هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Course Specifications
(Postgraduate Degree)

Course Title:	**Futures Methods & Techniques: Quantitative Approaches**
Course Code:	**MSFS 6312**
Program:	**MsC Futures Studies**
Department:	**Futures Studies**
College:	**College of Sciences and Human Studies**
Institution:	**Prince Mohammad Bin Fahd University**

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A. Course Identification

1. Credit hours: 3
2. Course type ☒ Required ☐ Elective
3. Level/year at which this course is offered: MsC, Year 1
4. Pre-requisites for this course (if any)**: N/A**
5. Co-requisites for this course (if any)**: N/A**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	45	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
1	**Lecture**	30
2	**Laboratory/Studio**	
3	**Seminars**	
4	**Others** (specify) Training session	15
Total		

B. Course Objectives and Learning Outcomes

1. Course Description

The course introduces (the most common) futures studies quantitative methods and mixed methods that have quantitative component as well as concept related to them.
Methods introduced include but are not limited to: statistical thinking and statistical methods, quantitative trend extrapolation, cluster anlysis, quantitative data and methods in Delphi and scenario processes, quatitative modelling, Big Data analyses

2. Course Main Objective

• Students will understand the essence of quantitative and mixed futures research methods.
• Students are capable to describe different futures research methods.
• Students undertand the difference between data gathering and data analysis.
• Students know how to select which method for what purpose, and acknowledge the flexibility of the use of the methods.

3. Course Learning Outcomes

Course Learning Outcomes (CLOs)		Aligned PLOs*
1	**Knowledge and Understanding**	
1.1	Understand how the research question critically drives the choice of methods in research design	K3
1.2	Acknowledge the development and pros and cons of methods introduced	K2
1.3	Understand the relationship between theory and method	K2
2	**Skills :**	
2.1	Apply methods according to research question and set-up	S3
2.2	Assess methods critically	S3
2.3	Develop method(s) further for new purposes	S3
2.4		
3	**Values:**	
3.1	Carry out methodologically and research ethically sound futures research work/project/process.	V1, V2

* Program Learning Outcomes

C. Course Content

No	List of Topics	Contact Hours
1	Trend analyses and extrapolation	8
2	Ouantitative modelling and simulations	8
3	Statistical thingking and methods in futures research	8
4	Big data and data mining	8
5	Other quantititative approaches and hybrid/mixed methods	13
Total		45

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Understand how the research question critically drives the choice of methods in research design	Lectures, training sessions	Exams, training report, learning diary
1.2	Acquire knowledge of the development and pros and cons of methods introduced	Lectures, training sessions	Exams, training report, learning diary
1.3	Understand the relationship between theory and method	Lectures, training sessions	Exams, training report, learning diary
2.0	**Skills**		
2.1	Abilty to apply methods according to research question and set-up	Lectures, training sessions	Exams, training report
2.2	Compentency to assess methods critically	Lectures, training sessions	Exams, training report

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
2.3	Abilty to develop method(s) further for new purposes	Lectures, training sessions	Exams, training report
3.0	**Values**		
3.1	Capable to carry out methodolgically and research ethically sound futures research work/project/process.	Lectures, training sessions	Exams, training report

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Learning diary		50
2	Group work report		50

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

- Advisors are assigned in Banner Student System for individual (general) student consultations and academic advice.
- Office hours are provided for students to ask questions related to the course.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	Statistics, mathematics, quantitative reserch methods in futures studies Futures Research Methodology V3.0 CD. (selected chapters) Neuman, W.L. (2014/2007) Basics of Social Research. Pearson Educations.
Essential Reference Materials	
Electronic Materials	Statistical computer programs (e.f. SAS, SPSS etc.)
Other Learning Materials	Kahane, Adam (2012) Transformative Scenario Planning: Working Together to Change the Future.

2. Educational and research Facilities and Equipment Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom with computer, projector and smart board suitable for graduate students
Technology Resources (AV, data show, Smart Board, software, etc.)	Smart Board

Item	Resources
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Computer lab equipped with finite element software

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching and Assessment	Independent reviewers by Program leaders and Deanship of Quality and Accreditation	Course survey through online Course Evaluation System
Effectiveness of Assessment	Independent reviewers/peer review	Independent Evaluation of Assessment Forms
Achievement of Course Learning Outcomes	Faculty	Exam Questions, Rubrics
Learning Resources	Student	Learning Resources Annual Survey
Effectiveness of Teaching and Assessment	Independent reviewers by Program leaders and Deanship of Quality and Accreditation	Course Survey through online Course Evaluation System
Effectiveness of Assessment	Independent reviewers/peer review	Independent Evaluation of Assessment Forms
Achievement of Course Learning Outcomes	Faculty	Exam Questions, Rubrics

Evaluation Areas/Issues (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	