



Course Specifications (Postgraduate Degree)

Course Title:	Theories in Anticipation
Course Code:	MSFS 6303
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 <input checked="" type="checkbox"/> Required <input type="checkbox"/> 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	25
2	Laboratory/Studio	10
3	Seminars	10
4	Others (specify)	
Total		45

B. Course Objectives and Learning Outcomes

1. Course Description

The course examines the theory of anticipation, anticipatory behavior, i.e. a behavior that ‘uses’ the future in its actual decisional process. It explores the question of how different kinds of systems anticipate, and assess the risks and uses of such anticipatory practices. The course refines the connection between the anticipatory approach and futures studies, and provides the ontological framework within which anticipation flourishes. Topics such as time and space, multidimensional systems including CAS, complexity, chaos, and the modeling of relations between futures influences, drivers and concepts are covered. It ensures students are familiar with the building and application of models as well as, gaming futures, the practice and purpose of futures literacy laboratories and a broad base of alternative, decentralized thinking techniques. The course in part uses futures literacy as a tool to substantiate the benefits and implications of anticipatory systems and processes.

2. Course Main Objective

- To educate students in the power of anticipatory theory and practice in providing students with a strong understanding and ability to enhance their repertoire of resources for developing ideas of the future.
- To expand and deepen their competence to use the future to act in the present based upon discontinuity rather than an evolutionary approach.
- To encourage students to identify the properties of our environment that are potential for change within a given futures horizon and elaborates upon the relevance and power of different types of anticipation and the preferred structures and processes that are necessary for framing anticipatory action.
- To advance student skills in optimizing the benefits of convergent and divergent thinking systems both separately and blended.

3. Course Learning Outcomes

Course Learning Outcomes (CLOs)		Aligned PLOs*
1	Knowledge and Understanding	
1.1	Recognize the critical aspects of anticipatory theory and its application as part of the futures studies framework.	K1
1.2	Understand the relevance and power of alternative anticipatory practices in developing effective futures in the present.	K1, K3
1.3	Understand roles of anticipatory theory for futures-related projects in local, national, and international markets.	K1, K2, K3
2	Skills :	
2.1	Use of anticipatory systems (systems thinking, modeling and applications) for a variety of futures horizons in futures-driven projects	S1, S2, S3
2.2	Conduct the futures literacy workshops	S4
3	Values:	
3.1	Understand the ethical and societal impacts of applying anticipatory theory.	V1
3.2	Engage students with the community for them to apply their classroom knowledge to public use.	V1

* Program Learning Outcomes

• C. Course Content

No	List of Topics	Contact Hours
1	Futures Literacy	9
2	Systems thinking/CAS design, modeling, relations and application in anticipatory systems	9
3	Game theory and gaming futures	6
4	Change, complexity, disruption and discontinuity	9
5	Applying anticipation	12
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	Recognize the critical aspects of anticipatory theory and its application as part of the futures studies framework.	Lectures, Labs	Assignments and Peer-to-peer evaluation
1.2	Understand the relevance and power of alternative anticipatory practices in developing effective futures in the present.	Lectures	Exams
1.3	Understand roles of anticipatory theory for futures-related projects in local, national, and international markets.	Seminars, Group labs	Assignments and group work and discussion
2.0	Skills		
2.1	Use of anticipatory systems (systems thinking, modeling and applications) for a variety of futures horizons in futures-driven projects	Lectures, Labs	Assignments, peer-to-peer evaluation,
2.2	Conduct the futures literacy workshops	Seminars, labs	Labs. Peer-to-peer
3.0	Values		
3.1	Understand the ethical and societal impacts of applying anticipatory theory.	Lectures, Seminars	Assignments
3.2	Engage students with the community for them to apply their classroom knowledge to public use.	Seminars	Peer-to-peer discussion

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Background and Theory <i>Assignment</i>	2	10
2	Complexity, disruption and change <i>Assignment</i>	4	10
3	Systems design, modeling and application <i>Assignment</i>	5	10
4	<i>Game theory and Gaming futures Assignment</i>	7	10
5	Futures literacy <i>Presentation</i>	9	10
6	Mid-term <i>Written Test</i>	10	15
7	Applying anticipation <i>Group project</i>	12	10
8	Final Project <i>Written project</i>	15	25

*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

<p>Required Textbooks</p>	<ul style="list-style-type: none"> • Introduction to Anticipation Studies, Roberto Poli, 2017, Springer International Publishing. • Transforming the Future: Anticipation in the 21st Century Edited By <u>Riel Miller</u> Copyright 2018, 300 Pages 15 B/W Illustrations by Routledge
<p>Essential Reference Materials</p>	<ul style="list-style-type: none"> • Futures Literacy: The Capacity to Diversify Conscious Human Anticipation, Riel Miller & Richard Sandford
<p>Electronic Materials</p>	

	<ul style="list-style-type: none"> • <u>Mitchel Resnick</u>:Turtles, Termites, and Traffic Jams: Explorations in Massively Parallel Microworlds • <u>Beverley Ellis</u>¹, <u>Stuart Ian Herbert</u> Complex adaptive systems (CAS): an overview of key elements, characteristics and application to management theory • Draper Kaufman: Systems 1: An Introduction to Systems Thinking (1980) • G. Owen, in Encyclopedia of Applied Ethics (Second Edition), 2012 Game Theory • Anticipation: The Discipline of Uncertainty Riel Miller
Other Learning Materials	

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
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

Evaluation Areas/Issues	Evaluators	Evaluation Methods
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	