



الجامعة الإسلامية العالمية ماليزيا
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
Garden of Knowledge and Virtue

LEADING THE WAY
KHALIFAH • AMĀNAH • IQRA' • RAHMATAN LIL-ĀLAMĪN
LEADING THE WORLD



AN INTERNATIONAL AWARD-WINNING INSTITUTION FOR SUSTAINABILITY

DEPARTMENT OF BASIC MEDICAL SCIENCES
KULLIYAH OF MEDICINE
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

POSTGRADUATE HANDBOOK

Academic Session 2022/2023

Updated: July 2023

**MASTER OF MEDICAL SCIENCES,
MASTER OF HEALTH SCIENCES
&
PhD IN HEALTH SCIENCES**

Senate Endorsement Master of Medical Sciences:

25th March 2022 (486th Senate Meeting)

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Any absence due to sickness or any unforeseen circumstances must be notified to the course coordinators as soon as possible and must be supported by suitable documentation e.g. sick certification

ACADEMIC STAFF

Anatomy/Histology

- Assoc. Prof. Dr. Zunariah Buyong
- Asst. Prof. Dr. Yusuf Sharizal Yusuf Azmi Merican
- Asst. Prof. Dr. Hazulin Mohd Radzuan
- Asst. Prof. Dr. Shahida Saharudin
- Asst. Prof. Dr. Wan Muhamad Salahudin Wan Salleh
- Asst. Prof. Dr. Nurulhasanah Mustapar
- Dr. Khodijah Zulkiflee (Study leave)
- Dr. Faridah Ismail (Study leave)

Physiology

- Assoc. Prof. Dr. Roslina Abd Rahim
- Asst. Prof. Dr. Aszrin Abdullah
- Asst. Prof. Dr. Maizura Mohd Zainudin
- Asst. Prof. Dr. Wan Fatein Nabeila Wan Omar
- Asst. Prof. Dr. Norbaiyah Mohd Bakrim
- Dr. Azril Shahreez Abdul Ghani (Study leave)

Biochemistry

- Prof. Dr. Sirajudeen Kuttulebbai Naina Mohamed Salam
- Asst. Prof. Dr. Noraihan Mat Harun
- Asst. Prof. Dr. Nurul Ashikin Muhammad Musa
- Dr. Mohd Afzal Alias (Study leave)

Microbiology/Immunology

- Prof. Dr. Mohamed Imad Al-Deen Mustafa Mahmoud
- Assoc. Prof. Dr. Hairul Aini Hamzah
- Asst. Prof. Dr. Hanan Hamimi Wahid
- Asst. Prof. Dr. Aniza Pakeer Oothuman
- Dr. Mohd Asyraf Abdull Jalil (Study leave)

Parasitology

- Prof. Dr. Md. Abdus Salam
- Asst. Prof. Dr. Soraya Ismail

Pathology/Chemical Pathology/Haematology/Histopathology

- Assoc. Prof. Dr. Norlelawati A. Talib (Head of PALM Department, Haematopathology)
- Assoc. Prof. Dr. Nor Zamzila Abdullah (Chemical Pathology)
- Asst. Prof. Dr. Asmah Hanim Hamdan (Histopathology)
- Asst. Prof. Dr. Azliana Abd Fuaat (Histopathology)
- Asst. Prof. Dr. Khairunnisa Ahmad Affandi (Histopathology)
- Asst. Prof. Dr. Norhidayah Kamarudin (Clinical Microbiology)
- Asst. Prof. Dr. Dhamirah Nazihah Mohd. Nasiruddin (Haematopathology)
- Dr. Sarah Abdul Halim (Haematopathology)
- Dr. Nurdiyana Mohamed (Study leave – Clinical Microbiology)
- Dr. Wan Zurainah Sazali (Study leave – Chemical Pathology)
- Dr. Ra (Study leave - Haematology)

Pharmacology

- Assoc. Prof. Dr. Wael Mohamed
- Asst. Prof. Dr. Mohd Fadly Mohd Noor
- Asst. Prof. Dr. Nour El Huda Abd Rahim
- Asst. Prof. Dr. Hidayatul Radziah Ismawi

NON-ACADEMIC STAFF

Name	Post/ Section
Sr. Rabiatul Aqilah Abdul Razak	<i>Administrative Assistant (PA, PALM)</i>
Sr. Nur Aimi Binti Azman	<i>Administrative Assistant (PA, BMS)</i>
Br. Kyairul Anuar Jamaluddin	<i>Medical Laboratory Technologist (BMS)</i>

Science Officers

Sr. Nurhayati Bujang	<i>Anatomy & Medical Museum</i>
Sr. Madia Baizura Baharom	<i>Microbiology/ Parasitology/ Physiology/Pharmacology</i>
Sr. Norsyafini Ahmad Marzuki	<i>Biochemistry/Molecular/Proteomics</i>
Sr. Zatur Rawihah Kamaruzaman	<i>Pathology & Laboratory Medicine</i>

Senior Medical Laboratory Technologists

Br. Mohd Maizam Maideen	<i>Chief MLT/Anatomy & Medical Museum</i>
Br. Zulnizam Azdan	<i>Microbiology/ Parasitology/ Physiology/Pharmacology</i>
Br. Aidil Azhar Dubi	<i>Biochemistry/Molecular/Proteomics</i>

Medical Laboratory Technologists

Anatomy & Medical Museum

- Br. Mohd Maizam Maideen
- Br. Muhammad Faiz Miskam
- Br. Mohd Dhiyaulhaq Halim
- Br. Saiful Fairul Abu Bakar
- Sr. Radin Nur Masyitah Radin Gunawan

Microbiology /Parasitology/Physiology/Pharmacology

- Br. Zulnizam Azdan
- Sr. Hanizah Noor Awalludin
- Br. Mohd Qusyairi Azli Mohd Azhar
- Sr. Nor Zaimah Abdul Razak
- Br. Mohd Shariffuddin Hassan
- Sr. Nur Ismalieyana Mohd Nizam

Biochemistry, Molecular & Proteomics

- Br. Aidil Azhar Dubi
- Br. Azri Rasid
- Sr. Rina Dahari
- Sr. Khalisa Ahmad

Histopathology & Haematopathology

- Sr. Wan Norulkhamisa Wan Muda
- Sr. Nur Farhana Zulkefli

Mortuary Attendants (Museum & Dissection Hall)

- Br. Mohamad Awang

- Br. Naazrai Abdul Wahab
- Br. Muhammad Syafiq Said (Health Attendant)

WELCOME

TO THE POSTGRADUATE PROGRAMME IN MASTER OF MEDICAL SCIENCES, MASTER OF HEALTH SCIENCES AND PhD IN HEALTH SCIENCES

This handbook is a guidebook prepared to assist students to conduct or involve in the related phases throughout the students' study period. It contains important information about the postgraduate programme in basic sciences, policies and resources that enable students to better navigate their academic journey and get most out of their student experience.

Please note that this guidebook augments and is not a substitute for other sources of information. This guidebook is to be read together with the following documents:

- International Islamic University Malaysia Postgraduate Regulations (Revised 2022).
- All information disseminated through i-Ma'alum or IIUM Centre of Postgraduate Study website.
- All information disseminated through the Kulliyah's Postgraduate Office or Department of Basic Medical Sciences, Postgraduate Coordinator.

This guidebook is issued 6th March 2023 and will be reviewed from time to time if any important new information or requirements becomes available. All efforts were made to ensure references quoted and link provided are the most current at the time of publication.

ADMISSION REQUIREMENT

1. General requirements

These will conform to the Postgraduate Policies and Regulations of the University.

2. First Degree

A recognised undergraduate medical degree (MBBS or its equivalent), a Bachelor of Science with Honours with a First Class or Second Class Upper grade in an appropriate subject from an accredited institution of higher learning or its equivalent; or other relevant basic degrees that are able to fulfil the specific Kulliyyah / Department Programme requirements, such as BDS or BVM from an accredited institution of higher learning.

As far as possible, BSc / M.Sc holders are advised to choose a MMDS / MHSc PhDSc programme in the same discipline as their bachelor / master degree. Non-MBBS or equivalent degree candidates are also required to take a minimum of two (2) credit hours of the relevant Special Requirement course in their discipline of study before they are eligible to register for the compulsory Programme-Required courses.

3. Entrance tests

Submission of satisfactory test scores of an internationally recognized graduate test will be considered for those holding first degrees from institutions of higher learning that are not accredited by the Ministry of Higher Education. They may also have to sit an Aptitude Test if deemed necessary by the Kulliyyah of Postgraduate Committee.

4. Professional references

As required in the postgraduate studies application form.

5. Character references

As required in the postgraduate studies application form.

6. Personal interview

Telephone or online interviews may be carried out if deemed appropriate by the Kulliyyah Postgraduate Committee.

7. Financial Documentation

Proof of financial sponsorship for the duration of the course is necessary as stipulated in the application form.

COURSE REGISTRATION POLICIES

1. Course Registration

A student is required to register online for courses that he intends to take in the following semester. A new student may register for courses after enrolment.

- i. A student shall not be allowed to register for a course after a period of one (1) week from the beginning of a regular semester or three (3) days from the beginning of a short semester. This rule is not applicable to students by research mode only.
- ii. A student who fails to register for any course by the fourth (4th) week of the semester with no valid reason shall receive a status NR (Not Registered). During this time, the student must apply for a leave of absence or appeal to register for courses.
- iii. By week twelve (12) week of the semester, a student who has an NR status shall be terminated (TD) from studies.

2. Academic Workload

- i. A full-time student must register for a minimum of nine (9) and a maximum of sixteen (16) credit hours or the equivalent in a regular semester. However, for Centre of Studies which offer five (5) credit hours per course, the maximum credit hour is twenty (20).
- ii. A part-time student must register for a minimum of three (3) and a maximum of nine (9) credit hours or the equivalent in a regular semester. However, for Centre of Studies which offer five (5) credit hours per course, the maximum credit hours is fifteen (15).
- iii. Full-time and part-time students may register for a maximum of two (2) courses in a short semester.

3. Withdrawal from Courses

- i. A student can apply to the Centre of Postgraduate Studies to withdraw from any courses that he has already registered for. The student must apply before week ten (10) of a regular semester or week four (4) of a short semester. A student in an executive programme can apply to withdraw from any course within the first three (3) weeks of a regular semester.
- ii. To withdraw from a course, a student must get the recommendation of his academic advisor/supervisor and the approval of the Deputy Dean (Postgraduate) of the Kulliyyah of Medicine.
- iii. The total credit hours after the approval must not be less than the minimum academic workload.

Further details to be referred to the Postgraduate Regulation in the CPS website.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO) AND PROGRAMME LEARNING OUTCOMES

Master of Medical Sciences & Master of Health Sciences

Programme Educational Objectives (PEO)

1. Professionals who apply the knowledge, understanding and laboratory experiences in quality research and providing quality education to research institutions, government agencies, and industries, locally and globally.
2. Professionals who are ethical and imbued with Islamic values.

Programme Learning Outcome (PLO)

1. Demonstrate continuing additional medical sciences knowledge with comprehension. (Knowledge)
2. Integrate the knowledge acquired from each discipline into a meaningful framework and critically appraise, develop, or use ideas in the context of research. (Cognitive)
3. Demonstrate good competency in skills related to research laboratory techniques. (Practical skills)
4. Clearly communicate the conclusion, knowledge and the rationale to experts and non- experts. (Interpersonal and Communication Skills)
5. Undertake critical evaluation of numerical and graphical data and use appropriate digital tools/methodologies to support and enhance research activities. (Digital and Numeracy Skills)
6. Exhibit teamwork and is capable of evaluating and making decisions in the situations without or with limited information by considering social responsibilities. (Leadership, Autonomy and Responsibility)
7. Apply basic managerial and entrepreneurial skills in research management. (Personal and entrepreneurial skills)
8. Exhibit high ethical and professional values. (Ethics and Professionalism)
9. Apply Islamic principles in analysing and evaluating ideas of related disciplines. (Islamisation)
10. Communicate effectively with researchers in various fields and participate in reduction of communicable and non- communicable diseases through comprehensive research. (Sustainable Development Goals)

PhD of Health Sciences

Programme Educational Objectives (PEO)

1. Professionals who apply the knowledge, understanding and laboratory experiences in quality research and providing quality education to research institutions, government agencies, and industries, locally and globally.
2. Outstanding research principals who lead and are engaged in research projects that explore solutions to problems and contribute to new knowledge within and across disciplines.
3. Professionals who are ethical and imbued with Islamic values.

Programme Learning Outcome (PLO)

3. Demonstrate systematic comprehension and in depth understanding of relevant basic medical sciences disciplines with scholarly strength. (Knowledge)
4. Integrate the knowledge acquired from each discipline into a meaningful framework and critically appraise, synthesizes new and complex ideas in the context of research to explore solutions to problems and contribute to new knowledge. (Cognitive)
5. Demonstrate excellent skills in generating, designing and implementing basic medical sciences research project. (Practical skills)
6. Professionally and clearly communicate with peers, scholarly communities and society at large concerning the field of expertise. (Interpersonal and Communication Skills)
7. Undertake critical evaluation of numerical and graphical data and use appropriate digital tools/ methodologies to develop, support and enhance research activities. (Digital and Numeracy Skills)
8. Exhibit teamwork and is capable of continuously progress on their own with a high degree of autonomy, evaluating and making decisions in the situations without or with limited information by considering social responsibilities. (Leadership, Autonomy and Responsibility)
9. Displayed good managerial and entrepreneurial skills in research management. (Personal and entrepreneurial skills)
10. Exhibit high ethical and professional values. (Ethics and Professionalism)
11. Apply Islamic principles in analysing and evaluating ideas of related disciplines. (Islamisation)
12. Communicate effectively with researchers in various fields and participate in reduction of communicable and non- communicable diseases through comprehensive research. (Sustainable Development Goals)

Master of Medical Sciences

Programme Educational Objectives (PEO)

1. Professionals who apply the knowledge, understanding and laboratory experiences in quality research and providing quality education to research institutions, government agencies, and industries, locally and globally.
2. Professionals who are ethical and imbued with Islamic values.

Programme Learning Outcome (PLO)

1. Demonstrate continuing additional medical sciences knowledge with comprehension. (Knowledge)
2. Integrate the knowledge acquired from each discipline into a meaningful framework and critically appraise, develop, or use ideas in the context of research. (Cognitive)
3. Demonstrate good competency in skills related to research laboratory techniques. (Practical skills)
4. Clearly communicate the conclusion, knowledge and the rationale to experts and non- experts. (Interpersonal and Communication Skills)
5. Undertake critical evaluation of numerical and graphical data and use appropriate digital tools/methodologies to support and enhance research activities. (Digital and Numeracy Skills)
6. Exhibit teamwork and is capable of evaluating and making decisions in the situations without or with limited information by considering social responsibilities. (Leadership, Autonomy and Responsibility)
7. Apply basic managerial and entrepreneurial skills in research management. (Personal and entrepreneurial skills)
8. Exhibit high ethical and professional values. (Ethics and Professionalism)
9. Apply Islamic principles in analysing and evaluating ideas of related disciplines. (Islamisation)
10. Communicate effectively with researchers in various fields and participate in reduction of communicable and non- communicable diseases through comprehensive research. (Sustainable Development Goals)

PROGRAMME STRUCTURE

The programme are highly structured with clear learning objectives. Fixed hours will be assigned for classroom, practical and other teaching and learning activities. A full-credit system based on semesters as being practiced by the rest of the university is used. The academic year consists of two regular semesters and one short semester. The regular semester has 14 weeks of lectures each while the short semester has only 7 weeks. The duration of leave or holiday within and between each semester is determined by the university with some discretion given to each department. Students can opt to do their programme as either full-time or part-time. There is some amount of flexibility to the duration and status of the study period, but it has to follow the university's Postgraduate Regulations.

University Required Courses, Kulliyah Required Courses and Generic Courses are compulsory courses that must be taken and passed before as student can graduate from the programme.

Programme Required Courses can either be compulsory or elective as prescribed in the programme of study. Compulsory courses must be taken and passed before a student can graduate from the programme. Elective courses are taken as necessary from any of the courses offered as deemed appropriate by the Kulliyah.

Special Requirement Course is a specific course that is required for non-medical background applicants. The applicants need to pass the discipline-based entrance evaluation prior to registering for a relevant postgraduate course (based on the evaluation of the applicants by departmental members of the discipline involved), failing which they have to register the discipline-based "Special requirement course". Postgraduate students may be required to attend specific courses that are being conducted for the undergraduate medical students, according to the programme pursued. The assessment is on a pass/fail basis.

Potential postgraduate students can choose to do the programme either by the Coursework and Research (in Semester 1 only) (**Mixed Mode**) or the **Research Mode**. The Kulliyah will recommend a suitable course structure to the student after considering the student's prior academic achievement and the availability of an appropriate supervisor. In suitable cases practical research work and experience can be conducted in an approved institution outside Kuantan or IIUM.

Students opting for the Research Mode programme will be required to send in a preliminary research proposal in an area of interest when applying for the programme. At the end of the programme students are expected to produce a substantive thesis showing some amount of originality. For the Master programmes, the thesis will be marked by an internal examiner for Mixed mode, internal and external examiners for Research mode. As for the PhD programme, the thesis will be assessed by both internal and external examiner/s.

A minimum of fifteen (15) credit hours in basic research knowledge (from the Programme Required Courses) and five (5) / seven (7) credit hours will be required for the Kulliyah Required and Generic Courses for the Mixed Mode programme. The

research component will contribute another 20 credit hours to the candidate as part of the requirement to obtain their degree.

CURRICULUM STRUCTURE

Master of Medical Sciences (MMDSc) Mixed Mode

STRUCTURE OF THE PROGRAMME	CREDIT HOURS
1. Special Requirement Course (For non-medical graduates only)	2
2. Kulliyyah -Required Courses	4
i) Islamisation of Human Knowledge in Medicine	
ii) Research Methodology	
3. Generic Courses	1
i) General laboratory techniques & instrumentation	
4. Programme Required Courses	15
i) Core Courses (Discipline Courses)	
ii) Elective Courses	
5. Research	20
Total Requirements for Graduation	40

Master of Health Sciences (MHSc) Research Mode

STRUCTURE OF THE PROGRAMME	CREDIT HOURS
1. Special Requirement Course (For non-medical graduates only)	-
2. Kulliyyah -Required Courses	
i) Islamisation of Human Knowledge in Medicine	
ii) Research Methodology	
iii) Basic Biostatistics	
3. Research	-
Total Requirements for Graduation	-

PhD in Health Sciences (PhDHSc) Research Mode

STRUCTURE OF THE PROGRAMME		CREDIT HOURS
1.	Special Requirement Course (For non-medical graduates only)	-
2.	Kulliyyah -Required Courses	
	iv) Islamisation of Human Knowledge in Medicine	
	v) Research Methodology	
	vi) Basic Biostatistics	
3.	Research	-
		-
Total Requirements for Graduation		

DURATION OF STUDIES

Students can opt to do their programme as either full-time or part-time. There are some amount of flexibility to the duration and status of the study period but it has to follow the university's Postgraduate Policies and Regulations.

Master

Status	Minimum	Normal	Maximum
Full-time	1 academic year	2 academic years	3 academic years
Part-time	2 academic years	4 academic years	5 academic years

Doctor of Philosophy

Status	Minimum	Normal	Maximum
Full-time	2 academic year	3 academic years	6 academic years
Part-time	3 academic years	6 academic years	8 academic years

TUITION FEES

1. Estimated Total Programme Fees for International and Permanent Resident Student - Master Programme

	IIUM Tuition Fees		Programme Structure		Total Tuition Fees	Other Fees					
	Coursework Fee (Per Credit Hour)	Research Fee (Per Semester)	Total Credit Hour Registered	Total Research Subject Registered		Recurrent Fees		Yearly Fee	One-off Fees		
						Recurrent Fees Per Semester	Bench Fee Per Semester		Health Insurance	Entrance Fees	Evaluation Fee
RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	
Coursework and Research	1,050.00	6,000.00	28	2 semesters	41,400.00	300.00	1,500.00	400.00	810.00	1,000.00	200.00
Research Only	1,050.00	6,000.00	N/A	4 semesters	24,000.00	275.00	1,500.00				

2. Estimated Total Programme Fees for Local Student - Master Programme

	IIUM Tuition Fees		Programme Structure		Total Tuition Fees	Other Fees				
	Coursework Fee (Per Credit Hour)	Research Fee (Per Semester)	Total Credit Hour Registered	Total Research Subject Registered		Recurrent Fees		Entrance Fees	One-off Fees	
						Recurrent Fees Per Semester	Bench Fee Per Semester		Evaluation Fee	Graduation Fee
RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	
Coursework and Research	280.00	2250.00	21	2 semesters	10,380.00	307.50	1000.00	610.00	1000.00	200.00
Research Only	280.00	650.00	N/A	4 semesters	2,600.00	282.50	1000.00	610.00	1000.00	200.00

3. Estimated Total Programme Fees for Local Student - Master Programme (Part Time)

	IIUM Tuition Fees		Programme Structure		Total Tuition Fees	Other Fees				
	Coursework Fee (Per Credit Hour)	Research Fee (Per Semester)	Total Credit Hour Registered	Total Research Subject Registered		Recurrent Fees		Entrance Fees	One-off Fees	
						Recurrent Fees Per Semester	Bench Fee Per Semester		Evaluation Fee	Graduation Fee
RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	
Coursework and Research	280.00	1125.00	28	4 semesters	12,340.00	307.50	1000.00	560.00	1000.00	200.00
Research Only	280.00	325.00	N/A	8 semesters	2,600.00	267.50	1000.00	560.00	1000.00	200.00

4. Estimated Total Programme Fees for International and Permanent Resident Student - PhD Programme

IIUM Tuition Fees		Programme Structure		Total Tuition Fees	Other Fees					
Coursework Fee (Per Credit Hour)	Research Fee (Per Semester)	Total Credit Hour Registered	Total Research Subject Registered		Recurrent Fees		Yearly Fee	One-off Fees		
					Recurrent Fees Per Semester	Bench Fee Per Semester	Health Insurance	Entrance Fees	Evaluation Fee	Graduation Fee
RM	RM			RM	RM	RM	RM	RM	RM	
1,875.00	7,500.00	N/A	6 semesters	45,000.00	275.00	1,500.00	400.00	810.00	1,000.00	200.00

5. Estimated Total Programme Fees for Local Student - PhD Programme

IIUM Tuition Fees		Programme Structure		Total Tuition Fees	Other Fees				
Coursework Fee (Per Credit Hour)	Research Fee (Per Semester)	Total Credit Hour Registered	Total Research Subject Registered		Recurrent Fees		One-off Fees		
					Recurrent Fees Per Semester	Bench Fee Per Semester	Entrance Fees	Evaluation Fee	Graduation Fee
RM	RM			RM	RM	RM	RM	RM	RM
250.00	1,750.00	N/A	6 Semesters	10,500.00	282.50	1,500.00	610.00	1000.00	200.00

6. Estimated Total Programme Fees for Local Student - Master Programme (Part Time)

IIUM Tuition Fees		Programme Structure		Total Tuition Fees	Other Fees				
Coursework Fee (Per Credit Hour)	Research Fee (Per Semester)	Total Credit Hour Registered	Total Research Subject Registered		Recurrent Fees		One-off Fees		
					Recurrent Fees Per Semester	Bench Fee Per Semester	Entrance Fees	Evaluation Fee	Graduation Fee
RM	RM			RM	RM	RM	RM	RM	RM
250.00	875.00	N/A	12 Semesters	10,500.00	292.50	1,500.00	560.00	1000.00	200.00

KULLIYAH REQUIRED COURSES

No.	Course Title	Credit Hours	Course Code	Mixed Mode	Research
1.	Islamisation of Human Knowledge in Health Sciences	2	ISLM 7212/ 8212	√	√
2.	Research Methodology	2	RESM 7130/ 8130	√	√
3.	Basic Biostatistics	2	STAT 7211/ 8211	-	√

GENERIC COURSE

Course Title	Course Code	Credit Hours
General Laboratory Techniques and Instrumentations	METL 7142	1

PROGRAMME REQUIRED COURSES

The Programme required courses are classified into Generic Courses, Disciplines Courses as listed below:

These are courses that will be beneficial and relevant across disciplines. Students are required to take a minimum of 12 credit hours.

Anatomy

	Course Title	Course Code	Course Classification	Credit Hours
1.	Introduction to Anatomy	ANAT 7210	Special Req	2
2.	Gross Anatomy	ANAT 7311	Core	3
3.	Neuroanatomy	ANAT 7312	Core	3
4.	Developmental Anatomy	ANAT 7313	Core	3
5.	Microscopic Anatomy	ANAT 7314	Core	3
6.	Applied Anatomy	ANAT 7315	Elective	3

Biochemistry

	Course Title	Course Code	Course Classification	Credit Hours
1.	Introduction to Medical Biochemistry	BIOC 7231	Special Req	2
2.	Regulation of Metabolism in Human	BCH 7332	Core	3
3.	Medical Enzymology	BIOC 7333	Core	3
4.	Basic Genetics and Human Disease	BCH 7334	Core	3

Microbiology

	Course Title	Course Code	Course Classification	Credit Hours
1.	Introduction to Medical Microbiology	MMBI 7241	Special Req	2
2.	Medical Mycology	MMBI 7141	Core	1
3.	Clinical Microbiology Diagnostic Laboratory Practice	MMBI 7242	Core	2
4.	Basic & Clinical Immunology	MMBI 7243	Core	2
5.	Medical Virology	MMBI 7341	Core	3
6.	Medical Bacteriology	MMBI 7441	Core	4

Parasitology

	Course Title	Course Code	Course Classification	Credit Hours
1.	Introduction to Medical Parasitology	PARA 7261	Special Req	2
2.	Oppurtunistic Infections	PARA 7262	Core	2
3.	Immunoparasitology	PARA 7263	Core	2
4.	Diagnostic Parasitology and Medical Entomology	PARA 7264	Core	2
5.	Tropical Diseases	PARA 7363	Core	3
6.	Control of Human Parasitic Diseases	PARA 7364	Core	3

Pharmacology

	Course Title	Course Code	Course Classification	Credit Hours
1.	Introduction to General Pharmacology	PHAR 7271	Special Req	2
2.	Basic and Laboratory Pharmacology	PHAR 7272	Elective	2
3.	Antimicrobial Agents II	PHAR 7279	Elective	2
4.	Autonomic Nervous System	PHAR 7373	Elective	3
5.	Central Nervous System Pharmacology	PHAR 7374	Elective	3
6.	Cardiovascular and Renal Systems Pharmacology	PHAR 7375	Core	3
7.	Respiratory and Gastrointestinal Systems Pharmacology	PHAR 7376	Core	3
8.	Endocrine System Pharmacology	PHAR 7377	Elective	3
9.	Antimicrobial Agents I	PHAR 7378	Elective	3

Physiology

	Course Title	Course Code	Course Classification	Credit Hours
1.	Introduction to Medical Physiology	PHYL 7021	Special Req	2
2.	Advanced Physiology II	PHYL 7220	Elective	2
3.	Physiology of Special Senses	PHYL 7221	Elective	2
4.	Renal Physiology	PHYL 7223	Elective	2
5.	Gastrointestinal Tract Physiology	PHYL 7225	Elective	2
6.	Endocrine Physiology	PHYL 7226	Elective	2
7.	Reproductive Physiology	PHYL 7227	Elective	2
8.	Physiology of the Central Nervous System II	PHYL 7228	Elective	2
9.	Advanced Physiology I	PHYL 7229	Elective	2
10.	CVS Physiology	PHYL 7322	Core	3
11.	Physiology of the Central Nervous System I	PHYL 7323	Core	3
12.	Respiratory Physiology	PHYL 7324	Core	3

Basic Laboratory

	Course Title	Course Code	Course Classification	Credit Hours
1.	Tissue Culture	METL 7211	Elective	2
2.	General Molecular and Proteomics Techniques	METL 7232	Elective	2

Research

	Course Title	Course Code	Credit Hours
1.	Research Proposal	ANA/BIOC/MMBI/PARA/PHAR/PHYL 7994/7998	10/-
2	Dissertation/Thesis	ANA/BIOC/MMBI/PARA/PHAR/PHYL 7994/7998	10/-

ISLM 7212/ 8212: Islamisation of Human Knowledge in Health Sciences

Course Coordinator: Asst. Prof. Dr Khairunisa

Directory of Course Instructors

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Section 1: Course Synopsis

This course is designed to introduce the principles of Islamic worldview and scientific development of Islamisation of Human Knowledge in health sciences. It also covers the fundamental Islamic principles of moral, objectives of Islamic divine law, the background of scientific research in Muslim history, achievements, challenges and ethics.

This course aligns the delivery of Islamisation of Human Knowledge with Sejahtera Academic Framework (SAF), especially to the principles of Maqasid Ash-Shari'ah in which the objectives of the Islamic law and medicine share inherent intersections with the ultimate aim of Shariah compliant concept to save the religion, life, knowledge, wealth and progeny; as well as on Sustainable Development Goals (SDG), with the main outcome to develop balanced and harmonious graduates.

Section 2: Learning Outcome

At the end of the course, the students should be able to:

1. Outline the philosophy and concept of Islamisation and integration of human knowledge.
2. Examine to the fundamental moral and ethical questions about modern sciences, medicine and new technologies.
3. Discuss sustainable development goals and the necessary steps to achieve sustainable future for Muslim communities.

Section 3: Teaching and Learning Format

1. Lecture
2. Seminar/Presentation
3. Self directed learning

Section 4: Course Assessment

- | | |
|----------------------------------|-----|
| 1. Assignment/Reflective writing | 60% |
| 2. Presentation | 30% |
| 3. Participation | 10% |

Section 5: Course Content

No.	Topic	Learning Outcome
1.	Worldviews: Islamic and Contemporary	<p>LO 1 Theology, cosmology.</p> <p>LO 2 Anthropology, teleology.</p> <p>LO 3 Epistemology, ontology, axiology.</p> <p>LO 4 Eschatology.</p> <p>LO 5 Role of Scholars, Islamic Institutions and Organisations</p>
2.	Islam and Knowledge	<p>LO 1 Islamic epistemology.</p> <p>LO 2 Seeking knowledge in Islam.</p> <p>LO 3 Concept of knowledge in Islam.</p> <p>LO 4 Classification, sources and tools.</p> <p>LO 5 Revelation (Waḥy) and reason ('aql).</p> <p>LO 6 Āyāt Allāh fi al-Qur'ān, Āyāt Allāh fi alkawn.</p> <p>LO 7 Knowledge Management in Islam.</p>
3.	Islamisation of the Self	<p>LO 1 Islamic anthropology & teleology (human origin & purpose).</p> <p>LO 2 The significance of the story of Adam (a.s.).</p> <p>LO 3 Human's raison d'être – ubūdiyyah, khilāfah.</p> <p>LO 4 The concept of the Self.</p> <p>LO 5 The Rūḥ, Qalb, 'Aql and Nafs.</p> <p>LO 6 Ūlū al-Albāb.</p> <p>LO 7 Diseases of the spiritual heart.</p> <p>LO 8 Tazkiyat al-Nafs, muḥāsabah, muraqabah.</p> <p>LO 9 Axiology and eschatology.</p>
4.	Islamisation of Human Knowledge	<p>LO 1 The definition and philosophy.</p> <p>LO 2 IOHK history, rationale, and concept.</p> <p>LO 3 Integration and Relevantisation.</p> <p>LO 4 Policy and categories of IOHK.</p> <p>LO 5 Theory and Methodology of IOHK.</p>
5.	Maqasid Ash-Shari'ah: Concepts and Principles	<p>LO 1 The sources of Shari'ah law.</p> <p>LO 2 The principle of law (Qawa'id Ash-Shari'ah).</p> <p>LO 3 The five pillars of Maqasid Ash-Shari'ah.</p> <p>LO 4 Contemporary issues in modern science and medicine.</p>
6.	Foundation of Islamic moral system within the scientific settings	<p>LO 1 Teleology, ontology, and axiology.</p> <p>LO 2 Human relations in Islam ('Aqidah, shari'ah, 'ibadah, akhlāq).</p> <p>LO 3 Human's triad-relations.</p> <p>LO 4 Contemporary ethics.</p> <p>LO 5 Ethics in Islam (Iḥsān, Itqān, Istikhlāf, ikhlāṣ, istiḳāmah, mas'ūliyyah)</p>

7.	Contemporary moral issues in scientific practices and Islamic jurisprudence	LO 1 Contemporary moral issues in scientific practices. LO 2 Integration of Islamic moral and legal values in medicine and scientific research
8.	Islamic virtues of professionalism	LO 1 Islamic virtues (integrity, trustworthiness, perfection, manners, and sincerity). LO 2 Prophetic role model.
9.	Islam, Science, and technology	LO 1 Philosophy of science (positivism, naturalism, secular humanism). LO 2 Philosophy of science in Islam. LO 3 History of science in brief during PreIslam, Islamic era, Renaissance, scientism, LO 4 and contemporary era. LO 5 Science for humanity. LO 6 Technology and values. LO 7 Technology & Muslim society. LO 8 Muslim Contributions to Knowledge. LO 9 Islamic Applications
10.	Ethics and moral issues in medical research	LO 1 Muslim contribution in medical ethics. LO 2 Ethics in clinical research. LO 3 Ethics in animal research. LO 4 Contemporary ethics and moral issues in medical research.
11.	Muslim contribution to medicine	LO 1 Muslim contribution in medicine and public health. LO 2 History of modern medicine.
12.	Sustainable Development from an Islamic Perspective	LO 1 Definition and principles of sustainable development. LO 2 The 17 Sustainable Development Goals (SDGs). LO 3 Implementation of sustainable development from an Islamic perspective. LO 4 SDG 18: Spirituality in the Sustainable Development Goals

Section 6: Learning Resources

Required Textbooks

1. Hassan, M. K. (2022). *Worldview: Islamic and contemporary*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
2. Hassan, M. K. (2022). *Islam and knowledge*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
3. Hassan, M. K. (2022). *Islamisation of the self*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
4. Hassan, M. K. (2022). *Islamisation of human knowledge*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
5. Hassan, M. K. (2022). *Islamisation of human knowledge*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
6. Hassan, M. K. (2022). *Islamisation of human knowledge*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
7. Hassan, M. K. (2022). *Islamisation of human knowledge*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.
8. Hassan, M. K. (2022). *Islamisation of human knowledge*. [Unpublished manuscript]. Centre of Islamisation, International Islamic University Malaysia.

Recommended Textbooks

1. Abdullah, M. F. (2004). *Professionalism: The Islamic Perspective*. Jurutera, 9-11.
2. Abdurezak Hashi (2018). *Bioethics: A Comparative Study of Its Concepts, Issues and Approaches*. IIUM Press, Gombak.
3. Baasher, T. A. (2001). *Islam and mental health*. *Eastern Mediterranean Health Journal*, 7 (3), 372-376, 2001.
4. Ghozali, M., Syamsuri, Daniar, Purwana, A. E. & Cahyanti, L. D. (2019). *Professionalism Concept of Work Ethic in Islamic Perspective*. Proceedings of the 1st International Conference on Business, Law And Pedagogy, ICBLP 2019; Surabaya. DOI: 10.4108/eai.13-2-2019.2286200
5. Ismail, A. & Rahman, M. H. (2013). *Islamic Legal Maxim: Essentials and Application*. IBFIM, Kuala Lumpur.
6. Kamali, M. H. (2005). *Principles of Islamic Jurisprudence*. Ilmiah Publishers. Malaysia.
7. Rahman, F. (1989). *Islam and health/medicine: A historical perspective*. In Sullivan, Lawrence E (Eds.), *Healing and Restoring: Health and Medicine in the World's Religious Traditions* (pp.149-172). MacMillan Publishing Company, New York.
8. Solihu, A. K. H. (2012). *The Islamic Worldview, Ethics and Civilization: Issues in Contemporary Interdisciplinary Discourse*. IIUM Press, Gombak.

RESM 7130/ 8130: Research Methodology

Course Coordinator: Prof. Dr. Jamalludin Abd Rahman

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4.	Asst. Prof. Dr. Hashima E Nasreen		
5.	Assoc. Prof. Dr. Nik Nur Fatnoon Binti Nik Ahmad		
6.	Asst. Prof. Dr. Ahmad Faidzal Othman		
7.	Asst. Prof. Dr. Islah Munjih B. Ab. Rashid		
8.	Assoc. Prof. Dr. Norlelawati Bt. A. Talib		
9.	Assoc. Prof. Dr. Zamzil Amin B. Asha'ari		
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11.	Asst. Prof. Dr. Norlinda Abdul Rashid		
12.	Asst. Prof. Dr. Sharifah Munirah Syed Elias		
13.	Asst. Prof. Dr. Siti Zuhaidah Shahadan		
14.	Asst. Prof. Dr. Azmir Ahmad		
15.	Asst. Prof. Dr. Siti Noorkhairina Sowntali		
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17.	Asst. Prof. Dr. Wan Hasliza Wan Mamat		
18.	Asst. Prof. Dr. Redzuan Nul Hakim		
19.	Asst. Prof. Dr. Syamsul Ariffin		
20.	Assoc. Prof. Dr. Abdurezak Hashi		
21.	Prof. Dr. Zainul Ahmad Rajion		
22.	Assoc. Prof. Dr. Basma Ezzat Mustafa		
23.	Asst. Prof. Dr. Firdaus Che		

	Musa		
24.	Asst. Prof. Dr. Azlini Ismail		
25.	Asst. Prof. Dr. Mohamad Shafiq Ibrahim		
26.	Assoc. Prof. Datin Dr. Khairani Mokhtar		
27.	Asst. Prof. Dr. Hafiz Arzmi		
28.	Assoc. Prof. Dr. Widya Lestari		
29.	Asst. Prof. Dr. Md. Muziman Syah Md Mustafa		
30.	Asst. Prof. Dr. Zafri Azran Abdul Majid		
31.	Assoc. Prof. Dr. Muhammad Bin Ibrahim		
32.	Asst. Prof. Dr. Norazsida Ramli		
33.	Asst. Prof. Dr. Nurulwahida Saad		
34.	Assoc. Prof. Dr. Mardhiah Mohammad		

Section 1: Course Synopsis

This course exposed the students to the principles and conduct of responsible research and innovation. Students will be taught the essential tools of research planning such as literature surveys, engagement with the community or end users to identify the real-world problem and practical solutions, planning for data collection, and planning for statistical analysis. They will also be taught on writing an impactful research proposal and to be familiarised with research ethics and safety.

Ability to conduct research properly is important to support University's responsible research agenda. The course is planned as a workshop to give the flexibility to the participant to attend the whole course within a few days rather than a fixed weekly classes. Students were taught the importance to engage with the end-users or the target community to discover their real need and relevant solutions to their problems, At the end of the course, with the knowledge and skill imparted, the participants can plan and strategise the best method to achieve their research objectives creatively, innovatively and responsibly.

Section 2: Learning Outcome

1. Describe the principles of responsible research and innovation. Appraise and apply the knowledge acquired in research works.
2. Justify and summarise conceptual framework using solution-based approach.
3. Plan and strategise best study design, sampling technique, sample size, data collection and statistical analysis
4. Adhere to ethical guidelines and policies in research
5. Prepare and defend research proposal

Section 3: Teaching Format and Guidelines

1. Lecture
2. Practical
3. Self directed learning

Section 4: Course Assessment

Research Proposal	100%
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Section 5: Course Content

No.	Content
1.	Introduction to responsible research and innovation <ul style="list-style-type: none">• Why we do research?• What is responsible research and innovation?• Concept of causality
2.	Problem statement <ul style="list-style-type: none">• Searching information in medical science• Bibliographic management• Summarising literature review• Identify real-world solutions• Engagement with target population to identify the need• Conceptual framework
3.	Formulating hypothesis and objective
4.	Research design I - Observational <ul style="list-style-type: none">• Cross-sectional study• Case-control• Cohort
5.	Research design II - Experimental study
6.	Sampling technique & sample size 10 <ul style="list-style-type: none">• Sampling technique• Sample size calculation
7.	Planning for data collection
8.	Planning of statistical analysis
9.	Safety in research (biological, chemical and physical)
10.	Biosecurity
11.	Managing research
12.	Ethic in research
13.	Writing research proposal
14.	Proposal presentation

Section 6: Learning Resources

Required Textbook

1. Ab Rahman, J. (2015). *Analysing Research Data Brief Guidelines for Methods and Statistics in Medical Research* (pp. 35-101): Springer Singapore.
2. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications

Recommended Textbook

1. Altman, D., Machin, D., Bryant, T., & Gardner, M. (Eds.). (2013). *Statistics with confidence: confidence intervals and statistical guidelines*. John Wiley & Sons.
2. Greenhalgh, T. (1997). How to read a paper: The medline database. *BMJ* 15(7101): 180-183.
3. Hill, A. B. (1965). The environment and disease: Association or causation? *Proc R Soc Med* 58: 295-300.
4. Leiner, F., Gaus, W., Haux, R., Gregori, P. K., & Wagner, G. (January 14, 2003). *Medical data management* (1st Ed.). Springer; # ISBN-10: 0387951598, # ISBN-13: 978-0387951591
5. Paul D., Leedy, Ormrod, J. E., & Johnson, L. R. (2014). *Practical research: Planning and design*. Pearson Education

METL 7142: General Laboratory Techniques and Instrumentations

Course Coordinator: Asst. Prof. Dr Nour El Huda Abd Rahim

Directory of Course Instructors

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11.	Sr. Syafini		Basic Medical Sciences, KOM

Section 1: Course Synopsis

This course is designed to enhance the students' knowledge in theory and principles of laboratory techniques, instrumentations, and their applications. It is a compulsory course for all students who registered Master in Medical Sciences (Mixed Mode). Satisfactory completion of the course is based on the required assessment.

This course imparts the elements of *Iqra'* and *Khalifah* within the lectures, seminars and demonstrations to integrate contemporary knowledge in medical sciences with attributes to independent lifelong learning. These elements are crucial in preparing the students to become holistic graduates who adhere to good governance with respect to different cultures, race and religion.

Section 2: Learning Outcome

6. Distinguish the principles of laboratory safety handling and applications of the laboratory instruments used in medical research laboratories.
7. Appraise and apply the knowledge acquired in research works.

Section 3: Teaching Format and Guidelines

4. Lecture
5. Practical
6. Demonstration
7. Seminar
8. Presentation
9. Self directed learning

Section 4: Course Assessment

Presentation	30%
Participation/Attendance	70%

Section 5: Course Content

No.	Topic	Mode of Delivery
15.	Laboratory safety (Chemical Hazards)	Seminar
16.	Laboratory safety (Radiological Hazards)	Seminar
17.	Laboratory safety (Microbiological Hazards)	Seminar
18.	Sterilization & disinfection	Lecture/Demo/Practical
19.	Preparation of buffer & reagent	Lecture/Demo/Practical
20.	Incubators & balances	Lecture/Demo/Practical
21.	Refrigeration & Freezers	Lecture/Demo/Practical
22.	Spectrophotometry & Turbidometry	Lecture/Demo/Practical
23.	Waterbaths & Sonicators	Lecture/Demo/Practical
24.	Water purification	Lecture/Demo/Practical
25.	Centrifuge and ultracentrifuge	Lecture/Demo/Practical
26.	Chromatographic Systems	Seminar
27.	Cryopreservation & Flowcytometry	Lecture/Demo/Practical
28.	Microscopy	Lecture/Demo/Practical
29.	Fluorescence Microscopy	Lecture/Demo/Practical
30.	Scanning Electron microscopy	Lecture/Demo/Practical
31.	Transmission Electron microscopy	Lecture/Demo/Practical
32.	ELISA/Radioimmunoassay	Lecture/Demo/Practical

Section 6: Learning Resources

Required Textbook

1. Burtis, C. A. & Bruns, D.E. (2015). Tietz fundamentals of clinical chemistry and molecular diagnostic (7th Edition.). W.B. Saunders.
2. Rifai, N., & Gay-Lussac, J. L. (2018). Tietz textbook of clinical chemistry and molecular diagnostics (6th Edition.). Elsevier Saunders.
3. Furr AK (2000); CRC handbook on laboratory safety, 5th. Ed

Recommended Textbook

1. McPherson, R. A. (2016). Henry's clinical diagnosis and management by laboratory methods (23rd. ed). Elsevier Saunders.
2. Aboul-Enein, H. Y. (2003). Separation techniques in clinical chemistry. Marcel Dekker

Section 3: Teaching Format and Guidelines

1. Lecture
2. Assignment
3. Seminar
4. Practical
5. Self-directed learning

Section 4: Course Assessment

Assignment	30%
Seminar	30%
Viva	30%
Participation/Attendance	10%

Section 5: Course Content

No.	Topic
1.	<ul style="list-style-type: none">• Basic Enzymology• Enzymes in Medicine
2.	<ul style="list-style-type: none">• Amino acids• Proteins
3.	<ul style="list-style-type: none">• Carbohydrates Metabolism• Blood sugar regulation
4.	Fatty acids & Triglycerides
5.	<ul style="list-style-type: none">• Lipoproteins• Phospholipids
6.	<ul style="list-style-type: none">• Nucleotides• DNA
7.	RNA & Protein Synthesis
8.	<ul style="list-style-type: none">• Basic Endocrinology• Hormones

Section 6: Learning Resources

Required Textbook

1. Ferrier, D.R. (2017). Biochemistry, Lippincott's illustrated reviews (7th Edition.). Lippincott Williams & Wilkins.

Recommended Textbook

1. Lieberman, M & Peet, A. (2017). Marks' basic medical biochemistry: A clinical approach (5th Edition.). Wolters Kluwer, Lippincott Williams & Wilkins.
2. Rodwell, V., Bender, D., Botham, K. M., Kennelly, P.J., P & Weil, P.A. (2015). Harper's illustrated biochemistry (30th Edition.). Lange Medical Books/McGraw-Hill.

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APPENDICES

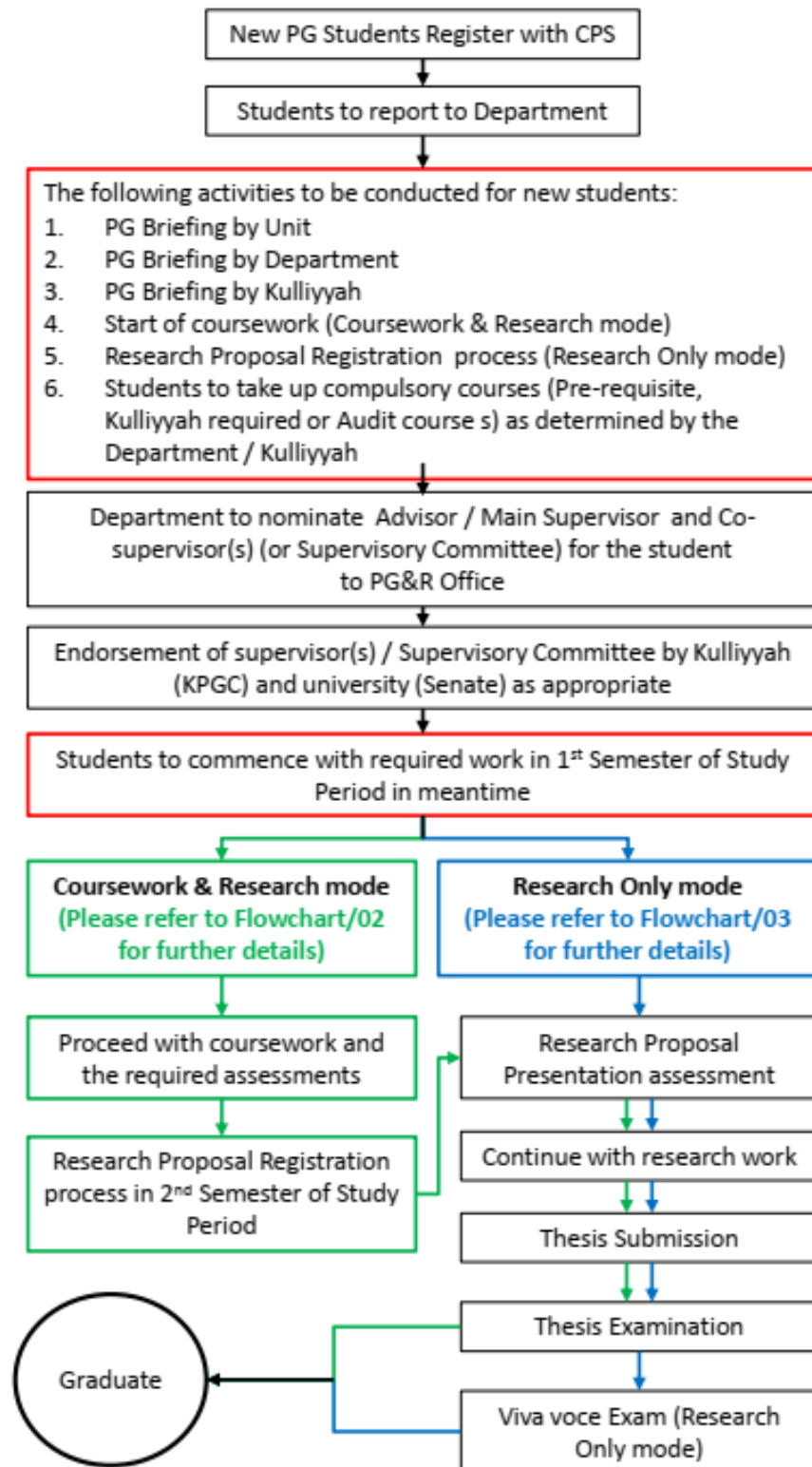
Appendix 1: Format, Marking Scheme and Allocation of Time for Final Examination

Format	Marking Scheme	Allocation Time
Essay	20 marks are allocated for each question; by choosing to answer 2 questions out of 3.	3 hours
Short Notes	10 marks are allocated for each questions; by choosing to answer 2 questions out of 3.	

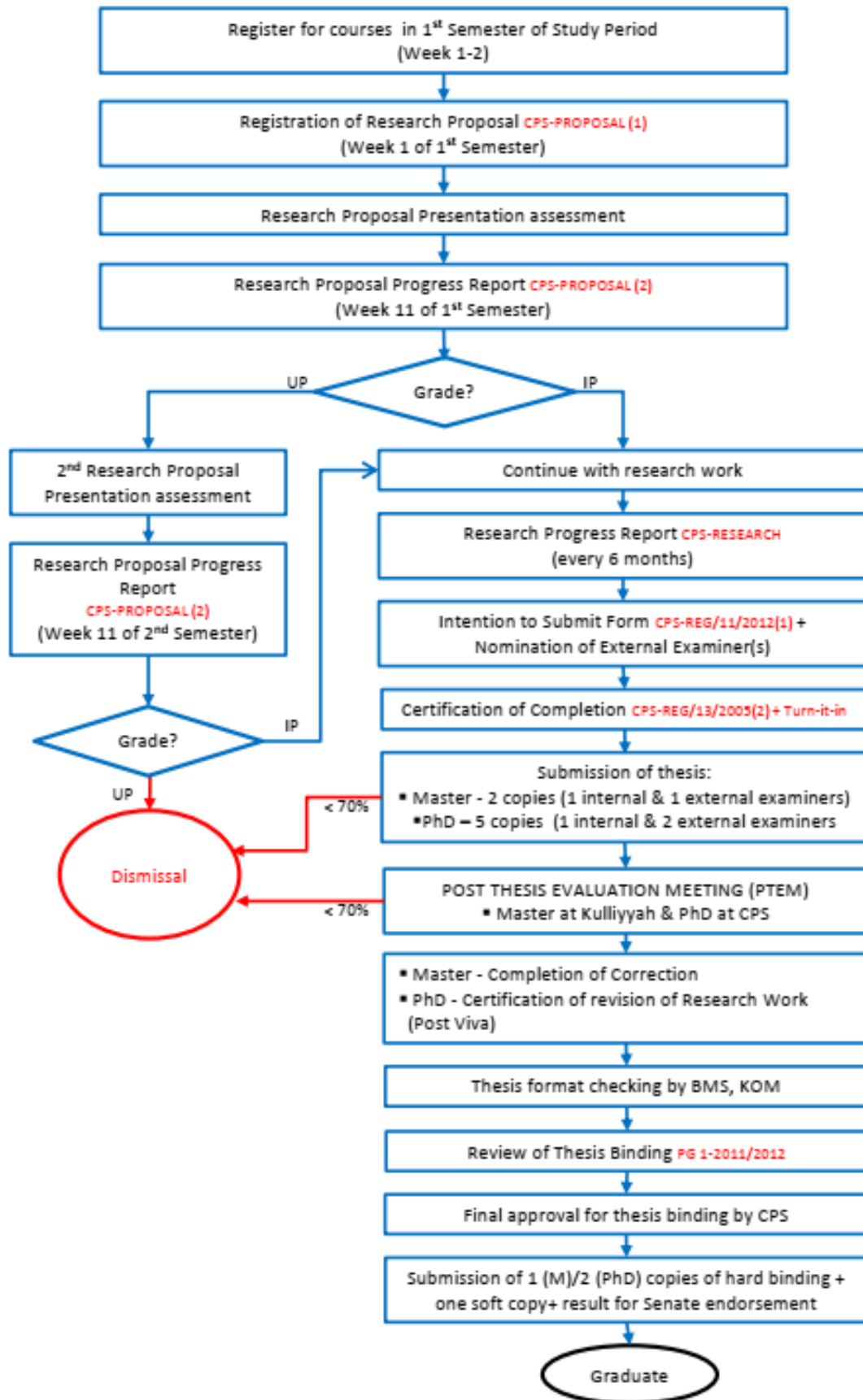
Appendix 2: Grading System

Score	Grade	Q.P.E.	Description	Remarks
80-100	A	4.00	Excellent	Pass
75-79	A-	3.67	Extremely Good	Pass
70-74	B+	3.33	Very Good	Pass
65-69	B	3.00	Good	Pass
60-64	B-	2.67	Fairly Good	Conditional Pass
55-59	C+	2.33	Satisfactory	Conditional Pass
50-54	C	2.00	Quite Satisfactory	Conditional Pass
45-49	C-	1.67	Poor	Fail
40-44	D	1.00	Very Poor	Fail
0-39	F	0.00	Failure	Fail

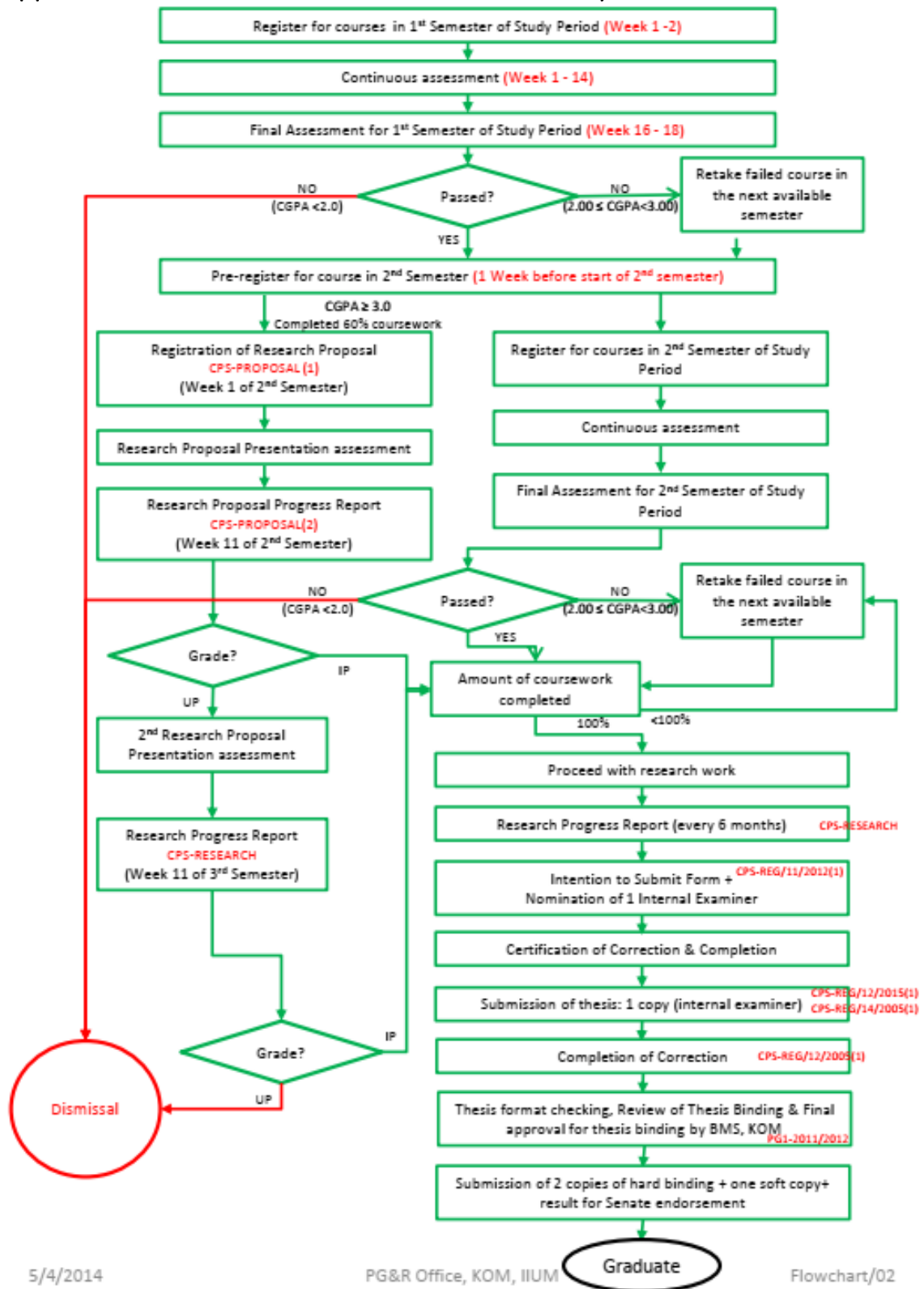
Appendix 3: Flowcharts of Programme Overview for New Non-Clinical Postgraduate Students in Kulliyah of Medicine



Appendix 5: Flowchart for Master – Mixed Mode



Appendix 4: Flowchart For Master - Research Only Mode



Appendix 5: Research Timeline and Forms/iViva Submissions for Master of Medical Sciences

- a) A PG student may register for research and present the Research Proposal in semester 2, if the following conditions are met:
- CGPA is 3.0 and above
 - Completed **at least 60% of the required coursework** (i.e. to get at least **15 credit hours in semester 1**)
 - Fulfilled all language requirements.
- b) The following procedures are to be carried out:
- Pre-register for course in 2nd Semester (**1 Week before start of 2nd semester**)
 - Registration of Research Proposal CPS/REG01/V2/R1 (**Week 1 of 2nd Semester**)
 - Research Proposal Presentation assessment: (**Week 11 of 2nd Semester**)
 - Amount of coursework must be **100% completed** before proceed with research work.
- c) The steps are similar as RESEARCH ONLY MODE in Appendix 6 **EXCEPT:**
- Fill in the Notification of Intention to Submit in the iViva\
 - Supervisor nominate **1 Internal Examiner**
 - Not required to present

Appendix 6: Research Timeline and Forms Submission for Postgraduate Student and Supervisor

1. Registration

- a) Register for courses in the first Semester of study period (Week 1-2)
- b) Registration of Research Proposal CPS/REG01/V2/R1 (Week 1 of first Semester)
- c) Submit to HOD for recommendation for registration in week 1.
- d) Forward to DDPG for approval
- e) Department to appoint academic advisor for the student (week 1-4)

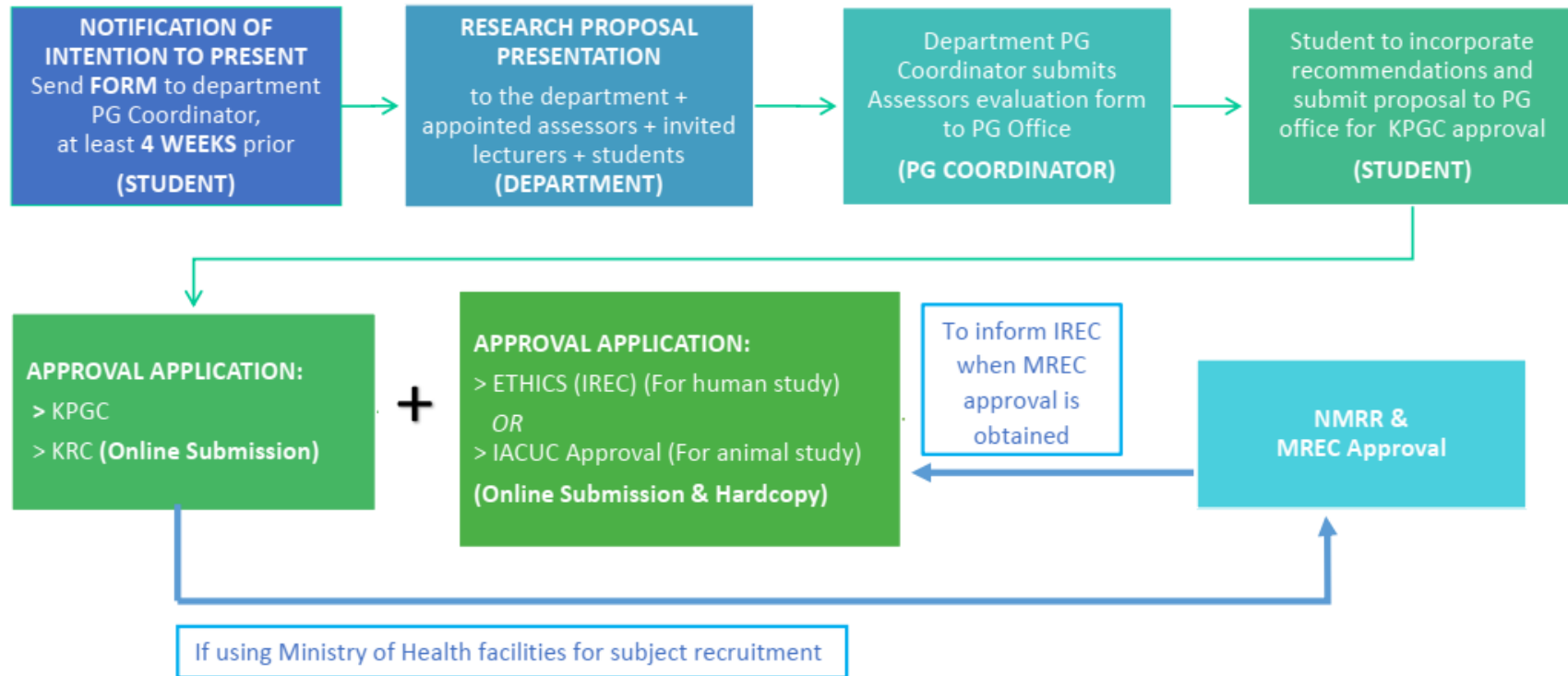
2. Research Proposal Presentation

- a) To present latest by week 11 in semester one at the departmental level.
- b) Master at Department level; PhD at Kulliyah level by PG Office
- c) One month before presentation date:
 - Submit intention to present research proposal form.
- d) One week before presentation:
 - Submit presentation slides to PG Coordinator (for assessors).
- e) Must obtain marks of 70% or more to submit a Research Proposal.
- f) Do all the necessary corrections following the presentation.

3. Ethical Approval Application

- a) Submit the research proposal via online for Kulliyah Research Committee approval. Approval letter will be issued.
- b) Apply for ethical approval from appropriate bodies: Malaysian Research Ethics Committee (MREC) and IIUM Research Ethics Committee (IREC)
- c) Apply for approval from corresponding research facilities to be conducted: Ministry of Health Hospital or Sultan Ahmad Shah Medical Centre
- d) Once the proposal and ethics is approved, data collection should start.

POSTGRADUATE STUDENT RESEARCH PROPOSAL PRESENTATION & APPROVAL APPLICATION



LINKS FOR ONLINE SUBMISSION:

- KRC : <http://iiumedic.net/forms/view.php?id=20747>
- IREC : <http://www.iium.edu.my/irec/how-apply/documentation>
- IACUC : <http://www.iium.edu.my/icracu/resource-centre/iacuc-info>
- NMRR & MREC : <https://www.nmrr.gov.my/fwbLoginPage.jsp>

NOTE:

- KPGC : Kulliyah of Medicine Postgraduate Committee
- KRC : Kulliyah of Medicine Research Committee
- IREC : IIUM Research Ethics Committee
- IACUC : Institutional Animal Care & Use Committee of IIUM
- NMRR : National Medical Research Register
- MREC : Medical Research & Ethics Committee

4. Research Progress Report

- a) Update in **i-MONITOR** every 6 months.
- b) Supervisor to review and submit the research progress report to HOD for recommendation of report latest by week 13.
- c) A student will be dismissed from the programme upon the recommendation of the KPGC and approval of the UCPS if he/she obtains an 'Unsatisfactory Progress (UP)' grade for two (2) consecutive semesters.

5. Intention to Submit Thesis and Nomination of Examiners using iViva

- a) Three months prior to submission of thesis date, student must submit **Notification of Intention to Submit Thesis** and the abstract using the i-Viva.
- b) Supervisor to submit Nomination of External Examiner(s) **CPS/EXAM/RTB/V2/RO** to be approved at Kulliyah of Postgraduate Committee Meeting before proceeding to nominate the examiners in the iViva.

6. Research Findings Presentation

- a) One month before submission of thesis date, student to submit **Notification of Intention to Present Research Finding Form CPS-REG/11/2005**.
- b) One week before presentation, student to submit presentation slides to PG Office (for assessors).
- c) Student must obtain at least 65% in Research Finding Presentation assessment to submit thesis.

7. Thesis Submission

- a) Do all the necessary corrections following research finding presentation.
- b) Submit **soft bound copy, Turnitin and proof of publication using the iViva**.
- c) Examiners:
 - Master by Mixed Mode: 1 internal examiner
 - Master by Research: 1 internal & 1 external examiners
 - PhD: 1 internal & 1 external examiners
- d) The student who has completed and submitted his thesis / dissertation to the Centre of Studies for the evaluation of the examiner, will be given a Thesis Examination (TE) status, upon approval from SV, PG Office administrative, Deputy Dean of Postgraduate along with the clear financial status. Student need to talk to the Finance Office for this matter.

8. Post Thesis Evaluation Meeting (PTEM) or Viva

- a) Masters - at Kulliyah level.
- b) PhD - at CPS level as viva voce.
- c) Student and SV are required to attend PTEM.
- d) Appointment of Post Viva SV

9. Final Thesis Submission

- a) Student must follow the Thesis Manual Appendix Version 2015 for the formatting of the thesis
- b) Student to get approval from Post Viva SV
- c) Final thesis submission using i-Viva and review by Post Viva SV, PG Office administrative, Deputy Dean Postgraduate and the Dean
- d) Student declares copyright and status open access.
- e) The approval by the Dean of the final thesis will alert the library to pull the thesis and other data from iViva system into IIUM Library Student Repository System.

Note:

- a) Please follow all the deadlines.
- b) Send all email communication or submission to PG coordinator and c.c to HOD and SV committee.
- c) **All the forms are to be submitted via i-VIVA**

Appendix 7: Checklist Form Submission for PG Coordinator and Assistant PG Coordinator

1. Registration

- a) Submit to HOD for recommendation for registration in week 1.
- b) To recommend / not recommend for registration of research proposal for the current semester.
- c) Forward to DDPG for approval
- d) Department to appoint academic advisor for the student (week 1-4)

2. Research Proposal Presentation

- a) To present latest by week 11 / semester 1.
- b) Master: Arranged by department.
- c) PhD: Arranged by PG Office.
- d) Submission by student:
 - i) One month before presentation date:
 - Submit intention to present research proposal form.
 - ii) One week before presentation:
 - Submit presentation slides to PG Coordinator (for assessors).
- e) Preparation by the department (2 weeks prior):
 - Notice of presentation to department members and supervisory committee.
 - Appointment of assessors (notify PG Office for letter of appointment).
 - Research Proposal Presentation Assessment Form.
 - Summary Assessment Form.
 - Attendance list for all non-clinical PG Students KOM (compulsory).
- f) Action by the department after research proposal presentation (within one week) :
 - Collect assessment forms from the assessors.
 - Endorsement of the results at the department level (non-clinical PG).
 - Submit the endorsed results to PG office.
 - Should the student need to repeat his/her research proposal presentation, it must be conducted in the semester 1.
 - If the student fails the second attempt, proceed with the procedure of repeat semester.

3. Intention to Submit Thesis and Nomination of Examiners using iViva

Three months prior to submission of thesis date:

- Student must submit **Notification of Intention to Submit Thesis** and the abstract using the i-Viva.
- Supervisor to submit Nomination of External Examiner(s) **CPS/EXAM/RTB/V2/R0** to be approved at Kulliyah of Postgraduate Committee Meeting before proceed to nominate the examiners in the iViva.

4. Research Findings Presentation

- a) To present in the final semester.
- b) Master: Arranged by department – to present at the department level.
- c) PhD: Arranged by PG Office.
- d) One month before submission of thesis date
 - Student to submit **Notification of Intention to Present Research Finding Form CPS-REG/11/2005**.
- e) One week before presentation, submit presentation slides to PG Coordinator (for assessors).
- e) Preparation by the department (2 weeks prior):
 - Notice of presentation.
 - Appointment of assessors (notify PG Office for letter of appointment).
 - Research Findings Presentation Assessment Form.
 - Summary Assessment Form.
 - Attendance list for all non-clinical PG Students KOM (compulsory).
- f) Action by the department after research finding presentation (within one week):
 - Collect assessment forms from the assessors.
 - Endorsement of the results at the department level.
 - Submit the endorsed results to PG office.
 - Set the date of submission of the dissertation / thesis to the PG office.

5. Thesis Submission and Thesis Examination (TE) Grace Period

- a) Student need to submit **soft bound thesis, Turnitin report and proof of publication using the iViva**.
- b) The examination of the dissertation/thesis can be can be monitored using the iViva by the student, SV and PG Office administrative.
- c) The examination report should be received by the PG Office/Viva Unit within 2 months.
- d) The student who has completed and submitted his thesis / dissertation to the Centre of Studies for the evaluation of the examiner, will be given a Thesis Examination (TE) status, upon approval from SV, PG Office administrative, Deputy Dean of Postgraduate along with the clear financial status.
- e) The maximum period allowed for 'TE' status is as follows:

Mode of Programme	Period of 'TE'
Research Only	Additional two (2) months after correction period.
Mixed Mode	Additional one (1) month after correction period

6. Post Thesis Evaluation Meeting (PTEM)/Viva

- a) Department needs to arrange for PTEM for Master students within the Thesis Examination (TE) grace period while the Viva Unit will arrange for Viva for PhD students.
- b) In PTEM, the following personnel will be involved:
 - Head of the Department as Chairperson.
 - **PG co-ordinator**
 - Supervisor(s) or representative(s).
 - Internal examiner(s) (if deemed necessary).

- External examiner (if deemed necessary).
 - Student.
 - Secretary (minute taking)
- c) Preparation by department (2 weeks prior):
- Invitation letter (signed by Dean)
 - Attendance form
 - Dissertation/ thesis marks and details
 - Chairman script
 - Result Form
 - Viva Result Form
 - Minute of PTEM
 - Master Examiners Report Form (Internal & External Examiners).

7. Final Thesis Submission

- a) Student must follow the Thesis Manual Appendix Version 2015 for the formatting of the thesis.
- b) Student to get approval from Post Viva SV.
- c) Final thesis submission using i-Viva and review by Post Viva SV, PG Office administrative, Deputy Dean Postgraduate and the Dean.
- d) Student declares copyright and status open access.
- e) The approval by the Dean of the final thesis will alert the library to pull the thesis and other data from iViva system into IIUM Library Student Repository System.

Appendix 8: Rubric For Research Proposal And Research Findings Assessment

No.	Domain	Criteria	Marks Allocated	Marks Obtained
1	Title	Clearly describe what the study is all about.	10	
2	Introduction & Literature Review	Able to convince that the study is important. Research gap clearly described. Important background of the study sufficiently described. Relevant and recent references are properly cited. Conceptual framework clearly explained.	20	
3	Research objectives	Research objectives are specific, measurable and clearly described.	10	
4	Methodology	Study population/animal clearly described. Correct study design for the said objectives. Sample size or study power properly described. Sampling method chosen was correct and described clearly. Variables properly defined and data collection properly described.	20	
5	Statistical analysis, expected outcomes & dummy Tables	Statistical method properly planned to answer each objective. Expected outcome clearly defined and presented in a clear dummy tables/figures.	20	
6	Research management	Important milestones & expected timeline showed. Financial implication estimated properly with justification.	10	
7	Presentation & Interaction	Clarity, legibility and quality of slides. Keeping to time (presentation). Ability of student to provide meaningful response to questions by audience.	10	

Appendix 9: Publication Requirements

As part of the requirement for graduation, postgraduate students in the related study mode are required to achieve the minimum points of publication equivalent (PE). The matrices for PE is outlined in the table below:

Mode of study	PE required
Master by coursework and research	Not applicable
Master clinical specialist training (MQF Level 7)	Minimum PE 0.3
Master by research	Minimum PE 0.6
Doctoral/PhD clinical specialist training (MQF Level 8)	Minimum PE 0.7
PhD by research	Minimum PE 2. At least 1 PE from indexed journal.

In addition to the flexibility to the type of publications mentioned above, a new matrix for publication type and PE is as follows:

Type of publications	PE
Indexed journal	1
Non-indexed journal	0.7
Indexed conference proceeding	0.6
Poster, non-indexed conference proceeding or any publications recognized by Kulliyyah.	0.3