هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Fundamentals of Mathematics for Business**
Course Code:	**QM 0676-101**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☒	Department☐	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:			Level 2 / 1st Year		
4. Course general Description This course provides students with the opportunity to learn and apply essential mathematical skills in business context. Through relevant business applications, students will develop problem solving and critical thinking skills.					
5. Pre-requirements for this course (if any): None					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main objective of this course is to provide students with the background about basic mathematical tools for solving economics and business problems.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Identify types of functions, its domain and range and different methods to solve equations and inequalities	K3	● Lectures ● Classwork	● Examinations ● Coursework assessments
1.2	Recall the basic rules of differentiation and integration.	K3	● Lectures ● Classwork	● Examinations ● Coursework assessments
1.3	List the formulas for the general term and the sum of a sequence.	K3	● Lectures ● Classwork	● Examinations ● Coursework assessments
1.4	Memorize basic properties of matrices and determinants.	K3	● Lectures ● Classwork	● Examinations ● Coursework assessments
2.0	Skills			
2.1	Perform basic math operations on functions and solve different types of equations and inequalities.	S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Apply differentiation and integration in business and economics context.	S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Calculate future value and interest of a single investment using sequences.	S2	● Lectures ● Case studies Classwork	● Examinations ● Coursework assessments ● Assignments
2.4	Use matrices and determinants in presenting and solving business and economics problems.	S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.5	Formulate functions, equations and inequalities to represent different business situations and interpret math results from a business/economic perspective.	S5	● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	● Classwork	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Sets and Functions	6
2.	Equations and Inequalities	7.5
3	Differentiation	7.5
4	Integration	6
5	Sequences	7.5
6	Determinants and Matrices	10.5
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Essays, reports and presentations	During Trimester	15%
2.	Quizzes	During Trimester	10%
3.	Mid Term Exam	7^{th}	30%
4	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Fathi Khalil Hemdan, "Mathematics for Managerial and Financial Sciences", Dar Wael publishers, 3th edition, 2012. Haeussler E., Paul R. and Wood R. "Introductory Mathematical Analysis for Business, Economics and the Life and social Sciences", 13th edition, 2011.
Supportive References	Lecture notes
Electronic Materials	Recorded lectures.
Other Learning Materials	A group of computer programs/applications (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	• Classrooms • Blackboard system
Technology equipment (projector, smart board, software)	• Data show • Smart board • PC/Laptop
Other equipment (depending on the nature of the specialty)	• None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Faculty (peer review) • Students	• Direct (Classroom observation) • Indirect (CES/SES/PES)
Effectiveness of students assessment	• Faculty (peer review) • Students	• Direct (Moderation & Verification) • Indirect (CES/SES/PES)
Quality of learning resources	• Faculty • Students	• Direct (Course report) • Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	• Faculty • Students	• Direct (Course results) • Indirect (CES/SES/PES)
Other	•	•

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Introduction to Statistics**
Course Code:	**QM 0676-102**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	3
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☒	Department☐	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	Level 3 / 1st year				
4. Course general Description Introduction to statistics course is about studying data collection, presentation and summarization, interpretation using different statistical tools, probability and probability distributions, as well as index numbers.					
5. Pre-requirements for this course (if any): Fundamentals of Mathematics for Business - QM 0676-101					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main objective of this course is to familiarize students with the use of different statistical tools to describe data and to introduce students to probability, probability distributions, and index numbers.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	36
2.	Laboratory/Studio	9
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	List different types of data and methods of data collection.	K3	Lectures	• Examination • Coursework assessments
1.2	Identify different graphical tools and numerical measures of descriptive statistics.	K3	Lectures	• Examination • Coursework assessments
1.3	Recall different forms of correlation and the structure of linear regression equations.	K3	Lectures	• Examination • Coursework assessments
1.4	Memorize basic rules and types of probabilities, random variables and probability distributions.	K1, K3	Lectures	• Examination • Coursework assessments
2.0	Skills			
2.1	Calculate summary statistical measures for grouped and ungrouped data and create graphs to represent different types of data.	S3	• Lectures • Case studies • Classwork	•Examinations •Coursework assessments •Assignments
2.2	Measure the correlation between two variables and predict the values of a variable based upon an estimated regression line.	S3	• Lectures • Case studies • Classwork	•Examinations •Coursework assessments •Assignments
2.3	Calculate different types of probabilities and moments for discrete and continuous distributions.	S2	• Lectures • Case studies • Classwork	•Examinations •Coursework assessments •Assignments
2.4	Calculate index numbers	S3	• Lectures • Case studies • Classwork	•Examinations •Coursework assessments •Assignments
2.5	Use statistical packages to create graphs and calculate statistical measures	S4	• Lectures • Case studies • Classwork	•Examinations •Coursework assessments •Assignments
2.5	Interpret software output and write statistical reports.	S4, S5	•Case studies •Classwork •Lab tutorials	•Examinations •Coursework assessments •Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	•Classwork	•Coursework assessments •Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to statistical science	3
2.	Data collection, coding and presentation	3
3.	Measures of location and dispersion	6
4.	Measures of relative dispersion, skewness and kurtosis	3
5.	Correlation and simple linear regression	6
6.	Probability theory	3
7.	Discrete random variables and probability distributions	4.5
8.	Continuous random variables and probability distributions	4.5
9.	Index numbers	3
10.	Introducing data analysis package on Excel	9
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments, reports and presentations	During Semester	5%
3.	Quizzes	During Semester	5%
4.	Project	9th	15%
4.	Mid Term Exam	7th	30%
5.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Douglas Lind, William Marchal and Samuel Wathen, Statistical Techniques in Business and Economics, 18th Edition, Mcgraw-hill, 2021.
Supportive References	Gerald Keller, Statistics for Management and Economics, 11th Edition, Cengage Learning, 2017.
Electronic Materials	Recorded lectures.
Other Learning Materials	A group of computer programs/applications (Word - Excel - PowerPoint - SPSS).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	• Classrooms • Computer Labs
Technology equipment (projector, smart board, software)	• LMS (Blackboard system) • Data show • Smart board • PC/Laptop

Items	Resources
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Business Statistics**
Course Code:	**QM 0676-201**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☒	Department☐	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	Level 4 / 2nd year				
4. Course general Description This course introduces selected fundamentals of business statistics, which include estimation, hypothesis testing, regression and correlation analysis, analysis of variance, nonparametric tests and categorical data analysis.					
5. Pre-requirements for this course (if any): Introduction to Statistics - QM 0676-102					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) This course aims to provide students with some basic statistical knowledge and tools needed for managers to make decisions. The course focuses on formulating problems, analyzing data, and decision-making process. Particular emphasis will be given to the selection criteria of appropriate techniques and how to use Excel to conduct statistical analyses.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	36
2.	Laboratory/Studio	9
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Explain how to estimate population parameters using point and interval estimates	K3	Lectures	● Examinations ● Coursework ● assessments
1.2	Outline the steps of statistical hypothesis testing	K3	Lectures	● Examinations ● Coursework ● assessments
1.3	Explain a linear regression model and identify its parameters	K3	Lectures	● Examinations ● Coursework ● assessments
2.0	Skills			
2.1	Use confidence intervals to estimate Population parameters	S3, S4	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.2	Conduct and interpret a variety of hypothesis tests to aid decision making in a business context	S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.3	Perform non-parametric tests for small samples and categorical data.	S3, S4	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.4	Use Excel to analyze data using the appropriate techniques.	S4	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.5	Interpret software output and write statistical reports.	S4, S5	● Case studies ● Classwork ● Lab tutorials	● Examinations ● Coursework ● assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework ● assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours

1.	Point and interval estimation for population parameters	7.5
2.	Hypothesis testing about population parameters	7.5
3.	Analysis of variance: One-way ANOVA	7.5
4.	Analysis of variance: Two-way ANOVA	6
5.	Non-parametric tests	7.5
6.	Multiple linear regression	9
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments, reports and presentations	During Semester	15%
3.	Quizzes	During Semester	10%
4.	Mid Term Exam	6th	30%
5.	Final exam	End of semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Gerald Keller, Statistics for Management and Economics, 11th Edition, Cengage Learning, 2017.
Supportive References	Douglas Lind, William Marchal and Samuel Wathen, Statistical Techniques in Business and Economics,18th Edition, Mcgraw-hill, 2021.
Electronic Materials	Recorded lectures.
Other Learning Materials	A group of computer programs/applications (Word- Excel - Power point - SPSS).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	●Data show ●Smart board ●PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review)	● Direct (Classroom observation)

Assessment Areas/Issues	Assessor	Assessment Methods
	● Students	● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Quantitative Methods for Business**
Course Code:	**QM 0676-202**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:			4th level /2nd year		
4. Course general Description Quantitative Methods for Business helps in solving problems in different decision-making environments. The course covers topics that include linear programming, DEA models, decision analysis and simulation. Analytic techniques and computer packages will be used to solve problems facing business managers in decision environments.					
5. Pre-requirements for this course (if any): Introduction to Statistics - 0676102					
6. Co- requirements for this course (if any):					
7. Course Main Objective(s) The main purpose of this course is to familiarize students how to use quantitative methods to solve an array of business and organizational problems, as well as improve decision-making.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	42
2.	Laboratory/Studio	3
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define the basic concepts of linear programming including model formulation, solution methods, duality and sensitivity.	K3	Lectures	● Examinations ● Coursework assessments
1.2	Explain efficiency concepts and identify DEA models for measuring relative efficiency.	K3	Lectures	● Examinations ● Coursework assessments
1.3	Illustrate the use of quantitative methods in decision-making and recognize different criteria for decision making under certainty, risk and uncertainty.	K3	Lectures	● Examinations ● Coursework assessments
1.4	Recall the definition of simulation and its applications.	K1, K3	Lectures	● Examinations ● Coursework assessments
2.0	Skills			
2.1	Formulate linear programming models and solve them using both graphical and simplex methods.	S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Transform linear programming models into dual forms and perform sensitivity analysis.	S3	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Calculate expected values and pay-offs for different types of decision-making models.	S1, S2, S3	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.4	Apply Monte-Carlo simulation models to simulate demand, queuing systems and inventory.	S2, S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.5	Use different software to solve LP models and measure efficiency using different DEA models.	S4	● Lab tutorials ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.6	Interpret software outputs for different optimization models and write/analyze results' reports.	S4, S5	● Lab tutorials ● Case studies ● Projects	● Examinations ● Coursework assessments ● Reports
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Operations Research	3
2.	Formulation of Linear Programming (LP) problems	4.5
3.	Methods of solving linear programming problems	9
4.	Duality problem and its economic interpretation	6
5.	Sensitivity analysis in LP	4.5
6.	Data Envelopment Analysis (DEA)	6
7.	Decision Analysis (DA)	6
8.	Introduction to Simulation	6
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments	During Semester	5%
3.	Project	9th	15%

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
4.	Quiz	2nd	5%
5.	Mid Term Exam	7th	30%
6.	Final exam	End of semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Anderson D R., Sweeney D J., Williams T A., Camm J D., and Martin R K., Quantitative Methods for Business, 13th Edition, South-Western Cengage Learning, 2016. Render B., Ralph M. and Michael E., "Quantitative Analysis for Management", 13th Edition, Global Edition, Prentice Hall, 2017, ISBN :9781292217659.
Supportive References	Charnes, A., Cooper, W.W., Lewin, A.Y., Seiford, L.M., Data Envelopment Analysis: Theory, Methodology, and Applications, ISBN-13: 978-0792394792.
Electronic Materials	http://www.phpsimplex.com/simplex/simplex.htm?l=en http://www.scienceofbetter.org/ http://www.mit.edu/~orc
Other Learning Materials	A group of computer programs/applications (Word, Excel, Power point, Lindo, Lingo, QM for Windows, R).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Faculty (peer review) • Students	• Direct (Classroom observation) • Indirect (CES/SES/PES)
Effectiveness of students assessment	• Faculty (peer review)	• Direct (Moderation & Verification)

Assessment Areas/Issues	Assessor	Assessment Methods
	● Students	● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Fundamentals of scientific research (Risk and insurance)**
Course Code: :	**QM 0676-204**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	2				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	7^{th} level /3^{rd} year				
4. Course general Description This course deals with: • Introduction to the basics of scientific research Scientific research methodologies • Qualitative research • Quantitative research • Writing and publishing scientific research • Research projects					
5. Pre-requirements for this course (if any): Fundamentals of Risk and Insurance - 0676203					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) This course aims to: • Giving the student initial knowledge about scientific research methodology • Introducing students to scientific research methods and tools • Identify the stages, types and methods of scientific research • Learn how to collect data and the different tools for that • Learn how to test hypotheses related to research • Learn how to prepare reports and research projects in the field of risk and insurance					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	30	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours

1.	Lectures	30
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	30

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define scientific research and identify the difference between it and other related concepts.	K1	Lectures	● Examinations ● Coursework assessments
1.2	Recognize the approaches, steps and methodology of scientific research.	K1	Lectures	● Examinations ● Coursework assessments
1.3	List the different methods and tools for collecting data and selecting variables for research.	K3	Lectures	● Examinations ● Coursework assessments
2.0	Skills			
2.1	Design a questionnaire to collect information about research.	S1, S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Prepare a research proposal to investigate a research problem in risk and insurance.	S1, S3	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Compose research questions and explain the steps to answer them through hypotheses testing.	S1, S3	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1	Classwork	● Coursework assessments ● Assignments

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.2	Demonstrate ethical and professional responsibility in doing research.	V2	● Case studies ● Projects	● Examinations ● Coursework assessments ● Reports

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to scientific research	4
2.	Research methodology	16
3.	Preparing research proposals and reports	10
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments	During Semester	5%
3.	Quizzes	During Semester	5%
4.	Project	9th	15%
5.	Mid Term Exam	5th	30%
6.	Final exam	12th	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Mark N.K. Saunders, Philip Lewis and Adrian Thornhill, Research Methods for Business Students, 8th Edition, Pearson, 2020.
Supportive References	Engwa Azeh Godwill, Fundamentals of Research Methodology: A Holistic Guide for Research Completion, Management, Validation and Ethics, Nova Science Pub Inc, 2015.
Electronic Materials	None
Other Learning Materials	A group of computer programs/applications (Word, Excel, Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Computational Statistics**
Course Code:	**QM 0676-205**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification	
1. Credit hours:	3
2. Course type	
a. University ☐ College ☐ Department☒ Track☐ Others☐	
b. Required ☒ Elective☐	
3. Level/year at which this course is offered: Level 5 / 2nd year	
4. Course general Description This course introduces Microsoft Excel and R statistical packages and their applications in various areas of risk and insurance.	
5. Pre-requirements for this course (if any): Statistics for Business - QM 0676-201	
6. Co- requirements for this course (if any): None	
7. Course Main Objective(s) The main purpose of this course is to provide students with the necessary knowledge and skills which enables them to use Excel and R in risk and insurance context.	

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	18
2.	Laboratory/Studio	27
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Memorize Excel functions and add-ons	K1	Lectures	●Examinations ●Coursework

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	used in the context of risk and insurance.			● assessments
1.2	Recall the steps of compiling R functions.	K2	Lectures	● Examinations ● Coursework ● assessments
1.3	Identify R packages and functions used in the context of risk and insurance.	K3	Lectures	● Examinations ● Coursework ● assessments
2.0	Skills			
2.1	Use Excel built-in functions and add-ons for modeling and analyzing risk and insurance data.	S1	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.2	Creating R functions to model risk and insurance data.	S2,S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.3	Use R packages and functions to calculate probabilities, simulate distributions and forecast future claims in the fields of risk and insurance. .	S4	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework ● assessments ● Assignments
2.4	Interpret software outputs for risk and insurance data and write/present results' reports.	S4, S5	● Case studies ● Classwork ● Lab tutorials	● Examinations ● Coursework ● assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework ● assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Microsoft Excel.	6
2.	Applications of Excel in risk and insurance.	12
3.	Introduction to R.	12
4.	Applications of R in risk and insurance.	15
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments, reports and presentations	During Semester	5%
3.	Quizzes	During Semester	10%
4.	Mid Term Exam	7th	10%
5.	Project	9th	30%
5.	Final exam	12th	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• Guerrero, Hector, Excel Data Analysis; Modeling and Simulation, Springer, 2019. • W. N. Venables, D. M. Smith and the R Core Team, An Introduction to R: A Programming Environment for Data Analysis and Graphics, CRAN 2019..
Supportive References	• Crawley, Michael J., Statistics: An Introduction Using R, 2nd Edition, Wiley 2014.
Electronic Materials	• A group of computer programs/applications (R -Excel - Word – Power point)..
Other Learning Materials	Handouts and other material provided or recommended by the course instructor.

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	●Data show ●Smart board ●PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Fundamentals of Risk and Insurance**
Course Code:	**QM-0676203**
Program:	**Bachelor Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 Hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Level 4 / 2nd year					
4. Course general Description: This course introduces the basics of risk and insurance. It enables the students to identify, and analyze risks that are inherent in the operation of profit and not-for-profit institutions, besides providing them with the essential basic knowledge about insurance as one of the major risk management policies.					
5. Pre-requirements for this course (if any): Introduction to Statistics - QM. 0676-102					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s): The main purpose of this course is introducing the fundamentals of risk management and insurance and the framework of insurance industry in Saudi Arabia.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Illustrate the basic concepts of risk and risk management process.	K1	● Lectures Case studies	● Examinations ● Coursework assessments
1.2	Identify main types of insurance and the difference between takaful and conventional insurance.	K2	Lectures	
1.3	Recall legal and technical principles for insurance.	K1	Lectures	
1.4	Recognize the nature and structure of Saudi insurance market.	K1	Lectures	
2.0	**Skills**			
2.1	Determine the appropriate risk management policy in different situations	S1	● Classwork ● Projects	● Examinations ● Coursework assessments ● Assignments
2.2	Calculate risk measures and risk exposure using quantitative analysis.	S1	● Case studies ● Classwork Projects	
2.3	Apply legal principles of insurance, including calculating indemnity and coinsurance shares.	S1	● Case studies ● Classwork Projects	
2.4	Assess the determinants and limitations of insurance demand in the Saudi insurance market	S1, S5	● Case studies ● Classwork ● Projects	● Coursework assessments ● Assignments ● Reports
3.0	**Values, autonomy, and responsibility**			
3.1	Show teamwork skills and responsibility for self-learning and commitment	V1	● Case studies ● Classwork Projects	● Coursework assessments ● Assignments ● Reports

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to risk.	6
2.	Risk management and measurement.	12
3	Introduction to insurance.	6
4	Technical and legal principles of insurance.	15
5	Insurance in Saudi Arabia.	6
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discussions	During Semester	5%
2.	Assignments	During Semester	10%
3.	Quizzes	3rd ,5th and 9th	15%
4.	Mid Term	6th	30%
4	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Rejda, G.E., McNamara, M. J. and Rabel W., Principals of Risk Management and Insurance, 14th Edition, Pearson, 2020. • "Insurance Foundations", The Financial Academy, Kingdom of Saudi Arabia, August 2019.
Supportive References	• Emmett. & Therese Vaughan, Fundamentals of Risk and Insurance, 11th Edition, Wiley, 2014
Electronic Materials	• https://www.sama.gov.sa/en-US/Laws/Pages/insurance.aspx
Other Learning Materials	A group of computer programs/applications (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Projector
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Life Insurance**
Course Code:	**0676-206**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	Level 7 /3rd year				
4. Course general Description This course covers a range of topics about cooperative life insurance starting from theory and basics ending with calculating contributions and surplus distribution.					
5. Pre-requirements for this course (if any): Fundamentals of Risk and Insurance QM 0676-203					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main objective of this course is to introduce cooperative life insurance concepts and application in Saudi insurance sector.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recall basic concepts of life insurance.	K1	● Lectures Case studies	● Examinations ● Coursework assessments ● Assignments
1.2	Outline the types of life insurance policies and the coverages.	K2	● Lectures Case studies	● Examinations ● Coursework assessments ● Assignments
1.3	Recognize different schemes of surplus distribution on policyholders.	K2	● Lectures Case studies	● Examinations ● Coursework assessments ● Assignments
2.0	Skills			
2.1	Compare cooperative life insurance coverages in Saudi Arabia.	S1	● Lectures ● Case studies Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Calculate policy share of surplus for different life insurance coverages.	S2	● Lectures ● Case studies Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Estimate the future net income of an insured and the economic value of a life using both the expected value approach.	S2	● Lectures ● Case studies Classwork	● Examinations ● Coursework assessments ● Assignments
2.4	Assess the sufficiency of insurance coverage taking into consideration future needs of the policyholder	S1	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	● Lectures ● Case studies Classwork	● Examinations ● Coursework assessments

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
				• Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to life insurance	12
2.	Life insurance policies	18
3	Life insurance in Saudi Arabia	6
4	Surplus calculation and distribution in takaful life insurance	9
Total		**45**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments, reports and presentations	During Semester	20%
3.	Quiz	3rd	5%
4.	Mid Term Exam	7th	30%
5.	Final exam	End of semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• Kenneth Black, Jr., Harold D. Skipper, Kenneth Black, III, Life Insurance, 15th Edition, Lucretian, LLC, 2015.
Supportive References	• MISHRA, Fundamentals of Life Insurance: Theories and Applications, PHI Learning PVT. LTD, 2016.
Electronic Materials	• None
Other Learning Materials	• A group of software (general: MSWord – MS Excel, course specific: by course instructor).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop

Items	Resources
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**General Insurance**
Course Code:	**QM 0676-207**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:					
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Level 4 / 2nd year					
4. Course general Description An introduction to the concepts and technical bases of most known types of property and liability insurance.					
5. Pre-requirements for this course (if any): Fundamentals of Risk and Insurance - QM 0676-203					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) **The main purpose of this course is to study some known branches of property and liability insurance and its practical application**					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recall different types of property and liability risks and policies.	K1	Lectures Case studies	Examinations Coursework assessments Assignments
1.2	Describe typical property/liability insurance policies in terms of covered causes of loss, exclusions and possible additional coverages.	K1, K2	Lectures Case studies	Examinations Coursework assessments Assignments
1.3	Identify the factors that affect property/liability insurance premiums.	K1, K2	Lectures Case studies	Examinations Coursework assessments Assignments
2.0	Skills			
2.1	Calculate property and liability insurance premiums using the expected loss approach.	S2	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
2.2	Determine whether, and for what amount, the property/liability insurance covers a described claim for different situations	S1	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
2.3	Compare coverages and exceptions of typical property and liability insurance policies in Saudi Arabia.	S1	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Case studies Classwork	Coursework assessments Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to property and liability risks	3

2.	Automobile insurance	12
3.	Fire insurance	10.5
4.	Marine and aviation insurance	10.5
5.	Accident and liability insurance	9
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments	During Semester	15%
3.	Quizzes	2nd	10%
4.	Mid Term Exam	7th	30%
5.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Carter, Craig A.,"Property & Casualty Insurance Primer", Amazon, 1998. • Parodi P., "Pricing in General Insurance", Amazon, 2015
Supportive References	Osman M. A., et al., "Property Insurance: Concepts and Applications", King Saud University, Riyad, KSA, 2020. • Osman M. A., et al., "Liability and Accidents Insurance: Concepts and Applications ", King Saud University, Riyad, KSA, 2020.
Electronic Materials	None
Other Learning Materials	A group of programs desktop (Word - Excel - Power point)

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms

Items	Resources
Technology equipment (projector, smart board, software)	Data show Smart board Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Financial Mathematics for Insurance**
Course Code:	**QM 0676-208**
Program:	**bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	7^{th} level /3^{rd} year				
4. Course general Description This course introduces the basics of simple and compound interest and the idea of money accumulation and discount. The course also highlights the use of compound interest in calculating the present value of insurance benefits and the present value of premiums.					
5. Pre-requirements for this course (if any): Fundamentals of mathematics for business - 0676101					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main purpose of this course is to explain the use of both simple and compound interest tools as a basis for calculating the present value of insurance benefits.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Understand the concept of time value of money and identify different types of: interest, discount, interest rates and discount rates.	K3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
1.2	Describe different type(s) of cash flows and annuities and interpret its future and present values in a business context.	K3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.0	Skills			
2.1	Calculate interest and accumulated values for different cash flows.	S2	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Calculate discount and present values for different cash flows.	S2	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Employ simple and compound interests in in a variety of business and finance applications.	S2	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Simple interest and accumulation	12
2.	Simple discount and present value	6
3.	Applications of simple interest	6
4.	Compound interest and future value	9
5.	Compound discount and present value	6
6.	Applications of compound interest	6
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments, essays, reports and presentations	During Semester	15%
2.	Quizzes	2nd	15%
3.	Mid Term Exam	7th	30%
4.	Final exam	End of semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Larry Daisley, Thambyrajah Kugathasan and Diane Huysmans, Mathematics of Business and Finance, 44th Edition, Vretta Inc, 2020, ISBN: 9781927737545, 1927737540.
Supportive References	• M. J. Alhabeeb, Mathematical Finance, Wiley, 2012, ISBN: 978-0-470-64184-2. • Robert Brown and Petr Zima, Schaum's Outline of Mathematics of Finance, 2nd Edition, McGraw Hill, 2011.
Electronic Materials	None
Other Learning Materials	A group of computer programs/applications (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	• Data show • Smart board • PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Faculty (peer review) • Students	• Direct (Classroom observation) • Indirect (CES/SES/PES)
Effectiveness of students assessment	• Faculty (peer review) • Students	• Direct (Moderation & Verification) • Indirect (CES/SES/PES)
Quality of learning resources	• Faculty • Students	• Direct (Course report) • Indirect (CES/SES/PES)

Assessment Areas/Issues	Assessor	Assessment Methods
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Enterprise Risk Management**
Course Code:	**QM 0676-306**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☐	Elective☒			
3. Level/year at which this course is offered: 9th level /3rd year					
4. Course general Description This course introduces major types of enterprise risks and some of the methods and tools used in enterprise risk management, including international standards, as well as using software for this purpose.					
5. Pre-requirements for this course (if any): Risk Analysis - 0676301					
6. Co- requirements for this course (if any):					
7. Course Main Objective(s) This course aims to introduce the student to the types of enterprise risks and the methods, tools, and processes used in enterprise risk management, with a focus on one of the international standards used in this field, including (ISO: 31000 or COSO). In addition, training students to use some software applications in this field.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	39
2.	Laboratory/Studio	6
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Describe main types and classifications of enterprise risks.	K1	● Lectures ● Case studies	● Examinations ● Assignments ● Coursework assessments
1.2	Explain the basic concepts of enterprise risk management.	K1	● Lectures ● Case studies	● Examinations ● Assignments ● Coursework assessments
1.3	Identify some of the international standards used in enterprise risk management.	K1	● Lectures ● Case studies	● Examinations ● Assignments ● Coursework assessments
2.0	Skills			
2.1	Apply one of the international standards in managing enterprise risks.	S1, S3	● Lectures ● Case studies ● Projects	● Examinations ● Assignments ● Reports
2.2	Utilize software applications in enterprise risk management.	S1, S3	● Lectures ● Case studies ● Projects	● Examinations ● Assignments ● Reports
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	● Classwork	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to ERM.	9
2.	Major types and classifications of enterprise risks.	15
3.	International standards in ERM.	21
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments	During Semester	5%

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
3.	Project	During Semester	10%
4.	Quiz	4th week	10%
5.	Mid-Term Exam	7th week	30%
6.	Final Exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	● Hunziker., S (2019) Enterprise Risk Management Modern Approaches to Balancing Risk and reward. SpringerGbler. Switzerland.
Supportive References	● Lam. J (2017) Implementing Enterprise Risk Management: From Methods to Applications, Wiley. ● Fraser, J and Simkins, B (2010) Enterprise Risk Management: Today's Leading Research and Best Practices for Tomorrow's Executives (Robert W. Kolb Series Book 3), Wiley.
Electronic Materials	
Other Learning Materials	A group of computer programs/applications (Word, Excel, Power point, Lindo, Lingo, QM for Windows, R).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review)	● Direct (Moderation & Verification)

Assessment Areas/Issues	Assessor	Assessment Methods
	● Students	● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Fundamentals of Risk and Insurance**
Course Code:	**QM-0676203**
Program:	**Bachelor Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 Hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Level 4 / 2nd year					
4. Course general Description: This course introduces the basics of risk and insurance. It enables the students to identify, and analyze risks that are inherent in the operation of profit and not-for-profit institutions, besides providing them with the essential basic knowledge about insurance as one of the major risk management policies.					
5. Pre-requirements for this course (if any): Introduction to Statistics - QM. 0676-102					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s): The main purpose of this course is introducing the fundamentals of risk management and insurance and the framework of insurance industry in Saudi Arabia.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Illustrate the basic concepts of risk and risk management process.	K1	● Lectures Case studies	● Examinations ● Coursework assessments
1.2	Identify main types of insurance and the difference between takaful and conventional insurance.	K2	Lectures	
1.3	Recall legal and technical principles for insurance.	K1	Lectures	
1.4	Recognize the nature and structure of Saudi insurance market.	K1	Lectures	
2.0	**Skills**			
2.1	Determine the appropriate risk management policy in different situations	S1	● Classwork ● Projects	● Examinations ● Coursework assessments ● Assignments
2.2	Calculate risk measures and risk exposure using quantitative analysis.	S1	● Case studies ● Classwork Projects	
2.3	Apply legal principles of insurance, including calculating indemnity and coinsurance shares.	S1	● Case studies ● Classwork Projects	
2.4	Assess the determinants and limitations of insurance demand in the Saudi insurance market	S1, S5	● Case studies ● Classwork ● Projects	● Coursework assessments ● Assignments ● Reports
3.0	**Values, autonomy, and responsibility**			
3.1	Show teamwork skills and responsibility for self-learning and commitment	V1	● Case studies ● Classwork Projects	● Coursework assessments ● Assignments ● Reports

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to risk.	6
2.	Risk management and measurement.	12
3	Introduction to insurance.	6
4	Technical and legal principles of insurance.	15
5	Insurance in Saudi Arabia.	6
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discussions	During Semester	5%
2.	Assignments	During Semester	10%
3.	Quizzes	3rd ,5th and 9th	15%
4.	Mid Term	6th	30%
4	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Rejda, G.E., McNamara, M. J. and Rabel W., Principals of Risk Management and Insurance, 14th Edition, Pearson, 2020. • "Insurance Foundations", The Financial Academy, Kingdom of Saudi Arabia, August 2019.
Supportive References	• Emmett. & Therese Vaughan, Fundamentals of Risk and Insurance, 11th Edition, Wiley, 2014
Electronic Materials	• https://www.sama.gov.sa/en-US/Laws/Pages/insurance.aspx
Other Learning Materials	A group of computer programs/applications (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Projector
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title: **Risk Analysis**	
Course Code: **QM 0676-301**	
Program: **Bachelor of Risk and Insurance**	
Department: **Quantitative Methods**	
College: **Business Administration**	
Institution: **King Faisal University**	
Version: **3**	
Last Revision Date: 1/2/2022	

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:					
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:			**Level 5 / 3rd year**		
4. Course general Description This course introduces some qualitative and quantitative tools used in identifying and assessing risks such as basic risk analysis, scenario analysis, probabilities and decision trees. The course also presents the role of risk analysis in rationalizing the decision-making process.					
5. Pre-requirements for this course (if any): Fundamentals of Risk and Insurance (0676203)					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main aim of this course is to help students to analyze and assess risks in different situations following a scientific approach and using specific qualitative and quantitative tools.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning	-	-
3.	Hybrid ● Traditional classroom ● E-learning	-	-
4.	Distance learning	-	-

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	-
3.	Field	-
4.	Tutorial	-
5.	Others (specify)	-
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Identify the basic concepts of risk analysis, risk metrics, and risk criteria.	K1, K2	Lectures Discussions Case studies	Examinations Coursework Assessments
1.2	Describe risk management process and steps	K2	Lectures Discussions Case studies	Examinations Coursework Assessments
1.3	Recognize quantitative and qualitative methods used in risk analysis.	K2	Lectures Discussions Case studies	Examinations Coursework Assessments
2.0	Skills			
2.1	Perform risk analysis using various quantitative and qualitative methods and techniques	S1	Lectures Discussions Case studies	Examinations Coursework Assessments Assignments
2.2	Integrate risk analysis results into decision process	S1	Lectures Discussions Case studies	Examinations Coursework Assessments Assignments
2.3	perform risk analysis in various types of problems	S2	Lectures Discussions Case studies	Examinations Coursework Assessments Assignments
2.4	Use IT technologies for effective oral and written communication.	S5	Lectures Discussions Case studies	Examinations Coursework Assessments Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework assessments ● Assign ments

C. Course Content

No	List of Topics	Contact Hours
1.	**Introduction to risk analysis**	15
2.	**Risk identification techniques**	15
3.	**Risk assessment techniques**	15

	45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discussions	During Semester	5%
2.	Assignments	During Semester	5%
3.	Project	During Semester	10%
4.	Quizzes	4th and 10th	10%
5.	Mid Term Exam	8th	30%
6.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Dorfman, M. and Cather, D. Introduction to Risk Management and Insurance Prentice-Hall, 2012.
Supportive References	IEC 31010:2019, Risk management: Risk assessment techniques. IEC 31010:2019, Risk management: Guidelines. Terje Aven, The Science of Risk Analysis: Foundation and Practice, Routledge, 2020.
Electronic Materials	None
Other Learning Materials	A group of computer programs/applications (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Faculty (peer review)	• Direct (Classroom observation)

Assessment Areas/Issues	Assessor	Assessment Methods
	● Students	● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Social Insurance**
Course Code:	**QM 0676-302**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☐	Department ☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Level 6 / 2nd year					
4. Course general Description This course introduces the fundamentals of social insurance systems and its financing schemes as well as the social security system and regulations in Saudi Arabia.					
5. Pre-requirements for this course (if any): Fundamentals of Risk and Insurance - QM 0676-203					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main purpose of this course is to analyze social insurance system including contributions and benefits for different personal needs and their application in Saudi Arabia.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define the types and characteristics of social insurance.	K1, K2	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
1.2	Recognize different schemes of financing social insurance systems.	K1		
1.3	Outline the basic structure and characteristics of the social insurance system in the Kingdom of Saudi Arabia.	K1, K2		
2.0	Skills			
2.1	Compare between social security and social insurance.	S1	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
2.2	Calculate the benefits of different types of social insurance in Saudi Arabia.	S2		
3.2	Assess the social insurance system in Saudi Arabia.	S1, S5	Case studies Classwork	Examinations Coursework assessments Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	Coursework assessments

C. Course Content

No	List of Topics	Contact Hours
1.	Social insurance: definition, emergence and evolution.	6
2.	Characteristics of social insurance.	3
3.	Social insurance types and systems of financing.	12
4.	Social insurance system and regulations in Saudi Arabia.	6
5.	Contributions and benefits of social insurance system in Saudi Arabia.	15
6.	Special social insurance coverages/systems in Saudi Arabia.	3
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments, essays, reports and presentations	During Semester	10%
2.	Quizzes	$10^{th}/4^{th}$	10%
3.	Mid Term Exam	7^{th}	30%
4.	Project	During Semester	10%
5.	Final exam	13^{th}	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Social security system in the Kingdom of Saudi Arabia General Organization for Social Insurance in Saudi Arabia (GOSI). www.gosi.gov.sa
Supportive References	Sami Najib Malk, Social insurance, Dar el Nahda alarbia, 2006.
Electronic Materials	None
Other Learning Materials	A group of programs desktop (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Faculty (peer review) • Students	• Direct (Classroom observation) • Indirect (CES/SES/PES)
Effectiveness of students assessment	• Faculty (peer review) • Students	• Direct (Moderation & Verification) • Indirect (CES/SES/PES)
Quality of learning resources	• Faculty • Students	• Direct (Course report) • Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	• Faculty • Students	• Direct (Course results) • Indirect (CES/SES/PES)
Other	•	•

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.

DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Probabilities and Simulation for Insurance**
Course Code:	**QM 0676-303**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**School of Business**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	**3 Hours**				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: 6th level /3rd year					
4. Course general Description This course introduces the fundamentals of probability theory, univariate and multivariate statistical probability distributions, moments, and simulation models and its application in various areas of risk and insurance.					
5. Pre-requirements for this course (if any): **• Risk and Insurance - QM 0676-203** **• Computational Statistical - QM 0676-205**					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) **The main purpose of this course is to provide students with the necessary knowledge of probability theory and simulation models in risk and insurance context..**					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	39
2.	Laboratory/Studio	6
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	**Memorize basic rules of counting and probability calculation.**	K3	Lectures	● Examinations ● Coursework assessments
1.2	**Recognize probability density functions and properties for some special discrete and continuous probability distributions.**	K3	Lectures	● Examinations ● Coursework assessments
1.3	**Define simulation and recall its applications in risk and insurance.**	K3	Lectures	● Examinations ● Coursework assessments
2.0	Skills			
2.1	**Calculate theoretical, empirical and conditional probabilities.**	S2	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	**Construct conditional, marginal and multivariate probability distributions and calculate its central and non-central moments.**	S2	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	**Calculate conditional, marginal and multivariate probabilities for discrete and continuous probability distributions.**	S2, S4	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.4	**Use probability distributions to estimate the number of losses and the value of a single loss for an insured risk.**	S2, S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.5	**Simulate insurance data using different statistical software.**	S4	● Lab tutorials ● Case studies ● Projects	● Examinations ● Coursework assessments ● Reports
3.0	Values, autonomy, and responsibility			

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework assessments ● Assignments
			●	●

C. Course Content

No	List of Topics	Contact Hours
1.	**Introduction to Probability theory.**	15
2.	**Special probability distributions.**	12
3.	**Multivariate probability distributions.**	9
4.	**Simulation in risk and insurance.**	9
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	**Assignments, reports and presentations**	During Semester	15%
3.	Quizzes	3nd	10%
4.	Mid Term Exam	7th	30%
5.	Final exam	13th	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	**Hassett M. & D. Stewart, Probability for Risk Management, Actex Publications, 2006.**
Supportive References	● **Handouts and other material provided or recommended by the course instructor.** ● **Philip J. Boland, Statistical and Probabilistic Methods in Actuarial Science, Amazon, 2007.** ● **Bean M .A., Probability: The Science of Uncertainty with Applications to Investments, Insurance & Engineering, Premium Cole Publishing Company, 2001**
Electronic Materials	A group of computer programs/applications (R - SPSS – Excel - Word - Power point).
Other Learning Materials	**None**

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Health Insurance**
Course Code:	**QM 0676-304**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**College of Business Administration**
Institution:	**King Faisal University**
Version:	3
Last Revision Date:	**1 February 2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☐	Department ☒	Track☐	Others☐
b.	Required ☐	Elective ☒			
3. Level/year at which this course is offered:				Level 10 / 3rd year	
4. Course general Description Identify the development of health insurance in the Kingdom of Saudi Arabia and the concept of cooperative health insurance, its importance, and its objectives and identify the role of insurance companies in the application of the cooperative health insurance system					
5. Pre-requirements for this course (if any): Social Insurance – QM 0676-302					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main purpose of this course is to provide students with the necessary knowledge related to all aspects of health insurance and apply it to cooperative health insurance market in Saudi Arabia.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define the basic concepts and principles of health insurance.	K1, K2	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
1.2	Recognize the structure and characteristics of the health insurance system in Saudi Arabia.	K1		
2.0	Skills			
2.1	Compare different health insurance coverages in Saudi Arabia.	S1	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Calculate health insurance benefits for various types of coverages.	S2		
2.3	Evaluate the benefits and special conditions for typical health insurance policies in KSA.	S1, S5	● Classwork ● Case studies ● Classwork ● Projects	● Examinations ● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	● Classwork ● Case studies ● Classwork ● Projects	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Concept, objectives and benefits of health insurance.	9
2.	Health insurance systems and financing.	9
3.	Underwriting and pricing health insurance.	9
4.	Health insurance coverages and claims.	12
5.	Health insurance system and regulations in Saudi Arabia.	6
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discussions	During Semester	5%
2.	Assignments	During Semester	5%
3.	Quiz	During Semester	5%
4.	Project	During Semester	15%
5.	Mid Term Exam	7th	30%
6.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	A. D. Khaled Bin Saad Abdul Aziz Ben Saeed, Cooperative Health Insurance, 1st edition, 1421
Supportive References	Kenneth B. and Harold D., "Life and Health Insurance", 13th edition, Amazon, 1999.
Electronic Materials	None
Other Learning Materials	A group of programs desktop (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Reinsurance**
Course Code:	**QM 0606-305**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**1/2/2023**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:					
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:			**Level 6 / 3rd year**		
4. Course general Description This course explains the definition and basic types of re-insurance, as well as the application of re-insurance in different branches of insurance and introduces re-insurance market in the Kingdom of Saudi Arabia					
5. Pre-requirements for this course (if any): - General Insurance - QM 0676-207					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) The main purpose of this course is to provide students with the necessary knowledge about the application of re-insurance principles in both property liability and life insurance					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning	-	-
3.	Hybrid ● Traditional classroom ● E-learning	-	-
4.	Distance learning	-	-

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	-
3.	Field	-
4.	Tutorial	-
5.	Others (specify)	-
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recall the definition and basic features of reinsurance.	K1, K2	Lectures	Examinations Coursework Assessments
1.2	Identify different types of reinsurance.	K2	Lectures	Examinations Coursework Assessments
1.3	Outline the structure and regulations of reinsurance market in Saudi Arabia.	K2	Lectures Case studies	Examinations Coursework Assessments
2.0	Skills			
2.1	Differentiate reinsurance from insurance, coinsurance and mutual insurance.	S1	Lectures, Case studies, Classwork	Examinations Coursework Assessments Assignments
2.2	Compare different types of reinsurance.	S1	Lectures, Case studies, Classwork	Examinations Coursework Assessments Assignments
2.3	Calculate reinsurance premiums and benefits for different reinsurance arrangements.	S2	Lectures, Case studies, Classwork	Examinations Coursework Assessments Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	Coursework assessments Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Reinsurance: concept, features, and types	18
2.	Proportional reinsurance	15
3.	Non-Proportional reinsurance	12
	Total	45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments	During Semester	15%
3.	Quizzes	2nd	10%
4.	Mid Term Exam	7th	30%
5.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Harison. C. M., Re-insurance, supra and to (first edition), American Institute for Property casualty underwriters/Insurance Institute of America, 2004. Patrik, G. S., Re-insurance, foundations of casualty actuarial Science (fourth edition), casualty actuarial society, 2001.
Supportive References	Bahaa Bahij Shukri, "Re-insurance between theory and practice", Culture House, Amman, Jordan, 2011. • Nabil Mohamed Mukhtar, "Re-insurance", (Dar AlfekrAlgamey - Alexandria), 2009..
Electronic Materials	None
Other Learning Materials	A group of computer programs/applications (Word - Excel - Power point).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Research Project in Insurance**
Course Code:	**QM 0676-307**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☐	Elective☒			
3. Level/year at which this course is offered: 10th level /4th year					
4. Course general Description This course presents the development of scientific research methodology in the field of risk and insurance, as well as ethical standards in the preparation of scientific research, and the bases upon which various scientific research are evaluated.					
5. Pre-requirements for this course (if any): Life Insurance - 0676206 General Insurance - 0676207					
6. Co- requirements for this course (if any):					
7. Course Main Objective(s) The main purpose of this course is to train students on how to prepare a research project in the fields of insurance and risk management.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	36
2.	Laboratory/Studio	9
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Describe various approaches and methodology for scientific research in the fields of insurance and risk management.	K1	Lectures	● Assignments ● Coursework assessments
1.2	Discuss different methods and tools for data collection.	K1	Lectures	● Assignments ● Coursework assessments
1.3	Explore possible issues that can be used as research topics in insurance.	K1	Lectures	● Assignments ● Coursework assessments
2.0	Skills			
2.1	Collect data related to a research topic using appropriate tools.	S1, S3	● Lectures ● Case studies ● Classwork	● Assignments ● Coursework assessments
2.2	Prepare a research project to investigate an insurance/risk management related issue.	S1, S3	● Lectures ● Case studies ● Projects	● Assignments ● Reports
2.3	Utilize statistical software to analyze data for scientific research and interpret results.	S4	● Lab tutorials ● Case studies	● Assignments ● Reports
2.4	Use technology as a tool for effective oral and written communication.	S5	● Lab tutorials ● Case studies	● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1	● Classwork	● Coursework assessments ● Assignments
3.2	Demonstrate ethical and professional responsibility in doing research.	V2	● Case studies ● Projects	● Coursework assessments ● Reports

C. Course Content

No	List of Topics	Contact Hours
1.	Data collection	6
2.	Research methodology in insurance and risk management	12
3.	Preparing research projects and reports	27
	Total	45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	10%
2.	Assignments	During Semester	10%
3.	Project (written report)	End of Semester	50%
4.	Project (oral presentation and discussion)	End of Semester	30%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	● Pamela Schindler, Business Research Methods, 14th Edition, McGrow Hill, 2022. ● Mark N.K. Saunders, Philip Lewis and Adrian Thornhill, Research Methods for Business Students, 8th Edition, Pearson, 2020.
Supportive References	● Bhattacherjee A., "Social Science Research: Principles, Methods, and Practices", 2012. ● Ahmed Hussein Rifai, Curricula scientific research, economic and administrative applications, Wael for publication, Amman, Jordan, 2009.
Electronic Materials	
Other Learning Materials	A group of computer programs/applications (Word, Excel, Power point, Lindo, Lingo, QM for Windows, R).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review)	● Direct (Classroom observation) ● Indirect (CES/SES/PES)

Assessment Areas/Issues	Assessor	Assessment Methods
	● Students	
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title: Introduction to Actuarial Sciences
Course Code: QM 0676-401
Program: Bachelor Risk and Insurance
Department: Quantitative Methods
College: Business Administration
Institution: King Faisal University
Version: 3
Last Revision Date: 01/02/2022

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 Hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Level 11 / 4th year					
4. Course general Description: The course introduces selected topics in actuarial science, which is a discipline that applies mathematical and statistical methods to assess risk in insurance, such as the construction of life tables, the estimation of specific and dependent mortality rates and risk modelling.					
5. Pre-requirements for this course (if any): Life Insurance (0676-206) Probability and Simulation for Insurance (0676-303)					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s): The main purpose of this course is to provide students with the necessary knowledge and tools which enable them to estimate mortality rates and risk exposure, understand how to model, analyze and measure risk and apply this to insurance.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid • Traditional classroom • E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	42
2.	Laboratory/Studio	3
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Define actuarial sciences and outline its use and applications in risk and insurance.	K1,K3	Lectures	-Examinations -Coursework assessments
1.2	Explain the concept of risk exposure, types of mortality rates, factors affecting mortality and sources of collecting mortality data.	K1,K3	Lectures	
1.3	Recall different types of risk models and measures and explain the concepts of ruin and insolvency.	K1,K3	Lectures	
2.0	**Skills**			
2.1	Calculate, convert and interpret different types of mortality rates.	S1	-Lectures -Classwork	-Examinations -Coursework assessments -Assignments
2.2	Estimate risk exposure and mortality rates based upon vital statistics and census data.	S1, S2	-Lectures -Classwork	
2.3	Model total claims and calculate its expected value, variance and the probabilities of ruin for the insurer in different situations.	S1, S2	-Lectures -Case studies -Classwork	
2.4	Use actuarial/statistical software to calculate mortality rates, construct mortality tables, calculate risk measures and estimate ruin probabilities.	S3, S4	-Lab tutorials -Case studies -Classwork	Coursework assessments -Assignments
3.0	**Values, autonomy, and responsibility**			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	-Coursework assessments -Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Concept, scope, and applications of actuarial sciences	**3**
2.	Mortality rates	**6**
3	Classification of mortality tables and the process of its construction	**3**
4	Estimating risk exposure and mortality rates	**9**
5	Individual risk model	**9**

6	Collective risk model	**6**
7	Ruin theory	**6**
8	Risk measures and insurance premiums	**3**
Total		**45**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discussions	During Semester	5%
2.	Assignments, and presentations	During Semester	10%
3.	Quizzes	During Semester	15%
4.	Mid Term	7th week	30%
4	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• Rob Kaas, M. Goovaerts and J. Dhaene, "Modern actuarial risk theory", Springer, 2009. • David C. M. Dickson, Mary R. Hardy and Howard R. Waters, Actuarial Mathematics for Life Contingent Risks, Cambridge University Press, 2009. • Handouts and other material provided or recommended by the course instructor.
Supportive References	• Benjamin B. and Pollard J. H, The Analysis of Mortality and other Actuarial Statistics, Cambridge University Press, 1980. • Dale S. Borowiak, Arnold F. Shapiro, Financial and Actuarial Statistics: An Introduction, Second Edition, Chapman and 6 Hall/CRC, 2013.
Electronic Materials	• http://SOA.org/ • http://www.actuaries.org.uk/ • http://www.actuarialpost.co.uk/software/
Other Learning Materials	A group of computer programs/applications: R - Actuarial software – Excel - Word - Power point.

2. Required Facilities and equipment

Items	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	• **Classrooms** • **Computer labs**

Items	Resources
Technology Resources (AV, data show, Smart Board, software, etc.)	• **Data show** • **Smart board** • **PC/Laptop**
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	**None**

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Special Topics in Insurance**
Course Code:	**QM 0676-402**
Program:	**bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	**3hours**				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	Level 10 / 4rd year				
4. Course general Description This course introduces selected topics in risk and insurance and some special insurance coverages that has a different nature compared to most general or typical insurance types.					
5. Pre-requirements for this course (if any): ● Life Insurance - QM 0676-206 ● General Insurance - QM 0676-207					
6. Co- requirements for this course (if any): **None**					
7. Course Main Objective(s) The main purpose of this course is to highlight some modern and specialized topics in risk management and insurance.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Recall the basic characteristics and coverage conditions for some special types of insurance.	K2	• Lectures • Case studies	• Examinations • Coursework assessments • Assignments
1.2	Outline the application of some specialized topics in insurance and recent advances in insurance and risk management.	K2	• Lectures • Case studies	• Examinations • Coursework assessments • Assignments
2.0	Skills			
2.1	Differentiate the conditions and exceptions of insurance coverage in a variety of typical special-type insurance policies.	S1	• Lectures • Case studies • Classwork	• Examinations • Coursework assessments • Assignments
2.2	Determine the insured's eligibility for indemnity and calculate indemnity for special insurance policies in different situations.	S1, S2	• Lectures • Case studies • Classwork	• Examinations • Coursework assessments • Assignments
2.3	Evaluate the application of some special-type insurance coverages in Saudi Arabia.	S1, S2	• Lectures • Case studies • Classwork	• Examinations • Coursework assessments • Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	• Case studies • Classwork	• Coursework assessments • Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Engineering insurance	12
2.	Credit insurance	6
3	Micro insurance	9

4	Agricultural insurance	9
5	Recent advances in risk and insurance	9
Total		**45**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments, reports and presentations	During Semester	5%
3.	Quizzes	During Semester	10%
4.	Project	During Semester	10%
5.	Mid Term Exam	7th	30%
6.	Final exam	End of semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	● Brown R., Introduction to ratemaking and loss reserving for Property and casualty Insurance, ACTEX publications; 3rd edition, ISBN-10: 1566986117, 2007.
Supportive References	● Materials provided by course instructor.
Electronic Materials	● None
Other Learning Materials	● A group of software (general: MSWord – MSExcel, course specific: by course instructor).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	● Classrooms
Technology equipment (projector, smart board, software)	● Data show ● Smart board ● PC/Laptop
Other equipment (depending on the nature of the specialty)	● None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review)	● Direct (Moderation & Verification)

Assessment Areas/Issues	Assessor	Assessment Methods
	● Students	● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Operations of Insurance Companies**
Course Code:	**QM 0676-403**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:					
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered: Level 4 / 2nd year					
4. Course general Description This course introduces the basic technical operations of insurance firms and how they operate. It also gives an insight into external factors affecting insurance operations.					
5. Pre-requirements for this course (if any): Reinsurance - QM 0676-305					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s) **The main objective of this course is to provide students with the required knowledge about the structure of insurance firms and how they operate**					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	List the basic operations of an insurance company	K1, K2	Lectures Case studies	Examinations Coursework assessments Assignments
1.2	Recognize the basics of insurance marketing and different types of insurance marketing schemes.	K2	Lectures Case studies	Examinations Coursework assessments Assignments
1.3	Memorize the steps of the processes of underwriting and claim settlement.	K1, K2	Lectures Case studies	Examinations Coursework assessments Assignments
2.0	Skills			
2.1	Assess the impact of some external factors on insurance company operations	S1	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
2.2	Estimate the insurance rate for a given applicant based upon a given rating system.	S2	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
2.3	Compare coverages and exceptions of typical property and liability insurance policies in Saudi Arabia.	S1	Lectures Case studies Classwork	Examinations Coursework assessments Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	Coursework assessments Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to property and liability risks	1.5
2.	Automobile insurance	12
3.	Fire insurance	12
4.	Marine and aviation insurance	12
5.	Accident and liability insurance	7.5
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments	During Semester	15%
3.	Quizzes	2nd	10%
4.	Mid Term Exam	7th	30%
5.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Myhr, A. E.; and Markham, J. J., Insurance Operations: Regulation and Statutory Accounting, Second edition, American Institute for Chartered Property Casualty Underwriters, 2004.
Supportive References	Handouts and other material provided or recommended by the course instructor. • Mohamed Salah al-Din Sidqi and others, "General Insurance, Dar Elshrooq, Cairo, 2006
Electronic Materials	None
Other Learning Materials	Agroup of computer programs/applications (R - Actuarial software - Excel).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students' assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Regression Analysis and Time Series**
Course Code:	**QM 0676-404**
Program:	**Bachelor of Risk and Insurance**
Department:	**Quantitative Methods**
College:	**Business Administration**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3 Hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:	9th level /3rd year				
4. Course general Description This course covers two of the widely used statistical methods for fitting data; namely regression analysis (linear and non-linear) and univariate time series models (ARIMA models)					
5. Pre-requirements for this course (if any): **Statistical Analysis - QM 0606-104**					
6. Co- requirements for this course (if any):					
7. Course Main Objective(s) The main objective of this course is to provide students with the required knowledge and tools to use regression and time-series for prediction purposes in insurance.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	39
2.	Laboratory/Studio	6
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Memorize the basics of linear regression including the steps of building and testing the model and expressing the model using matrices.	K3	Lectures	● Examinations ● Coursework assessments
1.2	Recognize different forms of nonlinear regression models and transformations.	K3	Lectures	● Examinations ● Coursework assessments
1.3	Identify some known forms of univariate deterministic and stochastic time series models.	K3	Lectures	● Examinations ● Coursework assessments
2.0	Skills			
2.1	Estimate the parameters of different linear and nonlinear regression models.	S3,S4	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Measure both the goodness of fit and the prediction error for linear regression models.	S3, S4	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Evaluate violations of linear regression assumptions and use some possible transformations or solutions.	S3	● Lectures ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.4	Calculate seasonal effects for traditional time series models and use them for predicting future values of the series.	S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.5	Prepare and interpret data analysis reports applying regression and time series models to insurance data using different statistical software.	S4, S5	● Lab tutorials ● Case studies ● Projects	● Examinations ● Coursework assessments ● Reports

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Simple linear regression	9
2.	Multiple-linear regression	15
3.	Introduction to Non-linear regression	6
4.	Introduction to time series analysis	15
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	In-class participation	During Semester	5%
2.	Assignments, reports and presentations	During Semester	20%
3.	Quizzes	3rd	5%
4.	Mid Term Exam	7th	30%
5.	Final exam	End of smester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Douglas C. Montgomery, Elizabeth E. Peck and Geoffrey G. Vining: Introduction to linear regression analysis, 4th edition student solutions manual (Wiley series in probability and statistics, ISBN: 0470125063, 2007.
Supportive References	Peter J. Brockwell, et al., Time series - Theory and methods, 2nd Edition (Springer series in statistics), ISBN: 8184890869, 2009.
Electronic Materials	A group of computer programs/applications (R - SPSS – Excel - Word - Power point).
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities	Classrooms

Items	Resources
(Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Pension Funds and Retirement Plans**
Course Code:	**QM 0676-405**
Program:	**Risk and Insurance**
Department:	**Quantitative Methods**
College:	**School of Business**
Institution:	**King Faisal University**
Version:	**3**
Last Revision Date:	**01/02/2022**

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:					
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☐	Elective☒			
3. Level/year at which this course is offered: 10th level /4th year					
4. Course general Description This course introduces the basics of designing and administrating retirement plans and private insurance funds.					
5. Pre-requirements for this course (if any): Social Insurance 0676-302					
6. Co- requirements for this course (if any):					
7. Course Main Objective(s) The main objective of this course is to provide students with the basics of private insurance funds and retirement plans and enable them to prepare a private insurance plan.					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	45	100%
2.	E-learning		
3.	Hybrid ● Traditional classroom ● E-learning		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	45
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define a retirement plan and a private insurance fund.	K1, K2	Lectures	● Examinations ● Coursework assessments
1.2	Identify different types of risks faced by a retired.	K2	Lectures	● Examinations ● Coursework assessments
1.3	Describe the steps of designing a retirement plan.	K2	Lectures	● Examinations ● Coursework assessments
2.0	Skills			
2.1	Plan the future needs of a retired.	S1, S2, S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.2	Calculate the individual's contribution in a private fund given a specific benefit.	S1, S2, S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
2.3	Evaluate and criticize given examples of retirement plans and private insurance funds.	S1, S2, S3	● Lectures ● Case studies ● Classwork	● Examinations ● Coursework assessments ● Assignments
3.0	Values, autonomy, and responsibility			
3.1	Show teamwork skills and responsibility for self-learning and commitment.	V1, V2	Classwork	● Coursework assessments ● Assignments

C. Course Content

No	List of Topics	Contact Hours
1.	Retirement risks	9
2.	Retirement plans	18
3.	Private insurance and pension funds	18
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Discussions	During Semester	5%
2.	Assignments	During Semester	15%
3.	Quizzes	4th and 10th	10%
4.	Mid Term Exam	6th	30%
5.	Final exam	End of Semester	40%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Eisterhold, H. Retirement savings and security – selected elements and considerations. Nova Publishers, New York, 2013.
Supportive References	Handouts and other material provided or recommended by the course instructor. "Fundamentals of Private Pensions", Ninth edition, McGill, 2010.
Electronic Materials	
Other Learning Materials	A group of computer programs/applications (Word, Excel, Power point, Lindo, Lingo, QM for Windows, R).

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms
Technology equipment (projector, smart board, software)	Data show Smart board PC/Laptop
Other equipment (depending on the nature of the specialty)	None

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	● Faculty (peer review) ● Students	● Direct (Classroom observation) ● Indirect (CES/SES/PES)
Effectiveness of students assessment	● Faculty (peer review) ● Students	● Direct (Moderation & Verification) ● Indirect (CES/SES/PES)
Quality of learning resources	● Faculty ● Students	● Direct (Course report) ● Indirect (CES/SES/PES)
The extent to which CLOs have been achieved	● Faculty ● Students	● Direct (Course results) ● Indirect (CES/SES/PES)
Other	●	●

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	COLLEGE OF BUSINESS ADMINISTRATION COUNCIL
REFERENCE NO.	17TH COUNCIL MEETING FOR THE ACADEMIC YEAR 1443/1444 H.
DATE	MONDAY 21/08/1444 H. (13/03/ 2023)