân Hà Nội, NXB ĐH KTQD

- Ngô Thế Chi, Nguyễn Trọng Cơ (2009). *Phân tích tài chính doanh nghiệp*, Học viện Tài chính, NXB Tài chính

EM4716   Managerial Accounting

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course is designed to introduce fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operation budgeting and planning, costs control, and management decision making.

LEARNING OUTCOMES

After this course, learners will be able to:

- Describe the differences between managerial and financial accounting.
- Evaluate the organizational role of management accountants.
- Explain job order cost systems.
- Describe process cost systems.
- Classify costs by behavior – variable, fixed, mixed.
- Describe budgeting, its objectives, and its impact on human behavior.
- Describe the types of standards and how they are established for businesses.
- Explain performance evaluation for decentralized operations.
- Discuss differential analysis and product pricing.
- Examine capital investment analysis.

COURSE CONTENTS

Chapter 1. INTRODUCTION TO MANAGERIAL ACCOUNTING

1.1. What Is Managerial Accounting

1.2. Why Does Managerial Accounting Matter to Your Career?

1.3. What Skills Do Managers Need to Succeed?

1.4. The Importance of Ethics in Business

1.5. Corporate Social Responsibility

Chapter 2. COST CONCEPTS

2.1. General Cost Classifications

2.2. Product Costs versus Period Costs

2.3. Cost Classifications for Predicting Cost Behavior

2.4. The Analysis of Mixed Costs

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class has to be an estimate for an average student.

ASSESSMENT

Class Participation: 10%

Assignments: 30%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK& REFERENCES

Textbook

- Garrison R., Noreen., Brewer P., (2012). *Managerial Accounting* – 14th Edition, McGraw_Hill, ISBN 978-0-07-811100-6.

BUSINESS CYCLE AND FORECASTING

EM4810   Business Forecasting

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

Forecasting the future is a fundamental aspect of decision making in any business or government. Since economic and business conditions vary over time, business and government leaders must find ways to keep abreast with the effects that such changes will have on their operations. This course aims to introduce quantitative methods and techniques for time series modeling, analysis, and forecasting with the aid of with computer programming software. Emphasis will also be put on the applications in economic and business-related areas.

LEARNING OUTCOMES

After this course, learners will be able to:

- understand and apply various forecasting techniques, tools and methodologies

- conduct data analysis, modeling and forecasting with computer programming software (Excel, EViews, SPSS)

COURSE CONTENTS

Chapter 1: Overview of Business Forecasting

1.1. Definition and role of business forecasting

1.2. Classification of business forecasting

1.3. Process of implementation business forecasts

1.4. Measures of forecast error

Chapter 2: Input data analysis and model selection

2.1. Role of input data analysis and data quality

2.2. Exploring data patterns

2.3. The choice of business forecasting model

Chapter 3: Simple forecasting models

3.1. Naïve Model

3.2. Simple average

3.3. Moving averages

3.4 Simple exponential smoothing

Chapter 4: Linear trend model for forecasting

4.1. Concepts of linear trend model

4.2. Explore linear trend model

4.3. Estimation and hypothesis testing in linear trend model

4.4. Forecasting through linear trend model

4.5. Linear trend models

Chapter 5: Time series model

5.1. Definitions of time series

5.2. Classification of time series

5.3. Time series components

5.4. Seasonal factor in time series

5.5. Forecasting by multiplicative model

5.6. Forecasting by additive model

Chapter 6: Forecast by regression model

6.1. Concepts simple regression and multiple regression

6.2. Simple regression model

6.3. Multiple regression model

6.4. Regression models with dummy variables

Chapter 7: The Box - Jenkins (ARIMA) methodology

7.1. Testing the stationary characteristic of time series

7.2. Autoregressive model

7.3. ARMA model

7.4. ARIMA model

Chapter 8: Judgmental Forecasting

8.1. Overview of judgmental forecasting

8.2. Advantages and disadvantages of judgmental forecasting

8.3. Judgmental forecasting methods

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Course assessment are as follows:

Assignment	Title	Weight
1	Forecasting by Regression	20%
2	Timeseries models and Box – Jenkins method	20%
3	Final Exam	60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Hanke, John E. and Dean W. Wichern. (2014) Business forecasting. 9th Edition. Pearson

References

- Gloria González-Rivera. (2013) Forecasting for Economics and Business. Routledge

- Diebold, Francis. X. (2017) Forecasting in Economics, Business, Finance and Beyond. University of Pennsylvania.

MI3093   Database

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course provides fundamental and essential knowledge for database management systems, especially in relational model; fundamental skills of designing and developing a relational database. Be able to design effective database schemas for realistic applications.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understand the basic concepts of database and relational database

- Applying techniques for database design

- Implement a relational database

- Using query languages SQL for data manipulating

COURSE CONTENTS

CHAPTER I. INTRODUCTION

1.1. Basic database concepts, terminology

1.2. Architecture of Database System

1.3. Types of database management systems

CHAPTER II. RELATIONAL MODEL

2.1. Introduction to Relational model

2.2. Relational Algebra

2.3. Key, Integrity

2.4. Introduction to Structure Query Language

2.5. Structure of SQL queries

2.6. SQL views, modifications, joins

2.7. SQL aggregate functions, nested subqueries

CHAPTER III. ENTITY RELATIONSHIP

3.1. Entities

3.2. Attributes

3.3. Relationships

3.4. Connectivity and Cardinality

3.5. Developing an ER

CHAPTER IV. DATA MODELLING AND NORMALIZATION

4.1. Normalization and Database design

4.2. Normalization forms: 1NF, 2NF, 3NF

4.3. Normalization process

4.4. Improving the Design

4.5. Surrogate Key Considerations

4.6. Higher level normal form: 4NF, Boyce-Codd Normal Form

4.7. Denormalization

CHAPTER V. DATABASE DESIGN AND IMPLEMENTATION

5.1. Database Life Cycle

5.2. Conceptual Design

5.3. Logical Design

5.4. Physical Design

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Assignments: 30%

Final exam: 60%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Coronel, C. M., Morris, S. & Rob, P., (2013). *Database systems: Design, implementation, and Management (10th ed.).* Boston: Cengage Learning

References

- Silberschatz, Korth, Sudarshan, (2005). *Database System Concepts , 5th ed.*

- Bryan Syverson and Joel Murach, *Murach's SQL Server 2008 for Developers*, ISBN-13: 978-1-890774-51-6

MI4060   Applied Data Science for Business

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course introduces the rapidly growing and promising area of research and business application purposes that has accompanied the explosion of data in the digital age, as nearly every aspect of life is now connected (e.g., mobile phones, smart devices, social media) and digitized (book archives, government records, websites, communication). Students are introduced to various techniques and software for collecting, cleaning, and analyzing data at large scales, especially text data (e.g., machine learning, topic modeling, location extraction, semantic networks).

LEARNING OUTCOMES

After completing the course, students can be able to:

- Gain a comprehensive understanding of data science as an interdisciplinary field.

- Be able to creatively apply digital data to answer real-world puzzles.

- Benefit from the seminar and project-oriented format of this course by launching potential collaborations with other students and faculty.

- Build computational skills pertinent to specific research questions.

COURSE CONTENTS

(1)   Supervised learning: Crush course on Data Classification.

(2)   Eager vs. Lazy learning: Decision Tree and k-Nearest Neighbors.

(3)   Probabilistic models: Näive Bayes classifier.

(4)   Ensemble methods, bagging and boosting: Random Forest and AdaBoost.

(5)   Classification performance evaluation: Precision/Recall/F1, Accuracy and ROC Curves.

(6)   Unsupervised learning: Crush course on Clustering Data.

(7)   Distance and similarity measures & K-means clustering.

(8)   Hierarchical Clustering and Dendrograms.

(9)   Density-based clustering.

(10)   Clustering performance evaluation.

(11)   Applications of texts and documents analysis.

(12)   Natural Language Processing and Part-of-speech tagging.

(13)   Sentiment Analysis.

(14) Networks: Statistical descriptors of networks: link analysis, centrality, and prestige.

(15) Network clustering: modularity and community detection.

(16) Dynamics of information and epidemics spreading: threshold and information cascade models.

(17) Network visualization algorithms: spring-like layouts, multidimensional scaling, Gephi.

(18) Intelligent systems: Recommender systems & Collaborative filtering

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Class Participation:	10%
Assignments:	30%
Final exam:	60%

More information regarding assignment and exam will be provided in class.

MATHEMATICS FOR BUSINESS ANALYTICS

MI4070   Mathematics for Business Analytics

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course provides fundamental and essential mathematics knowledge for business data analytics, introduction to business data. The students will be also provided some skills and techniques in using computer-based tools for basic as well as data analyses.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understand the basic concepts and theories of Business Analytics

- Apply data analysis techniques like descriptive, predictive and prescriptive analysis.

COURSE CONTENTS

CHAPTER 1. INTRODUCTIONS

1.1. Business Analytics Introductory

1.2. Business Data

1.3. Mathematics Review

1.4. Some Analytic Software

CHAPTER 2. DESCRIPTIVE ANALYSIS

2.1. Data Visualization

2.2. Descriptive Statistics

2.3. Probability and Models

2.4. Sampling and Evaluations

2.5. Statistical Inferences

2.6. Multivariate Data

CHAPTER 3. PREDICTIVE ANALYSIS

3.1. Regression

3.2. Multivariate Regression

3.3. Time Series Analysis

3.4. Classification

3.5. Association Analysis

3.6. Clustering Analysis

3.7. Monte Carlo Method and Risk Analysis

CHAPTER 4. PRESCRIPTIVE ANALYSIS

4.1. Linear Programming and Applications

4.2. Integer Programming

4.3. Multi Objectives Optimization

4.4. Decision Making

CHAPTER 5. ADVANCED TOPICS

5.1. Introductions to Data Science

5.2. Data Preprocessing

5.3. Data Warehousing and Business Intelligence

5.4. Data Mining

5.5. Machine Learning

5.6. Big Data

5.7. Decision Support Systems

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Assignments/Midterm:	30%
Final exam:	70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- James Evans, (2017). *Business Analytics 2nd Ed.*, Pearson

References

- Jeffrey D. Camm, James J. Cochran, Michel J. Fry, Jeffrey W. Ohlmann, David R. Anderson, Dennis J. Sweeney and Thomas A. Williams, (2019). *Business Analyitcs: Descriptive, Predictive, Prescriptive 3rd Ed.,* Cencage

- Christian Albright and Wayne L. Winston, (2017). *Business Analytics: Data Analysis and Decision Making 6th Ed.*, Cencage

- Joseph F. Hair Jr., William C. Black, Barry J. Babin and Rolph E. Anderson, (2014). *Multivariate Data Analysis 7th Ed,* Peason

- Jiawei Han, Micheline Kamber and Jian Pei, (2012). *Data Mining: Concepts and Techniques 3rd Ed.*, Morgan Kaufmann

MI4212   Big Data and Business Intelligence

Credit Hours: 3

Previous Courses: none

COURSE DESCRIPTION

This course provides specialized knowledge of Big Data and Business Intelligence (BI) introducing Big Data concept, Data warehouse, BI and related topics. The course aims at examining Business Intelligence (BI) as a broad category of applications and technologies for gathering, storing, analyzing, sharing and providing access to data to help enterprise users make better managerial decisions. You will learn the principles and best practices for how to use data in order to support fact-based decision making. Emphasis will be given to applications in marketing, where BI helps in, e.g., analyzing campaign returns, promotional yields, or tracking social media marketing; in sales, where BI helps performing for sales analysis; and in application domains such as Customer Relationship Management and e-Commerce. Practical experience will be gained by developing a BI project (case-study) with leading BI software. The students will be also provided some skills and techniques in using computer-based tools for practicing on sample data.

LEARNING OUTCOMES

After this course, learners will be able to:

- Understand the basic concepts and theories of Big Data and BI
- Use BI tools for developing a BI project

COURSE CONTENTS

(1) Introduction to Big Data and BI

(2) BI Essentials and Types

(3) Architecting the Data

(4) Introduction to Data Mining

(5) Data Mining Techniques

(6) Introduction to Data Warehousing

(7) Different Ways of Data Warehousing

(8) Knowledge Management

(9) Data Extraction

(10) BI Life Cycle

(11) BI User Model

(12) Issues and Challenges on BI

(13) Strategy and Road Map for BI

(14) Implementing Business Intelligence

EXPECTED WORKLOADS

A total of 150 hours of work is expected from students in this course. This consists of 45 hours of classes, 90 hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 15 hours during mid-semester break and study week. Time spent on work outside class must be an estimate for an average student.

ASSESSMENT

Midterm: 30%

Final exam: 70%

More information regarding assignment and exam will be provided in class.

TEXTBOOK & REFERENCES

Textbook

- Coronel, C. M., Morris, S. & Rob, P., (2013). *Database systems: Design, implementation, and Management (10th ed.)*. Boston: Cengage Learning

References

- Silberschatz, Korth, Sudarshan, (2005). *Database System Concepts, 5th ed.*

- Bryan Syverson and Joel Murach, *Murach's SQL Server 2008 for Developers*, ISBN: 978-1-890774-51-6