



UNIVERSITI TEKNOLOGI MARA

ASC302: INTRODUCTION TO ACTUARIAL SCIENCE

Course Name (English)	INTRODUCTION TO ACTUARIAL SCIENCE APPROVED
Course Code	ASC302
MQF Credit	3
Course Description	This course introduces the students to the actuarial science practices. The syllabus for this course provide with the basic understanding of actuarial science and how to become actuary that exist in the market provided by Malaysian's insurance companies. Students will also be equipped with the fundamentals of insurance in the context of actuarial science.
Transferable Skills	Expert in the Field Independent and Critical Thinker Solution Provider
Teaching Methodologies	Lectures
CLO	CLO1 Clarify the overview of actuarial profession in insurance industry. CLO2 Study the elements needed in an insurance product in insurance company. CLO3 Explain knowledge and understanding of actuarial science to community.
Pre-Requisite Courses	No course recommendations
Topics	
1. Role of the Actuary 1.1) Introduction 1.2) Types of Actuaries 1.3) Prudential Supervision 1.4) Disclosure Information 1.5) Fair treatment 1.6) Monitoring the standards within the actuarial profession 1.7) Materiality 1.8) Independence of Employed Actuaries 1.9) Data Quality 1.10) Ethics	
2. The Context of Actuarial Work 2.1) Introduction 2.2) Professional and regulatory contexts 2.3) Government policy 2.4) Taxation 2.5) Social assistance and social insurance 2.6) Economic conditions and trends 2.7) Accounting standards and practices 2.8) Range of products and services offered	
3. Meeting Consumer Needs 3.1) Financial Life Cycle 3.2) Risk and Volatility in the Life Cycle 3.3) Savings Products 3.4) Non-savings Products (Insurance)	
4. Risk Management for Insurers 4.1) Type of risk for insurers 4.2) Risk management strategies 4.3) Reinsurance	

5. Product Design

- 5.1) Product Design Cycle
- 5.2) Understand the need
- 5.3) Nature of the product design process
- 5.4) Risk assessment and underwriting

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment CLO2 20%	20%	CLO2
	Group Project	Group Project CL03 20%	20%	CLO3
	Test	TEST CLO1 10%	10%	CLO1

Reading List	Recommended Text	<ul style="list-style-type: none"> Reginald Edward Underwood 2018, <i>The Elements of Actuarial Science</i>, Franklin Classics [ISBN: 9780343501617]
	Reference Book Resources	<ul style="list-style-type: none"> John C. Hull 2018, <i>Risk Management and Financial Institutions</i>, John Wiley & Sons Inc [ISBN: 9781119448112] Miles Menander Dawson 2018, <i>Practical Lessons in Actuarial Science : An Elementary Text-Book; Volume 2</i>, Franklin Classics [ISBN: 978034185720] Clive Thompson,Paul Hopkin 2021, <i>Fundamentals of Risk Management</i>, Kogan Page Publishers [ISBN: 1398602876] Mathieu Boudreault,Jean-François Renaud 2019, <i>Actuarial Finance</i>, John Wiley & Sons [ISBN: 1119137020]

Article/Paper List	This Course does not have any article/paper resources
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Other References	This Course does not have any other resources
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