

Sinaut Campus, Tutong, UNISSA



FACULTY OF AGRICULTURE

UNDERGRADUATE PROGRAMME HANDBOOK 2024/2025

Prepared by:

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Foreword

بسم الله الرحمن الرحيم السلام عليكم ورحمة الله وبركاته الحمد لله رب العالمين، والصلاة والسلام على أشرف الأنبيآء والمرسلين و على آله وصحبه أجمعين، أما بعد



Alḥamdulillāh, all praises and thanks be to Allāh Subḥānahu wa Ta'ālā for His Blessings. The Faculty of Agriculture (FoA) was officially established on 28th January 2021. On its first year of establishment, the Faculty of Agriculture was offering Bachelor of Science in Agriculture (Agribusiness). Another new program, Bachelor of Science in Agriculture (Agrotechnology) was approved in 2022 and was first offered in August 2023. The latest program, Bachelor of Science in Agriculture (Aquaculture) was approved in August 2023.

This Undergraduate Programme Handbook 2024/2025 is published by FoA, Universiti Islam Sultan Sharif Ali (UNISSA) in order to convey accurate information on academic matters relating to the undergraduate programme offered by the Faculty. With this publication, it is hoped that the students, faculty members, staff

and the public can have access to the structures of the programme expected to be offered throughout their studies at UNISSA.

On this occasion, I would like to express my sincere gratitude to all parties involved in the preparation of this handbook. With all the efforts that we have put in, I pray that Allāh Subḥānahu wa Ta'ālā will reward us. Āmīn yā Rabbal 'Ālamīn.

وبالله التوفيق والهدايه والسلام عليكم ورحمة الله وبركاته

Associate Professor Dr. Hajah Rose binti Abdullah Dean Faculty of Agriculture Universiti Islam Sultan Sharif Ali

About Us

In an effort to uphold the *titah* of His Majesty the Sultan and Yang Di-Pertuan of Brunei Darussalam, UNISSA has worked towards the establishing and implementing the Agriculture Faculty with the appointment of agricultural specialists from among UNISSA academicians as well as from outside UNISSA, consisting of visiting academicians and practitioners.

During the Aidilfitri Celebration 1440H/2019 organized by Yayasan Sultan Haji Hassanal Bolkiah at Plenary Hall, International Convention Centre, Berakas, His Majesty said:

"In the period of 20 years from 1998 until 2017, the output of the agricultural sector, agri-food and fishery is encouraging."

"This positive development indicates that opportunities to develop this sector are widely open. Even more so with the geographical conditions of this country receiving rain, permitting weather and lands still unexplored. All that remains is our effort and commitment to develop this sector."

His Majesty also said to continue to improve the agricultural sector, productivity, use of advanced technology and to provide an orderly ecosystem and one of the important elements according to His Majesty that needs to be given attention is human resources, especially youths to be active in plantation or livestock activities.

"Thus, in this direction, I call upon the youths to appear as the main force in the country's agricultural industry. My government has been and is currently implementing several initiatives to help the growth of this sector."

Apart from that, His Majesty also paid serious attention towards the importance of the agricultural sector in the country as well as the role of educational institutions to also contribute to the development of agro-based industries. His Majesty's concern can be seen from a series of His Majesty's *titah* on the importance of agriculture. The culmination was the establishment of the Faculty of Agriculture at UNISSA in a *titah* during an unscheduled visit to UNISSA on 12 October 2020. He said:

"Wouldn't it be appropriate if UNISSA set up a new faculty called the Faculty of Agriculture because I understand that similar knowledge of Agriculture and Animal Husbandry is also found in Islam."

"So, I see that although we have yet to have a Centre of Higher Education for Agriculture, having a Faculty of Agriculture is just as sufficient."

Thereupon, UNISSA officially set up its agriculture faculty on 28th January 2021 and named it as Faculty of Agriculture.

Vision

To be a centre of excellence of international standard in providing agricultural education and research based on Islamic principles for the development of agriculture sector.

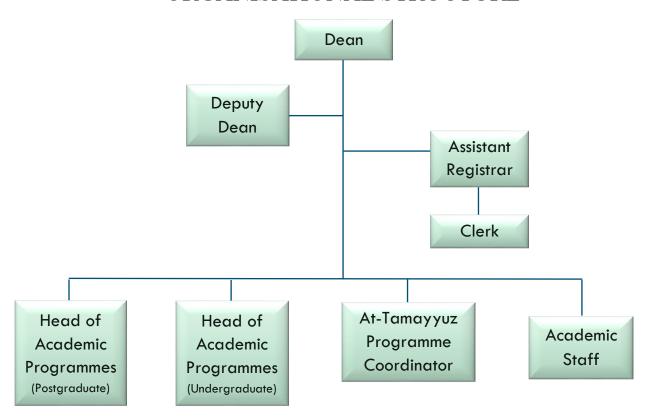
Mission

To produce virtuous, knowledgeable and highly skilled graduates in the field of agriculture in accordance to current technologies and needs.

Objectives

- cs To produce knowledgeable and skilled graduates in the field of agriculture based on the teachings of the Qur'an and Sunnah.
- To produce agriculture graduates who are critical thinkers and innovative in applying agricultural knowledge to develop the Ummah, industry and country.
- cs To train and produce competent agriculture graduates who can channel knowledge effectively to the community.
- To enable students to play a role in developing the field of agriculture based on the latest technology and identify entrepreneurial opportunities that can be contribute to the development of the country's agricultural industry.

ORGANISATIONAL STRUCTURE



STAFF DIRECTORY



DEAN & ASSOCIATE PROFESSOR

Associate Professor Dr. Hajah Rose Binti Abdullah

Educational Background

- PhD in Islamic Civilisation, National University of Malaysia (UKM), Malaysia.
- Master in Islamic Banking and Finance, Universiti Brunei Darussalam (UBD), Brunei Darussalam.
- Postgraduate Diploma in Islamic Banking and Insurance, Institute of Islamic Banking and Insurance, London, United Kingdom.
- Master in Business Administration, Heriot-Watt University, United Kingdom.
- Bachelor of Art in Economics (Honours), National University of Malaysia (UKM), Malaysia.
- Diploma in Public Administration, University of Technology Mara (UiTM), Malaysia.

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DEPUTY DEAN & LECTURER

Dr. Nur Thaqifah Salihah Binti Haji Mohd Salleh

Educational Background

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HEAD OF POSTGRADUATE & PROFESSOR

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Educational Background

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- Master of Agricultural Science in Soil Fertility and Biosystems Management, University Putra Malaysia (UPM), Malaysia.
- Master of Library and Information Science, International Islamic University Malaysia, (IIUM), Malaysia.
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HEAD OF UNDERGRADUATE & LECTURER

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- DIC in Molecular Plant Pathology, Imperial College London, United Kingdom.
- MSc in Plant Biotechnology, University of London, United Kingdom.
- Post Graduate Diploma in Plant Protection, University of Aleppo, Syria.
- BSc. in Agricultural Engineering, University of Aleppo, Syria.

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PROFESSOR

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- Post Graduate Specialization in Fisheries Planning, Extension and Management, Institute of Aquaculture, University of Stirling, Scotland, United Kingdom.
- Diploma in Islamic Revealed Knowledge, International Islamic University Malaysia (IIUM), Malaysia.
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PROFESSOR

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Educational Background

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Educational Background

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التقويم الجامعي للعام الدراسي ٢٠٢٥/٢٠٢٤ KALENDAR AKADEMIK / ACADEMIC CALENDAR 2024/2025



جامعة السلطان الشريف علي الإسلامية SULTAN SHARIF ALI ISLAMIC UNIVERSITY

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15 September 2024 / 12 Rabiulawal 1446 25 Disember 2021 / 23 Jamadilakhir 1116 Liammore 2025 / 30 Jarr add-khar 1446 27 Januari 2025 / 27 Rejab 1446 29 Januari 2025 / 29 Rejab 1446

رأس لاسدة الهجرية | Awral Tahun Hyrah 1445 | (sebagai ganti hari Ahad, 7 Julai 2024) Hari Keputeraan KDYMM Paduka Seri Baginda Sultan dan Yang Di-Pertuan عبد مبارد جلالة السلطان|Negara Brunei Darussalam

دكاري المولد الشيون الشريف | Maulud Nabi Muhammad SAW عبد النبلاد السبح / eri Krismes وأبي المنته الميلادية | Awal Tuhun Marahi | فيالينا "Isro' Mikro] | الاسواء والمعراج | عبد السنة الصينية | Lahun Daru Cina

24 Februari 2025 / 25 Sya'ban 1446

1 Mac 2025/ 1 Ramedan 1446 17 Mac 2025 / 17 Ramadan 1445 31 Mac 2025 / 1 Syswel 1445 31 Mei 2025 / 4 Zulhijjah 1449 7 Jun 2025 / 11 Zulhipsh 1446 26 Jun 2025 /1 Muharam 1447 15 Julai 2025 /20 Muharram 1447 عود الإحدادات Han Kebangsaan Negara Bruner Darusselam Ke 30 إ

(sebagai ganti hari Ahad, 23 Feb 2025) */wwal Romadon إنن رمصان أين فاكري نرول القرآن | Memperingati Nuzul al-Gur'an

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مرد الأحرس المرارك | Herr Baye Audd Adher | عرد الأحرس

*Awol Tahun Hijrah 1445 | أرض السنة اليعربة | Hari Keputersan KIYYN N Padula Seri Baginda Sultan dan Yang Di-Persuan Negara Brunei Derussalam | عبد سيلاد جلالة السلطان

PROGRAMME OFFERED

P001 – BACHELOR OF SCIENCE IN AGRICULTURE (AGRIBUSINESS)

Brief Profile	This programme provides a strong core curriculum in providing student with a strong foundation of Agricultural knowledge based on the teachings of the Qur'an and the Sunnah. It is designed to provide students with a specialist knowledge set and skills that arise out of combining the sciences of agriculture and business based on the latest technology. This programme aims to produce highly trained graduates who can contribute towards the improvement of the country's agricultural industry, the Ummah and the nation.
Mode and Duration of Study	Full-time basis – 3 years
Medium	English
Tuition Fee	BND 12,000.00
Intake	August

PROGRAMME STRUCTURE

Programme	Bachelor of Science in Agriculture (Agribusiness)
Code	P001
Faculty	Faculty of Agriculture (FoA)
Medium	English

	YEAR 1 SEM 1											
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ1105	Al-Qur'an Al-Karim	1	1	1	1	Eng	80	20	URC	Mnd	
2	KL1112	Co-Curriculum 1		1	0	2	NA	100	0	URC	Mnd	
3	KL1103	English for Busines	S	2	1	2	Eng	50	50	URC	Mnd	
4	TM1101	Artificial Intelligence and		3	2	1	Eng	70	30	URC	Mnd	
4	LIVITIOT	Emerging Technolog	ies	3		1	LIIG	70	30	ONC	IVIIIU	
5	AA1206	Arabic 1		2	1	2	Arb	50	50	FRC	Mnd	
6	GB1202	2 Fundamentals of Agriculture		3	2	1	Eng	60	40	FRC	Mnd	
7	GB1206 Agripreneurship		3	2	1	Eng	60	40	FRC	Mnd		
8	GB1301 Agriculture Microeconomics			3	2	1	Eng	60	40	PRC	Mnd	
	Total	Courses: 8	CHrs	18		Со	nt. Hrs:	22	W	orkload	: 54	

	YEAR 1 SEM 2											
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ1106	Al-Qur'an Al-Karim	2	1	1	1	Eng	80	20	URC	Mnd	
2	KL1113	Co-Curriculum 2		1	0	2	NA	100	0	URC	Mnd	
	KL1120	MIB (For Malay Speak	ers)				Mal					
3	3 Brunei Studies (For Non-Malay		3	2	1	Eng	40	60	URC	Mnd	1 of 2	
	KLIIZI	Speakers)					Eng					
4	AA1207	Arabic 2		2	1	2	Arb	50	50	FRC	Mnd	
5	GB1207	Farm Managemen	t	3	2	1	Eng	60	40	FRC	Mnd	
6	GB1302	Agricultural Macroecon	omics	3	2	1	Eng	60	40	PRC	Mnd	
7	GT1302	Applied Crop Science		3	2	1	Eng	60	40	PRC	Mnd	
8	GT1303	Applied Animal Scien	ice	3	2	1	Eng	60	40	PRC	Mnd	
	Total	Courses: 8	CHrs	19		Со	nt. Hrs:	22	Wo	rkload	= 57	

	YEAR 1 SEM 3											
No.	Code	Course Name	CHr	L	Т	Med	CW%	EX%	Type	As	Choices	
1	GB1208	Agriculture in Islam		3	2	1	Eng	60	40	FRC	Mnd	
2	GB1209	Applied Statistics		3	2	1	Eng	60	40	FRC	Mnd	
	Total	Courses: 2 CHrs				C	ont. Hrs	: 6	Wo	rkload	= 18	

	YEAR 2 SEM 1												
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices	
1	UQ2105	Al-Qur'an Al-Karim	3	1	0	1	Eng	60	40	URC	Mnd		
2	SU1203	Fiqh Al-Ibadat <fiqh Worship></fiqh 	of	3	2	1	Eng	40	60	URC	Mnd		
3	UA2224	Islamic Ethics		3	2	1	Eng	40	60	URC	Mnd		
4	UT2226	Introduction to Quranio Hadith Sciences	c And	3	2	1	Eng	40	60	URC	Mnd		
5	KL2122	Co-Curriculum 3		1	0	2	NA	100	0	URC	Mnd		
6	GB2301	Agribusiness Managen	nent	3	2	1	Eng	40	60	PRC	Mnd		
7	GB2302	Agriculture and Digital Marketing		3	2	1	Eng	60	40	PRC	Mnd		
8	EF2304	Principles of Account	ing	3	2	1	Eng	40	60	PRC	Mnd		
	Total	Courses: 8	CHrs	20		Со	nt. Hrs:	21	W	orkload			

YEAR 2 SEM 2												
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ2106	Al-Qur'an Al-Karim	4	1	0	1	Eng	80	20	URC	Mnd	
2	UA2125	Aqidah Ahl Al-Sunnah V Jama'ah (English Medi		3	3	0	Eng	40	60	URC	Mnd	
3	KL2123	Co-Curriculum 4		1	0	2	NA	100	0	URC	Mnd	
4	GT2304	Biosecurity in Agricult	ure	3	2	1	Eng	60	40	PRC	Mnd	
5	GT2305	Agricultural Extension	on	3	1	2	Eng	70	30	PRC	Mnd	
6	GB2207	Research Methodology in Agribusiness		3	2	1	Eng	60	40	FRC	Mnd	
7	GB2304	Agriculture Production System		3	2	1	Eng	60	40	PRC	Mnd	
8	GT2308	Precision and Smart Far	ming	3	2	1	Eng	60	40	PRC	Mnd	
	Total	Courses: 8	CHrs	20		Сс	nt. Hrs:	21	W	orkload	: 60	

	YEAR 2 SEM 3											
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	KL2324	Industrial Training	Industrial Training 1		0	6	Eng	100	0	PRC	Mnd	
	Total Courses: 1 CHrs					Co	ont. Hrs	: 6	W	orkload	: 18	

		YI	EAR 3	SEIV	11						
No.	Code	Course Name	CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ3105	Al-Qur'an Al-Karim 5	1	0	1	Eng	80	20	URC	Mnd	
2 DH2105 Islamic History and Civilisation		3	2	1	Eng	40	60	URC	Mnd		
3 EF3309 Management Accounting		3	2	1	Eng	40	60	PRC	Mnd		
4	GB3301	Export Marketing and Practices	3	2	1	Eng	40	60	PRC	Mnd	
5	GB3302	International Agricultural Trade	3	2	1	Eng	40	60	PRC	Mnd	
6	GB3303	Agricultural Business Risk and Investment	3	2	1	Eng	50	50	PRC	Mnd	
7	GB3304 Agribusiness Project 1		3	0	3	Eng	100	0	PRC	Mnd	·

Total Courses: 7 CHrs 19 Contact Hrs:19 Workload:57

				YE	AR 3	SEM	2					
No.	Code	Course	Name	CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ3106	Al-Qur'an A	l-Karim 6	1	0	1	Eng	80	20	URC	Mnd	
2	GB3210	Climate Change and Food Security		3	2	1	Eng	60	40	FRC	Mnd	
3 LG4305 Business Law		3	2	1	Eng	40	60	PRC	Mnd			
4	GB3305	Agribusiness Project 2		3	0	3	Eng	100	0	PRC	Mnd	
5	GB3306	Sustainable Agriculture		3	2	1	Eng	60	40	PRC	Mnd	
6	6 GB3307 Current Trends in Agricultural Markets		3	2	1	Eng	40	60	PRC	Mnd		
7	Supply Chain GB3308 Management in Agriculture		3	2	1	Eng	40	60	PRC	Mnd		
	Total	Courses: 7	CHrs	19		Со	nt. Hrs: 1	9	W	orkload	: 57	

	YEAR 3 SEM 3											
No. Code Course Name			CHr	L	Т	Med	CW%	EX%	Туре	As	Choices	
1	KL3324	Industrial Training 2		6	0	0 6 Eng 100		100	0 PRC Mnd			
Total		Courses: 1	CHrs	6 C			ont. Hrs	Workload : 18				

Grand Total Course	s: 50 CHrs: 133	Cont. Hrs: 142	Workload: 399
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Туре	Courses Count	%	Credit Hrs	%	Contact Hrs	%
URC	15	30	24	18	31	22
FRC	12	24	34	26	36	25
PRC	23	48	75	56	75	53
TOTAL	50	100	133	100	142	100

PROGRAMME OFFERED

P002 – BACHELOR OF SCIENCE IN AGRICULTURE (AGROTECHNOLOGY)

Brief Profile	This program is necessary to enhance learning, knowledge and skills in the field of agriculture in line with the era of industrial revolution 4.0 national needs and developments at the international level. This is to meet the needs of the country and preparation towards Brunei Vision 2035. Studies in agriculture aim to train aspects of research and innovation as well as towards the improvement and progress of the country's agricultural sector and industry.
Mode and Duration of Study	Full-time basis – 3 years
Medium	English
Tuition Fee	BND 12,000.00
Intake	August

PROGRAMME STRUCTURE

Programme	Bachelor of Science in Agriculture (Agrotechnology)
Code	P002
Faculty	Faculty of Agriculture (FoA)
Medium	English

			Υ	EAR 1	SEN	/ 11						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ1105	Al-Qur'an Al-Karim :	1	1	1	1	Eng	80	20	URC	Mnd	
2 KL1112 Co-Curriculum 1		1	0	2	NA	100	0	URC	Mnd			
3 KL1103 English for Business		2	1	2	Eng	50	50	URC	Mnd			
4	TM1101	Artificial Intelligence and Emerging Technologies		3	2	1	Eng	70	30	URC	Mnd	
5	AA1206	Arabic 1		2	1	2	Arb	50	50	FRC	Mnd	
6	6 GB1202 Fundamentals of Agriculture		3	2	1	Eng	60	40	FRC	Mnd		
7	7 GB1206 Agripreneurship		3	2	1	Eng	60	40	FRC	Mnd		
8	8 GT1301 Fundamentals of Soil Science		3	2	1	Eng	60	40	PRC	Mnd		
	Total Courses: 8 CHrs		18	Cont. Hrs: 22			W	orkload				

			Y	EAR 1	SEN	12						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ1106	Al-Qur'an Al-Karim 2	2	1	1	1	Eng	80	20	URC	Mnd	
2	2 KL1113 Co-Curriculum 2		1	0	2	NA	100	0	URC	Mnd		
KL1120 MIB (For Malay Speakers)					Mal							
3	3 Brunei Studies (For Non-Malay		3	2	1	Eng	40	60	URC	Mnd	1 of 2	
	Speakers)					LIIG						
4	AA1207	Arabic 2		2	1	2	Arb	50	50	FRC	Mnd	
5	GB1207	Farm Management		3	2	1	Eng	60	40	FRC	Mnd	
6	6 GT1302 Applied Crop Science		3	2	1	Eng	60	40	PRC	Mnd		
7	7 GT1303 Applied Animal Science		3	2	1	Eng	60	40	PRC	Mnd		
8	8 GT1304 Agricultural Economics		3	2	1	Eng	60	40	PRC	Mnd		
	Total	Courses: 8	CHrs	19	Cont. Hrs: 22			22	Workload = 57			

	YEAR 1 SEM 3											
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	GB1208	Agriculture in Islam		3	2	1	Eng	60	40	FRC	Mnd	
2	GB1209	Applied Statistics		3	2	2 1 Eng 60		60	40 FRC Mnd			
Total		Courses: 2	CHrs	6	Cont. Hrs: 6			Workload = 18				

				YEAF	R 2 SI	EM 1						
No.	Code	Course N	Name	CHr	Ш	Т	Med	CW%	EX%	Type	As	Choices
1	UQ2105	Al-Qur'an A	l-Karim 3	1	0	1	Eng	80	20	URC	Mnd	
2	SU1203	Fiqh Al-Ibadat <fiqh of<br="">Worship></fiqh>		3	2	1	Eng	40	60	FRC	Mnd	
3 UA2224 Islamic Ethics		3	2	1	Eng	40	60	FRC	Mnd			
4	UT2226	Introduction to Quranic And Hadith Sciences		3	2	1	Eng	40	60	FRC	Mnd	
5	KL2122	Co-Curriculum 3		1	0	2	NA	100	0	URC	Mnd	
6	GT2301	Seed Tech	inology	3	2	1	Eng	60	40	PRC	Mnd	
7	GT2302	Plant, Soil, Fertilizer, and Water Analysis		3	2	1	Eng	70	30	PRC	Mnd	
8	GT2303	Agriculture Water Resource Management		3	3 2 1 Eng		60	40	PRC	Mnd		
	Total Courses: 8 CHrs		20	Cont. Hrs: 21				Workload : 60				

			Υ	EAR 2	SEN	12						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ2106	Al-Qur'an Al-Karim	4	1	0	1	Eng	80	20	URC	Mnd	
2	UA2125	Aqidah Ahli Al-Sunnah V Jama'ah (English Medi		3	3	0	Eng	40	60	URC	Mnd	
3	KL2123	Co-Curriculum 4		1	0	2	NA	100	0	URC	Mnd	
4	GT2304	Biosecurity in Agricult	ure	3	2	1	Eng	60	40	PRC	Mnd	
5	GT2305	Agricultural Extension	n	3	1	2	Eng	70	30	PRC	Mnd	
6	GT2207	Research Methods & Experimental Designs Agriculture		3	2	1	Eng	60	40	FRC	Mnd	
7	GT2307	Animal Health and Hou	ısing	3	2	1	Eng	60	40	PRC	Mnd	
8	GT2308	8 Precision and Smart Farming		3	2	1	Eng	60	40	PRC	Mnd	
	Total Courses: 8 CHrs		20		Со	nt. Hrs:	21	Wo	orkload	: 60		

	YEAR 2 SEM 3												
No. Code Course Name					L	Т	Med	CW%	EX%	Type	As	Choices	
1	KL2324	Industrial Training	1	6	0	0 6 Eng 100			0	PRC	Mnd		
Total Courses: 1 CHrs			6		Co	ont. Hrs	: 6	W	orkload	: 18			

			YI	EAR 3	SEIV	11						
No.	Code	Course	Name	CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ3105	Al-Qur'an	Al-Karim 5	1	0	1	Eng	80	20	URC	Mnd	
2	DH2105		story and ation	3	2	1	Eng	40	60	URC	Mnd	
3	GT3301	Crop Pests a Managemen		3	2	1	Eng	60	40	PRC	Mnd	
4	GT3302	Post Production	n Technology	3	2	1	Eng	60	40	PRC	Mnd	
5	GT3303	Soil Fert Manag	ility and ement	3	2	1	Eng	60	40	PRC	Mnd	
6	GT3304	Genetics ar Techno	O	3	2	1	Eng	60	40	PRC	Mnd	
7	GT3305	Research	Project 1	3	0	3	NA	0	0	PRC	Mnd	
	Total Courses: 7 CHrs		CHrs	19		Con	tact Hr	s:19	Wo	rkload	:57	

			Υ	EAR 3	SEN	12						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ3106	Al-Qur'an Al-Karim	6	1	0	1	Eng	80	20	URC	Mnd	
2	GT3306	Research Project 2	2	3	0	3	Eng	100	0	PRC	Mnd	
3	GB3210	Climate Change and F Security	ood	3	2	1	Eng	60	40	FRC	Mnd	
4	GB3306	Sustainable Agricult	ure	3	2	1	Eng	60	40	PRC	Mnd	
5	GT3307	Agriculture Waste Management and Utilis Technologies		3	2	1	Eng	60	40	PRC	Mnd	
6	GT3308	Aquaculture and Fishe Technology	eries	3	2	1	Eng	60	40	PRC	Mnd	
7	HS3348	Halal Slaughtering & N Science	Meat	4	2	2	Eng	60	40	PRC	Mnd	-
	Total Courses: 7 CHrs		CHrs	19		Со	nt. Hrs:	19	Wo	orkload	: 57	

	YEAR 3 SEM 3												
No. Code Course Name					L	Т	Med	CW%	EX%	Туре	As	Choices	
1	KL3324	KL3324 Industrial Training 2		6	0	0 6 Eng 100 0 PRC Mr			Mnd				
Total Courses: 1 CHrs				6		C	ont. Hrs	: 6	W	orkload	: 18		

Grand Total	Courses: 50	CHrs: 133	Cont. Hrs: 142	Workload: 399

Туре	Courses Count	%	Credit Hrs	%	Contact Hrs	%
URC	15	30	24	18	31	22
FRC	12	24	34	26	36	25
PRC	23	46	75	56	75	53
TOTAL	50	100	133	100	142	100

PROGRAMME OFFERED

P003 – BACHELOR OF SCIENCE IN AGRICULTURE (AQUACULTURE)

Brief Profile This programme is necessary to enhance learnin knowledge, and skills in the field of aquaculture in line with the era of industrial revolution 4.0 national needs at developments at the international level. This is to meet the needs of the country and preparation towards Brunei Vision 2035. Studies in aquaculture aim to train aspects of research and innovation as well as towards the improvement as progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a accessible for all (Goal 1, No Poverty; Goal 2, Ze
the era of industrial revolution 4.0 national needs at developments at the international level. This is to meet the needs of the country and preparation towards Brunei Vision 2035. Studies in aquaculture aim to train aspects of research and innovation as well as towards the improvement asprogress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
developments at the international level. This is to meet the needs of the country and preparation towards Brunei Vision 2035. Studies in aquaculture aim to train aspects of research and innovation as well as towards the improvement as progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
needs of the country and preparation towards Brunei Vision 2035. Studies in aquaculture aim to train aspects of research and innovation as well as towards the improvement as progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
needs of the country and preparation towards Brunei Vision 2035. Studies in aquaculture aim to train aspects of research and innovation as well as towards the improvement as progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
2035. Studies in aquaculture aim to train aspects of research and innovation as well as towards the improvement as progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
and innovation as well as towards the improvement at progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports to country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
progress of the country's aquacultural sector and industry. This programme is also part of an initiative that supports the country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
This programme is also part of an initiative that supports to country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
country's aspirations towards achieving the Sustainab Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
Development Goals (SDG) as follows: 1. Diversify quality aquaculture products that a
1. Diversify quality aquaculture products that a
accessible for all Ctoal L NO Foverty Ctoal A Ze
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Hunger; Goal 3, Good Health and Well Being).
2. Increase and diversify aquaculture products f
domestic use and exportation (Goal 8, Decent Wo
and Economic Growth).
3. Increase high innovation capabilities in the
aquaculture sector (Goal 4, Quality Education; Go
9, Industry, Innovation and Infrastructure).
4. Supporting sustainable aspirations towards reducing
the effects of climate change (Goal 11, Sustainab
Cities and Communities; Goal 12, Responsib
Production and Consumption; Goal 13, Clima
Action; Goal 14, Life Below Water; Goal 15, Life of
Land).
Mode and Duration of Study Full-time basis – 3 years
Medium English
Tuition Fee BND 12,000.00
Intake August

PROGRAMME STRUCTURE

Programme	Bachelor of Science in Agriculture (Aquaculture)
Code	P003
Faculty	Faculty of Agriculture (FoA)
Medium	English

	YEAR 1 SEM 1											
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	UQ1105	Al-Qur'an Al-Karim	1	1	1	1	Eng	80	20	URC	Mnd	
2	KL1112	Co-Curriculum 1		1	0	2	NA	100	0	URC	Mnd	
3	KL1103	English for Business	5	2	1	2	Eng	50	50	URC	Mnd	
4	TM1101	Artificial Intelligence a	and	3	2	1	Eng	70	30	URC	Mnd	
4	11011101	Emerging Technologi	es	3		1	LIIG	70	30	OKC	IVIIIU	
5	AA1206	Arabic 1		2	1	2	Arb	50	50	FRC	Mnd	
6	GB1202	Fundamentals of Agricu	lture	3	2	1	Eng	60	40	FRC	Mnd	
7	GB1206	Agripreneurship	•	3	2	1	Eng	60	40	FRC	Mnd	
8	8 GQ1301 Principle of Aquaculture		3	2	1	Eng	60	40	PRC	Mnd		
	Total Courses: 8 CHrs		18		Со	nt. Hrs:	22	W	orkload	: 54		

			Υ	EAR 1	SEN	12						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ1106	Al-Qur'an Al-Karim	2	1	1	1	Eng	80	20	URC	Mnd	
2	KL1113	Co-Curriculum 2		1	0	2	NA	100	0	URC	Mnd	
	KL1120	MIB (For Malay Speak	ers)				Mal					
3	KL1121	Brunei Studies (For N Malay Speakers)	on-	3	2	1	Eng	40	60	URC	Mnd	1 of 2
4	AA1207	Arabic 2		2	1	2	Arb	50	50	FRC	Mnd	
5	GB1207	Farm Managemen	t	3	2	1	Eng	60	40	FRC	Mnd	
6	GT1304	Agricultural Econom	ics	3	2	1	Eng	60	40	PRC	Mnd	
7	GQ1302	Aquaculture Farm an Hatchery Technolog		3	2	1	Eng	70	30	PRC	Mnd	
8	GQ1303	Fish Physiology and Taxonomy	d	3	2	1	Eng	60	40	PRC	Mnd	
	Total	Courses: 8	CHrs	19		Со	nt. Hrs:	22	Wo	rkload	= 57	

	YEAR 1 SEM 3												
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices	
1	1 GB1208 Agriculture in Islam		3	2	1	Eng	60	40	FRC	Mnd			
2	2 GB1209 Applied Statistics		3	2	1	Eng	60	40	FRC	Mnd			
Total Courses: 2 CHrs			6		Co	ont. Hrs	6	Wo	rkload	= 18			

		Υ	EAR 2	SEN	11							
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ2105	Al-Qur'an Al-Karim	13	1	0	1	Eng	80	20	URC	Mnd	
2	SU1203	Fiqh Al-Ibadat <fiqh of<br="">Worship></fiqh>		3	2	1	Eng	40	60	FRC	Mnd	
3	UA2224	Islamic Ethics		3	2	1	Eng	40	60	FRC	Mnd	
4	UT2226	Introduction to Quranic and Hadith Sciences		3	2	1	Eng	40	60	FRC	Mnd	
5	KL2122	Co-Curriculum 3		1	0	2	NA	100	0	URC	Mnd	
6	GQ2301	Fish Nutrition		3	2	1	Eng	60	40	PRC	Mnd	
7	GQ2302	Water and Soil Quality in Aquaculture		3	2	1	Eng	60	40	PRC	Mnd	
8	GQ2303	Fish and Shellfish Culture		3	2	1	Eng	60	40	PRC	Mnd	
	Total	Courses: 8 CHrs		20	Cont. Hrs: 21			21	Workload : 60			

			Υ	EAR 2	SEN	12						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ2106	Al-Qur'an Al-Karim 4	Al-Qur'an Al-Karim 4		0	1	Eng	80	20	URC	Mnd	
2	UA2125	Aqidah Ahli Al-Sunnah W	Aqidah Ahli Al-Sunnah Wa Al-		3	0	Eng	40	60	URC	Mnd	
	UAZIZS	Jama'ah (English Medium)		3	3	U	LIIG	40	0	UNC	IVIIIU	
3	KL2123	Co-Curriculum 4		1	0	2	NA	100	0	URC	Mnd	
4	GT2304	Biosecurity in Agricultu	ure	3	2	1	Eng	60	40	PRC	Mnd	
5	GT2305	Agricultural Extension		3	1	2	Eng	70	30	PRC	Mnd	
		Research Methods &										
6	GT2207	Experimental Designs for		3	2	1	Eng	60	40	PRC	Mnd	
		Agriculture										
		Fish Broodstock										
7	GQ2304	Management and Breeding		3	2	1	Eng	60	40	PRC	Mnd	
		Technique										
8	GT2308	Precision and Smart Farming		3	2	1	Eng	60	40	PRC	Mnd	
	Total	Courses: 8	CHrs	20	Cont. Hrs: 21 Workload : 60		: 60					

	YEAR 2 SEM 3											
No.	Code	e Course Name		CHr	L T Med CW%			CW%	EX% Type As			Choices
1	KL2324	Industrial Training 1		6	0	0 6 Eng 100			0 PRC Mnd			
	Total Courses: 1 CHrs		6	Cont. Hrs: 6				W	orkload			

	YEAR 3 SEM 1										
No.	Code	Course Name	CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ3105	Al-Qur'an Al-Karim 5	1	0	1	Eng	80	20	URC	Mnd	
2	DH2105	Islamic History and Civilisation	3	2	1	Eng	40	60	URC	Mnd	
3	GQ3301	Fish Health and Disease	3	2	1	Eng	60	40	PRC	Mnd	

		Manag	Management									
4	GQ3302		Genetics and Biotechnology in Aquaculture		2	1	Eng	60	40	PRC	Mnd	
5	GQ3303	•	Aquaculture Crafts and Gear Technologies		2	1	Eng	70	30	PRC	Mnd	
6	GQ3304	Estuarine and Mangrove Ecology		3	2	1	Eng	60	40	PRC	Mnd	
7	GT3305	Research Project 1		3	0 3 Eng 0		0 PRC Mnd					
	Total Courses: 7 CHrs		19	Contact Hrs:19			Workload :57					

			Y	EAR 3	SEN	12						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Туре	As	Choices
1	UQ3106	Al-Qur'an Al-Karim	Al-Qur'an Al-Karim 6		0	1	Eng	80	20	URC	Mnd	
2	GQ3306	Research Project 2		3	0	3	Eng	100	0	PRC	Mnd	
3	GB3210	Climate Change and Food Security		3	2	1	Eng	60	40	FRC	Mnd	
4	GQ3308	Fish Postharvest Techn	ology	3	2	1	Eng	60	40	PRC	Mnd	
5	GT3307	Agriculture Waste Management and Utilisation Technologies		3	2	1	Eng	60	40	PRC	Mnd	
6	GQ3309	Conservation and Management of Aquatic Resources		3	2	1	Eng	60	40	PRC	Mnd	
7	GQ3307	Sustainable Aquaculture Practices		3	2	3	Eng	70	30	PRC	Mnd	
	Total Courses: 7 CHrs 19 Cont. Hrs: 19 Workload : 57											

	YEAR 3 SEM 3											
No.	Code	Course Name		CHr	L T Med CW%			CW%	EX% Type As			Choices
1	KL3324	Industrial Training 2		6	0	0 6 Eng 100			0 PRC Mnd			
	Total Courses: 1 CHrs		6	Cont. Hrs: 6			W	orkload				

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Type	Courses Count	%	Credit Hrs	%	Contact Hrs	%
URC	15	30	24	18	31	22
FRC	12	24	34	26	36	25
PRC	23	46	75	56	75	53
TOTAL	50	100	133	100	142	100

PROGRAMME OFFERED

B101 – AGRICULTURE BRIDGING CERTIFICATE PROGRAM

Brief Profile	This programme suits those with insufficient entry requirement for this university wishing to further education in Agriculture. This short but intensive programme serves as an excellent platform to prepare prospective applicants to gain entry into UNISSA's Agricultural Degree programmes upon successful completion.
Mode and Duration of Study	Full-time basis – 1 Semester
Medium	English & Malay
Tuition Fee	BND 2,000.00
Intake	August

PROGRAMME STRUCTURE

Programme	Agriculture Bridging Certificate
Code	B101
Faculty	Faculty of Agriculture (FoA)
Medium	English & Malay

			\	YEAR 1	SEI	M 1						
No.	Code	Course Name		CHr	L	Т	Med	CW%	EX%	Type	As	Choices
1	GB0006	Al-Qur'an		2	1	1	Eng	40	60	URC	Mnd	
2	GB0001	Introduction to Science of		4	4	0	Eng	60	40	Core	Mnd	
	GDOOOI	Agriculture		7	,	Ü	LIIB	00	40	COIC	IVIIIG	
3	GB0002	Basic Laboratory Practical Skills		3	0	3	Eng	100	0	Core	Mnd	
4	GB0003	Foundation of Business		4	2	2	Eng	60	40	Core	Mnd	
5	GB0004	Academic Numeracy & IT Skills		4	2	2	Eng	60	40	Core	Mnd	
6	GB0005	Academic Literacy Skills		4	2 2 Eng 60		60	40 Core Mnd				
	Total Courses: 6 CHrs		18	Cont. Hrs: 21			Workload : 63					

COURSES DESCRIPTION

UNIVERSITY REQUIRED COURSES (URCs)

UQ1105 AL-QURAN AL-KARIM 1

Students will be practising recitation and memorisation of Surah al-Fatihah, Surah al-Qari'ah until al- Nas with the rules of Ra': the velarisation and attenuation (tafkhim and tarqiq), the definition of al-Madd and its rules, assimilation (Idgham), the connecting Hamzah (Hamzah al-Wasl), Waqf and al-Ibtida', the calligraphy and vocalization of al-Qur'an al-Karim (Rasm al-Mushaf wa Dabtuhu) and ethics of concluding (Khatm) al-Qur'an.

UQ1106 AL-QURAN AL-KARIM 2

Students will be practising recitation and memorisation of Surah al-Dhuha until al-'Adiyat together with an introduction of the rules of al-Tajwid, definition of al-Lahn, the different categories and rules of al- Lahn, ahkam al-Isti'adhah, ahkam al-Basmalah, manners of reading the Qur'an, prostration of reading (Sujud al-Tilawah), description of degrees (al-Maratib) of recitation (al-Tilawah), The Nun Sakinah and Tanwin rules and Mim Sakinah and its rules.

UQ2105 AL-QURAN AL-KARIM 3

Recitation and memorization of the following Surahs – (al-Fajr until al-Layl).

UQ2106 AL-QURAN AL-KARIM 4

Recitation and memorization of the following Surahs – (al-Buruj until al-Ghasiyah).

UQ3105 AL-QURAN AL-KARIM 5

Recitation and memorization of the following Surahs – (al-Mutaffifin until al-Inshiqaq).

UQ3106 AL-QURAN AL-KARIM 6

Recitation and memorization of the following Surahs – (al-'Abasa until al-Infitar).

KL1112 CO-CURRICULUM 1 KL1113 CO-CURRICULUM 2 KL2122 CO-CURRICULUM 3 KL2123 CO-CURRICULUM 4

Co-Curriculum course 1, 2, 3 & 4 consist of two options: A: Uniformed Units or B: Workshops and Community Service. The Uniformed Units include: Royal Brunei Army Military Cadets, Fire & Rescue Cadets and Scouts. The workshops are divided into three (3) categories, namely soft skills workshops, creativity and innovation workshops and spiritual workshops. Finally, taken alongside these workshops is many forms of community service.

References

Berhormat Pehin Datu Seri Maharaja Dato Paduka Seri Setia (Dr.) Ustaz Haji Awang Abdul Aziz bin Juned, *Aqidah Ahli Sunnah Wal-Jamaah: Penyelamat Ummah.* 24 Rabiulakhir 1432H/29 Mac 2011M.

Buku Dikir Maulud Syarafil Anam. Buku Wirid dan Doa-Doa Pilihan.

KL1103 ENGLISH FOR BUSINESS

Prerequisite(s): English 'O' Level

The course covers language skills of reading, writing, speaking and listening particularly for business/economics-related contexts and academic registers. It also focuses on grammar business/economics-related and academic texts which comprise of the study of parts of speech and verb tenses. The reading component develops students" ability to comprehend and interpret various range of texts and through the following macro- and microreading skills: making inferences, making predictions, analysing and evaluating text and interpreting the writer's point of view. The writing component develops students" ability in organizing and summarizing information and citing document appropriately (in-text citations and references). The listening component will include how to listen and interpret, infer, predict outcome, draw conclusions, analyse and evaluate information. The speaking component will include how to express opinions,

participate in group discussions, support or oppose views or opinions and come to a general consensus.

References

Bailey, S. (2011). Academic Writing: A Handbook for International Students. n.pl.: Routledge Taylor & Francis Group.

Frendo, E. (2005). Teach Business English. n.pl.: Longman.

Krizan, Merrier Jones. (2002). *Business Communication*. 5th ed. n.pl.: Thomson Learning.

TM1101 ARTIFICIAL INTELLIGENCE AND EMERGING TECHNOLOGIES

AI & Emerging Technologies provides an in-depth analysis and comprehensive understanding of the latest advancements in Artificial Intelligence, emphasizing its synergy with emerging technologies such as the Internet of Things (IoT), blockchain, virtual reality (VR), and augmented reality (AR). The course explores how these technologies are reshaping industries, from healthcare to finance, and delves into their practical applications, highlighting the transformative potential of AI in creating innovative solutions. It also critically examines the ethical implications and societal impacts of these technologies, fostering a balanced understanding of their benefits and challenges. This course equips students with the knowledge to understand and leverage AI and emerging technologies in various professional contexts.

References:

Tidd, J., & Bessant, J. (2018). *Managing Innovation: Integrating Technological, Market and Organizational Change*. Wiley.

Lueth, K. L. (2020). State of the IoT 2020: 12 billion IoT Connections, Surpassing Non-Iot For The First Time. IoT Analytics.

Mougayar, W. (2018). The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology. Wiley.

KL1120 MIB (for Malay Speakers)

This course is designed to give students understanding of the meaning of Malay, Islam and Monarchy with the emphasis of its status as Brunei Darussalam national philosophy. In addition, to equip them with the core knowledge about 'Aqīdah of Ahlisunnah wal Jamā'ah and Shāfi'ī School of Thought.

References

Abdul Latif Haji Ibrahim, Haji and Mohd. Taib Osman. (1993). Melayu Islam Beraja, Kertas-Kertas Kerja Seminar "Melayu Islam Beraja". Universiti Brunei Darussalam: Akademi Pengajian Brunei.

Muhammad Abdul Hadi Al-Masri (1994). *Ahlussunnah Wal-Jama'ah: Petunjuk Jalan yang Benar.* Kuala Lumpur: Penerbitan Kintan.

Muhammad Abu Zahrah (terj). (2005). *Imam Shafi'i Biografi dan Pemikirannya dalam Masalah Aqidah, Politik dan Fiqh*. Jakarta: Penerbit Lentera.

KL1121 BRUNEI STUDIES (for Non-Malay Speakers)

This course is designed for non-Malay speaking international students who have arrived in Brunei Darussalam and are adapting and adjusting to life in Brunei. These students will be introduced to a brief historical overview of Brunei Darussalam; familiarize themselves with the unique national philosophy of MIB; learn about Brunei's society and culture as well as its traditions and customs; and equip them with practical communication in Malay / Brunei Malay as a means to help them cope with everyday interactions in Brunei society.

UA2224 ISLAMIC ETHICS

This course will cover topics on definition of ethics; its advantages and its theme; source of ethics; concept of ethics; important ethics in of Islam on improving ethics; nature of ethics and its

acquisition; benefits of ethics; ethics of the Prophet (Peace Be Upon Him) as found in the Al-Qurān and Al-Sunnah. This course consists of three parts, the first part consists of individual ethics; suppressing anger, truthfulness, humility, sincerity of intention, controlling passions, lowering gaze, telling lies, hypocrisy, self-conceit and jealousy. The second part consists of family ethics: Excellence behaviours with parents, implanting good ethics and responsibilities to spouses and children. The last part consists of social ethics: Behaviours for fulfilling promises, trustworthiness, forgiveness, sacrifice, justice, lowering voice, ways of talking with elders, seeking permission and its methods, cheating, deceit, sarcasm, back biting, and unfairness.

References

- Al-Ghazali, Abu Hamid Muhammad bin Muhammad. (1975). *Ihyā' Ulūmuddīn. Holland Muhtar (Trans). The Duties of Brotherhood in Islam.* Leicester, England: The Islamic Foundation.
- Al-Haq Muhammad Zia. (2000). *Professional Ethics of Islam*. Islamabad: Dakwah Academy International Islamic University.
- Haneef Shah, Sikandar Sayed. (2008). *Ethics and Fiqh for daily life: An Islamic Outline*. Kuala Lumpur: International Islamic University.

DH2105 ISLAMIC HISTORY AND CIVILISATION

There are two main components of the course. The first part deals with Islamic history and the second part deal with Islamic civilization. The course starts from the time of Prophet Muḥammad - Ṣallallāhu 'Alayhi wa Sallam – until the end of the Ottomans. It focuses on the history of the Prophet Muḥammad - Ṣallallāhu 'Alayhi wa Sallam – his message and valuable teachings; Islamic propagation (da'wah) and its expansion; Islamic administration during the time of the Prophet Muḥammad - Ṣallallāhu 'Alayhi wa Sallam – the Righteous Caliphs, the Umayyads, the Abbasids and Ottomans; Islamic civilization its meaning, concept, principles, sources and its impact on human civilization.

Abu Khaldun, Sati'al-Husari. (1967). *Dirāsāt 'an Muqaddimah Ibni Khaldūn*. Beirut: Dar al-kitab al-Arabi.

Al-Duri, Abd al-Aziz. (1960). *Bahth fī Nashāṭ 'Ilm al-Tārīkh 'Inda al-'Arab*. Beirut: Matba 'ah al-Kathulikiah.

Bosworth C.E. (ed). (1974). *The Legacy of Islam*, 2nd ed. Oxford: at the Clarendon Press.

UA2125 'AQIDAH AHLI AL-SUNNAH WA AL-JAMA'AH

This course will introduce students the concept of 'aqīdah and tawḥīd, the concept of Ahlussunnah wal-Jama'ah, and their sources and methodology in determining the foundations of the 'aqīdah and its branched, and in refuting false doctrines; the concept of 'Ash'arism and Māturīdism; the importance of the right 'aqīdah in the life of the individual and society; the doctrine of the Sunnis in the divinities (al-Ilāhiyyāt) and prophethood (al-Nubuwwāt) and cosmologies (al-Kawniyyāt) and metaphysics (al-Ghaybiyyāt) and Imamate (al-Imāmah); apostasy and its causes; Quasi-Doctrines and contemporary destructive doctrines and ideologies such as secularism, liberalism and religious pluralism.

References

Al-Buti, Muḥammad Saʻid Ramadan. (1996). Keyakinan Hakiki: Kewujudan Maha Pencipta dan Tugas Makhluk di Alam Semesta. Trsl. By Muhammad Sulaiman Yassin. Selangor: ABIM.

Sureties: The Creator's Existence and The Creatures Function.
Trsl. By Mahdi Lock. Singapore: www.fikr.com

Al-Ghazali. (1974). *The Foundations of the Articles of Faith*. Lahore: Sh. Muhammad Ashraf.

SU1203 FIQH AL-'IBADAT

The course covers the meaning of 'Ibadat (worships); its importance, characteristics, and objectives; definition of Taharah (purification) and types of water. Wudu' (ablution): its definition, obligations, recommendations and nullifiers, Tayammum. impurities and ways of purifying impurities; the conditions of prayer, times of prayers, essential requirements of prayers,

recommendations of prayers and leadership in prayers; Friday and 'Eid prayers; funeral prayers; Zakah: definition, conditions of payment and distribution and their rules; fasting: its definition, conditions, essential requirements, recommendations, and nullifiers, Kaffarah of breaking the fasting; I'tikaf: its meaning, conditions and rules; pilgrimage and 'Umrah: their definition, rules, conditions, essential requirements, obligations, recommendations, nullifiers and prohibitions of Ihram.

References

- Al-Haithami, Abdul Rahman. (n.d). *Tuhfah al-Muhtaj fi Sharh al. Minhaj*. Cairo: Mustafa al- Halabi.
- Al-Khin, Mustafa et. Al. (1991). *Al-Fiqh al-Minhaji 'Ala Madhhab al-Shafi'I*, 3rd ed. Damascus: Dar al- Qalam.
- Al-Nawawi, Muhyiddin Yahya ibn Sharaf. (n.d). *Al-Majmu' Sharh al-Muhazzab*. Cairo: Idarah al-Tia'ah al-Muniriyyah.

AA1206 ARABIC I

This course aims to provide the students with functional words and several linguistic patterns to develop their basic Arabic language skills so that they can learn the basic vocabulary and functional expressions, write simple sentences, express their basic needs in specific situations and use the necessary language expressions to communicate through the four language skills by their level of language. After completing this course, students are expected to be able to practice basic language skills.

- Sha'ban, Muhammed Adil, Fadl Allah, Muhammad al-Fatih & Sini, Mahmud Ismail. (1985). *Al-qira'ah al-Muyassarah: Silsilah fi al-'Arabiyyah li al-Natiqin bi Ghayriha*. Vol. 1. Saudi: Jami at Al Malik Sa'ud.
- Sini, Mahmud Ismail, Abul Aziz, Nasif Mustafa & Hussain, Mukhtar Al Tahir. (1983). *Al- 'Arabiyyah li al-Nashi'in*. Vol 1. Riyadh: Wizarat Al Ma'arif.
- Mahmud, Taha Muhammed. (1984). *Al- Ta'bir al-Muwajjah li al-Mubtadi'in min Ghayri al- Natiqin bi al- Arabiyyah*. Riyadh: Jami' at Al Malik Sa'ud.

AA1207 ARABIC 2

This course aims to develop what the students have learned in the previous course regarding the four skills and provide them with vocabulary and linguistic structures through topics related to Arab Islamic culture. The course also prepares them to use the language as a means of communication and read Arabic texts that suit the limited vocabulary they have learned. After completing this course, students are expected to be able to use what they have learned in occasions and situations at their language level.

References

- Mahmud, Taha Muhammed. (1984). *Al- Ta'bir al-Muwajjah li al-Mubtadi'in min Ghayri al- Natiqin bi al- Arabiyyah*. Riyadh: Jami' at Al Malik Sa'ud.
- Sha'ban, Muhammed Adil, Fadl Allah, Muhammad al-Fatih & Sini, Mahmud Ismail. (1985). *Al-qira'ah al-Muyassarah: Silsilah fi al-'Arabiyyah li al-Natiqin bi Ghayriha*. Vol. 1. Saudi: Jami at Al Malik Sa'ud.
- Sini, Mahmud Ismail, Abul Aziz, Nasif Mustafa & Hussain, Mukhtar Al Tahir. (1983). *Al- 'Arabiyyah li al-Nashi'in*. Vol 1. Riyadh: Wizarat Al Ma'arif.

UT2226 INTRODUCTION TO QURANIC AND HADITH SCIENCES

This course will explore and explain the importance and the ranking position of this subject in Islam; discover some of the applicable terminologies that are used in Qur'anic and Hadith Sciences; discover the important basic rules in understanding the texts and giving assessment whether it is strong or weak according to its firmness and semantics.

- Abdullah, Ismail & Abdul Manas, Shayuthy. (2006). *Introduction* to the Sciences of Hadith. 1st ed. Kuala Lumpur: Research Centre International Islamic University Malaysia.
- Denffer, Ahmad Von. (1983). *Ulum al-Qur'an: An Introduction to the Sciences of the Our'an*. Leicester: The Islamic Foundation.
- Ushama, Thameem. (2002). *Issues in the Study of the Qur'an*. Kuala Lumpur: Ilmiah Publishers.

FACULTY REQUIRED COURSES (FRCs)

GB1202 FUNDAMENTALS OF AGRICULTURE

This course is designed to give understanding on the basic and fundamental principles of agriculture. This course aims to give the foundation of knowledge for agriculture in different areas of agriculture including plants, animals, soil and health. Upon completing the course, students are expected to apply knowledge towards further understanding of agriculture.

References

- Damon, W.S. (2018). *Introduction to Animal Science: Global, Biological, Social and Industry Perspectives* (6th ed.). USA: Pearson.
- Davies, F.T., Jr., Geneve R.L., Wilson, S.E., Hartmann, H.T., & Kester, D.E., & (2018). *Plant Propagation: Principles and Practices* (9th ed.). USA: Pearson
- Field, T.G., & Taylor, R.E. (2020). Scientific Farm Animal Production: An Introduction to Animal Science (12th ed.). USA: Pearson.

GB1206 AGRIPRENEURSHIP

This course is designed to introduce students to agribusiness management. Upon completing the course, students are expected to understand the basic theories of agribusiness management and functional responsibilities of management. Students are also expected to apply different management tools in improving the efficiency of the agribusiness and provide alternative solutions to solve problems in agribusiness.

- Barnard, F., Ckridge, J., Dooley, F. & Foltz (2018). *Agribusiness Management* (4th ed.). USA: Routledge.
- Bryceson, K. P. (2019). *Issues in Agribusiness: The What, Why and How.* Australia: CABI Publication.
- Erickson, S., Ckridge, J. T., Barnard, F. & Downey, D. (2017). *Agribusiness Management* (3rd ed.). USA: McGraw-Hill.

GB1209 APPLIED STATISTICS

This course explains the basic concepts of applied statistics and its application for agriculture use. It is designed to enable students to grasp important concepts in statistics, which can enable students to understand/know the use of different statistical and biostatistical analysis and packages for agricultural sciences and agricultural data interpretations and inference.

References

- Levine, D., & Szabat, K. (2019). *Basic Business Statistics, Global Edition* (14th ed.). UK: Pearson.
- McDonald, J.H. (2014). *Handbook of Biological Statistics* (3rd ed.). USA: Sparky House Publishing.
- Levine, D.M., & Stephan, D.F. (2014). Even You Can Learn Statistics and Analytics: An Easy to Understand Guide to Statistics and Analytics (3rd ed.). UK: Pearson.

GB1207 FARM MANAGEMENT

This course is designed to give understanding of the key concepts of effective farm management. The students will be equipped with farm management knowledge and skills ranging from land to financial of farm businesses. Upon completing the course, students are expected to apply knowledge towards holistic management of farms.

References

- Bochtis, D., Sørensen, C., & Kateris, D. (2018). *Operations Management in Agriculture*. USA: Elsevier.
- Kay, R., Edwards, W., & Duffy, P. (2020). Farm Management (9th ed). USA: McGraw Hill.
- Mason, J. (2011). Farm Management (2^{nd} ed.). Australia: Kangaroo Press.

GB1208 AGRICULTURE IN ISLAM

This course is designed to acquaint the students with the importance and history of agriculture in the Islamic civilization. A detailed understanding of agriculture in Islam and the zakat of

agriculture produces and its measurement and calculation. This course discussed the concept of agribusiness in Islamic perspectives, Islamic contracts for agribusiness, the Islamic ethics in agriculture and agribusiness, and agricultural challenges and issues through the lens of Islam. Upon completing the course, students are expected to apply the knowledge in their dealings in agriculture.

References

- Ab. Aziz, M. R. (2012). Agriculture and Agribusiness from The Perspective of Al-Qur'An and Al-Sunnah. Riyadh: Dar al-Salam
- Ab. Aziz, M. R. (2012). Agriculture in Islam: From the Perspective of Economics, Banking & Finance. Malaysia: UTM Press.
- Andrew M. W. (2008). Agricultural Innovation in the Early Islamic World: The Diffusion of Crops and Farming Techniques. United Kingdom: Cambridge University Press

GB3210 CLIMATE CHANGE AND FOOD SECURITY

This course is discussing issues of climate change and how it can affect productivity of food systems and harm the livelihood of those already vulnerable. World's total greenhouse gas emissions, impacts of agricultural activities, including indirect effects like deforestation and other forms of land conversions and their influence on climate change and food security will also be highlighted together with climate change vulnerability based on IPCC's most recent assessment reports. Initiatives and strategies to mitigate climate change and food security and adaptations necessary at the country and global levels will also be highlighted.

- Ashley, J. (2016). *Food Security in the Developing World* (1st ed.). USA: Elsevier
- Lal, R., Uphoff, N., Stewart, B.A., and Hansen D.O. (2019). Climate Change and Global Food Security. USA: CRC Press.
- Ghosh, K. and Braun, G. (2020). Transforming food and agriculture to achieve the Sustainable Development Goals (SDG's). Rome: FAO.

PROGRAMME REQUIRED COURSES (PRCs)

AGRIBUSINESS

GB1211 AGRICULTURAL MICROECONOMICS

This course is designed to acquaint students with microeconomic principles including the fundamental and central core of economics. This includes roles and characteristics of agricultural businesses in our economic system. Upon completing the course, the students should have a sound knowledge of microeconomic theories and methods, and be able to apply their analytical skills to a range of contemporary microeconomic principles in the agricultural firms.

References

Centre for Islamic Economics. (2020). Contributions to Contemporary Islamic Economics – Moving Forward, Sayyid Abul A'la Mawdudi's 'First Principles of Islamic Economics'. Centre for Islamic Economics (Cie) International Islamic University Malaysia.

Mankiw, N. G. (2007). *Principles of Microeconomics* (4th ed.). South-Western College Publishing.

McEachern, W. A. (2009). *Microeconomics Principles: A Contemporary Introduction*. (8th ed.). South-Western Cengage Learning.

GB1302 AGRICULTURAL MACROECONOMICS

This course is designed to acquaint students with the basic concepts and issues of macroeconomics, as well as provide students with a deeper understanding of transmission mechanisms of demand management policies and the analysis of macroeconomics including macroeconomics of agriculture. On completing the course, the students should have a comprehensive knowledge of macroeconomic theories, methods and application on related issues.

- Centre for Islamic Economics. (2020). *Contributions To Contemporary Islamic Economics Moving Forward*, Sayyid Abul A'la Mawdudi's 'First Principles Of Islamic Economics'. Malaysia: Centre for Islamic Economics, IIUM.
- Mankiw, N. G. (2007). *Principles of Macroeconomics*. (4th ed.). New Jersey: South-Western College Pub.
- Nourse, E.G. (2013). Agricultural Economics: A Selection of Materials in Which Economics Principles Are Applied to the Practice of Agriculture. USA: University of Chicago Press.

GB2301 AGRIBUSINESS MANAGEMENT

This course is designed to equip students with agribusiness management skills and expose them to the environment in which an agricultural manager operates. Upon completing the course, students will be able to apply managerial functions in the farm business operations as well as throughout the agribusiness sector.

References

- Barnard, F. L., Foltz, J., & Yeager, E. A. (2016). *Agribusiness Management* (5th ed.). UK: Routledge.
- Dorfman, J. H. (2014). *Economics and Management of the Food Industry*. UK: Routledge.
- Fleet, E. V., Seperich, G., & Fleet, D. V. (2013). *Agribusiness: Principles of Management*. US: Cengage Learning.

EF2304 PRINCIPLES OF ACCOUNTING

This course is designed to equip students with aspects of the accounting and finance related to farm, ranch or related business. The course focus to unique aspects of agricultural and financial accounting that are not encountered in other industries. Upon completing the course, the students will have adequate understanding of accounting concepts and examples and show how an accounting system can be constructed and operated in agribusiness.

References

Needles B.E., Powers, M. & Crosson, S.V. (2014). Principles of Accounting (12th ed.). USA: Cengage.

Nagpal R.B. (2017). Agricultural Finance. India: Pacific Books.

Weygandt, J.J., Kimmel, P.D. & Kieso, D.E. (2018). *Accounting principles (13th ed)*. United Kingdom: John Wiley and Sons.

GB2302 AGRICULTURE AND DIGITAL MARKETING

This course is designed to provide students with a strong foundation in marketing theories and techniques in agriculture to satisfy the farmer, producer and consumer. It also includes the advertising and sale of agricultural produce. Upon completing the course, students will be able to apply digital marketing techniques and skills in the farm business operations as well as throughout the agribusiness sector in line with the teaching of Islam.

References

- Alserhan, B. K. (2016). *Principles of Islamic Marketing* (2nd ed.). UK: Gower Publishing.
- Crawford, I. D. (1997). *Agricultural and Food Marketing Management*. Rome: Food and Agriculture Organisation of the United Nations.
- Hanlon, A. H. (2010). *Digital Marketing: Strategic Planning & Integration*. UK: Sage.

LB4305 BUSINESS LAW

The course covers the study of concepts, principles and application of the laws and regulations relating to the sale of goods, agency, hire purchase and employment. The study discusses relevant statutory provisions, case law and application of various legal concepts on these areas of law.

- Atiyah, P.S., Adams, J.N. & MacQueen, H. *The Sale of Goods*. 10th ed. London: Longman.
- Aun, Wu Min. (1994). *Legal Aspects of Sale of Goods*. Kuala Lumpur: Longman (Malaysia) Sdn Bhd.
- Keenan, D. & Riches, S. (2007). *Business Law*. 8th ed. Essex: Pearson Education Ltd.

GB2304 AGRICULTURE PRODUCTION SYSTEM

This course is designed to explore both plant production industries, including pastures, cereal crops, and annual and perennial horticulture and animal production industries, for food (e.g., meat, milk & eggs) production in both extensively and intensively managed systems. Upon completing the course, students will be able to know the strategies that are employed to produce high quality crop products and productivity benchmarks in the major production animal systems.

References

- Field, T.G., & Taylor, R.E. (2020). *Scientific Farm Animal Production: An Introduction to Animal Science* (12th ed.). USA: Pearson.
- Lalitha, B.S., Shankar, M.A., & Prajwal Kumar, G.K. (2020). *Cropping Systems: Principles and Practices*. India: Nipa Books.
- McMahon, M.E. (2020). *Plant Science: Growth, Development, and Utilization of Cultivated Plants* (6th ed.). USA: Pearson.

GB2216 ACCOUNTING FOR DECISION MAKING

This course is designed to equip students with aspects of financial reporting, analysis and interpretation for decision-making. Upon completing the course, the students are expected to have adequate understanding to have better decision making, proper planning and formulation of policies, control management performance and interprets financial information.

- Birt, J., Chalmers, K., Maloney, S., Brooks, A. &Oliver, J. (2020). *Accounting: Business reporting for decision making* (7th ed). UK: John Wiley and Sons Ltd.
- Collier, P.M. (2015). Accounting for Managers: Interpreting Accounting Information for Decision Making (5th ed). UK: John Wiley and Sons Ltd.
- Weygandt, J.J., Kimmel, P.D. & Kieso, D.E. (2015). *Accounting: Tools for Business Decision Making* (6th ed.). United Kingdom: John Wiley and Sons Ltd.

GB3308 SUPPLY CHAIN MANAGEMENT IN AGRICULTURE

This course is designed to develop an advanced understanding the principles, concepts and approaches employed in the management of supply chains between industrial, commercial, and governmental organisations in agriculture. Upon completing the course, students are expected to be able to understand the role and manage supply chains in agriculture for the efficient production and supply of agribusiness products from farm level to consumers, to reliably meet consumers' requirements in terms of quantity, quality, and price.

References

- Chandrasekaran, N., & Raghuram, G. (2014). *Agribusiness Supply Chain Management*. US: Taylor & Francis Inc.
- Chase, R. B., & Jacobs, F. R. (2021). *Operations and Supply Chain Management*. Canada: McGraw Hill.
- Dani, S. (2015). Food Supply Chain Management and Logistics. London, UK: Kogan Page Ltd.

GB3301 EXPORT MARKETING AND PRACTICES

This course is designed to expose students with exporting strategies from the perspective of marketing planning and the mechanics of export practice. Upon completing the course, students will understand on how to make an explicit and informed choice between the real market options faced in practical export situations, which takes into account the many company and market factors shaping such strategies.

- Bhasin, B. B. (2011). *Doing Business in the ASEAN Countries*. US: Business Expert Press.
- Julian, C. C. (2016). *Research Handbook on Export Marketing*. UK: Edward Elgar Publishing Ltd.
- Neo, D., Sauve, P., & Streho, I. (2019). Services Trade in ASEAN: The Road Taken and the Journey Ahead. UK: Cambridge University Press.

GB3302 INTERNATIONAL AGRICULTURAL TRADE

This course is designed to understand agricultural trade patterns and institutions; trade theory with applications to agriculture. Upon completing this course, students should be able to Access economic news with greater sophistication; Relate international economic events to the operations of a firm, Assess the impact of proposed international economic policies; Appreciate the interrelatedness of national economies; and Understand towards the international economic interactions fluctuate.

References

Daniels, J. D., Radebaugh, L. H. & Sullivan, D.P. (2014). *International Business: Environments and Operations* (15th ed). UK: Pearson.

Feenstra, R. & Taylor, A. (2017). *International Trade* (4th ed). US: Worth Publisher.

Heydon, K. (2019). *The Political Economy of International Trade*. UK: Polity Press.

GB3303 AGRICULTURAL BUSINESS RISK AND INVESTMENT

This course is designed to equip students with the application of financial business management, economic and risk management principles to decision making in agribusiness and agricultural systems and to develop a framework on how to assess and measure risk, and formulate strategies to reduce it from qualitative and quantitative perspectives. Upon completing the course, students are expected to be able to apply principles of management and decision making in relation to agribusiness and apply techniques for the assessment of risk and develop strategies to enhance decision making.

References

Barry, P. & Ellinger, P. (2012). *Financial Management in Agriculture* (7th ed). US: Pearson.

Hardaker, J. B., Huirne, R. B. M., Anderson, J. R. & Lien, G. (2015). *Coping with Risk in Agriculture* (3rd ed). UK: CABI.

Hoag, D.L. (2010). Applied Risk Management in Agriculture. UK: Taylor & Franci

GB3307 CURRENT TRENDS IN AGRICULTURAL MARKETS

This course is designed to extend the students understanding of marketing and be able to analyse current trends of agriculture with particular reference to the agribusiness sector. Upon completing the course, students will gain an understanding of how to achieve a competitive advantage in the market by targeting the customers they can serve best and ensuring that product consistently meets the needs of the target market.

References

Luc, N. (2014). The Handbook of Global Agricultural Markets: The Business and Finance of Land, Water, and Soft Commodities. Basingstoke, UK: Palgrave.

Norwood, F. B., & Lusk, J. L. (2018). *Agricultural Marketing and Price Analysis*. US: Waveland Press.

Schrimper, R. A. (2000). *Economics of Agricultural Market*. US: Pearson.

GB3306 SUSTAINABLE AGRICULTURE

This course is designed to understand the Sustainable Agricultural Systems, characteristics, types of sustainable agricultural systems and how to assess the sustainability of a farming system, sustainable land management, and Policy of Sustainable Agriculture. Upon completing the course, students are expected to be able to assess and analyse the sustainability of agricultural systems and design integrated farming techniques based on sustainable agricultural systems.

References

Bos, M.G., van den Bosch H., Diemont H., van Keulen H., Lahr, J., Meijerink ,G. & Verhagen, A. (2007). Quantifying the sustainability of agriculture. *Irrig Drainage Syst*, 21, 1–15.

- Carter, M.R. (2002). Soil Quality for Sustainable Land Management: Organic Matter and Aggregation Interactions that Maintain *Soil. Agron, J.* 94, 38–47,
- Menalled, F., Bass, T. Buschena, D., Cash, D, Malone, M, Maxwell, B., McVay, K., Miller, P., Soto, R., & Weaver, D. (2008) *An Introduction to the Principles and Practices of Sustainable Farming*. US: Montana State University Extension.

GT1302 APPLIED CROP SCIENCE

The course is designed to provide students with a strong understanding of principles and practices in crop science. Principles of crop physiology, genetics & breeding, production and management of crops will be discussed. Concepts and essentials of good agricultural practices (GAPs) will be emphasized. Importance will be placed on selection, improvement and production of food, fiber and feed crops useful to man. In the process, students will be trained to critically analyse production area, soil, climate, economic aspects, etc. and make accurate decisions. Some experiential learning (hands-on) will be included. Factors influencing crop production will discussed thoroughly during lectures. Cropping systems and smart agriculture will also be explained.

References

Acquaah, G. (2005). *Principles of Crop Production: Theory, Techniques and Technology* (4th ed). Pearson Prentice Hall.

Acquaah, G., (2012). *Principles of Plant Genetics and Breeding* (2nd Ed). USA: Wiley-Blackkwell.

Hanks, J. (2016). *Agronomy and Crop Science*. USA: Callisto Reference.

GT1303 APPLIED ANIMAL SCIENCE

The aim of this course is to provide basic knowledge and understanding of animal science and its applications. Student will develop an understanding of the environmental, ethical and economic contexts in which the sector operates. Applied animal science helps to improve the productivity and sustainability of livestock production systems, control disease epidemics, standards of animal welfare, and to enhance wildlife biodiversity.

- Dewulf, J., & Immerseel, F. V. (2018). Biosecurity in animal production and veterinary medicine: From principles to practice. Leuven: Acco.
- Damon, W.S. (2018). *Introduction to Animal Science: Global, Biological, Social and Industry Perspectives* (6th ed.). USA: Pearson.
- Field, T.G., & Taylor, R.E. (2020). Scientific Farm Animal Production: An Introduction to Animal Science (12th ed.). USA: Pearson.

GT2304 BIOSECURITY IN AGRICULTURE

Biosecurity in Agriculture focuses on production animal management practices and the implementation of safeguards that eliminate and decrease the rate of infectious diseases. This course gives students the opportunity to understand and apply concepts of disease transmission in animal and plant production situations. Multiple species, pest and diseases will be discussed throughout the course as examples of biosecurity in practice. This course provides the foundation for students interested in learning the complexities of the prevention of disease transmission in both animals, plants and animals. This course aims to provide students with a fundamental understanding of what constitutes such biological hazards, the theory and practice of avoiding or controlling these hazards, the regulatory framework for managing biosecurity, and opportunities to explore topical examples of biosecurity issues.

Biosecurity in Agriculture is a discussion-based course to allow students to fully understand the practical application of biosecurity in our ever more global world.

- Dewulf, J., & Van Immerseel, F. (2020). *Biosecurity in Animal Production and Veterinary Medicine: From principles to practice*. USA: CABI.
- Gordh, G., & McKirdy, S. (2014). *The Handbook of Plant Biosecurity*. USA: Elsevier.

A. David Scarfe, Cheng-Sheng Lee, Patricia J. O'Bryen. (2006). Aquaculture Biosecurity: Prevention, Control, and Eradication of Aquatic Animal Diseases. USA: Wiley-Blackwell Publishing.

GT2305 AGRICULTURAL EXTENSION

This course will equip students with the principles, theories and practices of agricultural extension. It will cover extension communication methods which will enable students to conduct practical demonstrations of new agricultural technologies to others especially farmers. Students will be exposed to individual, group and mass extension methods. The use of ICT for this purpose will be emphasized. Students will gain knowledge and skills needed for application in effectively planning, organizing and conducting extension and training programs to successfully transfer new agricultural technologies.

References:

- Chole, R. R, Deshmukh, P. R. & Kapse, P. S. (2010). *Transfer of Agricultural Technology*. Jodhpur: Scientific Publishers.
- Janani, S., Sujeetha, T. N., Asokhan, M. & Harish, R. (2019). *Agricultural Extension: A Glimpse*. India: Scientific Publishers.
- Kalaitzandonakes, N., Carayannis, E.G. & Grigoroudis, E. (2018). From Agriscience to Agribusiness: Theories, Policies and Practices in Technology Transfer and Commercialization (Innovation, Technology, and Knowledge Management). Cham: Springer International Publishing.

GT2308 PRECISION AND SMART FARMING

This course is designed to introduce students to Precision and Smart Farming. Upon completing the course, students are expected to understand the definition, fundamental concepts, tools & techniques and applications of Precision and Smart Farming. Students are also expected to seek potential and suitable applications of precision and smart framing for more efficient and effective agroindustry and provide alternatives solution to solve problems in agroindustry.

- Choudhury, A., Biswas, A., Prateek, M., & Chakrabarti, A. (2021). Agricultural Informatics: Automation Using the IoT and Machine Learning. USA: Wiley-Blackwell Publishing.
- Srinivasan, A. (2008). *Handbook of Precision Agriculture: Principles and Applications.* USA: CRC Press.
- Zachariah, A. B. (2010). *Precision Agriculture: The Future of Farming*. Canada: Delve Publishing.

GB2207 RESEARCH METHODOLOGY IN AGRIBUSINESS

This course is designed to provide students with a tangible tool by revealing the explicit and implicit essentials of research writing, particularly at the initial stages. Upon completing the course, the students are expected to have the knowledge and skill necessary to apply research techniques, including assertion, confidence, discipline, as well as divergent thinking, and tacit writing ability within the confines of business, economics, and finance and banking research.

References

- Adrian, R.B. Chris, B. & Marcel, P. (Eds.). (2014). *Handbook of Research Methods and Applications in Empirical Finance*. UK: Edward Elgar.
- Bell, E., Bryman, A., Harley, B., & Bryman, A. (2019). *Business research methods*. UK: Oxford University Press.
- Creswell, J., & Creswell, J. (2018). *Research design* (5th ed.). US: Sage Publication.

GB3304 AGRIBUSINESS PROJECT 1 & GB3305 AGRIBUSINESS PROJECT 2

This course is designed to apply the principles of financial projects capital and applications appraisal of to agriculture/agribusiness investments through proposing an Agricultural Investment Project under supervision of a supervisor and approval of the faculty. Students are required to submit a full Project Appraisal Report. Upon completing the course, students are expected to be able to appraise and evaluate private investment projects related to agribusiness.

- Battles, R.W. & Thompson, R.C. (2001). Fundamentals of Agribusiness Finance. UK: Wiley.
- Dayananda, D, Irons, R, Harrison, S, Herbohn, J & Rowland, P. (2002). *Capital budgeting: Financial Appraisal of Investment Projects*. UK: Cambridge University Press.
- Ricketts, C. & Ricketts, G.K. (2009). *Agribusiness fundamentals and applications* (2nd ed). US:Cengage Learning.

KL2324 INDUSTRIAL TRAINING (LI) 1 & KL3324 INDUSTRIAL TRAINING (LI) 2

LI give students the opportunities to practice the theoretical knowledge that they learn in class and apply it in the real working environment. It is also to inculcate professionalism in the students through interaction and communication with the people at their training places besides to look for job opportunities for their future career. Moreover, LI helps in developing students' skills and abilities in every aspect of life. Finally, LI is also to develop and maintain good relations with government and non-government organizations that can help UNISSA to produce skilful and proficient graduates.

PROGRAMME REQUIRED COURSES (PRCs)

AGROTECHNOLOGY

GT1301 FUNDAMENTALS OF SOIL SCIENCE

Soil is a fundamental natural resource of humanity that must be managed and conserved in a sustainable way. This course will introduce students to the basic concepts and terms used in soil science, soil formation and the basic functions of soils with particular emphasis on tropical soils and their use in agriculture. Soil classification, their physical, chemical and biological properties will be covered. Fundamentals of land evaluation will be introduced so that students appreciate the varying capabilities or uses of soils in agriculture. Managing soils using precision farming approaches based on field data collection and basic

characterization of soils in the laboratory will be introduced to the students. Students will be able to apply the knowledge gained in this course to especially manage soil fertility and soil water for productive and sustainable agriculture.

References

- Halvin, J.L., Tisdale, S.L., Nelson W.L. and Beaton, J.D. (2005). Soil Fertility and Fertilizers: An Introduction to Nutrient Management. 8th ed. Pearson
- Huang, P.M., Li, Y. & Sumner, M.E. (2011) *Handbook of Soil Sciences* –Vols 1 & 2. (2nd ed.). USA: CRC Press
- Tan, K.H. (2005). *Soil Sampling, Preparation, and Analysis* (2nd ed.). USA: Taylor & Francis.

GT2301 SEED TECHNOLOGY

This course is designed to introduce students to agro-technology concepts. Upon completing the course, students are expected to describe the basics of concepts relating to seed technology, to find, analysis and solve problems in seed technology. The application of seed technology through research results and to communicate with groups.

References

- Agawal, R. L. (2021). *Seed Technology* (2nd ed.). UK: Oxford & IBH Publishing Co Pvt. Ltd.
- Bhattaray, D. R., Maharjan S. K. (2019). *Plant Breeding and Seed Technology*. UK: Heritage Publications.
- Taiz, L. & Zeiger, E. (1998). *Plant Physiology* (3rd ed.). UK: Oxford University Press.

GT2302 PLANT, SOIL, FERTILIZER, AND WATER ANALYSIS

This course introduces students to the principles, concepts, and theories for analysing plant tissues, soils, fertilizers, and water for production agriculture. The course does not only enable students to interpret results from analyzed plant tissues, soils, fertilizers, and water samples but it also equips students with practical knowledge and skills needed for modern agriculture, particularly for resource

optimization that translates into agronomic, economic and environmental efficiency (Agriculture 4.0).

References

- Pal, S.K. (2019). *Methods of Soil and Plant Analysis*. India: New India Publishing Agency-NIPA.
- Incorporated Administrative Agency (2020). Testing *Methods for Fertilizer*. Japan: Food and Agricultural Materials Inspection Center.
- Jorge Álvaro-Fuentes, Dénes Lóczy, Sören Thiele-Bruhn, & Raúl Zornoza. (2019). *Handbook of plant and soil analysis for agricultural systems*. Cartagena: CRAI Biblioteca

GT2303 AGRICULTURE WATER RESOURCE MANAGEMENT

This course will enable students to effectively and efficiently manage water resources for agriculture. Existing agriculture water resources, their quality, uses, and sustainable management will be emphasized. Students will appreciate that water is a scarce resource that needs to be managed well especially in the context of changing climate and other environmental factors. Current issues related to water use will be highlighted and discussed. Students will be introduced to existing technologies for managing water resources in agriculture and soil-water-plant relations. Students should be able to make a scientific assessment of plant water requirements and water resources, the management of efficient irrigation systems, agricultural drainage and management.

- Ehsan, G. (2018). Agricultural Drainage. Extension Bulletin E3370 New February 2018. Michigan State University Extension
- Srivastava, P., Gupta, M., Tsakiris, G. and Quinn, N. (2020). Agricultural Water Management: Theories and Practices. USA: Academic Press.
- Oweis, T. (2018). *Water Management for Sustainable Agriculture*. London: Burleigh Dodds Science Publishing.

GT3304 GENETICS AND BREEDING TECHNOLOGIES

This course is designed to give understanding of the principles of genetic and breeding plants, and animals. Foundation of conventional and modern technologies, plant culture and the effect of environmental factors on genetic, plant growth and development, biotechnology in agriculture

References

- McMahon, M.E. (2020). Plant Science: Growth, Development, and Utilization of Cultivated Plants. USA: Pearson.
- Mather, J. P., & Roberts P. E. (1998). *Introduction to Cell and Tissue Culture*. New York: Theory and Press.
- Thieman, W. J., & Palladino, M. A. (2013). *Introduction to Biotechnology* (3rd ed.) Boston: Pearson.

GT3301 CROP PESTS AND DISEASES MANAGEMENT TECHNOLOGY

This course will introduce students to the fundamental concepts and principles of protecting crops against economically important pests (including weeds) and diseases. The course will emphasize on knowledge related to the identification, symptoms, causal conditions/agents, spread and control which will enable effective and sustainable management of crop pests and diseases. Integrated pest management (IPM) approach will be highlighted. Students will have the opportunity to learn about pest and disease incidence assessment, prevention and control including use of state of the art technologies for selected crops both in the field and post harvest.

- Ciancio, A. & K.G. Mukerji, K.G. (2007) General Concepts in Integrated Pest and Disease Management. USA: Springer.
- Hill, D.S. (2008). Pests of Crops in Warmer Climates and Their Control. USA: Springer
- Rapisarda, C. & Cocuzza, G.E.M. (2018). *Integrated Pest Management in Tropical Regions*. New York: CABI Publishing.

GT2307 ANIMAL HEALTH AND HOUSING

In this course, students will be focused into animal health to improve and enhance welfare. The course combines classroom, field practical, research with applied science skills for use within the animal sector knowledge. In practical situations where an indepth understanding of animal health and welfare might be of benefit, for example in animal production, utilisation of animals for educational/therapeutic purposes, conservation efforts, and the role/value of animals in society more generally. The course will cover the scientific theory and practice relating to animal health. It will also critically evaluate and assess the biological and physiological with the aim of improving our understanding and overall the quality of animal welfare.

References

Davis, R.G. (2011). Animals, Diseases, and Human Health: Shaping Our Lives Now and in the Future. USA: ABC-CLIO.

Olsson, A., & Galindo, F. (2018). *Animal Welfare*. UK: CABI Publishing.

Houpt, K. A. (2018). *Domestic Animal Behavior For Veterinarians And Animal Scientists*. USA: Wiley-Blackwell.

GT3302 POST PRODUCTION TECHNOLOGY

Upon completion of the course, students are expected to be able to understand and use the principles of post-harvest technology, apply the basic principles and processes affecting postharvest quality, the harvesting systems (traditional and modern); postharvest biology (microbes and insect pests) as well as the physiology and chemistry of horticultural crop and livestock products, know how to apply this information to daily practice by developing strategies to maintain post production quality as well as the importance of quality, safety and marketability of the agricultural products. The skills and knowledge obtained will give the student the understanding on consumer attitudes, how to reduce postharvest loss, improve the quality of processed products, and add value to products to make more quality food available.

- Bala, B.K. (2020). *Agro-Product Processing Technology*. USA: CRC Press.
- Basharat, N.D., & Shabir A.M. (2021). *Emerging Technologies for Shelf-Life Enhancement of Fruits*. USA: Apple Academic Press.
- Yikmus, S. (2019). *Technological Developments in Food Preservation, Processing, and Storage*. USA: IGI Global.

GT3303 SOIL FERTILITY AND MANAGEMENT

This course enables students to understand the concept of soil fertility as the interactions among the physical, chemical, and biological properties of soils. The course also emphasizes on the sustainable management of soil fertility in relation to soil and crop productivity in modern agriculture. Maintenance of tropical soil health will be emphasized. Besides comprehending the principles and theories of soil fertility, upon completing this course, students will be able to assess soil fertility, soil health and quality to recommend soil management in a manner that ensures sustainable agronomic and environmental efficiency of farming systems.

References

- Havlin, J.L., Tisdale, S.L., Nelson, W.L. & Beaton, J.D. (2016). Soil Fertility and Fertilizers: An Introduction to Nutrient Management (8th ed.). India: Pearson.
- Plaster, E.J. (2013). *Soil Science & Management* (6th ed.). USA: Delmar Cengage Learning.
- Sharanappa (2021). *Soil Fertility and Nutrient Management*. India: NIPA Publishing.

GT2304 BIOSECURITY IN AGRICULTURE

Biosecurity in Agriculture focuses on production animal management practices and the implementation of safeguards that eliminate and decrease the rate of infectious diseases. This course gives students the opportunity to understand and apply concepts of disease transmission in animal and plant production situations. Multiple species, pest and diseases will be discussed throughout the course as examples of biosecurity in practice. This course provides the foundation for students interested in learning the

complexities of the prevention of disease transmission in both animals, plants and animals. This course aims to provide students with a fundamental understanding of what constitutes such biological hazards, the theory and practice of avoiding or controlling these hazards, the regulatory framework for managing biosecurity, and opportunities to explore topical examples of biosecurity issues.

Biosecurity in Agriculture is a discussion-based course to allow students to fully understand the practical application of biosecurity in our ever more global world.

References

- Dewulf, J., & Van Immerseel, F. (2020). *Biosecurity in Animal Production and Veterinary Medicine: From principles to practice*. USA: CABI.
- Gordh, G., & McKirdy, S. (2014). *The Handbook of Plant Biosecurity*. USA: Elsevier.
- A. David Scarfe, Cheng-Sheng Lee, Patricia J. O'Bryen. (2006). Aquaculture Biosecurity: Prevention, Control, and Eradication of Aquatic Animal Diseases. USA: Wiley-Blackwell Publishing.

GB3306 SUSTAINABLE AGRICULTURE

This course is designed to understand the Sustainable Agricultural Systems, characteristics, types of sustainable agricultural systems and how to assess the sustainability of a farming system, sustainable land management, and Policy of Sustainable Agriculture. Upon completing the course, students are expected to be able to assess and analyse the sustainability of agricultural systems and design integrated farming techniques based on sustainable agricultural systems.

References

Bos, M.G., van den Bosch H., Diemont H., van Keulen H., Lahr, J., Meijerink ,G. & Verhagen, A. (2007). Quantifying the sustainability of agriculture. *Irrig Drainage Syst*, 21, 1–15.

- Carter, M.R. (2002). Soil Quality for Sustainable Land Management: Organic Matter and Aggregation Interactions that Maintain *Soil. Agron, J.* 94, 38–47,
- Menalled, F., Bass, T. Buschena, D., Cash, D, Malone, M, Maxwell, B., McVay, K., Miller, P., Soto, R., & Weaver, D. (2008) *An Introduction to the Principles and Practices of Sustainable Farming*. US: Montana State University Extension.

GT1302 APPLIED CROP SCIENCE

The course is designed to provide students with a strong understanding of principles and practices in crop science. Principles of crop physiology, genetics & breeding, production and management of crops will be discussed. Concepts and essentials of good agricultural practices (GAPs) will be emphasized. Importance will be placed on selection, improvement and production of food, fiber and feed crops useful to man. In the process, students will be trained to critically analyse production area, soil, climate, economic aspects, etc. and make accurate decisions. Some experiential learning (hands-on) will be included. Factors influencing crop production will discussed thoroughly during lectures. Cropping systems and smart agriculture will also be explained.

References

Acquaah, G. (2005). *Principles of Crop Production: Theory, Techniques and Technology* (4th ed). Pearson Prentice Hall.

Acquaah, G., (2012). *Principles of Plant Genetics and Breeding* (2nd Ed). USA: Wiley-Blackkwell.

Hanks, J. (2016). *Agronomy and Crop Science*. USA: Callisto Reference.

GT1303 APPLIED ANIMAL SCIENCE

The aim of this course is to provide basic knowledge and understanding of animal science and its applications. Student will develop an understanding of the environmental, ethical and economic contexts in which the sector operates. Applied animal science helps to improve the productivity and sustainability of livestock production systems, control disease epidemics, standards of animal welfare, and to enhance wildlife biodiversity.

- Dewulf, J., & Immerseel, F. V. (2018). Biosecurity in animal production and veterinary medicine: From principles to practice. Leuven: Acco.
- Damon, W.S. (2018). *Introduction to Animal Science: Global, Biological, Social and Industry Perspectives* (6th ed.). USA: Pearson.
- Field, T.G., & Taylor, R.E. (2020). *Scientific Farm Animal Production: An Introduction to Animal Science* (12th ed.). USA: Pearson.

GT2305 AGRICULTURAL EXTENSION

This course will equip students with the principles, theories and practices of agricultural extension. It will cover extension communication methods which will enable students to conduct practical demonstrations of new agricultural technologies to others especially farmers. Students will be exposed to individual, group and mass extension methods. The use of ICT for this purpose will be emphasized. Students will gain knowledge and skills needed for application in effectively planning, organizing and conducting extension and training programs to successfully transfer new agricultural technologies.

- Chole, R. R, Deshmukh, P. R. & Kapse, P. S. (2010). *Transfer of Agricultural Technology*. Jodhpur: Scientific Publishers.
- Janani, S., Sujeetha, T. N., Asokhan, M. & Harish, R. (2019). *Agricultural Extension: A Glimpse*. India: Scientific Publishers.
- Kalaitzandonakes, N., Carayannis, E.G. & Grigoroudis, E. (2018). From Agriscience to Agribusiness: Theories, Policies and Practices in Technology Transfer and Commercialization (Innovation, Technology, and Knowledge Management). Cham: Springer International Publishing.

GT1304 AGRICULTURAL ECONOMICS

This course is designed to acquaint students with agricultural economics including both macroeconomics and microeconomic principles. This includes roles and characteristics of agricultural businesses in our economic system. Upon completing the course, the students should have a sound knowledge of agricultural macroeconomic and microeconomic theories and methods, be able to apply their analytical skills to a range of contemporary economics principles in the agricultural firms as well as understanding of transmission mechanism of demand management policies and the analysis of macroeconomic of agriculture.

References

- Colman, D. (2002). Principles of Agricultural Economics: Markets and Prices in Less Developed Countries. UK: Cambridge University Press.
- Debertin, D. L. (2012). *Agricultural Production Economics: The Art of Production Theory* (2012). UK: CreateSpace Independent Publishing Platform.
- Nourse, E.G. (2013). Agricultural Economics: A Selection of Materials in Which Economics Principles Are Applied to the Practice of Agriculture. USA: University of Chicago Press.

GS3205 AGRICULTURE WASTE MANAGEMENT AND UTILIZATION TECHNOLOGIES

This course introduces students to the basic concept on waste, types and sources of waste; Students will gain knowledge on wastes that are agriculturally based and understand different sources of agricultural wastes; Students also classify and characterize wastes that are hazardous in nature; Students are able to know and understand the decomposition of organic matter; the series of microorganism involved in the decomposition process; learn the simple way of carrying out the composting of organic wastes and residues; the general impact of various waste sources on the environment; Employ different waste management strategies to solve waste generation and its impact on environment; It also discusses different waste reduction, reuse and recycling techniques, landfilling and incineration of wastes, which are the conventional ways of waste treatment and disposal techniques;

This course also acquaint with students the modern ways of waste treatment and disposal, which include: pyrolysis, gasification, combined pyrolysis – gasification and anaerobic digestion; The course also reveals the integrated waste management technology is discussed, which combines all the technologies in one system.

References

- Barnes, Jr. R.C. (2018). *Agricultural Waste Management Field Manual*. UK: Forgotten Books Press.
- Muzaffar, A. B., Wani, A. A., Sikander, B. M., Lone, Y. & Malik, J.M. (2020). *Innovative Waste Management Technologies for Sustainable Development*. USA: IGI Global
- Zainul, A.Z. (2018). Sustainable Technologies for the Management of Agricultural Wastes. USA: Springer.

GT2207 RESEARCH METHODS & EXPERIMENTAL DESIGNS FOR AGRICULTURE

This course is designed to provide the foundation for research methods, experiments planning and interpreting the findings through relevent statistical analysis in experiments for agriculture. Upon completing the course the students are expected to be able to design, execute and analyse experimental programme.

References

- Hoshmand, A. R. (2020). *Design of Experiments for Agriculture* and The Natural Sciences (2nd ed.). USA: CRC Press.
- Ireland, C. R. (2010). Experimental Statistics for Agriculture & Holticulture. UK: CABI Publication.
- Glaz, B., & Yeater, K. M., J. T. (2020). *Applied Statistics in Agricultural, Biological and Environmental Sciences*. USA: American Society of Agronomy Inc

HS3349 HALAL SLAUGHTERING AND MEAT SCIENCE

This course aims to provide students with knowledge to address the need to ensure the welfare of food animals during pre-slaughter and slaughter processes until they are dead, conduct ante- and postmortem inspection, follow standard of halal slaughtering, and issues related to halal slaughtering such as stunning, slaughtering equipment, fatwa, etc. Upon completion of this course, students will understand the fundamental science and technique of meat production, determine, produce, manage and control the quality of meat and meat products.

References

Warriss, P. D. (2000). *Meat science: an introductory text*. CABI Publishing CABI Publishing. CAB

International, UK.

Lawrie, R. A. (2006). *Lawrie's Meat Science*. Seventh Edition. Woodhead Publishing Limited.

Nakyinsige K, Man YBC, Aghwan ZA, Zulkifli I, Goh YM, Bakar FA, et al. (2013). Stunning and animal welfare from Islamic and scientific perspectives. Meat Sci, 95:352-61.

GT2308 PRECISION AND SMART FARMING

This course is designed to introduce students to Precision and Smart Farming. Upon completing the course, students are expected to understand the definition, fundamental concepts, tools & techniques and applications of Precision and Smart Farming. Students are also expected to seek potential and suitable applications of precision and smart framing for more efficient and effective agroindustry and provide alternatives solution to solve problems in agroindustry.

References

Choudhury, A., Biswas, A., Prateek, M., & Chakrabarti, A. (2021). Agricultural Informatics: Automation Using the IoT and Machine Learning. USA: Wiley-Blackwell Publishing.

Srinivasan, A. (2008). *Handbook of Precision Agriculture: Principles and Applications.* USA: CRC Press.

Zachariah, A. B. (2010). *Precision Agriculture: The Future of Farming*. Canada: Delve Publishing.

GT3305 RESEARCH PROJECT 1 & GT3306 RESEARCH PROJECT 2

This course is designed to provide the students opportunity to do research project which include foundation planning and proposing proposal, literature review and on-field/experimental research and interpreting the findings. Upon completing the course the students are expected to be able to design, execute and analyse research project.

References

Glaz, B., & Yeater, K. M., J. T. (2020). Applied Statistics in Agricultural, Biological and Environmental Sciences. USA: American Society of Agronomy Inc

Hoshmand, A. R. (2020). *Design of Experiments for Agriculture* and The Natural Sciences (2nd ed.). USA: CRC Press.

Ireland, C. R. (2010). Experimental Statistics for Agriculture & Holticulture. UK: CABI Publication.

KL2324 INDUSTRIAL TRAINING (LI) 1 & KL3324 INDUSTRIAL TRAINING (LI) 2

LI give students the opportunities to practice the theoretical knowledge that they learn in class and apply it in the real working environment. It is also to inculcate professionalism in the students through interaction and communication with the people at their training places besides to look for job opportunities for their future career. Moreover, LI helps in developing students' skills and abilities in every aspect of life. Finally, LI is also to develop and maintain good relations with government and non-government organizations that can help UNISSA to produce skilful and proficient graduates.

GT3224 AQUACULTURE AND FISHERIES TECHNOLOGY

This course is designed to provide students with a strong foundation in professional or academic work in the field of aquaculture and fisheries. Upon completion the course the students are able to demonstrate the basic technical skills necessary for work in physical, biological, environmental data for sustainable aquaculture and fisheries management (e.g. culture system design,

water quality analysis, fish health, nutrition, and growth, and scientific method for data collection and analysis). This course is deliberate to aware students with the halal aquaculture policies towards 'Responsible Aquaculture and Fisheries and Management'. The students are able evaluate the importance on the recent advancement in science and technology towards the evolvement of aquaculture and fisheries management as the 'Paradigm of Blue Ocean'. Besides, it also integrates existing information and skills to develop problem-solving strategies and technologies relevant to aquaculture and fisheries management to achieve the United Nations Sustainable Development Goals.

- Geoffrey, G. (2019). *Aquaculture: Principles and Practices*.USA: Syrawood Publishing.
- Jacob, B. (2015). A guide to recirculation aquaculture. Rome: FOA.
- Sandhya, K. (2016). Aquaculture and Fish Technology: Fundamentals, Applications and Economics. Maldova: Lap Lambert Academic Publishing.

PROGRAMME REQUIRED COURSES (PRCs)

AQUACULTURE

GQ1301 PRINCIPLE OF AQUACULTURE

In this course, students will learn about the history of the aquaculture industry and its role especially in the production of aquatic animals and plants for human consumption. Students will also learn about water requirements in terms of quality and quantity as well as the important factors that need to be considered when choosing sites and aquatic species for aquaculture. Other than that, students will also learn about the culture techniques of selected aquatic species and marketing strategies in aquaculture. In this course, sustainable practice of aquaculture will be emphasized. Students will identify the effect of wastes produced from the aquaculture industry and its impact to the surrounding environment as well as how to solve the problem.

References

Stickney, R.R. (2017). Aquaculture: An Introductory Text 3rd Edition. India: CABI.

Lucas, J.S., Southgate, P.C., & Tucker, C.S. (2019). *Aquaculture:* Farming Aquatic Animals and Plants 3rd Edition. USA: Wiley-Blackwell.

Ezban, M. (2019). Aquaculture Landscapes: Fish Farms and the Public Realm. UK: Routledge.

GQ1302 AQUACULTURE FARM AND HATCHERY TECHNOLOGY

This course is closely integrated into the aquaculture industry. The fastest global aquaculture leads to adopting new concepts for sustainable farm and hatchery management. A sound understanding of the principle involved in designing a sustainable fish farm and hatchery with its compliance, a procedure in incubation eggs, fertilization and hatching fish fries is vital to coping with these changes. The sustainable farm and hatchery management course aims to formulate these concepts on developing the freshwater composite aquaculture farm. Students

are able to make designs of a freshwater composite aquaculture farm in relation to sustainable management.

- Davison, A. (2019). Recirculating Aquaculture Systems: A Guide to Farm Design and Operations. USA: Farmfish LLC
- Creed, R. (2018). *Aquaculture: Production and Engineering*. USA: Syrawood Publishing House.
- Lucas, J.S., Southgate, P.C., Tucker, C.S. (2018). *Aquaculture:* Farming Aquatic Animals and Plants. 3rd Edition. UK: Wiley-Blackwell.

GQ1303 FISH PHYSIOLOGY AND TAXONOMY

This course will provide basic coverage of the physiology, biology and taxonomy of aquaculture fish species (marine, brackish and freshwater). Emphasis will be placed on species inhabiting the Brunein native aquaculture fish species. After the successful completion of this course, students will be able to: 1. Describe the major groups of fishes and their evolutionary relationships; 2. Describe the morphology, physiology, and biology of fish; 3. Identify Brunei native aquaculture fishes to the level of family, genus, and species; 4. Summarize and critically evaluate scientific papers related to fisheries biology.

References

Currie, S. and Evans, D. H. (2020). *The Physiology of Fishes (CRC Marine Biology Series)*. USA: CRC Press.

Jayaram, K. C. (2021). *Fundamentals of Fish Taxonomy*. India: Narendra Publishing House.

Finn, R. N. (2020). Fish Larval Physiology. USA: CRC Press

GQ2301 FISH NUTRITION

Throughout this course, students will learn about the nutritional requirements of the fish of different species and age. Students will also learn about the fundamentals of fish nutrition, feed formulation, feed making, types of fish food, food size, nutritional level, the culture of live food and fish food storage. In addition, students will also learn about the importance of sustainable and safety of food source for fish in aquaculture.

Lee, C.-S.(2015). Dietary Nutrients, Additives and Fish Health - United States Aquaculture Society series. USA: John Wiley & Sons.

Jain, N. (2018). *Practical Manual on Fish Nutrition and Feed Technology*. India: DAYA Publishing House

Nates, S.F. (2015). Aquafeed Formulation. USA: Academic Press.

GQ2302 WATER AND SOIL QUALITY IN AQUACULTURE

This course covers theory and determination of water and soil quality for aquaculture project site selection. Analysis method and standard operating procedure for water and soil quality used in aquaculture, and the interpretation of physico chemicals of water and soil and approach and methods applied to mitigate and improve water and soil quality in various aquaculture scenarios.

References

Boyd, C. E., Tucker, C. S. (2015). *Handbook for Aquaculture Water Quality*. USA: Craftmaster Printer.

American Public Health Association (2017). Standard Methods for the Examination of Water and Waste Water (23th Edition). USA: American Public Health Association.

Loucks, D. P., & Van Beek, E. (2017). Water Resource Systems Planning and Management: An Introduction to Methods, Models and Applications. USA: Springer International Publishing AG.

GQ2303 FISH AND SHELLFISH CULTURE

There is considerable global interest in the culture of finfish and shellfish species both for cold and warm water aquaculture development and growth. Essential information on the biology, domestication and aquacultural characteristics of a wide selection of novel and established species is provided in the form of technical sheets, species descriptions and information on current rearing practices, making this a must-have reference in the field of aquacultural science. This course also offers a basic framework in order to support investment strategies for research and development efforts aimed at the emergence of a profitable finfish

and shellfish aquaculture industry and presents a rationale for species diversification, different approaches to species selection and basic economical and market considerations governing the launch of strategic development and commercialization efforts.

References

- Stickney, R.R. (2017). Aquaculture: An Introductory Text 3rd Edition. India: CABI.
- Lucas, J.S., Southgate, P.C., & Tucker, C.S. (2019). *Aquaculture:* Farming Aquatic Animals and Plants 3rd Edition. USA: Wiley-Blackwell.
- Ezban, M. (2019). Aquaculture Landscapes: Fish Farms and the Public Realm. UK: Routledge.

GQ3308 FISH POSTHARVEST TECHNOLOGY

This course offers a comprehensive knowledge on the process and activities that follow the catch or harvest, handling, transportation, processing and distribution of fish and fish products. It covers various aspects such as the physicochemical and biochemical changes that occur, methods for assessing product quality, and current technological developments aimed at extending the shelf-life of the products. At the end of the course, students will gain a deep understanding of the entire fish supply chain and the factors that affect the quality and freshness of the products.

References

- Nambudiri, N. M. (2023). Advances in Harvest and Post-Harvest Technology of Fish. India: New India Publishing Agency.
- Galanakis, C. M. (2021). Sustainable Fish Production and Processing. USA: Academic Press.
- Qureshi S. N. and Javeed, K. (2018). *Post-Harvest Technology*. India: Bioscientific Publisher.

GQ2304 FISH BROODSTOCK MANAGEMENT AND BREEDING TECHNIQUE

This course focuses on the reproductive technologies in breeding fish, such as sex selection, gamete technology such as frozen storage of oocytes and embryos (cryopreservation), in vitro fertilization and embryo culture, chromosome set manipulation, disease prevention and control for gametes and embryos and the development of transgenic fish with enhanced production characteristics. This course also discusses genetic and endocrine technologies for the production of monosex male and female fish stocks in aquaculture and other recent advances in the field of finfish reproductive biotechnology. Practical activity on new reproduction technologies such as cryopreservation will be organized in order to gain hands-on experience.

References

- Augusto, B., and Borges, A. (2017). *Aquaculture and Genetic Improvement*. Canada: Arcler Education Incorporated.
- Chattopadhyay, N.R. (2016). *Induced Fish Breeding: A Practical Guide for Hatcheries*. USA: Academic Press.
- Wang, H., Piferrer, F., & Chen, S. (2018). *Sex Control in Aquaculture*. USA: John Wiley & Sons.

GO3304 ESTUARINE AND MANGROVE ECOLOGY

This course is on the understanding of the ecology study, importance and area of estuaries and mangrove forests in Malaysia. In particular, the aspects that will be discussed in this course are the characteristics, types of estuaries and mangroves. Other topics discussed are on adaptation, distribution, biological diversity, food network and nutrient cycle. The importance of economics, threats, management and scientific studies in estuaries and mangroves are also discussed

References

- Abhijit, M., & Zaman, S. (2016). *Basics of Marine and Estuarine Ecology*. India: Springer New Delhi.
- Day, J. W. Jr., Kemp, W. M., Yanez-Arancibia A., & Crump, B. C. (2012). *Estuarine Ecology 2nd Edition*. USA: Wiley-Blackwell.
- Unni, K. S. (2018). Conservation & Management of Aquatic Resources. India: Daya Publishing House.

GQ3301 FISH HEALTH AND DISEASE MANAGEMENT

This course aims to introduce students to the fundamental principles of diagnosing, preventing, and controlling fish diseases

caused by bacteria, viruses, parasites, and fungi. It covers the basics of fish disease concepts, including etiology, epidemiology, clinical symptoms, pathogenesis, diagnosis, treatment, and control. The course will provide specific information on diagnostic techniques in virology, bacteriology, parasitology, and fungi. At the end of the course, students will be able to apply information on common fish diseases, including diagnosis, treatment, and control strategies.

References

- World Organisation for Animal Health (2021). *Manual of Diagnostic Tests for Aquatic Animals-8th edition*. France: WOAH
- Urdes, L., Walster, C., & Tepper, J. (2023). *Pathology and epidemiology of Aquatic Animal Diseases for Practitioners*. USA: Wiley-Blackwell.
- Smith, S. A. (2019). Fish diseases and medicine. USA: CRC Press

GQ3302 GENETICS AND BIOTECHNOLOGY IN AQUACULTURE

This course will begin with genetics of quantitative phenotypes, followed by discussions on current applications of genetics (biotechnology) in aquaculture, based on journals and case studies. Emphasis will be placed on management of brood stock with relation to genetics entities, and genetic implications of aquaculture activities.

- Harrel, K. (2019). *Genetics and Fish Breeding*. UK: ED-Tech Press.
- Bai, J., & Li, S. (2019). Genetic Breeding and Molecular Marker-Assisted Selective Breeding of Largemouth Bass (1st Edition). USA: Academic Press.
- Dudash, C.B., Fenster, R.C., & Lacy, P.S. (2017). Genetic Management of Fragmented Animal and Plant Populations 1st Edition. UK: Oxford University Press

GQ3309 CONSERVATION AND MANAGEMENT OF AQUATIC RESOURCES

This course explains and discusses the importance of the conservation and management of aquatic resources. Discussion on the aquatic resources in terms of their importance, ii) diversity of flora and fauna that occur within them, iii) major threats and iv) basic principles on their sustainable management will be done in this course. Awareness activity at selected aquatic habitats will be done to resolve the present issues regarding conservation of aquatic resources.

References

- Chiras, D., & Reganold, J. (2009). *Natural Resource Conservation: Management of a Sustainable Future (10th Ed)*. UK: Pearson..
- Nakano, S., Yahara, T., & Nakashizuka, T. (2016). Aquatic Biodiversity Conservation and Ecosystem Services (1st Ed). USA: Springer.
- Unni, K. S. (2018). Conservation & Management of Aquatic Resources. India: Daya Publishing House.

GQ3307 SUSTAINABLE AQUACULTURE PRACTICES

This course will discuss the concept of sustainability as well as current and potential aquaculture practices. Students will be able to discover the meaning of sustainable aquaculture practices which must not only maximize benefits, but also minimize accumulation of detriments, as well as other types of negative impacts on the natural and social environment. Therefore, this course has been developed with focus on the advancement of sustainable aquaculture as a manner that implies green technology. These approaches attempt to integrate aquaculture with indigenous fish species as well as the local communities, their cultures and the natural environment.

References

Tucker, C.S., & Hargreaves, J.A. (2009). *Environmental Best Management Practices for Aquaculture*. USA: John Wiley & Sons.

- Peter, W. Perschbacher, R. & Stickney, R. (2017). *Tilapia in Intensive Co-culture (World Aquaculture Society Book series) 1st Edition*. USA: Wiley-Blackwell.
- Bunting, S.W. (2018). Principles of Sustainable Aquaculture: Promoting Social, Economic and Environmental Resilience. UK: Routeledge.

GT2304 BIOSECURITY IN AGRICULTURE

Biosecurity in Agriculture focuses on production animal management practices and the implementation of safeguards that eliminate and decrease the rate of infectious diseases. This course gives students the opportunity to understand and apply concepts of disease transmission in animal and plant production situations. Multiple species, pest and diseases will be discussed throughout the course as examples of biosecurity in practice. This course provides the foundation for students interested in learning the complexities of the prevention of disease transmission in both animals, plants and animals. This course aims to provide students with a fundamental understanding of what constitutes such biological hazards, the theory and practice of avoiding or controlling these hazards, the regulatory framework for managing biosecurity, and opportunities to explore topical examples of biosecurity issues.

Biosecurity in Agriculture is a discussion-based course to allow students to fully understand the practical application of biosecurity in our ever more global world.

- Dewulf, J., & Van Immerseel, F. (2020). *Biosecurity in Animal Production and Veterinary Medicine: From principles to practice*. USA: CABI.
- Gordh, G., & McKirdy, S. (2014). *The Handbook of Plant Biosecurity*. USA: Elsevier.
- A. David Scarfe, Cheng-Sheng Lee, Patricia J. O'Bryen. (2006). Aquaculture Biosecurity: Prevention, Control, and Eradication of Aquatic Animal Diseases. USA: Wiley-Blackwell Publishing.

GT2305 AGRICULTURAL EXTENSION

This course will equip students with the principles, theories and practices of agricultural extension. It will cover extension communication methods which will enable students to conduct practical demonstrations of new agricultural technologies to others especially farmers. Students will be exposed to individual, group and mass extension methods. The use of ICT for this purpose will be emphasized. Students will gain knowledge and skills needed for application in effectively planning, organizing and conducting extension and training programs to successfully transfer new agricultural technologies.

References:

- Chole, R. R, Deshmukh, P. R. & Kapse, P. S. (2010). *Transfer of Agricultural Technology*. Jodhpur: Scientific Publishers.
- Janani, S., Sujeetha, T. N., Asokhan, M. & Harish, R. (2019). *Agricultural Extension: A Glimpse*. India: Scientific Publishers.
- Kalaitzandonakes, N., Carayannis, E.G. & Grigoroudis, E. (2018). From Agriscience to Agribusiness: Theories, Policies and Practices in Technology Transfer and Commercialization (Innovation, Technology, and Knowledge Management). Cham: Springer International Publishing.

GT1304 AGRICULTURAL ECONOMICS

This course is designed to acquaint students with agricultural economics including both macroeconomics and microeconomic principles. This includes roles and characteristics of agricultural businesses in our economic system. Upon completing the course, the students should have a sound knowledge of agricultural macroeconomic and microeconomic theories and methods, be able to apply their analytical skills to a range of contemporary economics principles in the agricultural firms as well as understanding of transmission mechanism of demand management policies and the analysis of macroeconomic of agriculture.

References

- Colman, D. (2002). Principles of Agricultural Economics: Markets and Prices in Less Developed Countries. UK: Cambridge University Press.
- Debertin, D. L. (2012). Agricultural Production Economics: The Art of Production Theory (2012). UK: CreateSpace Independent Publishing Platform.
- Nourse, E.G. (2013). Agricultural Economics: A Selection of Materials in Which Economics Principles Are Applied to the Practice of Agriculture. USA: University of Chicago Press.

GT3307 AGRICULTURE WASTE MANAGEMENT AND UTILISATION TECHNOLOGIES

This course introduces students to the basic concept on waste, types and sources of waste; Students will gain knowledge on wastes that are agriculturally based and understand different sources of agricultural wastes; Students also classify and characterize wastes that are hazardous in nature; Students are able to know and understand the decomposition of organic matter; the series of microorganism involved in the decomposition process; learn the simple way of carrying out the composting of organic wastes and residues; the general impact of various waste sources on the environment; Employ different waste management strategies to solve waste generation and its impact on environment; It also discusses different waste reduction, reuse and recycling techniques, landfilling and incineration of wastes, which are the conventional ways of waste treatment and disposal techniques; This course also acquaint with students the modern ways of waste treatment and disposal, which include: pyrolysis, gasification, combined pyrolysis - gasification and anaerobic digestion; The course also reveals the integrated waste management technology is discussed, which combines all the technologies in one system.

- Barnes, Jr. R.C. (2018). *Agricultural Waste Management Field Manual*. UK: Forgotten Books Press.
- Muzaffar, A. B., Wani, A. A., Sikander, B. M., Lone, Y. & Malik, J.M. (2020). *Innovative Waste Management Technologies for Sustainable Development*. USA: IGI Global

Zainul, A.Z. (2018). Sustainable Technologies for the Management of Agricultural Wastes. USA: Springer.

GT2207 RESEARCH METHODS & EXPERIMENTAL DESIGNS FOR AGRICULTURE

This course is designed to provide the foundation for research methods, experiments planning and interpreting the findings through relevent statistical analysis in experiments for agriculture. Upon completing the course the students are expected to be able to design, execute and analyse experimental programme.

References

- Hoshmand, A. R. (2020). *Design of Experiments for Agriculture* and The Natural Sciences (2nd ed.). USA: CRC Press.
- Ireland, C. R. (2010). Experimental Statistics for Agriculture & Holticulture. UK: CABI Publication.
- Glaz, B., & Yeater, K. M., J. T. (2020). Applied Statistics in Agricultural, Biological and Environmental Sciences. USA: American Society of Agronomy Inc

GT2308 PRECISION AND SMART FARMING

This course is designed to introduce students to Precision and Smart Farming. Upon completing the course, students are expected to understand the definition, fundamental concepts, tools & techniques and applications of Precision and Smart Farming. Students are also expected to seek potential and suitable applications of precision and smart framing for more efficient and effective agroindustry and provide alternatives solution to solve problems in agroindustry.

- Choudhury, A., Biswas, A., Prateek, M., & Chakrabarti, A. (2021). Agricultural Informatics: Automation Using the IoT and Machine Learning. USA: Wiley-Blackwell Publishing.
- Srinivasan, A. (2008). *Handbook of Precision Agriculture: Principles and Applications*. USA: CRC Press.
- Zachariah, A. B. (2010). *Precision Agriculture: The Future of Farming*. Canada: Delve Publishing.

GT3305 RESEARCH PROJECT 1 & GT3306 RESEARCH PROJECT 2

This course is designed to provide the students opportunity to do research project which include foundation planning and proposing proposal, literature review and on-field/experimental research and interpreting the findings. Upon completing the course the students are expected to be able to design, execute and analyse research project.

References

- Glaz, B., & Yeater, K. M., J. T. (2020). Applied Statistics in Agricultural, Biological and Environmental Sciences. USA: American Society of Agronomy Inc
- Hoshmand, A. R. (2020). *Design of Experiments for Agriculture* and The Natural Sciences (2nd ed.). USA: CRC Press.
- Ireland, C. R. (2010). Experimental Statistics for Agriculture & Holticulture. UK: CABI Publication.

KL2324 INDUSTRIAL TRAINING (LI) 1 & KL3324 INDUSTRIAL TRAINING (LI) 2

LI give students the opportunities to practice the theoretical knowledge that they learn in class and apply it in the real working environment. It is also to inculcate professionalism in the students through interaction and communication with the people at their training places besides to look for job opportunities for their future career. Moreover, LI helps in developing students' skills and abilities in every aspect of life. Finally, LI is also to develop and maintain good relations with government and non-government organizations that can help UNISSA to produce skilful and proficient graduates.

GT3213 LIVESTOCK PRODUCTION TECHNOLOGY

This course will acquaint students on basic aspects of various livestock and poultry including housing, feeding, breeding and healthcare. Students will gain knowledge on various systems of livestock production and Management Shelter designs and engineering, poultry farm and hatchery management, integrated livestock production systems in farming system, Integration of fish, arable farming and different livestock enterprises, livestock

business management, management of rabbits and intensive rearing of goats, sheep, and buffaloes for meat and milk.

References

Reddy, D.V. (2007). Applied Nutrition: Livestock, Poultry, Human, Pet, Rabbit and Laboratory Animal Nutrition. UK: IBH & Oxford.

Powell-Owen, W. (2008). *Poultry Farming and Keeping*. India: Daya Books.

Kassam, A., Kueneman, E., Kebe, B., Souleymane, Farako-ba, Faso, B., & Youdeowei, A. (2010). Enhancing Crop-Livestock Systems in Conservation Agriculture for Sustainable Production Intensification Integrated Crop Management Vol.7-2009. Rome: FOA.

GT3224 AQUACULTURE AND FISHERIES TECHNOLOGY

This course is designed to provide students with a strong foundation in professional or academic work in the field of aquaculture and fisheries. Upon completion the course the students are able to demonstrate the basic technical skills necessary for work in physical, biological, environmental data for sustainable aquaculture and fisheries management (e.g. culture system design, water quality analysis, fish health, nutrition, and growth, and scientific method for data collection and analysis). This course is deliberate to aware students with the halal aquaculture policies Aquaculture and 'Responsible Fisheries Management'. The students are able evaluate the importance on the recent advancement in science and technology towards the evolvement of aquaculture and fisheries management as the 'Paradigm of Blue Ocean'. Besides, it also integrates existing information and skills to develop problem-solving strategies and technologies relevant to aquaculture and fisheries management to achieve the United Nations Sustainable Development Goals.

References

Geoffrey, G. (2019). *Aquaculture: Principles and Practices*.USA: Syrawood Publishing.

- Jacob, B. (2015). A guide to recirculation aquaculture. Rome: FOA.
- Sandhya, K. (2016). Aquaculture and Fish Technology: Fundamentals, Applications and Economics. Maldova: Lap Lambert Academic Publishing.

GT3215 HORTICULTURAL TECHNOLOGY

This course introduces students to the principles and practices of Horticulture. Students will be exposed to matters related to the different branches of horticulture as well as business and career opportunities in the horticultural industry. The different systems and practices in horticultural crop production will be elaborated. Potential, high value crops will be introduced. New technologies and approaches adopted by horticultural practitioners such as soilless culture, vertical farming, "food factory" concepts, AI and IOT will be thoroughly discussed. Topics on nursery establishment & management and plant material production, maintenance & handling will be revisited.

- Bird, C. (2014). *The Fundamentals of Horticulture: Theory and Practice*. Cambridge: Cambridge University Press
- Mefferd, A. (2019). The Organic No-Till Farming Revolution: High Production Methods for Small-Scale Farmers. Gabriola Island: New Society Publishers.
- Yahia, E.M. (2019). Postharvest Technology of Perishable Horticultural Commodities. San Diego: Elsevier Science Publishing Co. Ltd.

AGRIBRIDGE

GB0001 INTRODUCTION TO SCIENCE OF AGRICULTURE

This course is designed to give understanding on the basic and fundamental principles of sciences which is important in order to comprehend agricultural science. This course aims to give the foundation of knowledge for sciences that are relevant in different areas of agriculture including plants, animals, soil and health. Upon completing the course, students are expected to apply knowledge towards further understanding of agriculture.

References

Field, T.G., & Taylor, R.E. (2020). Scientific Farm Animal Production: An Introduction to Animal Science (12th ed.). USA: Pearson.

McMahon, M.E. (2020). *Plant Science: Growth, Development, and Utilization of Cultivated Plants* (6th ed.). USA: Pearson.

GB0002 BASIC LABORATORY PRACTICAL SKILLS

This course is designed as a practical accompaniment to the module Science of agriculture. It is to equip students with basic technical skills in laboratory techniques for agriculture science. Upon completion of the course, students will be able to apply basic practical knowledge in understanding theoretical knowledge and working proficiently in laboratories, including preparation of chemical reagents, collection, safe handling, processing, and analysis of biological specimens.

- Meah, M. and Kebede-Westhead, E. (2008). *Essential Laboratory Skills for Biosciences*. United States: Wiley.
- Saba, B. (2011). *Laboratory Skills in Water and Wastewater Analysis*. Saarbrucken, Germany: VDM Verlag.
- Thien, S. and Graveel, J. (2008). *Laboratory Manual for Soil Sciences Agricultural AND Environmental Principles*. Iowa, United State: Kendall Hunt Publishing.

GB0003 FOUNDATION OF BUSINESS

This course is designed to expose the students with the necessary foundation to understand agribusiness. The course emphasises on learning by doing, and therefore, students are regularly required to work on actual projects. The students will have the opportunity to apply the concepts and strategies in the classroom to real life through projects, such as the set-up and operation of a pushcart. Upon completing the course, students are expected to be able to apply basic theories and concepts and the fundamentals of starting and operating a business.

References

- Barnard, F., Ckridge, J., Dooley, F. & Foltz (2018). *Agribusiness Management* (4th ed.). USA: Routledge.
- Erickson, S., Ckridge, J. T., Barnard, F. & Downey, D. (2017). Agribusiness Management (3rd ed.). USA: McGraw-Hill.
- Ricketts, C. & Rawlins, N. O. (2017). *Introduction to Agribusiness*. USA: Thomson Reuters.

GB0004 ACADEMIC NUMERACY & IT SKILLS

This course is designed to introduce the essentials of mathematics. The module will also use interactive software used at the university and in the workplace. Upon completing the course, the students should be able to understand key concepts, skills in solving problems and on the use of the Microsoft Excel spreadsheet as a tool in agriculture related quantitative computation and analysis.

- Buglear, J. (2004). *Quantitative Methods for Business*. Oxford. United Kingdom: Butterworth-Heinemann Ltd
- Kolluri, B., Panik, M.J. and Singamsetti, R.N. (2016). *Introduction to Quantitative Methods in Business: With Applications Using Microsoft Office Excel Set.* Hoboken, United States: Wiley-Blackwell.

Anderson, D., Sweeney, D., Williams, T., Fry, M., Ohlmann, J., Camm, J. and Cochran, J. (2016). *Quantitative Methods for Business*. Florence, United States: South-Western College Publishing.

GB0005 ACADEMIC LITERACY SKILLS

This course is designed to reinforce essay composition skills and introduce students to the practice of writing for academic purposes. It will prepare students for work in high level English courses in which research writing is a requirement. Upon completing the course, the students should be able to use basic research writing skills including: conducting research, note taking, paraphrase, summary, direct quotation, positioning, and MLA or APA style citation.

- Bailey, S. (2018). *Academic Writing: A Handbook for International Students*. London: Taylor & Francis Ltd.
- Oshima, A. and Hogue, A. (2017). *Longman Academic Writing Series 4: Essays, with Essential Online Resources*, 5th Edition. Upper Saddle River, United States: Pearson Education.
- Read, S.H. (2018). *Academic Writing Skills for International Students*. New York, United Kingdom: Red Globe Press.

MINOR PROGRAMMES

FACULTY OF USULUDDIN

MINOR IN CONTEMPORARY DA'WAH

MANDATORY COURSES

UA3104 INTRODUCTION TO DA'WAH

The content of this course: The definition of Islamic *da'wah*, tasks and responsibilities of da'wah, objectives of da'wah, da'wah and characters of Da'i, responsibilities and qualification of da'i, strategies of da'wah, challenges and solutions in contemporary da'wah.

References:

Ibn Hisyam, 'Abdullah (n.d). Al-Sirah al-Nabawiyyah. Beirut: Dar al-Jeel.

Nasr, Seyyed Hossein. (1964). *Traditional Islam in the Modern World*. London: Kegan Paul.

Rahman, Fazlur. (1982). *Islam and Modernity: Tranformation of an Intellectual Tradition*. Chicago: University of Chicago Press.

UM3004 TAFSIR - YEAR 3, SEMESTER 2

The Introduction of Tafsir, its definition, its gradual development, its categories, the explanation of the important rules and principles in Tafsir, the needed appliances by the interpreter, explanation of the rules in interpretation the meaning of the Qur'an, and which may not be allowed and may not be benefits. The course will focus on the exegesis of leading Qur'an interpreters on the last three parts of the Qur'an (parts 28, 29 and 30).

References:

Al-Jumal, al-Sheikh Sulayman ibn Umar al-'Ajali al-Shafi'i. (1994). *Al-Futuhat al-Ilahiyyah bi Taudih Tafsir al-Jalalayn li al-Daqa'iq al-Khafiyyah*. Beirut: Dar al-Fikr. Ushama, Thameem (2013). *History and Sciences of the Qur'an*. Malaysia: IIUM Press. Al-Mubarakpuri, Shaykh Saifur Rahman, (2003). *Tafsir Ibn kathir*, Riyadh: Darussalam.

UM3005 HADITH - YEAR 3, SEMESTER 2

The course will include the selection of some Ahadith with brief explanation from the forty Hadith of al-Imam an-Nawawi, on various topics, such as the importance of intention, definition of Islam, iman and ihsan, Pillars of Islam, Man's development and final deeds, prohibition of innovation in religion, avoidance of doubtful matters, religion is sincerity, obedience to the prophet (s.a.w), good character, Avoiding sins, shame and shyness, some attributes of Allah, righteousness and wrongdoing, social behavior. The focus will be on objectives and legal injunctions deduced from the Hadith.

References:

Al-Bugha, Mustafa and Misto, Muhyiddin. (1420AH/1999AD). *Al-Wafi fi Syarh al-Arba'in al-Nawawiyah*, Damascus: Dar Ibn Kathir.

Abdullah, Abdul Manas, Ismail, Shayuthy, (2006), *Introduction to the Sciences of Hadith*, Malaysia: Research Centre, IIUM

Muhammad, Umm, (1999). *The Forty Hadith of al-Imam an-Nawawi*. Saudi Arabia: Abdul-Qasim Publishing House

OPTIONAL COURSES

UM3105 ISLAMIC MEDIA - YEAR 3, SEMESTER 1

The content of this course includes, but not limited to, defining Islamic media academically and linguistically, modern tools of communications including social media, stature of media in Islam and its importance in propagating the faith; development of Islamic media outlets compare to secular non-Islamic media; fundamentals and characteristics of media based on Islamic teachings; principles of media as reported through the teaching of the Qur´an and the guidance of the Prophet Muhammad (PBUH). The performances and outcomes of Islamic media along with Islamic ethics are to be observed in all media techniques and methods; examples of contemporary Islamic media from newspapers, magazines, radio and TV, satellite channels, Islamic online web pages, social media tools, challenges faced by Muslim communities via global media reporting and find ways and means for enhancing better understanding of Islam in the media.

References:

Ab. Razak, A. and A. Abdul Majeed, (eds.). (2002). *Enhancing the Understanding of Islam for the Media*. Kuala Lumpur: Institute of Islamic Understanding Malaysia.

Bunt, G. R. (2000). Virtually Islamic: Computer-Mediated Communication and Cyber Islamic Environments. Cardiff, UK: University of Wales Press.

Mowlana, H. (1998), "Covering Islam: Media and Its Impact on Muslim Identity". *International Conference on Muslim Identity in the 21st Century: Challenges of Modernity*. School of Oriental and African Studies, University of London.

UM3003 STUDIES IN WORLD RELIGION - YEAR 3, SEMESTER 2

This course is an introduction to world major religions from an Islamic viewpoint. It will explore religious communities such as Hinduism, Buddhism, Judaism, Christianity, Chinese religions and native traditional believe systems as known in Brunei Darussalam. What do religious communities have in common, and what distinguishes them from each other? The contents of this course will focus on how Muslim students understand the discipline of studying "World Religions" and/or "Comparative Religion" as known among contemporary Muslim intellectuals and Islamic institutions. Specifically, this course will survey world major religions including topics such as their socio-historical background, philosophy, worship, rituals, sects, institutions, women status, "fundamentalist" movements, modern lifestyles and Qur'anic perspective. Other issues such as maintenance of religious identity; the media; diversity, secularization in the western society, will briefly be explored.

References:

- Al-Biruni, A, (d. 1048). Al-Biruni's India: An Account of the Religion, Philosophy, Geography, Chronology, Astronomy, Custom, Laws and Astrology of India about AD 1030. Edward C. Sachau, (ed.), trans., with notes and indices. London: Kegan Paul, Trench, Trubner and Co., 1910.
- Al-Faruqi, I. R, (1998). *Islam and Other Faiths*. Ataullah Siddiqui (ed.). Leicester, England: The Islamic Foundation.
- Kazi, A. K. and J. G. Flynn, (1984), "Introduction to Muhammad b. 'Abd al-Karim Shahrastani." *Muslim Sects and Divisions*. London: Kegan Paul International.

UM3006 CONTEMPORARY THOUGHTS – YEAR 2, SEMESTER 2

Definitions of the intellectual invasion and contemporary ideologies such as theory of Darwinism, Freemasonry, Zionism, Nationalis and its relationship with colonialism, Secularism, Liberalism, Sisters in Islam and its relationship with orientalist and missionaries, Baha'ism, Ahmadiyah and Qadiyani movement which include developments and goals of each ideologies and highlights the Islamic views of these ideologies.

References:

Al-Samuk, Sam'oun Mahmud. 2006. Fi al-Mazahib al-Gikriyyah al-Mu'asirah. Amman: Dar Wail li al-Nashr wa al-Tauzi'.

Qutb, Muhammad. 1988. Mazahib Fikriyyah Mu'asirah (3rd eds). Dar al-Syuruq.

Yasin Ghadban. 2012. *Madkhal li Dirasah al-Islam wa al-Mazahib al-Mu'asirah*. Amman: Dar al-I'lam

UM3007 TAUHID - YEAR 2, SEMESTER 1

The definition of the science of al-Tawhid and its three sections: divinities, prophecies, *al-Sam'iyyat*; the legitimacy of these knowledge and belief. The nature of Allah and His compulsory, permissible and impermissible attributes. The method of theologians in proving the existence of Allah and his attributes, analogical texts and stand of the predecessor and successor toward it. *Qada'* and *Qadar* (predestination)), human free will. The concept of prophecy and divine mission, the human need towards it. Attributes which are compulsory, permissible and impermissible for the Prophets. *Khatm al-Nubuwwah* (seal of the Prophets) and universal message of Muhammad (peace be upon him). Miracles and miraculous of Quran. *Sam'iyyat* (Transmitted knowledge) and its content: concept of death and *barzakhiyyah*, End of Time and its signs, resurrection and its horrors, heaven and pleasures, hell and torment.

- Al-Buti, Muhammad Said Ramadan. (1402H). Kubra al-Yaqiniyyat al- Kauniyyah. Dar al-Fikr.
- Al-Ghazali, Abu Hamid Muhammad. (1988). Al-Iqtisad fi al-I'tiqad. Beirut: Darul Kutub al-'Ilmiyyah.
- Al-Shafi'i, Mahmud. (1991). *Al-Madkhal Ila Dirasat 'Ilm al-Kalam*. ed. 2. Cairo: Maktabah Wahbah.

SULTAN HAJI HASSANAL BOLKIAH FACULTY OF LAW

MINOR IN LAW

MANDATORY COURSES

LB1301 CONSTITUTIONAL AND ADMINISTRATIVE LAW I

This course commences with some historical perspectives of the Constitution of Brunei Darussalam. This is followed by the discussion on the conventional fundamental constitutional concepts; the Rule of Law; the Separation of Powers; the Royal Prerogative; and Sovereignty, with special focus of these concepts in the Bruneian constitution. The course will also discuss the structures and roles of the institutions of a State, including the Executive, Legislature and Judiciary, and the relationship between the individuals and the State, citizenship, immigration, and the State security. Some comparative aspects of constitutional law will also be covered, including Commonwealth constitutional relations.

References

Carroll. A. (2007). Constitutional and Administrative Law. 4th ed. Essex: Pearson Education Limited.

Elliott, C. & Quinn, F. (2007). English Legal System. 8th ed. Essex: Pearson Education Limited.

Faruqi, Shad Saleem. (2008). Document of Destiny: The Constitution of the Federation of Malaysia. Petaling Jaya: The Star Publications (M) Bhd.

SL2302 INTRODUCTION TO LAW AND LEGAL SYSTEM IN BRUNEI

This course contains the study of the fundamental concepts, structures and functions of the legislature and the role of the judiciary, which includes the role of law in the society; sources of law; the court system in administration of justice; alternative dispute resolution; legal reasoning; statutory interpretation; and some basic laws, such as constitutional law, law of tort, criminal law, and law of contract.

References:

Catherine Elliot and Frances Quinn – English Legal System, Pearson & Longman, 9th edn (2008)

Ingman, T. (2008). *The English Legal Process*. 12th ed. Oxford: Oxford University Press. Siti Zaliha binti Haji Abu Salim (2007) – *Sistem Kehakiman Brunei: Satu Kajian Perbandingan dengan Sistem Kehakiman Islam*, Brunei, Universiti Brunei Darussalam

SJ4310 KANUN JENAYAH SYARIAH

Kursus ini mengandungi kajian berkaitan sifat, tujuan dan skop Kanun Keseksaan Brunei (Perenggan 22). Tumpuan akan diberikan kepada jenis-jenis kesalahan seperti yang terdapat dalam Kanun tersebut, termasuk kesalahan bunuh, mencederakan orang rogol, curi, rompakan dan lain-lain lagi; prinsip-prinsip undang-undang jenayah, prinsip-prinsip am seperti, kesilapan (mistake), kemalangan, ugutan, keperluan (necessity), persetujuan dan

hak-hak pertahanan diri. Kajian perbandingan undnag-undang jenayah Islam dengan Kanun Keseksaan Brunei (Perenggan 22) juga akan dibincangkan dari semasa ke semasa.

Rujukan:

Anwarullah. (1997). *The Criminal Law of Islam*. Kuala Lumpur: A.S. Noordeen Publisher. Paizah Hj Ismail (2008). *Undang-Undang Jenayah Islam*. Petaling Jaya: Tradisi Ilmu Sdn Bhd

Chandrachud, Y.V. & Manohar V.R. (Eds.) (2007). *Ratanlal's & Dhirajlal's Law of Crimes: A Commentary on the Penal Code*. 26th ed. New Delhi: Bharat Law House.

OPTIONAL COURSES (any TWO courses)

LS1301 PRINCIPLES OF ISLAMIC JURISPRUDENCE I <Usul al-Figh 1>

The course covers the definition of Usul al-Fiqh; subject-matter of Usul al-Fiqh; distinction between Usul al-Fiqh and fiqh; emergence and development of Usul al-Fiqh; approaches to writing in Usul al-Fiqh. This course also discusses the origin of Shariah (the Lawgiver); the nature and conditions of *taklif*; Legal capacity: meaning, types and causes of deficiency; classification of *hukm*: the obligatory, the forbidden, the recommended, the disapproved of, and the permissible; including the concepts of *rukhsah* and '*azimah*.

References:

Alwani, Taha Jabir Fayyad. (1990). Source Methodology in Islamic Jurisprudence: Usul al-Fiqh al-Islami. Herndon, Va. USA: International Institute of Islamic Thought.

Kamali, Mohammad Hashim (2003). *Principles of Islamic Jurisprudence*. UK: Islamic Texts Society.

Nyazee, Imran Ahsan Khan (2000). *Islamic Jurisprudence*. Islamabad: The International Institute of Islamic Thought.

LB4305 BUSINESS LAW

The course covers the study of concepts, principles and application of the laws and regulations relating to the sale of goods, agency, hire purchase and employment. The study discusses relevant statutory provisions, case law and application of various legal concepts on these areas of law.

References:

Lee Mei Pheng & Detta, I.J. (2009). *Business Law*. Shah Alam: Oxford University Press Keenan, D. & Riches, S. (2007). *Business Law*. 8th ed. Essex: Pearson Education Ltd. Adams, Alix, Law for Business students, (2008).5th ed. England: Pearson Education Limited (maintain Keenan, D. & Riches)

LS4306 ISLAMIC FAMILY LAW

The course focuses on the relevant marital issues, such as the importance and role of family, un-Islamic alternative practices of marriage (adultery, temporary marriage, illegal cohabitation, same-sex marriage), required characteristics of spouse, *kafa'ah* in marriage, betrothal and its rulings, solemnization of marriage and its rulings, conditions, essential

requirements, and legal effects (dowry, maintenance, property ownership, paternity), unlawful marriage, polygamy, fosterage, types and rulings in dissolution of marriage as well as its legal effects such as period of abstention, maintenance, guardianship and mut'ah. It includes the discussion on the Shariah legal rulings, provisions in the law supported by the case law studies.

References:

Mohamad Som bin Sujimon dan Abdul Basir bin Mohamad (2006). Fikah Kekeluargaan. Kuala Lumpur: UIAM.

Najibah Mohd. Zin (2016). *Islamic Family Law in Malaysia*. Kuala Lumpur: Sweet & Maxwell Thomson Reuters.

Nasser Hamid (ed.). (2010). *Islamic Family Law: Cases & Materials*. (maintain Mohamad Som Bin Sujimon)

LS5303 LAW OF THE EVIDENCE IN THE SHARIAH COURT

The meaning of Islamic law of evidence; the importance of evidence in the court; Islamic maxims relating to Islamic law of evidence; proceeding; essential requirements and conditions of Islamic law of evidence; discussion on some methods of evidence in Islamic law including iqrar (admission), shahadah (witness), yamin (oath), qasamah (collective oath relating to a murder), qafah (genetic evidence), qarinah (circumstantial evidence), qur'ah (lucky draw), 'Ilm al-qadi (the knowledge of the judge), kitabah (written documents), sections of the law and cases of Islamic law of evidence act.

References:

Abdul Muin Abdul Rahman. 1999. Witnesses in Islamic Law of Evidence: Malaysia: Pelanduk Publication

Mohammed Burhan Arbouna, 1999. Islamic Law of Evidence: The Function of Official Documents in Evidence A Comparative Study with Common Law: Malaysia Syarikat Nurulhas Publication

Perintah Keterangan Mahkamah Syariah, 2001. Brunei Darussalam: Jabata Percetakan Negara.

LS4302 CONTEMPORARY ISSUES IN FIOH

This course covers the topics on cloning; organ transplantation; surrogate motherhood; milk banks; hymenoplasty; cosmetic surgery; foetus gender selection; abortion; acting; painting; making statues (sculptures); music; among others.

References:

Al Qirra Daggy, 'Ali 'Al Muhammady Ali Yousif. (2005). Fiqh al Qadaya al Tibbiya al Muassara. Beirut: Dar al Bashair.

Yassin, Mohamed naiem. (1996). *Abhath Fiqhyyiah Fi Kadaya Fikhyyia Muassara*. Amman: Dar el Nafaais.

Al-Zuhayli, Wahbah. (2006). *Qadhaya al-Fiqh wa al-Fikr al-Moasir*. Damascus: Dar Al-Fikr.

FACULTY OF ARABIC LANGUAGE

MINOR IN TRANSLATION

MANDATORY COURSES

SEMESTER 2

AA1204 | Istikhdam Al-Teknologiyya Fi Al-Lughah Wa Al-Tarjamah (The use of technology in Language and Translation)

This course prepares students to learn the basic knowledge, techniques, and values of using technology to learn Arabic as non-Arabs and to acquire translation skills. At the end of the study, it is expected that learners will be able to benefit from various content areas, especially in the aspect of teaching and learning theories using new tools, and the principles of employing them in designing courses in teaching and learning, for the purposes of raising the level of teaching experiences in learning the subject matter together with the tasks of assessing the academic outcome using both traditional and innovative technologies. All social, ethical, and legal responsibilities will be taken into consideration.

هذه المادة تمهد الدارسين للاطلاع على المعارف والتقنيات والقيم الأساسية في استخدام التكنولوجيا في تعلم اللغة العربية كغير العرب واكتساب مهارات الترجمة. وفي نحاية الدراسة، من المتوقع أن يكون الدارسون قادرين على الاستفادة من مختلف مجالات المحتوى، وخاصة في جانب نظريات التعليم والتعلم باستخدام الأدوات المستحدثة، ومبادئ توظيفها في تصميم المقررات في التعليم والتعلم ورفع مستوى خبرات التدريس في تعلم المادة الدراسية ومهام تقييم الحصيلة الدراسية باستخدام التكنولوجيات التقليدية والمستحدثة على حد سواء، مع الأخذ في الاعتبار جميع المسؤولية الاجتماعية والأخلاقية والقانونية.

References:

الزهري، محمود حسن. (2022م). أثر استخدام الألعاب اللغوية الإلكترونية في تنمية مهارات القراءة الموسعة لدى تلاميذ الصف الثاني الإعدادي. المجلة التربوية لتعليم الكبار. 4(2).

صونيا قاسمي، (2019م). مساهمة تكنولوجيا التعليم في تحسين العملية التعليمية. مجلة العلوم الإنسانية والاجتماعية. 52(1).

فهيم، أحمد. (2023م). توظيف المدونات اللغوية واستخدامها في تدريس اللغة الثانية والترجمة. موقع أقلام الهند. الدخول في 3.8.2023م. https://www.aglamalhind.com/?p=2741

AA3305 | Al-Akhtaa' Al-Sya'iah Fi Al-Tarjamah (Common Mistakes in Translation)

This course aims to provide the students with sufficient thoughts on common mistakes in the translation, their categories, and causes. At the end of this course, students are expected to be able to know the common mistakes in translation according to their categories and understand various issues, causes, and solutions. This course also covers topics such as the most common mistakes in translating names, verbs, prepositions, sentence structures, various terms, and others through a series of training.

تحتوي هذه المادة على التعريف بأهم الأخطاء الشائعة في الترجمة، مع بيان أسباب هذه الظاهرة اللغوية، وأنواعها، ونتائجها، وآثارها المختلفة، وبيان أشهر الأخطاء الشائعة في ترجمة الأسماء، والأفعال، والحروف، والتراكيب، والمصطلحات المتعددة، مع بيان ضرورة معرفة الثقافات اللغوية لتحاشي الوقوع في هذه الأخطاء؛ وذلك من خلال النماذج التطبيقية المتنوعة.

References:

لارسون، ملدريد. (2007م). الترجمة والمعنى. ترجمة: محمد محمد حلمي هليل. الكويت: جامعة الكويت. مناع، علي. (د.ت). الترجمة بين التصويب والت عقيب. لندن: منشورات الإختلاف. نيو مارك، بيتر. (2004م). الجامع في الترجمة. ترجمة: حسن غزالة. الرياض: دار كنوز المعرفة.

SEMESTER 1

AA2301 | Madkhal Ila At-Tarjamah (Introduction to Translation)

This course introduces the students to translation theories according to the Arabs and Westerners. At the end of this course, students are expected to be able to benefit from these theories. This course covers topics such as the definition of translation and its importance, fields of translation, types of translation, interpreting, text types, cultural translation, and many others.

الترجمة وأمهيتها، تعريفات الترجمة، مؤهلات المترجم، ميادين الترجمة، أنواع الترجمة الترجمة التحريرية والترجمة الفورية، أصناف النصوص، تحليل النص، نظريات الترجمة عند العرب الأوائل، الترجمة الدينية، الترجمة والمكافآت والترجمة والثقافة، وترجمة نصوص من العربية إلى الملايوية، ومن الإجنليزية إلى الملايوية والعكس.

References:

خورشيد، إبراهيم زكي. (1985م). الترجمة ومشكالتها. القاهرة: الهيئة المصرية العامة للكتاب. ديداوي، محمد. (1992م). علم الترجمة بين النظرية والتطبيق. تونس: دار المعارف للطباعة والنشر. عبد الرحمن، عبد الذي. (1986م). دراسة في فن التعريب والترجمة. القاهرة: مكتبة الانجلو المصرية.

OPTIONAL COURSES (any TWO courses)

SEMESTER 1

AA4303 | Tarjamah Al-Nusus Al-Diniyyah (Translation of Religious Texts)

This course aims to provide students with a full idea of translating religious texts, their varieties, and their secrets. At the end of this course, students are expected to be able to translate religious texts and criticize various examples, know translation methods, and various issues. This course covers topics such as the origins and development of translation of religious texts, especially translation of the al-Qur'an, and the views of scholars on them in both past and present, and methods of translating religious texts and various terms.

نشأة وتطور ترجمة النصوص الدينية وخاصة ترجمة كتاب الله ، ووجهات نظر العلماء فيها قديما وحديثا ، وفضل العلماء في ترجمة كتب التراث، وضرورة دراسة هذه الترجمة، وترجمة الأسماء بأنواعها، والأفعال والأحرف بأقسامها، ومعرفة الأسرار اللغوية للنصوص ومختلف المصطلحات، وتعدد الترجمات، والأصول المنهجية، وأساليب ترجمة النصوص الدينية.

References:

لارسون، ملدريد. (2007م). الترجمة والمعنى. ترجمة: محمد محمد حلمي هليل. الكويت: جامعة الكويت.

نيومارك، بيتر. (1992م). الجامع في الترجمة. ترجمة: حسن غزالة. د. م: دار الحكمة.

Abdullah Hassan, Ainon Mohammad. (2008). Teori dan Teknik Terjemahan. Kuala Lumpur: PTS Professional Publishing Sdn. Bhd.

AA4304 | Tarjamah Lughah Al-I'lam (Media Technology)

This course aims to introduce students to the concept of media translation, and its types, such as translation of political, economic, cultural, social, and sports and news. It also discusses the importance of media translation, and its most prominent problems. After completing this course, students are expected to be able to carry out translations of various media texts.

تحتوي هذه المادة على بيان مفهوم اللغة الإعلامية، وأهم الخصائص العامة لها، وترجمة أسلوب الكتابة الإذاعية، ومكونات لغة الراديو والتلفزيون وترجمتما، ترجمة لغة الأخبار في الراديو والتلفزيون، ترجمة لغة الصحافة، ترجمة لغة بيانات العالاقات العامة والرسائل الإعلانية، ترجمة الأخبار والتقارير، والتعاليق على الأنباء مع دراسة أخطاء في ترجمة اللغة الإعلامية.

References:

شرف، عبد العزيز. (1991م). اللغة الإعلامية. بيروت: دار الجليل للطبع والنشر والتوزيع.

عناني، محمد. (2000م). فن الترجمة. ط5. القاهرة: لونجمان.

محمد الباقر بن الحاج يعقوب. (2009م). مقدمة إلى فن الترجمة. مالىزيا: مطبعة الجامعة الإسلامية العاملية.

AA4305 | At-Tarjamah Al-Siyahiyyah (Tourism Translation)

Tourism Translation is taught as an academic discipline focusing on the mediation role of translation in the tourism sector and the necessity of high-quality translations to reach an appropriate communication process with tourists. This course will then highlight the importance of adequate translations of tourist texts and the multiple difficulties of this specialized language, especially regarding cultural elements, and it will show some frequent linguistic and pragmatic mistakes found in common tourist communication practices. The importance of tourism nowadays brings us to establish a series of possible solutions to improve the quality of this kind of specialized translation so as to ensure a good relationship between source and target cultures.

يتم تدريس مادة الترجمة السياحية كنظام أكاديمي تخصصي يركز على دور الوساطة للترجمة في قطاع السياحة وضرورة الترجمات عالية الجودة للوصول إلى عملية تواصل فعال مع السياح. ستسلط هذه المادة بعد إلقاء الضوء على أهمية الترجمات المؤثرة للنصوص السياحية والصعوبات المتعددة لهذه اللغة المتخصصة، خاصة فيما يتعلق بالعناصر الثقافية المنتمية إلى خلفيات اجتماعية متباينة، كما ستبين بعض الأخطاء اللغوية التي تتكرر وقوعها عند ممارسات الاتصال السياحي الشائعة. إن أهمية السياحة في الوقت الحاضر تجعل لهذه المادة أهميتها البالغة في إيجاد سلسلة من الحلول الممكنة لتحسين جودة هذا النوع من الترجمة المتخصصة بما يضمن وجود علاقة جيدة بين ثقافتي المصدر والهدف.

References:

العروسي، محمد على. (2020م). مدخل إلى علم وصناعة السياحة الحديثة، الطبعة 1، اليمن: دار الفؤاد للطباعة والنشر.

Kelly, D. (1997). The translation of texts from the tourist sector: textual conventions, cultural distance, and other constraints. **TRANS**, no. 2. 33-42.

Yang Lihua. (2014). "On the cultural differences in Tourism Translation" cross cultural communication. vol.10, No .1.

AA4307 | Al-Maharat Al-Mihaniyyah Li Al-Mutarjimin (Professional Skills For Translator)

This course contains definitions of the professional skills that every translator needs in the practice of translation. Its nature is both scientific and creative. This is in addition to linguistic skills related to mastery of the languages in which he deals. The course aims to help students understand the nature of practicing translation in a professional manner and train them in it using texts in various fields and including linguistic, cognitive, practical, communication, and translation writing skills, and then details the necessary, basic, additional, and field skills for the professional. This is done after covering the theoretical aspects of professional skills in understanding concepts and principles before focusing on practical and fieldwork experiences that provide them with a typical and representative exercise.

تحتوي هذه المادة على التعريفات الخاصة بالمهارات المهنية التي يحتاج إليها كل مترجم في ممارسة الترجمة. وذلك الأنها قائمة على إنجازات علمية وإبداعية في آن واحد. هذا، فضلا عن مهارات لغوية متعلقة بالتمكن في اللغات التي يتعامل فيها. وقدف المادة إلى مساعدة الدارسين لفهم طبيعة ممارسة الترجمانية، بالطريقة الاحترافية، وتدريبهم عليها مستعينا بالنصوص المختلفة المجالات ومشتملا على المهارات اللغوية والإدراكية والعملية والاتصالية والكتابة الترجمانية، ومن ثم يتم التفصيل بين المهارات اللازمة والأساسية والإضافية والميدانية للمحترف. ويتم ذلك بعد تغطية الجوانب النظرية عن المهارات المهنية في استيعاب المفاهيم والمبادئ وقبل التركيز على التدريبات العملية والميدانية التي تمرنهم تمرينا نموذجيا وتمثيليا.

References:

حديد، حسيب إلياس. (2013م). **أصول الترجمة: دراسات في فن الترجمة بأنواعها كافة: الترجمة الفورية والترجمة الأدبية والترجمة الإعلامية.** دار الكتب العلمية.

ربعي، هاجر. (2023م). آليات واستراتيجيات تكوين المترجم المهني. مجلة في الترجمة. 10(2).

قريمط، نور الدين. (2022م). مقاربة مبنية على المدونات اللغوية في تعليمية الترجمة المتخصصة. حوليات جامعة بشار. 2009(21).

SEMESTER 2

AA4309 | Al-Tarjamah Al-Fawriyyah (Interpreting)

This course aims to prepare trainee interpreters by providing them with necessary skills for simultaneous and consecutive translation, as well as providing them with the ethics of the translators, their manners in international conferences and forums. It also aims to develop their memory skill and deliver the message faithfully to the listeners. After completing this course, students are expected to be able to interpret in different situations. This course contains the definition of simultaneous interpretation and its types, the advantages and qualifications of the interpreters, culture, ethics, and simultaneous translation through a series of training.

تحتوي هذه المادة على التعريف بالترجمة الفورية وأنواعها، ومزايا ومؤهلات المترجم الفوري، وثقافته، وأخلاقيات المترجم الفوري، الترجمة التتابعية مع تدريب وتطبيق على مواقف من الترجمة بين العربية والملايوية / الإنجليزية.

References:

حديد، حسيب إلياس. (2014م). أصول الترجمة: دراسات في فن الترجمة بأنواها كافة (الترجمة الفورية والأدبية والإعلانية). بيروت: دار الكتب العلمة.

خلوصي، صفاء. (1986م). فن الترجمة. القاهرة: الهيئة المصرية العامة للكتاب. عناني، محمد. (2000م). فن الترجمة. ط5. القاهرة: لوجنمان.

FACULTY OF ISLAMIC ECONOMIC AND FINANCE

MINOR IN ISLAMIC ECONOMICS

MANDATORY COURSES

SEMESTER 1

EE1301 PRINCIPLES OF ISLAMIC ECONOMICS

Topics covered are: Foundation of the Islamic Economic paradigm; principles of Islamic Economics: (ownership, fair and equitable distribution, rent, usury and interest); key microeconomic concepts: (defining microeconomics, issue of needs and wants, consumer behavior, theory of the firm, dynamics of demand and supply, efficiency versus equity, and market models); key macroeconomic concepts: (principal economic agents, national income, consumption, savings, investment, inflation, deflation, unemployment, open economy, international trade and Islam); Islamic economic systems: (role of the state; role of financial system; and role of market system).

References

Askari, H., Iqbal, Z., & Mirakhor, A. (2015). *Introduction to Islamic Economics: Theory and Application*. Singapore: John Wiley & Sons Singapore Pte. Ltd.

Case, K. E., Fair, R. C., & Oster, S. M. (2017). *Principles of Economics*. 12th ed. Upper Saddle River: Pearson Education.

Mankiw, G. (2014). Principles to Economics. 7th ed. Florence: Cengage Learning, Inc.

EF1302 TRANSACTIONS IN ISLAMIC BANKING AND FINANCE

Topics discussed are: the formation of contracts under Islamic law; lawful contracts vs. ribawī contracts; interest-free banking system; ribā in Islamic commercial law; lawful contracts in Islamic commercial law; contract of sales: (Bay' al-Murābaḥah, Bay' al-'Īnah, al-Tawarruq, al-Istiṣnā', Bay' bi Thaman Ājil, and Bay' al-Salam); contracts of equity based: (al-Mudārabah, al-Mushārakah, and al-Mushārakah al- Mutanāqiṣah); contract of lease based: (al-Ijārah, al-Ijārah Thumma al-Bay', and al- Ijārah al-Muntahiyah bi al-Tamlīk); contract of fee based: (al-Wakālah); contract of Tabarru' based: (ṣadaqah, Hibah, Waqf, and Takāful); contract of security based: (Damān, Kafālah, and Wa'd); contract of Amānah based: (Qard, Rahnu, Wadī'ah Yad Amānah, and Wadī'ah Yad Damānah); and supporting contracts: (Ta'wīd, and Gharāmah); Muqtadā al-'Aqd (the objectives of contracts); and the basic techniques of structuring Islamic financial transactions and how they are applied to practice.

References

Abdul Ghafar Ismail. (2017). *Money, Islamic Banks and the Real Economy*. 2nd ed. Singapore: Cengage Learning Asia Pte Ltd.

Billah, M. M. (2009). Shari'ah Standard of Business Contract. Malaysia: A. S.

Noordeen.

International Shariah Research Academy for Islamic Finance. (2011). *Islamic Financial System*. Malaysia.

SEMESTER 2

EB1302 PRINCIPLES OF MANAGEMENT

Topics covered are: the roles and functions of managers from both an Islamic and western perspective; different types of organisations; the need for and nature of management; managerial responsibilities and professional ethics; the four functions of management: (planning and decision making, organizing, leading and motivating, controlling and evaluating); strategic planning; leadership theories; teamwork; change and innovation; management from an Islamic perspective; the Islamic worldview and management; motivations from Islamic perspectives; and Islamic leadership.

References

Ahmad, K. (2007). *Management from an Islamic Perspective*. Malaysia: International Islamic University.

Ali, J.A. (2005). *Islamic Perspectives on Management and Organisation*. Cheltenham: Edward Elgar Publishing.

Jabnoun, N. (2012). *Islam and Management. New Revised English 3rd ed.* Saudi Arabia: International Islamic Publishing House.

OPTIONAL COURSES (any TWO courses)

SEMESTER 1

EB3309 PRINCIPLES OF MARKETING

Topics covered are: introduction to the principles of marketing; manage profitable customer relationship; marketing environment and managing marketing information; introducing the different types of consumer markets and consumer buyer behaviour; business markets and business buyer behaviour; product, services and branding strategy used in marketing; pricing strategies; retailing and wholesaling; advertising and public relations; understanding Islamic marketing: (Islamic business deals, markets and marketing in Islam); the Islamic marketing mix: (the product, the pricing practices, promotions, logistics, etc.); issues in Islamic marketing: (the Muslim consumer, and Islamic branding).

References

Baker Ahmad Alserhan. (2011). *Principles of Islamic Marketing*. Ashgate Publishing. Kalthom Abdullah. (2008). *Marketing Mix from an Islamic Perspective: A Guide for Marketing Courses*. Malaysia: Pearson.

Kotler, P. and Armstrong, G. (2007). *Principles of Marketing*. 12th ed. New Jersey: Pearson Education.

EE3303 HUMANOMICS

Topics covered are: Social capital systems (ukhuwwah, tabarru', hibbah, sadaqah, etc.); social organization (philanthropy organization); the theory of human-centred economic development; main organizations of philanthropy: (zakat organization, waqf organization, and microfinance organization). The discussion of each organization will focus on:

- (i) sources and uses of each philanthropy;
- (ii) regulation and supervision (including governance) of each organization; and
- (iii) its relationship with humanitarian aid and economic development.

References

Abdul	Ghafar	Ismail.	(2016).	Zakat:	Pensyariatan,	Perekonomian	dan	Perundangan.
Bai	ngi: UKN	M Press.						
& Abdelrahman Elzahi Saaid Ali. (2017) Regulation and Supervision of Islamic								
Mic	crofinan	ce. Gom	bak: IIUI	M Press.				

______, Khalifa Muhamed Ali & Raditya Sukmana. (2017) *Waqf and Socio Economic Development*. Gombak: IIUM Press.

EF3308 ISLAMIC BANKING

Topics covered are: understanding the concept of money; understanding the working of money and Islamic bank in economy; management of Islamic banks' funds: (liquidity management, risk management, and capital management); composition of Islamic bank's balance sheet (asset and liability management); regulation and supervision of Islamic banking operations (on and off site examination); transmission of monetary policy: (identify the tools and method of transmission mechanism); and Islamic banks and the real economy.

References

Abdul Ghafar Ismail. (2017). *Money, Islamic Banks and the Real Economy*. Singapore: Cengage Learning Asia Pte Ltd.

Aishah Abdul-Rahman, Shahida Shahimi & Abdul Ghafar Ismail. (2017). *Case Studies in Islamic Banking & Finance*. Bangi: UKM.

International Shariah Research Academy on Islamic Finance. (2012). *Islamic Financial System: Principles & Operations*. Kuala Lumpur: ISRA.

SEMESTER 2

EB1303 BUSINESS PRESENTATION AND COMMUNICATION SKILLS

Topics covered are: Islamic communication foundations: (communication model, and technology's impact on business communication); the intercultural communication in the workforce; communication strategies without bias and in team environments; outlines the writing process: (targeting the audience, planning, composing, revising business messages, fundamentals of grammar and usage, format and layout of business documents); formats and styles of writing: (reports, routine letters, Curriculum Vitae, goodwill messages,

business correspondence, memos and email messages, persuasive messages, and good and bad news messages); illustrates the application of essential communication tools to enhance clarity, accuracy, conciseness unity, and coherence and logical organization.

References

- Cornelissen, J. (2014). *Corporate Communication: A Guide to Theory and Practice*. London: Sage.
- Guffey, M.E. & Du-Babcock, B. (2007). *Essentials of Business Communication*. 2nd Ed. Cengage Learning.
- Hair, D.O, & Friedrich, G.W. (2011) *Strategic Communication in Business and the Professions*. 7th ed. (International ed.) Boston. New York: Allyn & Bacon.

EF2302 ISLAMIC ECONOMICS

Topics covered are: What is an economic system, current state of the global economic system, Islamic economics paradigm, short history of economic thought in Islam, social and economic justice, prohibition of interest (riba), risk-sharing economic system and notion of risk-sharing, issue of needs versus wants, models of an interest- free economy, building blocks of the Islamic financial system, role of the state in the Islamic economic system, policy instruments of the state in Islam, fiscal policy in an Islamic economy, monetary policy in an Islamic economy, foundation and framework of development and growth in Islam, Islamic perspective on financial inclusion, economic justice and public policy in the Islamic economic system.

- Ahmad, K. (ed.). (2013). *First Principles of Islamic Economics*. Ahmad Imam Shafaq Hashemi (Trans.). United Kingdom: The Islamic Foundation.
- Askari, H., Iqbal Z. & Mirakhor A. (2014). *Introduction to Islamic Economics: Theory and Application*. n.pl: John Wiley & Sons.
- El-Gamal, M. A. (2008). *Islamic Finance: Law, Economics, and Practice*. Houston: Rice University

FACULTY OF ISLAMIC DEVELOPMENT MANAGEMENT

MINOR IN ISLAMIC DEVELOPMENT MANAGEMENT

MANDATORY COURSES

DM1301 ISLAMIC BASED DEVELOPMENT

The course focuses on the theory and practice of Islamic-based development. It consists of seven components:

- 1. Introduction and meaning of Islamic-based development;
- 2. Highlights literatures on development in Islam;
- 3. Principles of Islamic-based development;
- 4. Fundamentals in implementing Islamic-based development;
- 5. Approaches of Islamic-based development and conventional development;
- 6. Issues in Islamic-based development;
- 7. The philosophy of MIB, Concept of Negara Zikir and Wawasan Brunei 2035 within the framework of Islamic-based development.

The principles and concepts of Islamic-based development as well as examine the approaches and issues of contemporary Islamic-based development at both national and international levels will also be covered.

References:

Ahmad Shukri Nain & Rosman Md Yusoff. (2013). Konsep, Teori, Dimensi & Isu Pembangunan. Johor: Penerbit UTM.

Mohd Shukri Hanapi. (2014). *Tasawur Islam dan Pembangunan*. Kuala Lumpur: Dewan Bahasa & Pustaka.

Mohd Shukri Hanapi. (2015). *Acuan Dasar dan Strategi Pembangunan Negara Zikir*. In Siti Sara Haji Ahmad & Muhammad Syukri Salleh (eds.). Dasar dan Strategi Pembangunan Negara Zikir. Brunei: UNISSA Press.

DM1304 ISLAMIC BASED MANAGEMENT

The course provides a general overview on Management functions, planning and decision making, organizing, organizational structures, the theory of Islamic management, principles of Islamic management, Islamic management functions, communication from Islamic perspectives, managing ethics from Islamic perspectives and managing quality from Islamic perspectives. Students are expected to know the definition and sources of Islamic-based management as well as be well versed with issues pertaining to Islamic-based management encompassing strategic planning, human resource, leadership, communication skills, conflict management and quality management.

References:

Ahmad, F.A. (2013). Konsep Pengurusan Institusi Pembangunan Berteraskan Islam. Pulau Pinang: ISDEV dan Kuala Lumpur: DBP.

Ahmad, K. & Fontaine, R. (2011). *Management from Islamic Perspective (2nd Edition)*. Petaling Jaya: Pearson Malaysia Sdn. Bhd.

Schermerhorn, R.J. (2014). *Introduction to Management*. 12th Ed. New Jersey: John Wiley & Sons.

CM2309 ISLAMIC SUSTAINABLE DEVELOPMENT

The course provides a general background and overview of sustainable development from the Islamic perspective by studying the evolution to the definition and source of sustainable development as well as the Islamic epistemology and tasawwur on the understanding and what is exactly entailed in sustainable development from the Islamic perspectives. In addition this course provides the required attributes and traits of the actor in managing sustainable development from the Islamic perspectives.

References:

Azlina Sobian & Muhammad Husni Mohd. Amin. (2017). Science for Sustainable Development: Islamic and Interfaith Perspectives. Kuala Lumpur: Penerbit IKIM.

United Nations Development Programme. (UNDP) (2015). Sustainable Development Goals Booklet. Retrieved from http://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf.

Wan Norhaniza Wan Hasan & Nurul Suhada Ismail. (2016). *Pembangunan Lestari Islam: Konsep & Aplikasi*. Pulau Pinang: Pusat Kajian Pengurusan Pembangunan Islam.

OPTIONAL COURSES (any TWO courses)

DM1302 LEADERSHIP IN ISLAM

The course provides concept of leadership from Al-Qur'an, Hadith and other Islamic literatures. The course starts with the basic operational principles of leadership in Islam. Thereafter components of leadership from Islamic perspective will also be covered. This course will introduce students to the true concept of a leader according to the behaviour of Rasulullah SAW and his teachings. It provides examples of how Rasulullah SAW resolves conflicts and becomes a leader that is able to unite all the Arab tribes. Thus the concept of leadership in resolving conflict based on Al-Qur'an, Hadith and other Islamic literatures will then form the second part of this course bringing students to understand the concept of peace and its components in Islam.

References

Randeree, K. (2011). Leadership Lessons from Early Islamic Literature in Ahmad, K., Rafikul Islam & Ismail, Y. (Eds.) Issues in Islamic Management: Theories and Practices. Selangor: IIUM Press.

Thaib, L. (2015) *Leadership: An Islamic Perspective*. Germany: Lambert Academic Publishing.

Wirba, A. V. (2017). *Leadership from an Islamic and Western Perspective*. Oxford: Chartridge Books Oxford.

DM1303 DEVELOPMENT MANAGEMENT IN NAQLI SOURCES

The course offers the identification of verses in al-Qur'an and Ahadith that are related to development management through a thematic approach (Tafsir Maudu'iy). It also includes the background of Tafsir Maudu'iy and its approaches in determining the theme and thereafter in identifying the various verses in al-Qur'an related to the chosen theme. From the identified verses on development management, the exegesis of these verses and asbab al nuzul (reasons for revelation) will also be studied. In the meantime based on the identified Ahadith also through a thematic approach, the various explanations and background for the Ahadith will be taught. These identified verses and Ahadith will then be examined to identify how they can help in shaping the development management worldview according to Islam.

References

Ahmad Uthmani, Z. (2014). *Qawa'id fi 'Ulum al-Hadith: Underlying Principles of the Sciences of Hadith*. United Kingdom: Turath Publishing.

Hanapi, M.S. (2015). Acuan dasar dan strategi pembangunan Negara Zikir. In Siti Sara Haji Ahmad & Muhammad Syukri Salleh (eds.). Dasar dan Strategi Pembangunan Negara Zikir. Brunei: UNISSA Press.

Muhd Najib Abdul Kadir, Mazlan Ibrahim & Zulkifli Abd. Mubi. (2015). *Tafsir Mawdui: Harta Menurut Perspektif al-Quran*. Bangi: UKM Press.

DM1307 ISLAMIC SERVICES MANAGEMENT

The course offers a general background on the meaning of services management both from the conventional perspective as well as in Islam. It outlines the various concepts on what is exactly entailed in services management and how to recognize and identify services management that are Islamic. This course brings students to examine the current definition and understanding of Islamic services management. A key requirement in a service and relationship strategy is that a manufacturer, wholesaler, retailer, service firm or supplier has a thorough insight into the customers' everyday processes, and into the relationship between them and the customers' life or business processes, and the long-term needs and desires of their customers. It also exposes students on the real sources of Islamic services management based on Islamic principles and the Maqasid Syariah. Based on this understanding it depicts how Islamic services management provide a comprehensive issue especially in this modern technology and digital era.

References

Grönroos, C. (2015). *Service management and marketing: managing the service profit logic.* Chichester: John Wiley & Sons.

Sulaiman, M., Sabian, N. A. A., & Othman, A. K. (2014). The understanding of Islamic management practices among Muslim managers in Malaysia. Asian Social Science, 10(1), 189.

Othman, K. (2017). Quality Management System vs. Maqasid Shariah Islamic Quality Management System vs. Customer Satisfaction. International Journal of Academic Research in Business and Social Sciences.

- Othman, K., Hamdani, S. M., Sulaiman, M., Mutalib, M. M., & Ramly, R. (2018). *A philosophy of maqasid shariah underpinned Muslim food consumption and the halalan toyyiban concept.* AL-ABQARI: Journal of Islamic Social Sciences and Humanities.
- Othman, K. (2014). The development and application of quality management from conventional and Islamic perspectives. International Journal of Business and Management Studies, 3(2), 219-228.
- Jay Kandampully. (2012). Service Management: The New Paradigm in Retailing. New York: Springer
- Fitzsimmons, James A and Fitzsimmons, Mona J. (2006). Service Management: Operations Strategy and Information Technology. McGraw Hill
- N. Delener. (2012). Service Science Research, Strategy and Innovation: Dynamic Knowledge Management Methods. USA: Business Science Reference
- Robert Johnston, Michael Shulver, Nigel Slack and Graham Clark. (2011) *Operations Management*. UK: Pearson
- G Lawrence Sanders. (2012). *Developing New Products and Services*. USA: Saylor Foundation
- G Lawrence Sanders. (2012). *Developing New Products and Services*. USA: Saylor Foundation
- Azreen Hamiza Abdul Aziz and Norazliawati Md Daud. (2016). *Islamic Service Management: A New Paradigm*. Malaysia: Centre for Islamic Development Management Studies (ISDEV).

CM2305 PRINCIPLES OF 'UMRANIC STUDIES

Definition of 'umrān and other related terms such as culture, urbanization and civilisation and to highlight the important of 'umrān in the study of human life as a source of religious knowledge. So, this course is particularly concerned with the contradictory views by drawing special attention to the theory of 'umrān to determine which of the views is correct. The method used in this course is called "induction", a method of logical reasoning that obtains or discovers general laws from particular facts. Among the topics discussed including the concept of 'umrān and its meaning, characteristics and objectives and other related terms such as int'ma and ma'mūr revealed in the Holy Qur'ān.

References

Abd al-Rahman bin Khaldun. (1993). *Muqaddimah*. Beirut: Dar al-Kutub al- Ilmiyyah. Boukraa, R. (2008). *The Khaldunian Concept of `Umran/Ijtima` in the Light of the Current Paradigm of Post-Modern Society*. Journal of North African Studies, Vol. 13, No. 3. Mahmoud Dhaouadi. (2005). *The Ibar Lessons of Ibn Khaldun`s Umran Mind*. Vol. 34. No.

6. Contemporary Sociology: American Sociological Association.

CM3316 ISLAMIC ORGANIZATIONAL MANAGEMENT

The course imparts a comprehensive imparts a comprehensive understanding of management principles and practices, all framed within the context of Islamic ethics and values. The course is organized around twelve key topics, each aimed at equipping students with the knowledge and skills required for effective leadership and management while adhering to Islamic principles. It begins with an exploration of fundamental management concepts and the unique principles of Islamic organizational management, emphasizing ethics, social responsibility, and alignment with Islamic values. The course covers ethical foundations, organizational design, Shura-based decision-making, leadership qualities, human resource management, financial management, conflict resolution, social responsibility, and innovation, and addresses contemporary challenges. Students gain insights into applying Islamic principles to contemporary management practices throughout the course. This comprehensive course equips students with the knowledge and skills necessary to lead, manage, and make ethical decisions within Islamic organizations. By emphasizing the integration of Islamic values with modern management principles, students will be prepared to navigate the unique challenges and opportunities presented by Islamic organizational management.

- Ahmad, K. (2007). *Management from Islamic Perspective*. Kuala Lumpur: International Islamic University Malaysia.
- Ali, J.A. (2005). *Islamic Perspective on Management & Organizations*. N.P: Edward Elgar Publishing.
- Ishak, A. H., & Osman, M. R. (2016). A Systematic Literature Review on Islamic Values Applied in Quality Management Context. Journal of Business Ethics, 138(1), 103–112.
- Khan, K., Abbas, M., Gul, A., & Raja, U. (2015). Organizational Justice and Job Outcomes: Moderating Role of Islamic Work Ethic. Journal of Business Ethics, 126(2), 235–246.
- Murtaza, G., Abbas, M., Raja, U., Roques, O., Khalid, A., & Mushtaq, R. (2016). *Impact of Islamic Work Ethics on Organizational Citizenship Behaviors and Knowledge-Sharing Behaviors*. Journal of Business Ethics, 133(2), 325–333.

HALALAN THAYYIBAN RESEARCH CENTRE

MINOR IN HALAL SCIENCE

MANDATORY COURSES

SEMESTER 1

HS2335 HALAL STANDARDS, POLICY AND REGULATIONS

This course aims to provide students the knowledge on halal standards, policy and regulation from local and international level. This course will also discuss various issues related to halal standards and guidelines. Upon completion of this course, students are expected to be able to understand the importance of halal standard, policy and regulation agreed upon Shariah for the steady growth of the halal industries globally

References

Bandar Seri Begawan: The Religious Council. (2007). *Halal Food: Piawai Brunei Darussalam*.

State Mufti's Office, Prime Minister's Office. (2007). Fatwa of State Mufti Issues on Halal Products; Compilation of State Mufti's Fatwa on issues on Halal Products 1994-2006 Brunei Darussalam. Bandar Seri Begawan: State Mufti's Office, Prime Minister's Office.

Jaswir, I. (2019, November 2). *Opinion: Harmonizing Halal Standards*. Halal Focus: Halal & Ethical Business News Updates & Analysis

HS3341 HALAL INDUSTRY MANAGEMENT

The aim of this course is to introduce the overview, definition, concept and objectives as well as the management of halal industrial products and services, highlight the Halal products and services as a global potential market as well as the contemporary issues related to it. Upon completing the course, the students are expected to be able to evaluate the differences between Islamic and traditional management, build and assemble a team of reliable and with expert proficiency in halal products and services, resolve issues and challenges in halal products and services management.

References

Ahmad, K. & Fontaine, R. (2011). *Management from Islamic Perspective (2nd Edition)*. Petaling Jaya: Pearson Malaysia Sdn. Bhd.

Hamidon Katan, Mohd Radzi Zainuddin et al. (2015). *Innovation Management (UniKL)*. Malaysia: Oxford Fajar.

Khalidah Khalid Ali, Satirenjit Kaur Johl et al. (2015). *Business Management: A Malaysian Perspective (Third Edition)*. Malaysia: Oxford.

SEMESTER 2

HS2340 OBJECTIVES OF ISLAMIC LAW (MAQASID AL-SHARIAH) IN HALAL INDUSTRY

This course aims to provide the students with knowledge on the significant roles of Maqasid Shari`ah and their applications in halal industry. Upon completing the course, students are expected to understand the requirement of Islamic-compliant products and services and ensure to obtain the objectives of shariah.

References

Âshûr, Muhammad Thâhir Ibn. (1946). *Maqâshid al-Sharî'ah al-Islâmîyyah*. Tunis. Gamal Eldin Attia. (2007). *Towards Realization of the Higher Intents of Islamic Law*. Kuala Lumpur: Islamic Book Trust.

Masud, Muhammad Khalid. (2005). *Shatibi's Philosophy of Islamic Law*. Kuala Lumpur: Islamic Book Trust.

Mohammad Hashim Kamali. (2013). *The Parameters of Halal and Haram in Shariah and The Halal Industry*. Kuala Lumpur: International Institute of Advanced Islamic Studies (IAIS) Malaysia.

OPTIONAL COURSES (any TWO courses)

SEMESTER 2

HS2338 ISLAMIC LEGAL MAXIM (QAWAID FIQHIYYAH) IN HALAL INDUSTRY

This course aims to introduce and discuss Islamic legal maxims with a special focus on highlighting the relevant Islamic legal maxims that are applicable to halal industry. Upon completing the course, students are expected to understand Islamic legal maxim's applications in contemporary halal issues.

References:

Azman Ismail & Md. Habirur Rahman. (2013). *Islamic Legal Maxims: Essentials and Applications*. Kuala Lumpur: IBFIM.

Mohammad Hashim Kamali. (2013). *The Parameters of Halal and Haram in Shariah and The Halal Industry*. Kuala Lumpur: International Institute of Advanced Islamic Studies (IAIS) Malaysia.

Al-Raysuni, Ahmad. (2006). *Imam Al-Shatibi's Theory of the Higher Objectives and Intent of Islamic Law*. Herndon: The International Institute of Islamic Thought.

HS2339 HALAL FOOD SCIENCE

The aim of this course is to give students an understanding on the basic fundamental of food science and underlying technology associated with providing a safe, halal, and thayyib

food. On successful completion of this course, a student will be expected to be able to obtain knowledge and skill in halal food science and technology through theory and applications as well as apply science and technology principles to deliver safe, halal, and thayyib food products from raw materials to consumers.

References

- Ahmad, Musa, Kuswandi, Bambang, & Mat Radzi, Salina. (2018). *Halal Science and Technology Module: Technique & Instruments Implemented for Halal Analysis Product.* Malaysia, USIM.
- Ng PC, Ahmad Ruslan NAS, Chin LX, Ahmad M, Abu Hanifah S, Abdullah Z & Khor SM (2022). *Recent advances in halal food authentication: Challenges and strategies*. Journal of Food Science, 87:8-35. Doi:10.1111/1750-3841.15998
- Housecroft, Catherine E. & Constable, Edwin C. (2006). *Chemistry*, 3rd edition. Harlow, ESX: Pearson Education Limited.

HS3347 FIQH ADMINISTRATION IN HALAL INDUSTRY

This course aims to provide knowledge on the concept of Islamic administration and the significant role of the fiqh-based administrative system in Halal Industry. Upon completion, students will be able to understand the concept and design of administration for halal industry sectors in accordance with Islamic teaching and hukm Syara'.

References

- Bakar, A., Pratami, A. & Sukma, A.P. (2021) *Analisis Fiqih Industri Halal*. Jurnal Taushiah FAI UISU, 11(1):1-13.
- Masud, Muhammad Khalid. (2005). *Shatibi's Philosophy of Islamic Law.* Kuala Lumpur: Islamic Book Trust.
- Mohammad Hashim Kamali. (2013). *The Parameters of Halal and Haram in Shariah and The Halal Industry*. Kuala Lumpur: International Institute of Advanced Islamic Studies (IAIS) Malaysia.

HS3348 HALAL SLAUGHTERING AND MEAT SCIENCE

This course aims to provide students with knowledge to address the need to ensure the welfare of food animals during pre-slaughter and slaughter processes until they are dead, conduct ante- and post-mortem inspection, follow standard of halal slaughtering, and issues related to halal slaughtering such as stunning, slaughtering equipment, fatwa, etc. Upon completion of this course, students will understand the fundamental science and technique of meat production, determine, produce, manage and control the quality of meat and meat products.

References

- Warriss, P. D. (2000). *Meat science: an introductory text*. CABI Publishing CABI Publishing. CAB International. UK.
- Lawrie, R. A. (2006). *Lawrie's Meat Science*. Seventh Edition. Woodhead Publishing Limited.

Nakyinsige K, Man YBC, Aghwan ZA, Zulkifli I, Goh YM, Bakar FA, et al. (2013). *Stunning and animal welfare from Islamic and scientific perspectives.* Meat Sci, 95:352-61.

SEMESTER 3

HS1334 HALAL CONSUMERISM AND MARKETING

This course is designed to acquaint students with the Islamic Consumerism and Halal marketing concept in the halal industry and examine issues related to the consumer behaviour, perception, planning and marketing towards halal industry including the aspects of trust and values. At the end of the course, the students should be able to learn about the Islamic marketing principles, the rights of consumers and ensure that their consumption behaviours in tandem with values promulgated by Islam for their wholesomeness and well being.

References

Afida Mastura, M.A., Elistina, A.B. & Syuhaily, O. (2014). *Perlindungan Pengguna Ke Arah Memperkasakan Pengguna di Malaysia*. Serdang: Persatuan Ekonomi Pengguna dan Keluarga Malaysia

Lokman, A.R. (2001). *Halal Products: Consumerism, Technology and Procedures*. Malaysia: Islamic Department of Melaka and Islamic Council of Melaka.

Mohd Hamdan Adnan (1994). *Konsep Asas Kepenggunaan*. Kuala Lumpur, Serdang Penerbit UPM.

FACULTY OF ISLAMIC TECHNOLOGY

MINOR IN INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

MANDATORY COURSES

SEMESTER 1

FT2306 DIGITAL TECHNOLOGIES

This course covers the basics of mobile app development, computer networking, and ICT project management. This course enables students to understand, communicate, and adapt to the digital world's effect on their lives, society, and business. Exposure to existing and emerging industrial revolution technology. When it comes to technology, students need to understand the fundamentals of technology such as hardware, software, programming, web design, IT support, and networking. With the guidance of this course knowledge and technology abilities, students will be able to not only understand but also implement the concept and justify their actions/decisions/choices using course knowledge and technological skills provided. In addition, the main focus is also to provide students with technology skills to increase their marketability through activities, assignments, and projects to demonstrate business and industrial competencies.

References

Jeanne W. Rose, et al. (2020). Designed for Digital. USA: MIT Press Ltd

Hans Schaffers, Matti Vartiainen and Jacques Bus (2021). *Digital Innovation and the Future of Work*. Denmark: River Publisher.

Michelle F. Wright, PhD (2020). *Digital Technology: Advances in Research and Applications*. USA: Nova.

Martin Hall, et al (2015). *Digital Futures*. Oxford: Elsevier Science and Technology, Oxford Ltd.

Thomas Floyd (2015). *Digital Fundamentals, Global Edition*. United Kingdom: Pearson Education Limited.

SEMESTER 2

FT3409 MANAGEMENT INFORMATION SYSTEMS

Management Information Systems is an established subject in dealing with management of systems and information in business. Topics covered in this course include: Information Systems in Global Business Today, Global E-Business, Information Systems, Organizations and Strategy, Ethical and Social Issues in Information Systems, Enterprise Applications, E-Commerce, Managing Knowledge and Collaboration, Enhancing Decision Making, Building Information Systems, Managing Projects and Managing Global Systems, Identification of the features of the Islamic framework of business practices and ethics, embedded in a strong ethical doctrine that can play a vital role in raising the standards of business conduct worldwide, while in no way compromising the quality of services or

products offered to customers, or surrendering the profit margins of businesses. The case studies in this course will help students to understand common issues in Management Information Systems faced by today's business world.

References

Laudon, K.C. and Laudon J.P. (2010). *Management Information Systems Managing the Digital Firm. 17th Ed.* New York: Pearson.

Baltzan, P. (2024). M: Information systems (7th ed.). McGraw Hill.

Ahamad, K. (2009). Management from and Islamic Perspective. Kuala Lumpur: Pearson.

Fadzliwati Mohiddin. (2012). *Information System Success in Brunei*. Bandar Seri Begawan: UNISSA.

FT3406 MULTIMEDIA TECHNOLOGY

UNISSA students gain academic knowledge and skills in their chosen field of study. They also cover general problem-solving and critical thinking skills. Available software tools are used to create a comprehensive multimedia project that incorporates the many aspects of project development from idea generation through distribution. The combination can empower them to participate as educated citizens in the economic, political, and cultural life of their communities in the knowledge based economy. The course contents are Multimedia Theory and Analysis, Fundamentals of Flash Animation, Production Team Roles and Responsibilities, Planning Multimedia Projects, Advanced Flash Animation Techniques, Audio Recording and Editing and Authoring and Distributing Multimedia Projects.

References

Adobe Creative Team (2017). Adobe Premiere Pro CC Classroom in a Book (2017)
Release) (Classroom in a Book (Adobe)). USA: Adobe Press.
(2013). Adobe Audition CC Classroom in a Book. USA: Adobe Press
Digital Video with Adobe Creative Cloud Classroom in a Book. USA
Adobe Press.

Tay Vaughan (2014). *Multimedia: Making it Work, Ninth Edition*. USA: McGraw-Hill Osborne

William Heldman (2012). Adobe Flash Professional CS6 Essentials (Essentials). USA: John Wiley.

OPTIONAL COURSES (any ONE (1) courses)

SEMESTER 2

FT3407 WEB TECHNOLOGIES

Interactive Web Systems & Applications provides an in-depth exploration of the design, development, and deployment of interactive web-based systems and applications. This course covers essential topics such as advanced web programming, user interface design, user experience principles, and modern web frameworks and technologies. Students will gain practical experience in creating dynamic, responsive, and user-centred web applications, focusing on both client-side and server-side development. The course also

emphasizes the importance of web accessibility and usability, preparing students to develop web applications that cater to diverse user needs and contexts.

References

Krug, S. (2018). Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability. New Riders.

McFarland, D. (2019). JavaScript: The Missing Manual. O'Reilly Media.

Robbins, J. N. (2018). Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics. O'Reilly Media.

FT3408 INTERNET AND ETHICS

Technology Ethics delves deeply into the ethical considerations and challenges arising in the rapidly evolving technological landscape. The course examines key topics such as data privacy, AI ethics, digital rights, cybersecurity, and the social impact of technological advancements. Students will engage with contemporary case studies and theoretical frameworks to develop a nuanced understanding of the ethical principles guiding technology development and use. This critical exploration aims to equip students with the ability to make informed, ethical decisions in their future technological endeavours and understand the broader societal implications of technology.

References

Mittelstadt, B., & Floridi, L. (2019). *The Ethics of Biomedical Big Data*. Springer. O'Neil, C. (2018). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. Broadway Books.

Vallor, S. (2018). *Technology and the Virtues: A Philosophical Guide to a Future Worth Wanting*. Oxford University Press.

FT1203 DATABASE APPLICATION

Introduction to databases and its environment. Conceptual Database Design. Logical Database Design (including Normalisation). Entity-Relationship (ER) modelling techniques. Physical Database design. Structured Query Language (SQL). Data Warehousing Concepts. DW Design. Client Server Architecture, Data & Database Administration: Duties, security, Transaction Management, concurrency control and Distributed Database. The course covers theoretical concepts in depth and gives the students a thorough practical knowledge of databases. The assignments will require students to demonstrate their mastery of the practical aspects of SQL DBMS (selected from available resources in the university for DBMS such as MySQL, MS-SQL or Oracle DBMS) and database design. On completion, the student will be able to develop and design a practical database application using the current database managements systems technology. Application on web based database application will supplement the proficiency and mastery of the DBMS.

References

Nathan George (2022). Mastering Access 365: An Easy Guide to Building Efficient Databases for Managing Your Data. UK: GTech Publishing

- D.Wyse (2022). Microsoft Access All-In-One Guide: Beginner to Expert Guide to Master Microsoft Access with Ease + Secrets to Professional Database Management. UK: Independently published
- Laurie A. Ulrich & Ken Cook (2021). Access for Dummies (For Dummies (Computer/Tech))1st Edition. UK: In Easy Steps Limited
- Mike McGrath (2019). Access in easy steps: Illustrated using Access 2019. UK: In Easy Steps Limited
- Mike McGrath (2019). *Visual Basic in easy steps: Updated for Visual Basic*. 6th Edition. UK: In Easy Steps Limited

SEMESTER 1

FT3402 INFORMATION SYSTEM

The course contents are Introduction to Database Applications, Database Concepts, Creating A Database (Using Microsoft Access), Creating of Tables (Type of Fields, Field Properties and Data Types), Forms (AutoFom, Adding New Records, Using Form Wizard, Forms in Design View, Formatting Forms, and Adding Graphics to Forms) Table Manipulation (Sorting and Filtering Data, Inserting, Deleting and Renaming Fields), Queries (Simple Query Wizard, Setting Criteria, Query by Parameters, Calculated Fields, Action Queries), Report (Report Wizard and Reports in Design View), Relationships (A Database with Two or More Tables, Setting Table Relations, Types of Relationships), Macro (Setting Macros and many functions of Macros), Security (Creating Password, Change and Delete Password).

References

Amy Kinser (2022). *Microsoft Access 2022 Comprehensive*. Microsoft Press Store: Peason. Joan Limbert (2021). *Microsoft Access 2021 – Step by Step*. Microsoft Press Store: Peason. Stewart Melart (2016). *Microsoft Access 2016 – The Complete Guide*. Microsoft: Pinterest.

FT3401 INFORMATION AND COMMUNICATION TECHNOLOGY FUNDAMENTAL

Students will be provided with a general and practical introduction to information technology for students in all disciplines. The course will include basic instructions in computers, operating systems, and functions of word processing, presentation, spreadsheet, e-mail, and Web browser applications. The areas includes; Hardware: Fundamental principles of computer operation, the main hardware components of the computer, data storage and retrieval, introduction to system software, introduction to data communications, hardware selection and evaluation; Software & Applications: Use of Word processing skills, presentation package to create, format and prepare presentation using charts and graphics for illustrations, spreadsheets package for standard simple numerical computation and analysis.

References

- Joan Lambert (2022). *Microsoft Office 2016 Step by Step*. USA: Microsoft Press Keith Turvey (2022). *Primary Computing and Digital Technologies: Knowledge, Understanding and Practice*. Sage Publishing.
- Miller, M (2022). Computer Basics: Windows 10 Edition, Absolute Beginner's Guide (Absolute Beginner's Guides). Indiana: Que publishing
- Ron White (2021). *How Computers Work (How It Works)*. Indiana: Que publishing Studio Visual Steps (2022). *Protect, Backup and Clean Your PC for Seniors: Stay Safe When Using the Internet and Email and Keep Your PC in Good Condition!*. Visual Steps B.V.

FACULTY OF SHARIAH

MINOR IN SHARIAH

MANDATORY COURSES

آيات وأحاديث الأحكام SU4308

التعريف بمفهوم آيات الأحكام وأحاديث الأحكام، وتشتمل آيات وأحاديث الأحكام المجالات المتعددة: العبادات، المعاملات، الأحوال الشخصية، الجنايات. الخ. وتتضمن هذه المادة دراسة آيات قرآنية وأحاديث نبوية مختارة تتعلق بالموضوعات الآتية: نواقض الوضوء، وصلاة الجماعة، وصلاة المسافر، والزكاة، والرضاع، والحضانة، والنفقة، والخلع، والقرض، والربا، والرهن، والذبائح، والسحر، والخمر، والقذف، والقصاص.

المراجع:

الشَّافعي، محمد بن إدريس، أحكام القرآن، تحقيق عبد الغني عبد الخالق، (بيروت: دار الكتب العلمية،1400م).

الصابوني، محمد علي، روائع البيان في آيات الأحكام، (بيروت: المكتبة العصرية للطباعة والنشر، 2003م).

القرطبي، أبو عبد الله محمد بن أحمد، الجامع لأحكام القرآن، تحقيق هشام سمير البخاري، (الرياض: دار عالم الكتب

1423هـ/ 2003م).

مقاصد الشريعة SU4304

تعريف مقاصد الشريعة، لمحة عن تاريخ التأليف فيها، أهمية التعرف عليها، تقسيماتها، طرق التعرف عليها، الكليات الخمس وكيفية حفظ الشارع لها (حفظ الدين، حفظ النفس، حفظ النسل، حفظ العقل، حفظ المال)، منهج الشريعة في الموازنة بين المصالح والمفاسد، مقاصد الشارع من وضع الشريعة للتكليف، مقاصد الشارع من وضع الشريعة للامتثال، مقاصد المكلّف وعلاقتها بمقاصد الشارع.

المراجع:

الريسوني، أحمد، نظرية المقاصد عند الإمام الشاطبي، (فرجينيا: المعهد العالي للفكر الإسلامي 1992م).

النجار، عبد المجيد، مقاصد الشريعة بأبعاد جديدة، (بيروت: دار الغرب الإسلامي، 2006م). عطية، جمال الدين، نحو تفعيل مقاصد الشريعة، ط2، (دمشق: دار الفكر، 2000م).

القواعد الفقهية SU3304

تعريف القاعدة الفقهية والفرق بينها وبين القاعدة الأصولية، علم القواعد الفقهية: تاريخه، أهميته، كتبه، الفرق بينه وبين علم أصول الفقه، القواعد الفقهية الخمس: الأمور بمقاصدها، الضرر يزال، العادة محكمة، المشقة تجلب التيسير، اليقين لا يزول بالشك، شرح معاني تلك القواعد الخمس، وبيان مصادر استمدادها، القواعد الفقهية المتفرعة من تلك القواعد الأساسية، أمثلة من التطبيقات الفقهية لتلك القواعد، والاستثناءات الواردة عليها.

المراجع:

البورنو، محمد صدقي، الوجيز في القواعد الفقهية الكلية، ط4، (بيروت: مؤسسة الرسالة 1416هـ/ 1996م).

الزركشي، بدر الدين محمد بن بهادر، المنثور في القواعد، تحقيق تيسير فائق، ط2، (الكويت: شركة دار الكويت للصحافة، 1405هـ/ 1985م).

السيوطي، عبد الرحمن بن أبي بكر، الأشباه والنظائر، (بيروت: دار المعرفة، 1973م).

OPTIONAL COURSES (any TWO (2) courses)

أصول الفقه SU1301 I

تعريف علم أصول الفقه، والفرق بينه وبين الفقه، وأهميته في الدراسات الشرعية والقانونية، وموضوعاته. لمحة عن نشأة أصول الفقه وتاريخ تدوينه ومناهج التأليف فيه. الحكم الشرعي وأنواعه الخمسة. الحكم الوضعي وأنواعه. الرخصة والعزيمة. الحاكم. المحكوم فيه وشروط التكليف. المحكوم عليه ومباحث الأهلية.

المراجع:

زيدان، عبد الكريم، الوجيز في أصول الفقه (بيروت: مؤسسة الرسالة، 1998م) الزحيلي، وهبة، أصول الفقه الإسلامي (بيروت: مؤسسة الرسالة، 2000م) الغزالي، أبو حامد، المستصفى من علم الأصول (بيروت: دار إحياء التراث العربي، مؤسسة التاريخ العربي، د. ت)

أصول الفقه SU2301 II

تعريف الدليل الإجمالي، والفرق بينه وبين الدليل التفصيلي. الأدلة المتفق عليها (القرآن، والسنة، والإجماع، والقياس)، حجيتها، والمسائل المتعلقة بها. الأدلّة المختلف فيها (الاستحسان، والمصالح، والعرف، والذرائع، وشرع من قبلنا، وقول الصحابي، والاستصحاب)، حجيتها، والمسائل المتعلقة بها. المراجع:

الرازي، فخر الدين محمد بن عمر، المحصول في علم أصول الفقه، ط1، (بيروت: دار الكتب العلمية، 1988م).

الزحيلي، وهبة، أصول الفقه الإسلامي، (بيروت: مؤسسة الرسالة، 200م).

زيدان، عبد الكريم، الوجيز في أصول الفقه، (بيروت: مؤسسة الرسالة ، 1998م).

فقه المناكحات SJ2301

أهمية الأسرة على صعيد الفرد والمجتمع. نقد الممارسات البديلة للزواج الشرعي وتكوين الأسرة (الزّنا، ونكاح المتعة، والتّساكُن، وزواج مثيلي الجنس). الصّفات المطلوبة في شريك الزواج. الكفاءة وأحكامها. الخِطبة وأحكامها. النّكاح: حكمه، وشروطه، وأركانه، وأحكامه، وآثاره. الأنكحة المحرّمة في الإسلام. تعدّد الزوجات: حُكْمُهُ وَحِكَمُه وشُروطُه. المهر ووليمة الزفاف وأحكامهما. المَحْرمية بالنّسب والرّضاع والمصاهرة. كفالة اليتيم والتبني والفرق بينهما. فررق النّكاح: أنواعها وأحكامها. النّفقات. العِدّة والإحداد.

المراجع:

الشربيني، محمد الخطيب، مغني المحتاج إلى معرفة ألفاظ المنهاج، (بيروت: دار الفكر. د.ت). الزحيلي، وهبة، الأسرة المسلمة في العالم المعاصر، (دمشق: دار القلم، د.ت) الخن، مصطفى، وآخرون، الفقه المنهجي على مذهب الإمام الشافعي، ط7، (دمشق: دار القلم، 1427هـ/2006 م).

فقه منتجات الحلال SU4301

تحتوي هذه المادة على تعريف الحلال والحرام، بيان حقيقة منتجات الحلال وأنواعها وأهدافها، ومصادرها، والضوابط الشرعية لمنتجات الحلال المختلفة؛ الغذائية والتجميلية والصحية، وأحكام الذبائح والصيد والأضحية والعقيقة، وأحكام المنتجات المعدلة جينيًا، والحكم الشرعي في استخدام المواد الكيماوية في حفظ المنتجات الغذائية والأشربة، وحكم استخدام الأسمدة والمياه النّجسة في الإنتاج الزراعي، وأحكام المواد المستحالة وتطهير النجاسات، والرقابة الشرعية على المنتجات بصفة عامة. المراجع:

أحمد محمد إسماعيل، أحكام الذبح والمستجدّات المتعلّقة به في الفقه الإسلامي. د.ط. (الإسكندرية: دار الجامعة الجديدة، 2004م).

ازدهار بنت محمود بن صابر المدني، أحكام تجميل النّساء في الشّريعة الإسلاميّة، ط1، (الرياض: دار الفضيلة، 1422ه/ 2002م).

الخن، مصطفى وآخرون، الفقه المنهجي على مذهب الإمام الشافعي. ط7. (دمشق: دار القلم، 2006م).

مسائل الفقهية المعاصرة SJ3306

الاستنساخ. نقل الأعضاء البشرية. استئجار الأرحام. بنك اللبن البشرى المختلط. رتق غشاء البكارة. عمليات التجميل. تحديد نوع الجنين. إجهاض الجنين. التلقيح الاصطناعي. مهنة التمثيل. التصوير والنحت. الموسيقى.

المراجع:

القره داغى ، على محى الدين ، المحمدى ، على يوسف، فقه القضايا الطبية المعاصرة ط 1 ، (بيروت: دار البشائر،

2005م).

السالوس، علي أحمد، موسوعة القضايا الفقهية المعاصرة والاقتصاد الإسلامي ، (دوحة: دار الثفاقة، 1996م).

الشافعي، محمد فريد ، خلف ، عبد الجواد ، دراسات في قضايا الفقه المعاصرة (مصر: دار البيان، 2006 م).