

PANDUAN PRASISWAZAH

DOKTOR PERUBATAN 20²³₂₄

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Sesi Akademik 2023-2024

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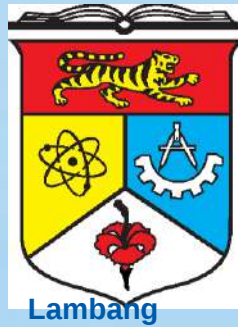
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puncak dari usaha kita ke arah
memenuhi tuntutan dan aspirasi rakyat
yang ingin melihat bahawa bahasa ibunda
mempunyai kedaulatan dan kedudukan
yang sewajarnya di dalam usaha
memenuhi keperibadian nasional*

(Ucapan Tun Abdul Razak di Konvokesyen Pertama UKM, 1973)





Lambang

Universiti Kebangsaan Malaysia (UKM) ialah sebuah perisai yang berpetakempat. Setiap petak mengandungi gambar dan warna latar yang berlainan dengan membawa maksud tertentu. Gambar yang didapati dalam petak tersebut ialah seperti yang berikut :

- * Seekor harimau berwarna kuning yang gagah sedang menyerang ke arah kanan berlatar warna merah.
- * Simbol atom berlatar warna kuning.
- * Simbol teknologi berlatar warna biru.
- * Sekuntum bunga raya berwarna merah berlatar warna putih.

Buku

Buku melambangkan ilmu pengetahuan, iaitu peranan utama UKM sebagai institusi pengajian tinggi dan penyelidikan.

Perisai

Perisai bererti keteguhan. Keteguhan yang dimaksudkan ialah kemampuan UKM memainkan peranan sebagai institusi pengajian tinggi di negara ini.

Harimau

Harimau melambangkan keberanian dan kegagahan. Harimau mencerminkan masyarakat Malaysia yang berteraskan kebudayaan Melayu. Harimau garang menggambarkan kesediaan dan keupayaan UKM mara memerangi kejahatan, kejahatan dan kepalsuan.

Atom dan Teknologi

Simbol atom dan teknologi melambangkan konsep pembangunan negara yang berlandaskan sains dan teknologi moden. UKM sebagai institusi ilmu bertanggungjawab mengeluarkan tenaga mahir dalam semua bidang untuk memenuhi keperluan pembangunan negara.

Bunga Raya

Bunga raya adalah bunga kebangsaan Malaysia. Lima helai ranggi melambangkan lima prinsip Rukun Negara yang dihayati dan sentiasa dipelihara oleh rakyat Malaysia.



Kandungan

Kata Aluan Naib CanselorTarikh Sesi

Akademik

Pihak Berkuasa dan Pegawai Universiti 16

Lembaga Pengarah Universiti 17

Pegawai Pengurusan Utama 18

Falsafah, Misi, Wawasan dan Matlamat UKM 26

Latar belakang UKM 27

Pentadbiran Fakulti 29

Latar belakang Fakulti Perubatan UKM 68

Ijazah Doktor Perubatan

Struktur Kurikulum 71

Objektif Program PendidikanObjektif Umum

Hasil Pembelajaran ProgramStruktur Kursus

Tahun 1 77

Tahun 2 86

Tahun 3 97

Tahun 4 102

Tahun 5 109

Penilaian Pelajar 115

Peraturan-peraturan Fakulti Perubatan Di Bawah Peruntukan 118

Peraturan-peraturan Universiti Kebangsaan Malaysia (Pengajian Sarjana Muda)



Kata Alu-aluan

Assalamualaikum w.b.t dan Salam Sejahtera

Saya merakamkan setinggi-tinggi tahniah atas kejayaan saudara dan saudari melanjutkan pengajian ke Universiti Kebangsaan Malaysia (UKM) di peringkat Ijazah Sarjana Muda. UKM amat berbangga menerima kehadiran saudara dan saudari yang telah mempamerkan kecemerlangan yang tinggi dalam pelajaran masing-masing. Anda sememangnya bertuah terpilih menjadi sebahagian daripada warga universiti watan ini, yang ditubuhkan lebih 51 tahun dahulu pada 18 Mei 1970 atas aspirasi dan perjuangan masyarakat dan pejuang-pejuang bangsa yang ingin melihat penubuhan sebuah universiti beracukan semangat kebangsaan.

Sepanjang pengajian di UKM, saudara-saudari digalakkan untuk berinovasi dan berusaha gigih untuk mencapai kejayaan yang cemerlang. Rebutlah peluang yang disediakan untuk memperkayakan ilmu pengetahuan dan menjadi modal insan yang berilmu.

Saudara dan saudari juga digalakkan untuk menyertai secara aktif dalam pelbagai aktiviti keilmuan, kokurikulum, kebudayaan, sukan dan sebagainya bagi memantapkan pengetahuan dan memantapkan pengalaman masing-masing. Saya juga berharap para pelajar dapat bergerak sederhana dengan pelan strategik dan hala tuju universiti melalui penghayatan nilai TERAS iaitu *Talent* (Bakat), *Ethics* (Etika), *Revitalise* (Memperkasa), *Agile* (Tangkas) dan *Soul* (Jiwa) yang menjadi lembayung bagi UKM untuk membina universiti yang keterhadapan dan cemerlang.

Semoga saudara-saudari akan terus mencapai kejayaan cemerlang dalam pengajian yang diikuti dan berusaha meneroka pelbagai ilmu baru yang boleh menyumbang kepada pembangunan diri, masyarakat dan negara. Gunakanlah peluang melanjutkan pengajian ini untuk mengejar cita-cita dengan keazaman, tekad dan kesungguhan yang tinggi.

Sekian.

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SEMESTER I		
TARIKH	MINGGU	AKTIVITI
01 Okt 2023 - 08 Okt 2023	1	Pendaftaran & Minggu Apresiasi Watan (MAW)
09 Okt 2023 - 15 Okt 2023	1	Kem PPA
16 Okt 2023 - 10 Dis 2023	8	Sesi Pembelajaran
11 Dis 2023 - 17 Dis 2023	1	CUTI PERTENGAHAN SEMESTER
18 Dis 2023 - 11 Feb 2024	8	Sesi Pembelajaran
12 Feb 2024 – 18 Feb 2024	1	CUTI
19 Feb 2024 - 25 Feb 2024	1	MINGGU ULANGKAJI
25 Feb 2024 - 10 Mac 2024	2	PEPERIKSAAN AKHIR SEMESTER I
11 Mac 2024 - 17 Mac 2024	1	CUTI AKHIR SEMESTER I

SEMESTER II		
TARIKH	MINGGU	AKTIVITI
18 Mac 2024 - 7 Apr 2024	3	Sesi Pembelajaran
8 Apr 2024 - 14 Apr 2024	1	CUTI
15 Apr 2024 - 19 Mei 2024	5	Sesi Pembelajaran
20 Mei 2024 - 26 Mei 2024	1	CUTI PERTENGAHAN SEMESTER
27 Mei 2024 - 21 Jul 2024	8	Sesi Pembelajaran
22 Jul 2024 – 28 Jul 2024	1	MINGGU ULANGKAJI
29 Jul 2024 - 11 Ogos 2024	2	PEPERIKSAAN AKHIR SEMESTER II
12 Ogos 2024 - 9 Sept 2024	4	MINGGU ULANGKAJI SEMESTER I & II
9 Sept 2023 - 22 Sept 2023	2	PEPERIKSAAN (U) SEMESTER I & II
JUMLAH MINGGU	51	

Catatan :

12 & 13 November 2023	Ahad & Isnin	Cuti Hari Deepavali & Cuti Hari Deepavali (Cuti Gantian)
25 Disember 2023	Isnin	Cuti Hari Krismas
01 Januari 2024	Isnin	Cuti Tahun Baru
25 Januari 2024	Khamis	Cuti Thaipusam
01 Februari 2024	Khamis	Cuti Hari Wilayah
10, 11 & 12 Februari 2024	Sabtu & Ahad & Isnin	Cuti Tahun Baru Cina & Cuti Tahun Baru Cina (Cuti Gantian)
28 Mac 2024	Khamis	Cuti Nuzul Quran
10 & 11 April 2024	Rabu & Khamis	Cuti Hari Raya Aidilfitri
01 Mei 2024	Rabu	Cuti Hari Pekerja
22 Mei 2024	Rabu	Cuti Hari Wesak
03 Jun 2024	Isnin	Hari Keputeraan YDP Agong
17 Jun 2024	Isnin	Cuti Hari Raya Aidil Adha
07 & 08 Julai 2024	Ahad & Isnin	Cuti Awal Muharam & Cuti Awal Muharam (Cuti Gantian)
31 Ogos 2024	Sabtu	Cuti Hari Kebangsaan
16 September 2024	Isnin	Hari Malaysia / Cuti Maulidur Rasul

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Falsafah, Wawasan, Misi dan Matlamat UKM

Falsafah

Paduan antara iman kepada Allah dengan ilmu yang bermanfaat serta gabungan antara teori dan amal adalah dasar utama bagi perkembangan ilmu, proses pembinaan masyarakat terpelajar dan pembangunan Universiti.

Wawasan

UKM bertekad menjadi Universiti terkehadapan yang mendahului langkah masyarakat dan zamannya bagi membentuk masyarakat dinamis, berilmu dan berakhlak mulia.

Misi

Menjadi Universiti terpilih yang memartabatkan bahasa Melayu serta mensejagatkan ilmu beracuan budaya kebangsaan.

Matlamat

Untuk menjadi pusat keilmuan yang terkehadapan, berteknologi dan berdaya saing yang memartabatkan bahasa Melayu sebagai pusat bahasa ilmu, membangun masyarakat dinamis dan berakhlak mulia, mengantarabangsakan citra dan sumbangan UKM bagi masyarakat sejagat, menjana teknologi yang bermanfaat kepada masyarakat.

Imbasan Sejarah Universiti Kebangsaan Malaysia

Cetusan pertama gagasan perlunya pendidikan tinggi untuk orang Melayu muncul dalam Mesyuarat Majlis Raja-raja pada 1903. Za'ba, seorang cendekiawan, menulis berkenaan gagasan tersebut dalam akhbar Lembaga Melayu pada 1917. Gerakan pemikiran, perdebatan serta tekad golongan cendekiawan Melayu untuk menubuhkan sebuah universiti dan menggunakan bahasa Melayu sebagai bahasa pengantar di institusi pengajian tinggi bermula pada 1923 apabila Abdul Kadir Adabi, seorang lagi cendekiawan Melayu mengemukakan memorandum gagasan tersebut kepada DYMM Sultan Kelantan. Namun demikian, pemikiran dan tekad tersebut tidak dapat berkembang dan terlaksana kerana wujudnya berbagai-bagai halangan dan rintangan oleh tekanan kolonialisme.

Mulai 1957 hingga 1967, perjuangan untuk penubuhan universiti kebangsaan menjadi semakin bersemarak sebagai memenuhi tuntutan dan semangat kemerdekaan bangsa dan negara. Sehubungan itu, pada 1968 cendekiawan Melayu telah membentuk sebuah jawatankuasa penaja yang berperanan merancang penubuhan sebuah universiti kebangsaan. Pelbagai forum budaya dan politik diadakan bagi mendapat sokongan kerajaan dan rakyat untuk mewujudkan sebuah institusi pengajian tinggi yang memartabatkan bahasa Melayu sebagai bahasa pengantar dalam semua bidang pengajian dan keilmuan. Perjuangan yang tidak pernah luput itu mencapai kejayaan dengan penubuhan Universiti Kebangsaan Malaysia (UKM) pada 18 Mei 1970 yang memulakan operasi pertamanya di Lembah Pantai Kuala Lumpur. Kumpulan pertama pelajar prasiswazah seramai 192 orang dan dua (2) orang siswazah mula mendaftar di tiga buah fakulti iaitu Fakulti Sains, Fakulti Sastera dan Fakulti Pengajian Islam.

Pada 1974, UKM menubuhkan UKM Kampus Sabah di Kebun Kawang, Papar. Nama Kebun Kawang kemudiannya ditukar kepada Limauan oleh Tun Datu Mustapha Datu Harun yang ketika itu sebagai Ketua Menteri Sabah. Kampus yang menempatkan Fakulti Sains dan Sumber Alam ini berpindah ke Bukit Padang, Kota Kinabalu pada 1980. Seterusnya berpindah ke Menggatal, Tuaran pada 1990 bersama Fakulti Sains Pembangunan yang asalnya ditempatkan di Kampus Induk Bangi. Dengan penubuhan Universiti Malaysia Sabah pada 1994, UKM Kampus Sabah ditutup secara rasminya pada 1996 dan kedua-dua fakulti berkenaan dipindahkan ke Kampus Induk Bangi, Selangor.

Sejak 45 tahun penubuhannya, UKM telah menghasilkan 170,112 graduan prasiswazah dan siswazah. Universiti ini terus berkembang pesat sebagai sebuah universiti awam terkehadapan yang kini mempunyai tiga belas (13) fakulti dan tiga belas (13) institut kecemerlangan penyelidikan. UKM juga mempunyai entiti yang beroperasi secara komersial, iaitu UKM Holdings Sdn. Bhd. dan UKM Technology Sdn. Bhd. sebagai satu pendekatan dalam mengkomersilkan dan memasyarakatkan kepakaran yang dimiliki di samping menjaga kewangan Universiti.

Kampus induk UKM di Bangi yang memulakan operasinya pada 1977 mempunyai keluasan 1,096.29 hektar. Kampus Induk Bangi menempatkan sembilan (9) fakulti, dan sebelas (11) institut penyelidikan. Selain itu, UKM juga mempunyai sebuah kampus di Jalan Raja Muda Abdul Aziz, Kuala Lumpur dengan keluasan 20 hektar yang menempatkan Fakulti Sains Kesihatan, Fakulti Pergigian, Fakulti Farmasi dan Institut Telinga, Pendengaran dan Pertuturan (I-HEARS). Manakala Pusat Perubatan UKM (PPUKM) yang mempunyai keluasan 22.3 hektar di Cheras, Kuala Lumpur menempatkan Fakulti Perubatan, Hospital Canselor Tunku Muhriz dan Institut Perubatan Molekul (UMBI).

Berasaskan kecemerlangan dalam bidang penyelidikan lebih empat dekad, UKM dipilih sebagai salah sebuah universiti penyelidikan di Malaysia pada 2006. Proses pemantapan bidang penyelidikan disusuli dengan pengwujudan projek-projek tertumpudi bawah dua belas (12) nic yang dikenalpasti iaitu Cabaran Membina Negara Bangsa; Pembangunan Lestari Wilayah; Tenaga Keterbaharuan; Teknologi Kesihatan & Perubatan; Perubahan Iklim; Nanoteknologi & Bahan Termaju; Kepelbagaian Biologi dalam Pembangunan Bioteknologi; Informatik Isian; Penyelidikan Ekonomi, Kewangan dan Perniagaan; Pendidikan dan Peradaban; Politik dan Keselamatan; dan Penyelidikan Transformasi Luar Bandar.

Universiti juga adalah penerima Anugerah Kualiti Perdana Menteri 2006 dan memperolehi status Swa-Akreditasi tahun pada 2010 dan diberi status Universiti Autonomi pada Januari 2012. Penganugerahan ini adalah pengiktirafan bagi kecemerlangan UKM dalam bidang akademik dan tadbir urus. UKM melestarikan kecemerlangannya melalui Pelan Strategik UKM 2000-2020 (PS2020).

Kini, UKM memberi tumpuan terhadap enam (6) Bidang Keberhasilan Utama yang dijangka terus melonjakkannya lebih tinggi. Tumpuan tersebut adalah Graduan Beraspirasi Kebangsaan, Berkompeten, Berdaya Saing dan Inovatif; Penyelidikan dan Inovatif yang Berimpak Tinggi; Perkongsian Pintar dan Keterlibatan Strategik; Sumber Manusia dan Institusi Cemerlang; Penjanaan Kekayaan Secara Optimum dan Strategik; dan Prasarana dan Persekitaran Ilmu yang Kondusif.

Bagi memastikan roh perjuangan para pelopor UKM terus subur dan segar, kesedaran terhadap sejarah penubuhan dibugar secara berterusan. Menginsafi bahawa UKM adalah institusi harapan masyarakat, seluruh warga universiti sama ada warga kerja mahupun pelajar diimbau supaya menyelami dan memahami keperluan rakyat menerusi persoalan yang berlegar dalam kehidupan bernegara selaras dengan peranan UKM sebagai Pendaulat Amanah Negara. Namun ini tidak menghadkan jangkauan universiti terhadap segenap perkembangan malah pergolakan yang berlaku di peringkat antarabangsa. Universiti yang memiliki pelbagai kepakaran merentas disiplin diyakini berupaya melangkaui garis psikologi yang membolehkannya beraksi tangkas dalam arena global serta sama-sama memberi jawapan dan penyelesaian permasalahan yang menghambat kehidupan sejagat..

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JABATAN PATOLOGI

Ketua Jabatan

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Timbalan Ketua Jabatan

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MD(UKM), M.S.Ortho.(UKM)

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BSc., MBBCh,BAO(Ireland), MEMed(UKM)

Prof. Madya Dr. Tan Toh Leong
MD(USM), MEMed(UKM)

Prof. Madya Dr. Hashim Embong
MD(UKM), MEMed(UKM)

LT. Kol. Bersekutu (PA) Prof. Madya Dr. Mohd Hisham Mohd Isa
MD (USM), DrEmMed (UKM)

Dr. Shamsuriani Md Jamal
MBBS(Adelaide), MEMed(UKM)

Dr. Nik Azlan Nik Muhamad
MBBCh BAO(Ireland), MEMed(UKM)

Dr. Dazlin Masdiana Sabardin
MD(UKM), MEMed(UKM)

Dr. Muhammad Munawar Mohamed Hatta
MBBS(IIUM), MEMed(UKM)

Dr. Ida Zarina Zaini
MBBS(UM), M.Med.Emergency Medicine(USM)

Dr. Azlan Helmy Abd Samat
MBBCHBAO (UCD), DrEmMed (UKM)

Dr. Amirudin Sanip
MD (UKM), DrEmMed (UKM)

Dr. Aireen Zamhot
MD (VSMU), DrEmMed (UKM)

Dr. Evelyn Chau Yi Wen
MD(UGM) DrEmMed (UKM)

Ketua Program

Dr. Alias Mahmud

PhD(UPM), Med(UPM), PgCerTHE(Dundee), BachHsc(Unisel), DMHSE(Unisel), DMA(MOH)

Penyelaras Program

Che Salim Sulaiman

DTRP (UiTM), DMA (MOH), Post Basic Orthopaedic Nursing (MOH), BSc. Nursing (UM)

Pengajar

Puan Shirin Khashim

Diploma in Nursing (UKM), RN, Bachelor of Nursing (Hons)(UiTM), Post Basic Diabetes Educator (HCTM, UKM), Master of Health Sciences (Nutrition)(UKM) Registered Nurse U41/ Diabetes Educator/ Part-time Lecturer Faculty of Medicine

Puan Shahidatul Shuhada Mohd Yusof

Diploma in Medical Assistant (WIDAD), Bachelor of Environmental Health (Hons) (UniKL), Penolong Pegawai Perubatan U29 Fakulti Perubatan

JABATAN PERUBATAN KELUARGA

Ketua Jabatan

Prof. Madya Dr. Saharuddin Ahmad

MD (UKM) MMed (Fam Med) (UKM)

Pensyarah

Prof. Dr. Noor Azah Abd Aziz

MD (USM), MMed (Fam Med)(UKM), MPhil (UoN) PGCert (Harvard)

Prof. Madya Dr Aznida Firzah Abdul Aziz

MBBS (UM), MMed (Fam Med) (UKM), PhD (Community Health)(UNU IIGH-UKM)

Prof. Madya Dr. Noorlaili Mohd Tauhid

MD(UKM), MMed (Fam Med)(UKM) , PhD (Australia)

Prof. Madya Dr. Leelavathi a/p Muthupalaniappen

MBBS (Jaipur), MMed (Fam Med)(UKM), GDFPD(NUS)

Prof Madya Dr. Noor Azimah Muhammad

MBBS (Queensland), MMed Fam Med (UKM), PhD(Community Health) (UKM)

Prof. Madya Dr. Saharuddin Ahmad

MD (UKM) MMed (Fam Med) (UKM)

Prof. Madya Dr. Tan Chai Eng

MD (UKM), MMed (Fam Med) (UKM)

Dr. Zuhra Hamzah

MBBS (UM), MMed (Fam Med) (UKM)

Dr. Syahnaz Mohd Hashim

MBBch BAO (Ireland), MMed (Fam Med) (UKM), PhD (UKM)

Prof. Madya Dr. Mohd Fairuz Ali
MBBS (W.Aus), MMed (Fam Med) (UKM) PGCert in Dementia (UTAS) Clinical Fellowship in
Community Stroke Care (UKM)

Dr. Rashidi Mohamed Pakri Mohamed
MD (UKM) Dr Fam. Med (UKM)

Prof. Madya Dr. Ezura Madiana
Md. Monoto, IBCLC MBBS (IIUM), Dr. Fam.Med (UKM)

Dr. Teh Rohaila Jamil
MB BCh BAO (Ireland), Dr. Fam.Med (UKM)

JABATAN PSIKIATRI

Ketua Jabatan

Prof. Madya Dr. Azlin Baharudin
MD(UKM), M.Med. Psych(UKM)

Pensyarah

Prof. Dr. Marhani Midin
MBBCh.BAO(Dublin), M.Med. Psych(UKM), MIMH(Australia)

Prof. Dr. Nik Ruzyaneyi Nik Jaafar
MBBCh BAO(Ireland), M.Med. Psych(UKM)

Prof. Madya Dr. Wan Salwina Wan Ismail
MBBS(Adelaide), M.Med. Psych(UKM), Adv.M.Ch.Ado.Psych.(UKM)

Prof. Madya Dr. Fairuz Nazri Abdul Rahman
MBChB(Glasgow), M.Med. Psych(UKM)

Prof. Madya Dr. Chan Lai Fong
MD(UKM), M.Med. Psych(UKM)

Prof. Madya Datin Sri Dr. Suriati Mohamed Saini
MBBS(Adelaide), M.Med. Psych(UKM)

Prof. Madya Dr. Suzaily Wahab
MD(UKM), M.Med. Psych(UKM)

Prof. Madya Dr. Tuti Iryani Mohd Daud
MBBS(Adelaide), M.Med. Psych(UKM)

Puan Raynuha A/P Mahadevan
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Dr. Shalisah Sharip
BA(Hons.)(UKM), M.A.(Clin. Psych)(UKM), P.hD (University of Newcastle Australia)

Dr. Luke Woon Sy-Cherng
MD (USU), M.Med Psych (UKM)

Dr. Hajar Mohd Salleh Sahimi
M.B.B.Ch, B.A.O. (Dublin), MRCPsych (UK)

Dr. Eu Choon Leng
MD.VSMU (Russia), Dr. Psych (UKM)

Dr. Nurul Ain Mohamad Kamal
MD (UNPAD), Dr. Psych (UKM)

Dr. Nuur Asyikin Mohd Shukor
MBBS (Monash Malaysia), Dr. Psych (UKM)

Dr. Farah Deena Abdul Samad
MD(UPM), M.Med Psych (UKM)

Dr. Kanit Tha Deang
MD(UKM), M.Med Psych (UKM)

Dr. Jane Lim Tze Yn
MD(UKM) Dr Psych (UKM)

JABATAN RADIOLOGI

Ketua Jabatan

Prof. Madya Datin Dr. Shahizon Azura Mohamed Mukari
MBChB(Glasgow), MMed (Rad) (UKM), Fellowship in Neuroradiology (UM)

Pensyarah

Prof. Dr. Hamzaini Abdul Hamid
MBBCh(Ireland), M Med (Rad) (UKM), Fellowship in Paediatric Radiology (Toronto)

Prof. Madya Dr. Rozman Zakaria
MBBS (Queensland), MMed.(Radiology)(UKM)

Prof. Madya Dr. Faizah Mohd Zaki
MD(UKM), MMed(Rad)(UKM), Fellowship in Paediatric Radiology (Toronto)

Prof. Madya Dr. Suraya Aziz
BMBS, BMedSci (Nottingham), MMed(Rad)(UKM)

Prof. Madya Dr. Nur Yazmin Yaacob
MBchB(Otago), MMed(Rad)(UKM)

Prof. Madya Dr. Kew Thean Yean
BMBS, BMedSci (Nottingham), MMed(Rad)(UKM)

Prof Madya Dr. Hanani Abdul Manan
B.Sc.(UKM), M.Sc.Medical Physics (USM) , PhD.Biomedicine (Neuroimaging) (UKM)

Dr. Rizuana Iqbal Hussain
MBBS(Bangalore), MMed(Rad)(UKM)

Dr. Nik Azuan Nik Ismail
MBBCh, BAO (Ireland), MMed(Rad)(UKM)

Dr. Erica Yee Hing @ Wong
MBBS (Mal), MMed (Rad) (UKM)

Dr. Mohd Imree Azmi
MBChB (Manchester), Dr Rad (UKM)

Dr. Aida-Widure Mustapha Mohd Mustapha
MBChB (Sheffield), Dr (Rad) (UKM)

Dr. Leong Yuh Yang
MD (UKM), Dr Rad (UKM), FRCR UK, MMED Nus Sg

Dr. Nik Farhan Nik Fuad
MBBChBaO (NUI), Dr Rad (UKM)

Dr. Juliana Fairuz Makhtar
MD(Moscow), Dr Rad (UKM)

Dr. Ho Shuang Yee
MD (RSMU Russia), MMed(Diagnostic Radiology) (NUS Singapore), FRCR UK

Dr. Emilia Rosniza Mohammed Rusli
MBBChBaO (NUI), Dr Rad (UKM)

Dr. Isa Azzaki Zainal
MD(UGM), Dr Rad (UKM)

Dr. Chai Jia Ning
MBBS (UM), Dr Rad (UKM)

Dr. Ani Anisa Basir
MBBS (UM) , Dr Rad (UKM)

Dr. Mohamed Ariff Jaafar Sidek
BSc (USA) , Dip Edu, MSc (UK)

Dr. Mohamad Izzat Arslan Che Ros
MD (VSMU Russia), Dr Rad (UKM)

JABATAN SURGERI

Ketua Jabatan

Prof. Madya Dr. Shahrin Niza Abdullah Suhaimi
MBBS(Mal) MS SURG (UKM), AM (Malaysia) Fellowship in Endocrine (Tokyo)

Pensyarah

Prof. Dato' Dr. Razman Jarmin
MBBS (UM) MD(UKM), MS (UKM), SmSn(Per), Fellow in Hepatobiliary Surgery (Melbourne)

Prof. Dato' Dr. Hanafiah Haruna Rashid
BScMed.(St Andrews), MBChB(Edinburgh), FRCSE(Ireland), FRCSEd FRCS(Gen), CCST (Vaskular) (UK), AM(Mal)

Prof. Dato' Sri Dr. Mohd. Ramzisham Abdul Rahman
MBChB (Sheffield), MRCS(Edinburgh), MRCS(England), MS (UKM)

Prof. Dr. Rohaizak Muhammad
MBChB(Glasgow), FRCS(Glasgow), MS (UKM)

Prof. (Klinikal) Dr. Norlia Abdullah
MBBS(Malaya), Dr. Gen. Surg. (UKM), Kepakaran Lanjutan (Fellowship) Rawatan Barah Payudara & Rekonstruktif Payudara (Univ. of London)

Lt. Kol (PA) Prof. Dato' Dr. Zulkifli Md. Zainuddin
MD(UKM), MS (UKM), Board of Urology (Mal), Fellow in Urology (Australia) FRCS (Urol) Glasgow

Prof. Datuk Dr. Ismail Sagap
MB BCh (NuIreland), M. Gen Surg (UKM), Fellow CCF (CRS'06), FRCSEdin, FFAM'sia

Prof. Madya Dr. Azizi Abu Bakar
MBBS(Malaya), MS (UKM)

Prof. Madya (Klinikal) Dato' Dr. Jegan Thanabalan
MBBS(Mangalore), MS (UKM)

Prof. Madya Dr. Ramesh Kumar A/L Athi Kumar
MBBCh BAO, LRCP&SI (Ire.), MMedSc.(1st Hons.) (Ire.), MRCS(Ire.), FRCS(Ire.), MD(England), CCST(England)

Prof. Madya Dr. Azlanuddin Azman
MBBCh.BAO, BMedSc.(Ireland), MS (UKM)

Prof. Madya Dr. Nani Harlina Md. Latar
MBBS (Malaya), MS (UKM) PhD(Newcastle)

Prof. Madya Dato' Dr. Nik Ritza Kosai Nik Mahmood
BSc.(St. Andrews), MBChB (Manchester), MRCS (England), FRCS(UK)

Prof. Madya Dr. Farrah-Hani Imran
MB BCh BAO, LRCP & SI(RCSI), MRCS (Ireland), MS (Plastic) AM (Malaysia)

Prof. Madya Dato' Dr. Ainul Syahrilfazli Jaafar
MBChB(Sheffield), MS (UKM), MRCS(Edin), GCCT (Uni Melbourne)

Dr. Marjmin Osman
MD(USM), MS (UKM) European Board of Examination (EBPS)

Dr. Mohamad Azim Md. Idris
MBChB(Sheffield), MS (UKM)

Dr. Sanmugarajah a/l Paramasvaran
MBBS(Banaras), FRCS(Edinburgh), Masters in Neuro-Oncological Surgery

Dr. Zairul Azwan Mohd Azman
MD (UKM), MS Gen. Surg (UKM), Fellow in Robotic & Laparoscopic Colorectal Surgery (Seoul, South Korea), Fellow in Colorectal & General Surgeon (Malaysia)

Dr. Nur Afdzillah Abdul Rahman
MBBS (Lon) MS (UKM), Colorectal Fellowship (SUH, UK)

Prof. Madya Dr. Farizal Fadzil
MBChB (Manchester), MS (USM)

Dr. Hairulfaizi Haron
MBBS (Bangalore), MS (UKM)

Prof. Madya Dr. Kamalanathan a/l Palaniandy
MD (UKM), MRCS(Edinburgh), MS(USM), AM (Mal)

Prof. Madya Dr. Fam Xeng Inn
MD (UKM), Dr. Gen Surg (UKM) FRCS (Uro), (Glasg), Board Of Urology (Mal)

Dr. Nur Ayub Md. Ali
MBBCh,BAO (Ireland), Dr. Gen Surg (UKM)

Dr. Soon Bee Hong
MD (UKM), PhD

Dr. Ishamuddin Ismail
MS (UKM)

Dr. Lenny Suryani Safri
MD (USM) M. Gen Surg (UKM)

Dr. Chik Ian
MD (Dalhousie), M. Gen Surg (UKM)

Dr. Adzim Poh Yuen Wen
MD(UKM) MECSed, MS (Plastic) USM

Dr. Fahrol Fahmy Jaafar
BSc (UM), MBBS (IMU), M. Gen. Surg (UKM)

Dr. Khoo Hau Chun
MBBS (IMU), MRCS (Ire), M. Gen. Surg (UKM)

Dr. Adi Syazni Muhammed
MBBS BSc (UNSW), M. Gen. Surg (UKM)

Dr. Azrina Syarizad K. Zaman
MBBS (KCL, London) Fellow of European Board of Paediatric Surgery

Dr. Lim Li Yi
MBBS (Australia) Doctor Of Surg (UKM) FRCS Urology (Glasgow)

Dr. Kishen Raj a/l Chandrasakaran
MBBS (AIMST), M. Gen Surg (UKM)

Dr. Guhan A/L Muthkumaran
MBBS (imu), MRCSEd. Dr. Gen Surg (UKM)

Dr. Nabil Mohammad Azmi
MBBS (Cyberjaya) Doctor Of Surg (UKM)

Dr. Hisham Arshad b. Dr Habeebullah Khan
MBBS (Manipal) Doctor Gen Surg (UKM)

PUSAT KAJIAN KEJURUTERAAN TISU DAN PERUBATAN REGENERATIF (CTERM)

Ketua Jabatan

Prof. Madya Dr. Mohd Fauzi Mh Busra
BSc. Hons. (Biomedical Science) UKM, Ph.D (Tissue Engineering), UKM

Timbalan Ketua Jabatan

Prof. Madya Dr. Yogeswaran Lokanathan
BAppSc. Hons.(Biotechnology, USM),.PhD (Biochemistry,UKM)

Pensyarah

Prof. Madya Dr. Ng Min Hwei
BSc Hon (Biotechnology,UPM), MSc Med Sci (Pathology, UM), PhD Med Sci (Physiology, UKM)

Dr. Fazlina Nordin
BSc. (Microbiology) UKM, MMedSc (Pathology) UKM, PhD. (Cancer Studies) King's College London, UK.

Dr. Muhammad Dain Yazid
BSc. Hons. (Genetics, UKM), MSc. (Molecular Biology, UKM), Ph.D (Birmingham, UK)

Dr. Manira Maarof
BSc. Hons. (Biomedical Science, UKM), Ph.D (Tissue Engineering, UKM)

Dr. Nadiah Sulaiman
BSc. (Industrial Biology,UTM), MMedSc. (Physiology, UKM), PhD. (Uni. of Bristol, UK)

Dr. Nur Atiqah Haizum Abdullah

BSc Hons (Biochemistry, UM), MSc (Biochemistry, UM), PhD (Biochemistry and Cell Biology, Monash University, Australia)

Dr. Law Jia Xian

BSc (Hons) Biomedical Science, UKM), PhD (Tissue Engineering, UKM)

Penerangan Mengenai Fakulti Perubatan

Latar Belakang

Fakulti Perubatan telah ditubuhkan pada 30 Mei 1972 dengan Dekan pertama Dato' Dr. Amir Abas. Tujuan penubuhan Fakulti ini adalah untuk memberi peluang kepada pelajar-pelajar aliran kebangsaan mengikuti kursus perubatan dan dapat melahirkan ramai doktor-doktor Melayu dan tempatan. Fakulti ini memulakan kursus pra-perubatan di Fakulti Sains UKM Jalan Pantai Baharu, Kuala Lumpur pada Mei 1973 dengan pengambilan seramai 44 orang pelajar (39 lelaki dan 5 perempuan). Kursus perubatan praklinikal bermula pada bulan Mei 1974 di bangunan sementara Fakulti Perubatan di Jalan Raja Muda Abdul Aziz dalam Kompleks Hospital Kuala Lumpur. Pada 27 Februari 1975, Menteri Kesihatan Tan Sri Lee Siok Yew telah mengisytiharkan Hospital Kuala Lumpur sebagai Hospital Pengajar Fakulti Perubatan UKM bagi latihan tahun klinikal.

Pada awal penubuhannya, Fakulti Perubatan telah mendapatkan khidmat tenaga pengajar pinjaman dari Indonesia untuk pengajaran praklinikal dan dari negara-negara Commonwealth untuk pengajaran klinikal sementara menunggu pensyarah-pensyarah pelatih UKM kembali dari latihan perubatan di luar negara. Peperiksaan Ikhtisas Akhir Ijazah Doktor Perubatan yang pertama telah diadakan pada 19 hingga 31 Mac 1979 dan daripada 42 orang pelajar yang mengambil peperiksaan, 37 daripadanya telah lulus dan dikurniakan Ijazah Doktor Perubatan. Ini merupakan detik gemilang bagi Fakulti Perubatan khasnya dan UKM amnya kerana telah berjaya mengeluarkan graduan pertama Ijazah Doktor Perubatan. Fakulti juga telah memulakan program sarjana kepakaran perubatan mulai sesi 1981/82 bermula dengan Sarjana Bedah (Bedah Am) dan Sarjana Bedah (Ortopedik) dan diikuti dengan Sarjana Sains Perubatan dan Doktor Falsafah.

Pada awal 1990, Fakulti bercadang menubuhkan hospital pengajarnya sendiri dan pada 2 November 1993 pembinaan Hospital UKM (HUKM) telah dimulakan di tapak seluas 23 hektar di Jalan Tenteram, Bandar Tun Razak, Cheras. Pada 1 Julai 1997 HUKM telah siap dan memulakan operasinya. Pejabat Dekan dan jabatan-jabatan klinikal telah berpindah ke kompleks HUKM sementara jabatan-jabatan praklinikal masih mendiami kampus Jalan Raja Muda Abdul Aziz dan pelajar-pelajarnya menginap di Kolej Tun Dr. Syed Nasir, Jalan Temerloh, Kuala Lumpur; sementara pembelajaran Tahun III, IV, dan V dilakukan di HUKM dan pelajar-pelajarnya menginap di Kolej Tun Dr. Ismail. HUKM mempunyai keluasan lantai 200,000 meter persegi, kos pembinaannya bernilai RM 327,822,000.00 dan boleh menampung 1054 katil pesakit. Fakulti juga menawarkan program-program kejururawatan seperti Sarjanamuda Kejururawatan Dengan Kepujian, Diploma Kejururawatan dan Diploma Lanjutan Kebidanan. Fakulti juga telah mengorak langkah dengan menawarkan program Sarjana Kepakaran Lanjutan seperti Sarjana Lanjutan Dermatologi, Sarjana Lanjutan Kardiologi dan Sarjana Lanjutan Psikiatri Kanak-kanak dan Remaja. Sehingga kini, Fakulti Perubatan telah melahirkan 4423 orang doktor perubatan dan lebih 2100 orang pakar klinikal.

Visi

Untuk menjadi hab akademik perubatan yang terkehadapan dan berdaya saing berteraskan ilmu, inovasi dan pasukan profesional perubatan yang berdedikasi dalam membentuk masyarakat yang sihat dan bermaklumat.

Misi

Untuk memberi pendidikan dalam penyediaan profesional perubatan dan perkhidmatan bermutu tinggi berteraskan penyelidikan dalil perubatan, inovasi dan kepekaan sosial.

Objektif

Program ini dijalankan dengan tujuan untuk melahirkan doktor yang mahir dalam bidangnya. Semasa melaksanakan khidmat utamanya untuk memenuhi keperluan dan tuntutan kesihatan Malaysia, doktor ini akan berupaya :

1. Menggunakan pengetahuan, kemahiran dan memperlihatkan sikap yang diperlukan dengan cekap dan bijaksana.
2. Menceburi mana-mana bidang pengkhususan perubatan yang dipilihnya.
3. Bertugas di mana-mana situasi (hospital, pusat kesihatan dan lain-lain) yang berkenaan.
4. Mengenal pasti dan menganalisis masalah-masalah kesihatan pada tahap individu, keluarga dan masyarakat serta menyelesaikan masalah-masalah ini melalui peningkatan kesihatan pada tahap individu, keluarga dan masyarakat serta menyelesaikan masalah-masalah ini melalui peningkatan kesihatan, pencegahan, penyembuhan dan pemulihan semula dengan menggunakan sumber dengan cermat dan berkesan.
5. Menunjukkan kepekaan terhadap nilai-nilai agama dan moral, adat resam dan tradisi masyarakat serta menghormatinya di mana pun mereka bertugas.
6. Memimpin dan berperanan sebagai ahli pasukan kesihatan yang berkesan.
7. Menerima hakikat bahawa pendidikan perubatan adalah suatu proses yang berterusan seumur hidup.

DOKTOR PERUBATAN

1. CURRICULUM STRUCTURE

The curriculum structure is based on 8 broad outcome domains :

- i. Clinical Skills.
- ii. Scientific Foundation.
- iii. Professional Values & Attitude.
- iv. Population Health.
- v. Critical Thinking.
- vi. Information Management.
- vii. Communication Skills.
- viii. Entrepreneurship Skills

2. PROGRAMME EDUCATIONAL OBJECTIVES

The objective of this programme is to produce doctors who are able to:

1. apply their knowledge and skills in an effective and judicious manner whilst demonstrating an attitude that is appropriate and desirable.
2. function effectively in any healthcare setting (hospitals, healthcare centres, etc.)
3. recognize and analyze health problems at the level of the individual, family and community; and solve these problems through health promotion, disease prevention, treatment and rehabilitation, using the available resources in a cost-effective manner.
4. demonstrate sensitivity towards religious, moral, cultural and traditional values of the community they serve.
5. lead and play an effective role in the healthcare team.
6. pursue any field of specialization of their choice.
7. accept the principle of life-long learning.

3. GENERAL OBJECTIVE

This curriculum is designed to train students to apply knowledge and skills effectively in a holistic and professional manner expected of a doctor. It also prepares them to be leaders in the field of medicine in both the local context and the global arena.

4. PROGRAMME LEARNING OUTCOMES

By the end of the course students will demonstrate :

1. the ability to apply knowledge and clinical skills to practice safely and competently.
2. a scientific critical approach to problem solving and decision-making.
3. the ability to work collaboratively within a multi-professionals team with integrity and enthusiasm and to assume a leadership role when appropriate.
4. the ability to lead and collaborate with other health professionals in health promotion and disease prevention.
5. a caring attitude and sensitivity to the needs of self, patients and their families, colleagues and the community.
6. the ability to adopt a holistic approach to patient management.
7. effective communication and social skills.
8. ethical, spiritual and moral principles and abide by legal requirements.
9. competency in information and communication technology and its management.
10. the appropriate teaching skills and willingness to educate patients, their families, the community and colleagues.
11. a commitment to life long learning.

5. COURSE STRUCTURE

5.1 Faculty

Year 1

Semester I

FFFF1113	Cellular Biomolecules
FFFF1213	Tissues of Body
FFFF1333	Membranes & Receptors
FFFF1412	Metabolism
FFFF1813	Personal & Professional Advancement (PPA) IA

Semester II

FFFF1312	Human Genetics
FFFF1244	Infection & Immunity
FFFF1223	Mechanisms of Diseases
FFFF1424	Musculoskeletal System
FFFF1521	Clinical Sciences IB (History Taking II)
FFFF1622	Medicine & Society I
FFFF1822	Personal & Professional Advancement (PPA) IB

Year 2*Semester I*

FFFF2113	Blood & Lymph
FFFF2214	Cardiovascular System
FFFF2313	Respiratory System
FFFF2433	Urinary System
FFFF2511	Clinical Sciences IIA
FFFF2613	Medicine & Society II
FFFF2812	Personal & Professional Advancement IIA

Semester II

FFFF2125	Gastrointestinal & Hepatobiliary System
FFFF2242	Endocrine System
FFFF2325	Neuro Sciences
FFFF2443	Reproductive System
FFFF2522	Clinical Sciences IIB
FFFF2822	Personal & Professional Advancement IIB

Year 3

FFFF3119	Internal Medicine I
FFFF3129	Surgery I
FFFF3115	Family Medicine
FFFF3618	Medicine & Society III
FFFF3816	Personal & Professional Advancement III
FFFF3512	Radiology I

Elective

FFFF3922	Elective Posting
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Year 4

FFFF4118	Psychiatry
FFFF4127	Paediatrics I
FFFF4618	Obstetrics & Gynaecology I
FFFF4229	Orthopaedics
FFFF4212	ORL-HNS
FFFF4322	Ophtalmology
FFFF4422	Anaesthesiology
FFFF4823	Personal and Professional Advancement IV
FFFF4812	Special Study Module I

FFFF4822	Special Study Module II
FFFF4911	Forensic Pathology I (Semester I)
FFFF4921	Forensic Pathology II (Semester II)
FFFF4622	Radiology II

Year 5

FFFF5522	Family Medicine II
FFFF5119	Surgery II
FFFF5212	Emergency Medicine
FFFF5227	Paediatrics II
FFFF5329	Internal Medicine II
FFFF5419	Obstetrics & Gynaecology II
FFFF5823	Personal & Professional Advancement V
FFFF5816	Special Study Module III

5.2 Citra UKM

Year 1

Semester I

LMCE1072	<i>Academic Literacy (Muet 3 & 4)</i>
LMCE1082	<i>Page To Stage (Muet 5 & 6)</i>
LMCW2193	<i>Bahasa Melayu Komunikasi II – International Student</i>

Semester II

LMCW1022	<i>Asas Keusahawanan Dan Inovasi</i>
LMCE2103	<i>Advanced Communication Project (Muet 5 & 6)</i>
LMCE2092	<i>Speak To Persuade (Muet 3 & 4)</i>

Year 2

Semester I

LMCW2153	<i>Penghayatan Etika Dan Peradaban – Local Student</i>
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Semester II

LMCW2022	<i>Pengurusan & Analitik Data</i>
LMCE2143	<i>Falsafah Dan Isu Semasa</i>
LMCE3071	<i>Professional Communication (Muet 3 & 4)</i>

Struktur Penawaran Kursus Pendidikan Citra Sesi Akademik 2023 - 2024

Struktur Penawaran Kursus Pendidikan Citra Sesi Akademik 2023-2024

1. Pelajar baru yang mula mendaftar Semester I Sesi Akademik 2023-2024 perlu lulus dan melengkapkan:
 - 1.1 22 unit kredit Kursus Pendidikan Citra untuk tujuan pengijazahan bagi pelajar Program Profesional iaitu melibatkan Fakulti Undang-Undang, Fakulti Kesihatan, Fakulti Farmasi, Fakulti Pergigian, Fakulti Kejuruteraan dan Alam Bina, Fakulti Perubatan dan Fakulti Ekonomi dan Pengurusan (Program Perakaunan);
2. Kursus Pendidikan Citra bagi Program Profesional dan Program Berasaskan Model 2u2i & Model 3u1i terbahagi kepada dua (2) komponen iaitu:
 - 2.1 Kursus Wajib Universiti – 10 kredit
 - 2.2 Kursus Citra Rentas – 12 kredit
3. Kursus Wajib Universiti - Taraf kursus adalah CW dan kursus ini ditawarkan oleh Pusat Citra Universiti. Pelajar perlu lulus dan melengkapkan 10 kredit. Kursus Wajib Universiti adalah :
 - 2.3 Bagi pelajar Warganegara
 - i. LMCW1022 – Asas Keusahawanan dan Inovasi (2 kredit)
 - ii. LMCW2022 – Pengurusan & Analitik Data (2 kredit)
 - iii. LMCW2143 - Falsafah dan Isu Semasa (3 kredit)
 - iv. LMCW2153 - Penghayatan Etika dan Peradaban (3 kredit)
 - 2.4 Bagi pelajar Bukan Warganegara
 - i. LMCW1022 – Asas Keusahawanan dan Inovasi (2 kredit)
 - ii. LMCW2193 – Bahasa Melayu Komunikasi 2 (3 kredit) ATAU
 - iii. LMCW2022 – Pengurusan & Analitik Data (2 kredit)
 - iv. LMCW2143 - Falsafah dan Isu Semasa (3 kredit)

LMCW2193 - Bahasa Melayu Komunikasi 2 perlu diambil semasa Tahun 1 Semester I

3. Kursus Citra Universiti - Taraf kursus adalah C1, C2, C3, C4, C5 & C6. Pelajar perlu melengkapkan keperluan kredit minimum mengikut Citra seperti rajah dibawah:

	Domain Citra	Program Profesional, Program Bukan Profesional dan Program berasaskan model 2u2i/3u1i/2u1i
Citra 1	Literasi Bahasa & Komunikasi	2 Kredit
Citra 2	Pemikiran Kritis & Reka Cipta	2 Kredit
Citra 3	Literasi Sastera, Budaya & Ketamadunan	2 Kredit
Citra 4	Literasi Sains, Teknologi & Kesihatan	2 Kredit
Citra 5	Keusahawanan & Tanggungjawab Sosial	2 Kredit
Citra 6	Keterampilan Diri & Pasukan	2 Kredit

- 3.1 Kursus Citra Universiti Luar Fakulti adalah Kursus Citra Universiti (Taraf C1, C2, C3, C4, C5, C6) yang bukan ditawarkan oleh fakulti pelajar. Pelajar perlu mengambil kursus yang ditawarkan samada oleh Pusat Citra Universiti (kod kursus LMXX) atau fakulti lain.
- 3.2 Baki keperluan kredit Kursus Citra mengikut domain adalah ditentukan oleh pelajar. Pelajar bebas memilih sendiri mana-mana kursus yang bertaraf Kursus Citra melalui mana-mana Domain Citra

5.1.1 Year 1

General Objectives

By the end of Year 1, students should be able to :

1. explain the structures and functions of biomolecules, cell tissues, human genetics, endocrine changes and metabolism in relation to basic pathological process of common diseases and principles of drug action.
2. differentiate among the various pathogens and their interactions with the host's immunity.
3. apply the principles of history taking, basic life support, aseptic techniques & universal precaution in clinical practice.
4. explain the concepts and principles of community health and its management, related health care services and the effects of globalization on health care.
5. demonstrate skills in problem solving, decision-making, self-management, and team work effectively with a caring attitude and sensitivity.
6. apply basic information technology skills in every aspect of their learning.

Specific Objectives

By the end of Year 1, students should be able to :

1. explain the normal structures and functions of biomolecules, cells and tissues of the body.
2. explain biochemical processes and their regulation in the cells.
3. explain genetic inheritance and mutation and relate their effects on individuals and population.
4. differentiate among the various pathogens and their interactions with the host's immunity.
5. explain the basic pathological processes of diseases.
6. explain the principles of drug actions.
7. explain the concepts and principles of community health and its management, related health care services and the effects of globalization on health care.
8. explain the principles of ecology in relation to human health.
9. perform history taking, basic life support and hand washing.
10. explain the concepts and principles of aseptic techniques and universal precaution in clinical practice.
11. demonstrate self-management and coping skills in the university environment.
12. work effectively as a team member, as well as a team leader.
13. demonstrate caring attitude and sensitivity to the needs of others.
14. demonstrate problem solving, decision-making and IT skills.

FFFF1113 CELLULAR BIOMOLECULES

The aim of this module is to describe to the students the structure and function of biomolecules and their role in cellular structure and function. The module will emphasise and relate protein structure to their functions. Enzymes will be introduced as important biocatalysts and as a tool in diagnosis. The synthesis of proteins and its regulation will also be discussed. In addition, the module will discuss the structure of DNA in relation to its function in inheritance and expression of genetic material, differentiate between eukaryotic and prokaryotic processes and explain how these differences can be exploited therapeutically. Several structural abnormalities in biomolecules leading to diseases will also be illustrated. Students will also perform some biochemical tests and be able to relate this to the structure and function of biomolecules.

References :

1. Michael R Cummings 2015. Human Heredity: Principles and Issues 11th edition. Thomson, Brooks and Cole.
2. Lynn B Jorde, John C Carey, Michael J Bamshad, Raymond L White. 2015. Medical Genetics. 5th edition. Mosby Inc.
3. Bruce R Korf. 2013. Human Genetics and Genomics: A problem-based approach. 4th edition. Blackwell Publishing.
4. Robert L Nussbaum, Roderick R McInnes, Huntington F Willard. 2015. Thompson and Thompson Genetics in Medicine. 8th edition. Saunders.
5. R J McKinlay Gardner, Grant R Sutherland. 2011. Chromosome Abnormalities and Genetic Counselling 4th edition. Oxford University Press.
6. Tom Strachan, Judith Goodship, Patrick Chinnery. 2014. Genetics and Genomics in Medicine. 1st Edition, Garland Sciences.
7. Levinson W, Chin-Hong P, Joyce EA, Nussbaum J, Schwartz B. eds. 2020. Review of Medical Microbiology and Immunology. 16th Edition. McGraw-Hill Education.
8. Chen, E.M. & Kasturi S.S. 2020. Deja Review: Microbiology and Immunology. 3rd Edition. McGraw-Hill Education.
9. Goering, R.V., Dockerel, H.M., Zuckerman, M. & Chiodini, P.L. 2018. Mim's Medical Microbiology. 6th Edition. Elsevier.

FFFF1213 TISSUES OF BODY

The cell is the functional unit of all living organisms. The aim of this module is to describe to the students the living body, based on cell, classification of basic tissues and explain their embryological derivatives. The knowledge will then be applied in stating the cellular basis of diseases. This module helps in learning about the structure of body tissues which is composed of cells. Structure is closely related to the cells function. Together with the knowledge from physiology, biochemistry, pathology and other basic sciences, the study of body tissues can provide a powerful tool in understanding the normal functioning of the body as well as the disease process.

References :

1. Moore, K.L., Dalley, A.F., Agur, A.M.R. 2022. Clinically Oriented Anatomy. 9th edition. Lippincott, Williams & Wilkins.
2. Young, B., O'Dowd, G., Woodford, P. 2013. Wheater's Functional Histology. 6th edition. Churchill Livingstone.
3. Sadler, T.W. 2023. Langman's Medical Embryology. 15th edition. Lippincott Williams & Wilkins.

4. Kumar, V., Abbas, A.K., Aster, J.C. 2020. Robbins & Cotran Pathologic Basis of Disease. 10th edition, Elsevier Saunders.
5. Hoffbrand, V., Moss, P.A.H. . Hoffbrand's Essential Haematology. 8th edition. Wiley Blackwell.
6. Lieberman, M. and Peet, A. 2022. Marks' Basic Medical Biochemistry: A Clinical Approach. 6th edition. Wolters Kluwer.
7. Kennelly, P.J., Botham, K.M., McGuinness, O.P., Rodwell, V.W., Weil, P.A. 2022. Harper's Illustrated Biochemistry. 32nd edition. McGraw-Hill Education.
8. Snell, R. 2018. Clinical Anatomy by Regions. 10th edition. Lippincott, Williams & Wilkins.
9. Mescher, A.L. 2021. Junqueira's Basic Histology: Text & Atlas. 16th edition. McGraw-Hill.

FFFF1223 MECHANISMS OF DISEASES

The module aims to provide an introduction to basic pathological processes which will help students to understand the diseases of the organ systems. Appreciation of the mechanisms and characteristics of the principle types of disease processes facilitates an understanding of the symptoms with which patients present, the physical signs which they demonstrate and the abnormal investigation results. It will also allow an appreciation of how various therapeutic interventions affect disease processes.

References :

1. Katzung BG and Trevor AJ. 2015. Basic & Clinical Pharmacology. 13th Edition, Appleton & Lange.
2. Klatt EC. 2015. Robbins and Cotran Atlas of Pathology. 3rd edition. Philadelphia: Saunders.
3. Kumar V, Abbas AK and Aster JC. 2015. Robbins and Cotran Pathologic Basis of Disease: with STUDENT CONSULT Online Access (Robbins Pathology). 9th Edition. Philadelphia: Saunders.
4. Kumar V, Abbas VK and Aster JC. 2013. Robbins Basic Pathology. 9th Edition, Saunders, Philadelphia.
5. Lakhani SR, Finlayson C, Dilly SA and Gandhi M. 2016. Basic Pathology: An introduction to the mechanisms of disease. 5th Edition, Arnold, London.
6. Levinson W. 2016. Review of Medical Microbiology & Immunology. 14th edition. Lange McGraw Hill.
7. Rang H, Ritter J, Flower R and Henderson G. 2015. Rang and Dale's Pharmacology. 8th Edition. Churchill Livingstone.
8. Reid R, Robert F and MacDuff E. 2011. Pathology Illustrated. 7th Edition, Churchill Livingstone, Edinburgh.
9. Underwood JCE (Ed) and Cross SS. 2009. General and Systemic Pathology. 5th Edition, Churchill Livingstone, Edinburgh.
10. Whalen K, Finkel R and Panavelil TA. 2015. Lippincott's Illustrated Reviews: Pharmacology. 6th Edition. Philadelphia: Lippincott Williams and Wilkins.
11. Website: <http://medsci.indiana.edu/c602web/602/c602web/>
12. Website: <http://www.med.uiuc.edu/PathAtlas/framer3/path3.html>

FFFF1244 INFECTION & IMMUNITY

The aim of this module is to enable the students to acquire the fundamental knowledge of a wide range of organisms that are pathogenic to man. The scope includes introduction to classification of microorganisms (such as helminths, protozoa, fungi, bacteria and viruses), their genetics, virulence factors, pathogenesis and laboratory identification of these microorganisms from clinical specimens. This module also emphasizes the importance of the role of host's immune system (cellular and humoral) in protecting the body from the invading pathogens. The components of the immune system and the mechanisms of immune response will be covered and the consequences of an abnormal immune response will be briefly introduced. A basic understanding of the antigen-antibody reactions in vivo and in vitro is also covered. Despite the availability of many new antibiotics, there are few instances where antimicrobial therapy fails to combat the pathogens. This module will enable the students to know the appropriate use of antibiotics and its mechanism of action. They will also understand the different mechanisms how the pathogens can successfully evade the immune system and develop antibiotic resistance. Relevant to the education of future doctors in Malaysia, the students will be taught the basics of the various types of infectious diseases and medical entomology. In addition, the elementary aspects of some emerging diseases of non-human origin will be introduced to raise the awareness to their importance. Where relevant, the basic principles of host-pathogen relationship, epidemiology, control and prevention strategies will be highlighted. This is to provide a foundation for the students understanding of the common types of infectious diseases to be learned in the forth coming systemic modules respectively.

References :

1. Michael R Cummings 2015. Human Heredity: Principles and Issues 11th edition. Thomson, Brooks and Cole.
2. Lynn B Jorde, John C Carey, Michael J Bamshad, Raymond L White. 2015. Medical Genetics. 5th edition. Mosby Inc.
3. Bruce R Korf. 2013. Human Genetics and Genomics: A problem-based approach. 4th edition. Blackwell Publishing.
4. Robert L Nussbaum, Roderick R McInnes, Huntington F Willard. 2015. Thompson and Thompson Genetics in Medicine. 8th edition. Saunders.
5. R J McKinlay Gardner, Grant R Sutherland. 2011. Chromosome Abnormalities and Genetic Counselling 4th edition. Oxford University Press.
6. Tom Strachan, Judith Goodship, Patrick Chinnery. 2014. Genetics and Genomics in Medicine. 1st Edition, Garland Sciences.
7. Levinson W, Chin-Hong P, Joyce EA, Nussbaum J, Schwartz B. eds. 2020. Review of Medical Microbiology and Immunology. 16th Edition. McGraw-Hill Education.
8. Chen, E.M. & Kasturi S.S. 2020. Deja Review: Microbiology and Immunology. 3rd Edition. McGraw-Hill Education.
9. Goering, R.V., Dockerel, H.M., Zuckerman, M. & Chiodini, P.L. 2018. Mim's Medical Microbiology. 6th Edition. Elsevier.

FFFF1312 HUMAN GENETICS

The aim of this module is to present the principles of inheritance and communicate an understanding of the origin and amount of genetic diversity. Students will learn about the causes of mutation and how these mutations can lead to disease. The molecular mechanisms of genetic diseases will be learned and how these may affect patients individually and in discrete populations. Students will also be exposed to the principles and applications of recombinant DNA technology.

References :

1. Peter Turnpenny, Sian Ellard 2017. Emery's Elements of Medical Genetics 15th edition. Elsevier Churchill Livingstone.
2. Michael R Cummings 2015. Human Heredity: Principles and Issues 10th edition. Thomson, Brooks and Cole
3. Lynn B Jorde, John C Carey, Michael J Bamshad, Raymond L White. 2015. Medical Genetics. 5 th edition. Mosby Inc.
4. Bruce R Korf. 2013. Human Genetics and Genomics: A problem based approach. 4th edition. Blackwell Publishing.
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6. R J McKinlay Gardner, Grant R Sutherland. 2011. Chromosome Abnormalities and Genetic Counselling 4th edition. Oxford University Press.
7. Tom Strachan, Judith Goodship, Patrick Chinnery. 2014. Genetics and Genomics in Medicine. 1st Edition, Garland Sciences
8. Landmark journals
9. Ramos E. Genetic Counseling, Personalized Medicine, and Precision Health. 2019 Cold Spring Harb Perspect Med. 2019 Sep 30. pii: a036699.
10. Yahaya TO, Salisu TF. A Review of Type 2 Diabetes Mellitus Predisposing Genes. Curr Diabetes Rev. 2019;16(1):52-61. doi: 10.2174/1573399815666181204145806. PMID: 30514191.

FFFF1333 MEMBRANES AND RECEPTORS

Continuous medical learning requires an adequate knowledge of the membrane structure and function of membrane lipids and proteins. This module helps the students to learn about the movement of ions and molecules across membrane, as well as the properties of cell surface and other receptors. By understanding how chemical messengers such as hormones and neuro transmitters influence the activity of cells and organs through their interactions with the receptors, they will appreciate how drugs might modify the action of such chemical messengers. In relation to that, they will learn the fate of drugs in the human body and the mechanisms of drug action and toxicity.

References :

1. Barret K, Brooks H, Boitano S: Barman S. 2020. Ganong's Review of Medical Physiology. 26th edition. McGraw-Hill Medical.
2. Baynes JW & Dominiczak MH. 2022. Medical Biochemistry. 6th edition. Elsevier Health Sciences, UK.
3. Goodman & Gilman. 2018. The Pharmacological Basis of Therapeutics. 13th edition. Brunton L, Knollman B, Hilal-Dandan R (eds). McGraw Hill, New York.
4. Katzung BG & Trevor AJ. 2021. Basic and Clinical Pharmacology. 15th edition, Appleton & Lange, McGraw Hill.

5. Michael Lieberman & Allan Marks. 2022. Basic Medical Biochemistry: A Clinical Approach. 6 th Edition, Lippincott Williams & Wilkins.
6. Sherwood L. 2016. Human Physiology: From Cells to System. 9th edition, Brooks/Cole Thompson Learning.

FFFF1412 METABOLISM

This module is designed to expose 1st year medical students to the basic knowledge on biochemical process in cells with regards to synthesis, degradation, storage, utilization and inter-conversion of sugar, amino acids, fatty acids and their role in energy expenditure to the students. The importance of balanced diet and regulation of body weight in terms of the balance between energy intake and expenditure will be discussed. Students will also perform some simple biochemical tests which are related to carbohydrate metabolism.

References :

1. B. G. Katzung, , A. J. Trevor; Basic and Clinical Pharmacology. 2015. Lange Basic Science. 13rd edition. McGraw Hill-Medical, California.
2. Baynes, J & Dominiczak, MH. 2009. Medical Biochemistry. 3rd edition. Elsevier Mosby Publisher, London, UK
3. Devlin TM. 2010. Textbook of Biochemistry with Clinical Correlations. 7th edition. Wiley-Liss. Harvey RA and Ferrier DR. 2014. Lippincott's Illustrated Reviews. Biochemistry. 6th edition. Lippincott Williams and Wilkins Publications. Pennsylvania. USA.
4. Liebermanns M & Marks AD. 2013. Mark's Basic Medical Biochemistry: A Clinical Approach. 4th Edition. Lippincott, Williams & Wilkins, USA.
5. Murray RK et. al. 2012. Harper's Biochemistry. 29th edition. Prentice Hall Int.

FFFF1424 MUSCULOSKELETAL SYSTEM

The aim of this module is to enable the student to acquire the cardinal principles of structures of the bones, joints, muscles, neurovascular supply and its function. The emphasis on the application of basic knowledge to the common clinical disorders and diseases of the musculoskeletal system will be discussed. In addition, clinical correlations classes in radiology and orthopaedic disciplines will be introduced to enhance the students' knowledge and appreciation to this module. The students shall learn through concept lectures, practicals, Problem-Based Learning packages (PBL) and Self-Learning packages (SLP).

References :

1. Bertram G Katzung B.G. 2015. Basic and Clinical Pharmacology. Edisi Ke-13. McGraw-Hill Companies Inc.
2. Kumar V, Abbas AK, Aster JC. Robbins and Cotran Pathologic Basis of Disease. 2014. Edisi Ke-9. Saunders. Philadelphia.
3. Moore KL, Dalley AF, Agur AMR. 2013. Clinically Oriented Anatomy. Edisi Ke-7. Lippincott, Williams & Wilkins.
4. Ryan KJ, George Ray C. 2014. Sherris Medical Microbiology. Edisi Ke-6. McGraw-Hill.
5. Sherwood L. 2015. Human Physiology, From Cells to Systems. Edisi Ke-9. Cengage Learning.

FFFF1521 CLINICAL SCIENCES IB (HISTORY TAKING II)

History-taking is an integral component of doctor-patient relationship. Early clinical exposures among students are essential for them to develop awareness to appreciate a patient as an individual in an unfamiliar and stressful situation. Specific skill objectives include proficiency in history-taking. Various teaching-learning methodologies including role-play will further emphasize the need for effective communication skills. In this module, the student will learn techniques to obtain basic history in adults and special groups like children, women, elderly and disabled patients and in patients who do not communicate well, thus the need for using interpreters or third parties. This module also aims to integrate the teaching of basic sciences with clinical practice by revisiting the cases and clinical problems learnt in the basic sciences modules.

References :

1. 13th Edition. Churchill Livingstone
2. Douglas, G, Nichol, F. & Robertson, C. 2013. Macleod's Clinical Examination.
3. Glynn M, Drake WM. Hutchinson's Clinical Methods: An Integrated Approach to Clinical Practice, 23rd edition. WB Saunders 2012
4. Murtagh, J. 2003. General Practice. 3rd Edition. Australia: McGraw Hill.
5. Swash, M. 2002. Hutchinson's Clinical Methods. 21st Edition. London: WB Saunders.
6. Talley, N. & O'Connor, S. 2014. Clinical Examination: A Systemic Guide to Physical Diagnosis. 7th Edition. Churchill Livingstone
7. Talley, N. & O'Connor, S. 2015. Clinical Examination Essentials: An Introduction to Clinical Skills (and how to pass your Clinical Exams). 4th Edition. Elsevier Science Health Science.
8. UKM. 2005. CD audio-visual package on History Taking.

FFFF1622 MEDICINE & SOCIETY I

The module discusses several issues and challenges in the current and future settings in delivering health care services. It combines various disciplines of basic community health in tackling the issues of disease prevention and health care. The module covers topics on psychosocial aspects of disease and comprehensive health care, principle of disease prevention, basic environmental health, principle of health management, basic family health and nutrition. By introducing the principles of community health to the students, it is hoped that they are able to use it in evaluating health problems, to plan and monitor community health activities and to deliver health education to the community.

References :

1. Asma Rahim. 2008. Principles & Practice of Community Medicine. New Delhi: Jaypee Brothers Medical.
2. Feinstein, R., Connelly, J. & Feinstein, M. (eds.). 2017. Integrating Behavioral Health and Primary Care. 1st Ed. USA: Oxford University Press
3. Howard Frunkin. 2016. Environmental Health from Global to Local. 3rd ed. USA: John Wiley & Sons, Inc.
4. Malaysia Ministry of Health. www.moh.gov.my/
5. McKenzie, J.F. & Pinger, R.R. (eds.). 2015. An Introduction to Community and Public Health. 8th ed. USA: John & Bartlett Learning.
6. Raihanah Abdullah. 2004. Kesihatan Keluarga. PTS Publications & Distributors. Kuala Lumpur.
7. Robbins & Coulter. 2002. Management. 7th Edition. Prentice and Hall International Inc.
8. Smolin, L.A. & Grosvenor, M.B. 2008. Nutrition: Science & Applications. 1st Ed. John Wiley & Sons, Inc., USA.
9. World Health Organization. www.who.int/

FFFF1813 PERSONAL & PROFESSIONAL ADVANCEMENT (PPA) IA

It is essential to facilitate the student's personal and professional development in holistic and comprehensive manner. In this module, students would be introduced to the major components of the Personal and Professional Development strand, mainly to facilitate the students' adaptation to university life and to the medical school in particular. Students will also be introduced to skills in teamwork and leadership, communication skills, spiritual enhancement, time management, stress management, critical thinking and decision making skills.

References :

1. Adams KL, Galanes GJ. 2014. *Communicating in Groups: Applications and Skills (Communication)*. 9th Edition, McGraw-Hill Education. New York.
2. Colaianne P. 2015. *The Overwhelmed Brain: Personal Growth for Critical Thinkers*. Ulysses Press. USA.
3. Covey, SR. 2013. *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change*. Simon & Schuster. New York.
4. David L. Dotlich, D.L., Noel, J.L. & Walker, N. 2004. *Leadership Passages: The Personal and Professional Transitions That Make Or Break A Leader*. Jossey- Bass. San Francisco.
5. De Bono, E. 2008. *Six Thinking Hats*. Penguin. New York.
6. Elliot, S.N., Kratochwill, T.R., Cook, J.L. & Travers, J.F. 2000. *Educational Psychology*. 3rd Edition. Mc Graw Hills.
7. Hettler, B. 1984. Wellness: encouraging a lifetime pursuit of excellence. *Health Values*, 8(4): 13-17.
8. Jacalyn Duffin, J. 2010. *History of Medicine: A Scandalously Short Introduction*. 2nd Edition. University of Toronto Press. Toronto.
9. Maxwell JC. 2013. *The 17 Indisputable Laws of Teamwork: Embrace Them and Empower Your Team*. Thomas Nelson Incorporated. USA.
10. Sood A. 2013. *The Mayo Clinic Guide to Stress-Free Living*. Da Capo Press. USA.

FFFF1822 PERSONAL & PROFESSIONAL ADVANCEMENT (PPA) IB

This module is a continuation of previous FFFF1812. Being the second module in this PPA strand for the first year, the required personal and professional skills are further emphasized. The major aim is to further enhance the students' understanding and skills in critical areas in PPA such as adaptation skills, critical thinking, communication skills, teamwork, leadership and spiritual development

References :

1. Andrei P ,2020. *How Highly Effective People Speak: How High Performers Use Psychology to Influence With Ease (Speak for Success)*. Independent Press
2. Barak. ME. 2021. *Managing Diversity: Toward a Globally Inclusive Workplace*. 5th Edition. SAGE Publications, Inc
3. Boullad A. 2022. *Living a Life in Balance: A Holistic Guide for Physical, Mental, Social, Spiritual Health & Performance*. The Balance
4. Cohen.H. 2022. *You Can Negotiate Anything: The Groundbreaking Original Guide to Negotiation*. Echo Point Books & Media,
5. Cottrell. S, 2023. *Critical Thinking Skills: Effective Analysis, Argument and Reflection (Bloomsbury Study Skills)* 4th Edition. Bloomsbury Academic.
6. Covey, SR. 2020. *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change*. 30th Anniversary Edition, Simon & Schuster. New York.

7. Dawson N. 2021. TeamWork: How to Build a High-Performance Team. Houndstooth Press
8. Patterson R.J. 2022. The Assertiveness Workbook: How to Express Your Ideas and Stand Up for Yourself at Work and in Relationships . 2nd Edition, New Harbinger Publications
9. Sinek.S. 2017. Leaders Eat Last: Why Some Teams Pull Together and Others Don't. Reprint Edition. Portfolio Press
10. Trenton N. 2021. Stop Overthinking: 23 Techniques to Relieve Stress, Stop Negative Spirals, Declutter Your Mind, and Focus on the Present. Pkcs Media, Inc

5.1.2 YEAR 2

General Objectives

By the end of Year 2, students should be able to :

1. explain the structures and functions of, the pathological process, effects and complications of common diseases in the musculoskeletal, blood and lymph, cardiovascular, respiratory, gastrointestinal, urinary, reproductive and nervous systems and the principle of drug action.
2. perform history taking, physical examination and basic clinical procedures.
3. interpret results of basic laboratory investigations in the diagnosis of common diseases.
4. compare and contrast the approaches used in the health care services, in the provision of comprehensive and holistic care to patients, families and the community, as well as groups with special needs and those related to occupational and environmental problems.
5. apply critical thinking, demonstrate leadership, effective communication skills, basic principles of religious and cultural values in dealing with patients, colleagues and the community.
6. demonstrate the ability to utilize various resources to obtain relevant and current information.

Specific Objectives

By the end of Year 2, students should be able to :

1. describe the anatomy and explain the physiology of the following organ systems :
 - i. Blood and lymph
 - ii. Cardiovascular system
 - iii. Respiratory system
 - iv. Gastrointestinal & Hepatobiliary system
 - v. Urinary system
 - vi. Reproductive system
2. discuss the aetiology, pathological processes, effects and complications, and describe the pathological changes of common diseases affecting them.
3. perform physical examination of the above organ systems in a normal person as well as take his/her history.
4. interpret the results of basic laboratory investigations in the diagnosis of common diseases of the above organ systems.
5. discuss the pharmacology of different drugs used in the treatment of diseases of the above organ systems.
6. compare the different approaches used in health care services for patient, family and the community.
7. apply basic principles of epidemiology and statistics in conducting small research.
8. apply basic principles of a comprehensive and holistic approach in health care.
9. describe basic principles of health care services and health programme for groups with special needs such as mothers, children and workers.
10. discuss the risk factors, problems and preventive approaches related to occupational and environmental health.
11. perform the following basic clinical procedures :
 - i. Venepuncture
 - ii. Dressing
 - iii. Blood pressure measurement
 - iv. Catheterization

12. recognize basic teachings of various religions and apply universal, spiritual and humanistic values in self development and interpersonal interaction.
13. demonstrate critical thinking in the learning process.
14. demonstrate the ability to work collaboratively in a team as well as the ability to lead.

FFFF2113 BLOOD & LYMPH

The module aims to enable the students to acquire basic knowledge of the normal blood cells production and the mechanisms and pathophysiology of common blood and lymphoreticular disorders. It will also facilitate students to understand the signs and symptoms of these common blood disorders and enable them to interpret the relevant investigation results for the diagnosis of these disorders. The module will also cover the principles of blood grouping and transfusion and the basic principles of stem cell transplantation. In this module, students shall learn through concept lectures, practical, Problem-Based Learning packages (PBL) and self-learning packages (SLP). The scope of learning is outlined in the guide book as shown in the content and specific objectives of the topics. Students are expected to further acquire their knowledge through reading the suggested textbooks and websites.

References :

1. Arora DR and Arora B. 2007. Medical Parasitology. 2nd edition. New Delhi: CBS Publishers and Distributors
2. Atul B. Mehta and Keith Gomez. 2017. Clinical Haematology. 2nd edition. CRC Press.
3. Bertram G. Katzung, Anthony J. Trevor. 2015. Basic and Clinical Pharmacology. 13th Edition. McGraw-Hill Education.
4. CK Jayaram Paniker. 2013. Textbook of Medical Parasitology. 7th Edition. New Delhi: Jaypee Brothers Medical Publishers
5. David Male Jonathan Brostoff David Roth Ivan Roitt. 2013. Immunology. 8th Edition. London: Gower Medical Publishing
6. Hoffbrand, A.V., and Moss, P.A.H. 2016. Hoffbrand's Essential Haematology. 7th edition. Wiley Blackwell.
7. Kenneth J Ryan and C George Ray. 2004. Sherris Medical Microbiology. An Introduction to Infectious Diseases. 4th Edition. Mc Graw Hill
8. Kumar, Abbas and Aster. 2015. Robbins and Cotran: Pathologic Basis of Disease. 9th edition. Philadelphia: Elsevier
9. Lewis S.M., Bain B.J., Bates I and Laffan M. 2012. Dacie and Lewis Practical Haematology. 11th edition. Churchill Livingstone.
10. Martin R Howard, Peter J Hamilton. 2013. Haematology, an Illustrated Colour Text. 4th edition. Churchill Livingstone.
11. Noor Hayati Md Isa. 2004. Atlas Berwarna Parasitologi Perubatan. Edisi Kedua, Kuala Lumpur: NHMIKBM Enterprise
12. Parakrama Chandrasoma, Clive R. Taylor. 1997. Concise Pathology. 3rd edition. Appleton and Lange.
13. Sallehuddin Sulaiman. 1999. Entomologi Perubatan. Penerbit Universiti Kebangsaan Malaysia Bangi.
14. www.BloodMed.com

FFFF2125 GASTROINTESTINAL & HEPATOBILIARY SYSTEM

The aim of this module is to guide the students in understanding and learning the development (embryology), structure, relation, radiology and histology (anatomy), functions (physiology) and metabolisms (biochemistry) of gastrointestinal tract and hepatobiliary system. It also emphasizes on the pathological aspects in terms of epidemiology, aetiology, pathogenesis, clinical manifestations (pathology, microbiology and parasitology) and basic principles of management and control (pharmacology & public health) of gastrointestinal diseases and infections.

References :

Anatomy

1. Dalley, A.F. & Agur, A.M.R. 2022. *Moore's Clinically Oriented Anatomy*, 9th Edition. Philadelphia: Lippincott Williams & Wilkins.
2. O'Dowd, G., Bell, S., & Wright, S. 2023. *Wheater's functional histology* (7th ed.). Elsevier Health Sciences.
3. Netter, F.H. 2023. *Atlas of Human Anatomy* (Netter Basic Science). 7th Edition. Elsevier.
4. T.W. Sadler. 2023. *Langman Medical Embryology*, 15th edition. Wolters Kluwer Health. Lippincott Williams & Wilkins.

Physiology

1. Lauralee Sherwood, J.H.P. 2019. *Human Physiology-From Cells to Systems*. 9th Edition. USA: Brooks/Cole Thompson Learning.
2. Ganong, W.F. 2019. *Review of Medical Physiology*. 26th Edition. Singapore: Lange Medical Publication.
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Biochemistry

1. Lieberman M., Peet A. 2022. *Marks' Basic Medical Biochemistry, A Clinical Approach*. 6th Edition. Philadelphia, USA. Lippincott Williams & Wilkins Publications or Wolters Kluwer.
2. Rodwell VW., Bender DA., Botham KM., Kennelly PJ., Weil PA. 2022. *Harper's Illustrated Biochemistry*. 32nd Edition. USA. The McGraw-Hill Education.
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Pathology

1. Cotran, R.S., Kumar, V. & Robbins, S.L. 2020. *Robbin's Pathologic Basis of Disease*. 10th Edition. Philadelphia: Elsevier Saunders.
2. Underwood, J.C.E. 2018. *General and Systemic Pathology*. 7th Edition. Churchill Livingstone.
3. Reid, R. & Roberts, F. 2018. *Pathology Illustrated*. 8th Edition. Churchill Livingstone.

Microbiology

1. Carroll, K.C., Morse, S.A., Mietzner, M., et al. 2019. *Jawetz, Melnick, & Adelberg's Medical Microbiology*. 28th edition. McGraw-Hill Education
2. Goering, R.V., Dockrell, H.M., Zuckerman, M., et al. 2021. *Mims' Medical Microbiology*. 9th edition. Elsevier Saunders

Parasitology

1. Jayaram Paniker, C.K. 2019. *Textbook of Medical Parasitology*. 8th Edition. New Delhi: Jaypee Brothers Medical Publishers
2. Elizabeth Ziebig. *Clinical Parasitology – A Practical Approach* 3rd Edition. 2019. Elsevier Saunders.

Pharmacology

1. Katzung, B.G. 2023. *Basic and Clinical Pharmacology*. 16th Edition. Norwalk: McGraw Hill.
2. Hardman, J.G. et al. 2018. *Goodman A. and Gilman's The Pharmacological Basis of Therapeutics*. 13th Edition. New York: Hardman and Limbird International Edition, McGraw Hill.

FFFF2214 CARDIOVASCULAR SYSTEM

The aim of this module is to expose students to disease processes affecting the cardiovascular system. The module builds upon an understanding of the structure, functions and metabolism of the heart and blood vessels. Students will be able to acquire knowledge on the underlying mechanisms and the principles of management of common diseases of the cardiovascular system, enabling them to integrate basic science knowledge and clinical concepts related to the system.

References :

1. Arthur F. Dalley, Anne M.R Agur. 2022. *Clinically Oriented Anatomy*. 9th Edition. Philadelphia: Lippincott Williams & Wilkins.
2. Murray P.R., Rosenthal K.S., Kobayashi G.S., Pfaller M.A. 2021. *Medical Microbiology*. 9th Edition. USA: Elsevier.
3. Katzung and Masters. 2020. *Basic and Clinical Pharmacology*. 15th Edition. Lange/ Mc Graw Hill.
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5. Barret et al. 2019. *Ganong's Review of Medical physiology*. 26th Edition. New York: Lange Medical Books/McGraw-Hill.
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8. Ritter et al. *Rang & Dale's Pharmacology*. 2018. 9th Edition. London: Churchill Livingstone.
9. TW Sadler. 2018. *Langman's Medical Embryology*. 14th Edition. Lippincott Williams & Wilkins.
10. Chia, B.L. 2016. *Clinical Electrocardiography*. 4th edition. New Jersey: World Scientific.
11. Cotran, Kumar, Collins. 2015. *Robbins Pathologic Basis of Disease*. 9th edition. WB Saunders Company.

FFFF2242 ENDOCRINE SYSTEM

The aim of this module is to enable the students to acquire basic knowledge on the endocrine system which include the anatomy of the endocrine glands, the hormones they secrete including their synthesis and degradation, mode of action and regulation of their secretion and also the mechanisms and pathophysiology of common endocrine disorders. It will also facilitate students to understand the signs and symptoms of these common endocrine disorders and enable them to interpret the relevant investigation results for the diagnosis of these disorders. The module will also cover the pharmacological management of some common endocrine disorders.

References :

1. Kumar, V., Abbas, A. K., & Aster, J. C. (2020). Robbins and Cotran pathologic basis of disease (Tenth edition.). Philadelphia, PA: Elsevier/Saunders. (C)
2. Chandrasoma, P. & Taylor, C.R. 2002. Concise Pathology. 4 th Edition. Appleton and Lange. (C)
3. Marshall W, Lapsley M, Day A, Shipman K. 2020. Clinical Chemistry. 9 th Edition. Elsevier. (S)
4. Lieberman, M., & Peet, A. (2018). Marks' basic medical biochemistry: A clinical approach (Fifth edition.). Philadelphia: Wolters Kluwer.(S)
5. Katzung, B.G. 2018. Basic and Clinical Pharmacology. 14th Edition. McGraw Hill Education.
6. Brunton LL, Hilal-Dandan R, Knollmann, B.C. 2018. The Pharmacological Basis of Therapeutics. 13th Edition, McGraw Hill Education. (S)
7. Illustrated Reviews. 2011 Pharmacology. 5th Edition, Williams & Wilkins Lippincotts
8. Snell, R.S. 2004. Clinical Anatomy for Medical Students. 7 th Edition. Lippincott Williams and Wilkins Publications. (C)
9. Luiz Carlos Junqueira & José. 2018. Basic Histology Atlas. 15th Edition. McGraw-Hill. (C)
10. Moore, K.L. & Dalley. A.F. 2017. Clinically Oriented Anatomy. 8 th Edition. Lippincotts Williams & Wilkins. (S)
11. Young, B. & Heath, J.W. 2013. A Textbook and Colour Atlas. 6 th Edition. Churchill Livingstone Publication. (C)
12. Sadler, T.W. 2018. . 14th Edition. Lippincott Williams & Wilkins Publications, USA.(C)
13. Lauralee Sherwood. 2016. Human Physiology. From Cells to Systems. 9th Edition. Cengage Learning. Boston, USA.
14. Netter, F.H. 2018. Atlas of Human Anatomy. 7th Edition. Icon Learning System. New Jersey, USA. (C)

FFFF2313 RESPIRATORY SYSTEM

The aim of this module is that the students should be able to understand the structure of the respiratory system and relate the structure to its functions. The knowledge of basic sciences obtained in year 1 such as infection and immunity, the mechanism of diseases and the pharmacokinetics of drugs will help students to understand the diseases commonly affecting the respiratory system and the drugs used in respiratory diseases.

References :

1. Barret, K.E., Barman, S.M., Brooks H. & Yuan, J. 2019. Ganong's Review of Medical Physiology. Edisi ke-26. USA: McGraw Hill.
2. Kumar, V, Abul, A. & Jon A. 2020. Robbins & Cotran Pathologic Basis of Disease. Edisi ke-10. USA: WB Saunders Company.
3. Katzung, Bertram G.. Basic & clinical pharmacology. Edisi ke-16. New York: McGraw-Hill, 2023.
4. Sherwood, L. 2016. Human Physiology: From Cells to System. Edisi ke-9. USA: Brooks/Cole Thomson Learning.
5. Murray, P.R., Rosenthal K.S., Kobayashi G.S., PFaller M.A. 2021. Medical Microbiology. Edisi ke-9. USA: Elsevier.
6. Snell, R.S. 2018. Snell's Clinical Anatomy by Regions. Edisi ke-10. Philadelphia: Lippincott Williams & Wilkins.
7. Sadler, T.W. 2023. Langman's Medical Embryology. Edisi ke-14. Philadelphia: Lippincott Williams & Wilkins.
8. Walter & Israel. 1996. General Pathology. Edisi ke-7. Connecticut: Appleton & Lange.
9. O'Dowd, G., Bell, S. & Wright, S. 2023. Wheather's Functional Histology. Edisi ke-7. Philadelphia: Elsevier.

FFFF2325 NEURO SCIENCES

Through this Neuroscience Module, we are aiming to provide medical students a detailed view of the structure and the function of the major components of the human nervous system, the important connections and the concept of its functions and dysfunctions. The students also would gain insight into the testing and imaging of the nervous system as applied to patients' problems. It will make the diagnostic importance of concepts such as upper and lower motor neurons and peripheral and central divisions of the nervous system and the associated lesions more apparent. Besides, examining discrete malfunction of the major elements, the global function of the cerebral cortex and the other parts of the nervous system, is covered with reference to the neurochemistry of the brain. They will also understand common infections of the nervous system including toxoplasmosis, prevention and the drugs used in the treatments. In addition, they will understand the drugs used in degenerative diseases, drugs of abuse, sedative-hypnotics, anaesthetics, anticonvulsants, antidepressants, and antipsychotics. Furthermore, the student will understand the common cerebral neoplasia, the effects, and complications. Similarly, they will understand the effects of the space-occupying lesions in the nervous system.

References :

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2. Barret KE, Barman SM, Brooks HL, and Yuan J. 2019. Ganong's Review of Medical Physiology. 26th Edition, Boston: McGraw Hill.
3. Brunton L.L. & Hilal-Dandan R. 2018. Goodman and Gilman's The Pharmacological Basis of Therapeutics. 13th Edition. USA: McGraw Hill.
4. Moore, K.L. and Dalley, A.F., 2018. Clinically oriented anatomy 8th Edition. Wolters kluwer india Pvt Ltd.
5. Splittgerber, R., 2018. Snell's clinical neuroanatomy 8th Edition. Lippincott Williams & Wilkins.
6. Goering, R. V., Dockrell, H. M., Zuckerman, M. & Chiodini, P.L. 2018. Mims' Medical Microbiology and Immunology. 6th Edition. Philadelphia: Elsevier.
7. Hall, J.E. 2020: Guyton and Hall Textbook of Medical Physiology. 14th Edition. Philadelphia: Elsevier.
8. Katzung, B.G. 2020: Basic and Clinical Pharmacology. 15th Edition. Boston: McGraw Hill/Lange.
9. Kumar V., Abbas A.K. & Aster J.C. 2020. Robbins & Cotran Pathologic Basis of Disease. 10th Edition. Elsevier.
10. Lieberman M. & Peet, A. 2017: Marks' Basic Medical Biochemistry: A Clinical Approach. 5th Edition, USA: Wolter Kluwer/Lippincott Williams & Wilkins.
11. Ritter, J., Flower, R.J., Henderson, G., Loke, Y.K., MacEwan, D.J. and Rang, H.P., 2019. Rang and Dale's pharmacology. 9th Edition. Elsevier.
12. Sadler, T.W. 2019: Langman's Medical Embryology. 14th Edition. Philadelphia: Wolters Kluwer.
13. Sherwood, L. 2015: Human Physiology: From Cells to Systems. 9th Edition. Canada: Cengage Learning.
14. Katzung B, .Kruidering-Hall M, Tuan R..L, Vanderah T.W, and Trevor, A. 2021. Katzung & Trevor's Pharmacology Examination & Board Review, 13th Edition. McGraw-Hill Education / Medical.
15. Underwood, J.C.E, and Cross, S.S. 2009. General and Systemic Pathology. 5th Edition. Churchill Livingstone, Edinburgh.
16. Waller D.G. & Sampson A.P. 2017. Medical Pharmacology and Therapeutics. 5th Edition. Philadelphia: Elsevier.
17. Whalen K., Radhakrishnan R. & Field C. 2018: Lippincott Illustrated Reviews: Pharmacology. 7th Edition. Philadelphia: Wolters Kluwer.

18. Koeppen BM, Stanton BA. 2017. Berne and levy physiology e-book. Elsevier Health Sciences.
- Nasr, Seyyed Hossein. 1976. Islamic Science: an Illustrated Study. London: World Islamic Festival Publishing Co. Ltd.
19. Saddler, T.W. 2004. Langman's Medical Embryology. 10th Edition. Williams & Wilkins, Lippincott, USA. Sezgin, Fuat. 1984.
20. Sherwood, L. 2012. Human Physiology. From Cells to System. 8th Edition. Brooks/Cole Thompson Learning, USA.
21. Snell RS. 2001. Clinical Neuroanatomy for Medical Students. 5th Edition, Lippincott Williams and Wilkins Publications.
22. Snell, R.S. 2004. Clinical Anatomy for Medical Students. 7th Edition. Lippincott Williams and Wilkins Publications.
23. Underwood, J.C.E. 2004. General and Systemic Pathology. 4th Edition. Churchill Livingstone, Edinburgh.

FFFF2433 URINARY SYSTEM

The aims of this module are, first, the students should have sufficient knowledge of macroscopic and microscopic structure of the urinary tract system in order to understand the normal function and common clinical problems. Second, that the students should appreciate the role of the kidney in controlling the volume and composition of body fluid and the way in which they respond to abnormal volume, electrolyte concentration and systemic haemodynamics. Third, students should understand as much detail of renal cellular function as well as allow them to appreciate the basis of relevant therapeutics. Fourth, students should be able to describe normal micturition, the reasons for oliguria and such common conditions as glomerulonephritis, pyelonephritis, urinary tract infection, urinary calculi, haematuria, proteinuria and acute and chronic renal failure.

References :

1. Katzung BG, Masters SB and Trevor AJ. Basic and Clinical Pharmacology. 2015. 13th Edition. Appleton-Lange / McGraw Hill.
2. Devlin, TM. Textbook of Biochemistry with Clinical Correlations. 2010. 7th Edition. New York, USA: A John and Wiley and Sons, Inc. Publication.
3. Reid R, Roberts F and MacDuff E. 2011. Pathology Illustrated. 7th Edition, Churchill Livingstone.
4. <http://www.bartleby.com/107/253.html>
5. <http://www.med/uiuc.edu/PathAtlas/framer3/path3.html>.
6. <http://www-medlib.med.utah.edu/WebPath/webpath.html>
7. Kumar and Clark. Clinical Medicine. 2017. 9th Edition. Elsevier.
8. Murray RK, Granner RK, Mayers PA, Rodwell VW. Harpes Biochemistry. 25th Edition. USA: Prentice Hall International.
9. Chandrasoma P, Taylor CR. Concise Pathology. 3rd Edition. Stamford, Appleton and Lange
10. Ganong WF. Review of Medical Physiology. 2012. 24th Edition. Appleton-Lange Medical Books / McGraw Hill, Medical Publishing Division, NY
11. Snell R. Clinical Anatomy for Medical Students. 2004. 7th Edition. Lippincott Williams & Wilkins.
12. Kumar V, Abbas VK and Aster JC. Robbins Basic Pathology. 2013. 9th Edition Saunders, Philadelphia.
13. Ryan KJ, Ray CG, Ahmad N, Drew WL, Plorde JJ. Sherris Medical Microbiology 2014. 6th Edition. McGraw-Hill
14. Parslow TG, Stites DP, Terr AI, Imboden JB. Medical Immunology. 10th Edition. Langen.
15. Brunton L, Chabner B, Knollman B. Goodman & Gilman's The Pharmacological Basis of Therapeutics. 2011. 12th Edition. McGraw-Hill.

16. Sadler TW. Langman's Medical Embryology. 2012. 12th Edition. Lippincott Williams & Wilkins.
17. Young B, Woodford P, O'Dowd G. Wheater's Functional Histology 2014. 6th Edition. Elsevier Churchill Livingstone
18. Marshall WJ, Lapsley M, Day A, Ayling R. Clinical Biochemistry: Metabolic and Clinical Aspects, 2014. 3rd Edition. Churchill Livingstone

FFFF2443 REPRODUCTIVE SYSTEM

The aim of this module is that students should understand the processes of human reproduction from the production of gametes to the establishment of independent life of the neonate. Students should understand common problems and disorders of the male and female reproductive tract, mechanisms of contraception and the sexual transmission of infections.

References :

1. Wineski, L. E. 2018. Snell's Clinical anatomy by Regions 10th ed. Lippincott Williams & Wilkins.
2. Dalley, A.F. & Agur, A.M.R. 2022. Moore's Clinically Oriented Anatomy, 9th Edition. Philadelphia: Lippincott Williams & Wilkins.
3. O'Dowd, G., Bell, S., & Wright, S. 2023. Wheater's functional histology (7th ed.). Elsevier Health Sciences.
4. Saddler T.W. 2023. Langman's Medical Embryology. 15th Edition, USA: Lippincott Williams & Wilkins.
5. Netter, F.H. 2023. Atlas of Human Anatomy (Netter Basic Science). 7th Edition. Elsevier.
6. Barrett, K., Barman, S., Yuan, J. and Brooks, H. 2019. Ganong's Review of Medical Physiology. 26th Edition. New York: McGraw Hill Education Europe
7. Sherwood, L. 2015. Human physiology: from cells to systems. 9th edition. Belmont, CA: Brooks/Cole, Cengage Learning.
8. Hall, J.E. and Hall, M.E. 2020. Guyton and hall textbook of medical physiology. 14th edition. Elsevier.
9. Costanzo, L. 2021. Costanzo Physiology. 7th edition. Elsevier.
10. Kumar, V., Abbas, A. and Aster, J. 2020. Robbins and Cotran Pathologic Basis of Diseases. 10th Edition, Elsevier, Amsterdam.
11. Fiona Roberts Elaine MacDuff. 2018. Pathology Illustrated. 8th Edition. Churchill Livingstone.
12. Goering, R.V., Dockrell, H.M., Zuckerman, M., Chiodini, P.L. 2018. Mims' Medical Microbiology. 6th Edition. Elsevier.
13. Sastry, A.S., Bhat, S. 2021. Essentials of Medical Microbiology. 3rd edition. Jaypee Brothers Medical Publishers, New Delhi.
14. Murray, P.R., Rosenthal, K.S., Pfaller, M.A. 2021. Medical Microbiology. 9th edition. Elsevier.
15. Vanderah, T.W. 2023 Katzung Basic and clinical pharmacology. 16th edition. McGraw Hill. LANGE

FFFF2511 CLINICAL SCIENCES IIA

This module is to provide the students with a basic knowledge on clinical procedure relevant to cardiorespiratory, abdomen, urinary and nervous system. The students will also be performing venipuncture, aseptic technique learning on how to interpret chest Xray interpretation. These will make them familiarise with the indications, interpretations & complications of clinical procedures. Their learning will be further reinforced by performing basic life support.

References :

1. Douglas, G., Nichol, F. & Robertson, C. 2013. Macleod's Clinical Examination. 13th Edition. Churchill Livingstone
2. Glynn, M., Drake, W.M. 2012. Hutchinson's Clinical Methods: An Integrated Approach to Clinical Practice. 23rd edition. WB Saunders.
3. Swash, M. 2002. Hutchinson's Clinical Methods. 21st Edition. London: WB Saunders.
4. Talley, N. & O'Connor, S. 2014. Clinical Examination: A Systemic Guide to Physical Diagnosis. 7th Edition. Churchill Livingstone
5. Talley, N. & O'Connor, S. 2015. Clinical Examination Essentials: An Introduction to Clinical Skills (and how to pass your Clinical Exams). 4th Edition. Elsevier Science Health Science.

FFFF2522 CLINICAL SCIENCES IIB

The module is designed to expose students to knowledge of clinical science as applied to medicine. This module will be divided into four clinical blocks. In each block, students will be exposed to a complete approach to history taking and physical examination of the respective block/systems. The module also provides an understanding of the interface between basic and clinical sciences, and enable students to integrate basic sciences with clinical concepts related to the respective systems.

References :

1. Douglas, G, Nichol, F. & Robertson, C. 2013. Macleod's Clinical Examination. 13th Edition. Churchill Livingstone
2. Glynn M, Drake WM. 2012. Hutchinson's Clinical Methods: An Integrated Approach to Clinical Practice. 23rd edition. WB Saunders.
3. Jeremy J N Oats, Suzanne Abraham. 2016. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology. 10th Edition. Elsevier
4. Louise Kenny, Helen Bickerstaff. 2017. Gynaecology by Ten Teachers. 20th Edition. CRC Press
5. Louise Kenny, Jenny Myers. 2017. Obstetrics by Ten Teachers. 20th Edition. CRC Press
6. Nicholas J Talley and Simon O'Connor. 2013. Clinical Examination: A Systematic Guide to Physical Diagnosis. 7th edition. Churchill Livingstone
7. OJ Garden, AW Bradbury and JLR Forsythe. 2017. Principles and Practice of Surgery. 7th edition. Churchill Livingstone.
8. Parveen Kumar and Michael Clark. 2016. Kumar and Clark's Clinical Medicine. 9th edition. Saunders Ltd.
9. Reider B. Saunders. 2005. The Orthopaedic Physical Exam. 2nd edition
10. Swash, M. 2002. Hutchinson's Clinical Methods. 24th Edition. London: WB Saunders.
11. Talley, N. & O'Connor, S. 2014. Clinical Examination: A Systemic Guide to Physical Diagnosis. 7th Edition. Churchill Livingstone
12. Talley, N. & O'Connor, S. 2015. Clinical Examination Essentials: An Introduction to Clinical Skills (and how to pass your Clinical Exams). 4th Edition. Elsevier Science Health Science.
13. UKM. 2005. CD audio-visual package on Physical examination (of the system)

FFFF2613 MEDICINE & SOCIETY II

The module discusses the concept of prevention and control of communicable and non-communicable diseases. Special attention is given to the prevention and control of emerging and re-emerging diseases that are of public health concern in Malaysia. This module also introduces basic demography on comprehension of vital statistics, fertility data and population expansion. Basic knowledge on occupational safety and health, as well as the need for hazard assessment and control measures at workplace are also explored. The students will be exposed to the existing occupational safety and health acts and regulations in Malaysia. This module also introduces the students to the technique of conducting research from proposal preparation and data collection until data analysis and report writing. Basic statistical techniques such as descriptive statistics and inferential statistics will be introduced to the students as they conduct their research.

References :

1. Campbell, M.J. & Swinscow, T.D.V. 2011. Statistics at Square One. 11th Edition. BMJ Books. ISBN:978-144-435-780-6 (ebook).
2. Campbell, M.J. 2006. Statistics at Square Two: Understanding Modern Statistical Applications in Medicine. 2nd Edition. BMJ Books. ISBN:978-140-513-490-3
3. Gordis, L. 2013. Epidemiology. 5th Edition. Saunders. ISBN: 978-145-573-733-8
4. Jamalludin, A.R. 2015. Guidelines for Methods and Statistics in Medical Research (Springer Briefs in Statistics). 1st Edition. Springer. ISBN:978-981-287-923-3
5. Rothman, K.J. 2012. Epidemiology – An Introduction. 2nd Edition. Oxford University Press. ISBN:978-019-975-455-7
6. Swinscow, T.D.V. 1997. Statistics at Square One. 9th Edition. BMJ Books. (free)
7. <http://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one>

FFFF2812 PERSONAL & PROFESSIONAL ADVANCEMENT IIA

The aims of this module are to further develop the students' total approach towards learning and practice of medicine which includes information technology. Student's ability to adapt to life as a medical student is emphasized, and issues related to stress management are also revisited and discussed. In addition, there will be more emphasis on interprofessional learning. Student's communication skills, teamwork, leadership skills as well as critical thinking are further developed in this module particularly in terms of issues concerning peers and significant others.

References :

1. Gamble, T.K. & Michael W. Gamble, M.W. 2013. Interpersonal Communication: Building Connections Together. California: SAGE Publications,
2. Hay, I., Bochner, D., Blackett, Gill. & Dungey, Carol. 2015. Communication Skills Guidebook. Melbourne: Oxford University Press Australia & New Zealand,
3. Paul, R. & Elder, L. 2014. Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life (2nd Edition). Pearson Education, Inc. New Jersey.
4. Paul, R. & Elder, L. 2014. The Miniature Guide to Critical Thinking Concepts & Tools. 7th edition. California: Foundation for Critical Thinking.
5. Tummers, N. 2013. Stress Management: A Wellness Approach. Human Kinetics, Illinois.
6. Weiss, D., Tilin, F. & Morgan, M.J. 2014. The Interprofessional Health Care Team: Leadership and Development. Jones & Bartlett Learning, Massachusetts.

FFFF2822 PERSONAL & PROFESSIONAL ADVANCEMENT IIB

The aims of this module in the second semester of the second year program are centered on achieving a satisfactory standard of communication skills and to provide guidance for managing diversity. This is primarily because the students will be moving to the clinical years. There is also a need to consolidate their professional judgements and critical thinking skills.

References :

1. Brookfield, S.D. 1999. *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. San Francisco: Jossey-Bass.
2. Donald, J.G. 2002. *Learning to think: Disciplinary perspectives*. San Francisco: Jossey-Bass.
3. Gosall N. & Gosall G.. 2012. *The Doctor's Guide to Critical Appraisal*. 3rd Ed. Cheshire: PasTest Ltd.
4. Hakim A. C. & Solomon M. 2016. *Working with Difficult People, Second Revised Edition: Handling the Ten Types of Problem People Without Losing Your Mind*. New York: Tarcher and Perigee.
5. Malaysian Medical Council: *Ethical Code & Guidelines*. 2015. <http://www.mmc.gov.my/index.php/ethical-code-guidelines>

5.1.3 YEAR 3

General Objectives

At the end of Year 3, students should be able to:

1. take a complete history, perform a proper physical examination, formulate provisional and differential diagnoses, justify relevant investigations and plan patient management taking into considerations the pathogenesis of diseases; pharmacological principles of drug use; medico-legal aspect; psychosocial, cultural, religious, and ethical values of patients, family and the community.
2. perform basic investigations and procedures.
3. communicate effectively as an individual, a leader and a team member.
4. demonstrate a sense of responsibility in self development and life-long learning ability as a junior doctor.
5. discuss health services provided by district health offices, health clinics and hospitals.
6. make a research proposal, conduct a survey, diagnose the main health problems in the community and perform health promotion activities.

Specific Objectives

At the end of year 3, students should be able to:

1. demonstrate self-learning and self-independence in acquiring clinical skills and interacting with patients and the community.
2. work effectively as a team member as well as a leader.
3. take clinical history and perform relevant physical examination, taking into consideration the holistic approach in the respective disciplines :
 - 3.1 Medicine.
 - 3.2 Surgery.
 - 3.3 Obstetrics and Gynaecology.
4. formulate provisional and differential diagnoses in the respective disciplines:
 - 4.1 Medicine.
 - 4.2 Surgery.
 - 4.3 Obstetrics and Gynaecology.
5. relate the pathogenesis of disease to the clinical diagnosis.
6. perform basic investigations and procedures.

FFFF3115 FAMILY MEDICINE

This module is designed for students to acquire the competency in performing history taking and physical examination of patients in the community as the first point of contact. Students will learn the basic investigations and management of wide range of patients seen at the primary care level. Students should develop clinical reasoning in making diagnosis and differential diagnoses. Students will be exposed to health issues encompassing all walks of life. This module emphasizes primary care principles of personalised, comprehensive and holistic care.

References :

1. Academy of Medicine, Malaysia (For online access to Malaysian Clinical Practice Guidelines) <http://www.acadmed.org.my>
2. Mc Whinney, IR. 2016. *A Textbook of Family Medicine*. 4th edition. Oxford University Press.
3. Medscape Reference: Diseases & Conditions <http://emedicine.medscape.com/>
4. Merck Manual on-line <http://www.merckmanuals.com/professional>.
5. Murtagh J. 2015 *General Practice*. 6th Revised edition. Mc Graw Hill Book Co.
6. Rakel R. Editor. 2015. *Textbook of Family Practice*. 9th edition. W B Saunders.
7. Taylor R. Editor. 2013. *Fundamentals of Family Medicine: The Family Medicine Clerkship Textbook*. 3rd edition. Springer Pub. Co.

FFFF3119 INTERNAL MEDICINE I

The module is aimed to give an early exposure to the clinical approach to various diseases in medicine. By applying basic and clinical sciences, the students learn through an integrated approach encompassing history taking, clinical examination and interpretation of relevant investigations. At the end of this module, students should also have knowledge of the principles of patient management in a holistic manner and are expected to be able to perform basic clinical procedures.

References :

1. Brian R. Walker, Nicki R. Colledge, Stuart H. Ralston and Ian Penman. 2014. *Davidson's Principles and Practice of Medicine*. 22nd Edition. Churchill Livingstone.
2. David A. Warrell, Timothy M. Cox, and John D. Firth. 2012. *Oxford textbook of Medicine*. Updated from 5th edition. USA: Oxford University Press.
3. Dennis Kasper, Anthony Fauci, Stephen Hauser, Dan Longo, J. Larry Jameson, Joseph Loscalzo. 2015. *Harrison's Principles of Internal Medicine*. 19th edition. The McGraw-Hill Companies Inc.
4. Malaysian Clinical Practice Guidelines (CPG). <http://www.acadmed.org.my/index.cfm?&menuid=67>
5. Nicholas J.T., Simon O'Connor. 2013. *Clinical Examination: A systemic Guide to Physical Diagnosis*. 7th Edition. Blackwell Publishers.
6. Parveen J.K., Michael C. 2016. *Kumar & Clark Clinical Medicine*. 9th Edition. W.B. Saunders Company
7. UpToDate. <https://www.uptodate.com/contents/search>

FFFF3129 SURGERY I

This 12 week module covers the basic clinical approach to the surgical patient. By applying basic and clinical sciences, the students learn through an integrated approach of core clinical and PPD components to gain adequate knowledge and skills in the management of the patients. The candidate will also be exposed to many different surgical patients, environments and experiences. The evaluation will be done in the form of continuous learning as well as a final assessment and case write-ups. At the end of module, students are expected to develop adequate knowledge to approach and manage; as well as developed a proper attitude and conduct in treating a surgical patient.

References :

1. Clive R. G. Quick, Joanna B Reed, Simon J.F. Harper, KouroshSaeb-Parsy, Philip J. Deakin. 2013. Essential Surgery: Problems, Diagnosis and Management With STUDENT CONSULT Online Access, 5e (Burkitt, Essential Surgery).5th Edition. Churchill Livingstone.
2. Kevin G. Burnand, John Black, Steven A. Corbett, William E.G. Thomas. 2014. Browse's Introduction to the Symptoms & Signs of Surgical Disease.5th Edition.CRC Press.
3. Nicholas J Talley. Simon O'Connor. 2016. Examination Medicine: A Guide to Physician Training, 8th Edition. Elsevier
4. Norman S. Williams, Christopher J. K. Bulstrode, P. Ronan O'Connell. 2013. Bailey & Love's Short Practice of Surgery (Williams, Bailey and Love's Short Practice of Surgery).26th Edition. CRC Press
5. O. James Garden, Andrew W. Bradbury, John L. R. Forsythe, Rowan W Parks. 2017.Principles and Practice of Surgery. 7th Edition.Churchill Livingstone

FFFF3512 RADIOLOGY I

The radiology mini strand will be integrated into the clinical years in Year 3 Medical and Surgical postings. The aim of the undergraduate radiology teaching is to equip students with the knowledge and interpretational skills required to practice safely and appropriately in their early career. Students will also be given knowledge base of the principles of radiology on which to build as their career develops. Last but not least, the module aims to ensure that medical graduates are fully aware of their legal responsibilities with regard to patient care and safety as influenced by radiology.

References :

1. Frank H. Netter, MD. 2011. Atlas of Human Anatomy. 5th edition.
2. Jamie Weir, Peter H. Abrahams, Jonathan D. Spratt, Lonie R. Salkowski. 2011.Imaging Atlas of Human Anatomy. 4th edition.
3. Gerald de Lacey, Simon Morley, Laurence Berman. 2008.The Chest X-ray: A Survival Guide. 1st edition.
4. Nigel Raby, Laurence Berman, Simon Morley, Gerald de Lacey. 2015.Accident and Emergency Radiology: A Survival Guide. 3rd edition
5. William Herning. 2016.Learning Radiology: Recognizing the basics. 2nd edition
6. Peter Armstrong; Martin L. Wastie; Andrea G. Rockall.2009. Diagnostic Imaging

FFFF3618 MEDICINE & SOCIETY III

The Medicine & Society III (FF3618) posting is a six-week educational programme. There are seven subjects/disciplines covered during the posting such as Health and Hospital Management, Family Health, Epidemiology and Statistics, Environmental Health, Occupational Health, Health Promotion and Community Nutrition. During this posting, the medical students are exposed to health services system and activities provided by the Ministry of Health. They are also required to carry out a community health survey by applying their epidemiological and statistical knowledge. The principles guiding the design of the posting stem are from the ultimate objective to produce a competent medical doctor's professional who will primarily serve the health needs of the Malaysian population.

References :

1. Department of Environment, Malaysia. www.doe.gov.my
2. Guideline for Hazard Identification, Risk Assessment and Risk Control (HIRARC). <http://www.dosh.gov.my/index.php/en/legislation/guidelines/hirarc-2>
3. Lee, Robert & Nieman, David. 2012. Nutritional Assessment. 6th International Edition. McGraw-Hill
4. Malaysia DOSH. 2016. Legislations: Acts. <http://www.dosh.gov.my/index.php/en/legislation/acts>
5. Malaysia DOSH. 2016. Legislations: Regulations. <http://www.dosh.gov.my/index.php/en/legislation/regulations-1>
6. Malaysia SOCSO. 2016. Social security protection. <http://www.perkeso.gov.my/en/> Ministry of Health, Malaysia. www.moh.gov.my
7. Theory And Practice by Trisha Greenhalgh Department of Primary Care and Population Sciences University College London UK. Blackwell publishing.
8. United States Department of Labor. Reproductive Hazards. <https://www.osha.gov/SLTC/reproductivehazards/hazards.html>

FFFF3816 PERSONAL & PROFESSIONAL ADVANCEMENT III

PPA module is to facilitate adaptation to clinical work and life as future doctors. There is more emphasis given to medical ethics leadership, teamwork and communication skills. The module will also familiarize the students with the uncertain nature of clinical medicine, as well as the unpredictable and varied behaviour of patients.

References :

1. Arain M, Suter E, Mallinson S, Hepp SL, Deutschlander S, Nanayakkara SD, Harrison EL, Mickelson G, Bainbridge L, Grymonpre RE. Interprofessional education for internationally educated health professionals: an environmental scan.
2. Birden H, Glass N, Wilson I, Harrison M, Usherwood T, Nass D. Teaching professionalism in medical education: a Best Evidence Medical Education (BEME) systematic review. BEME Guide No. 25. Med Teach. 2013 Jul;35(7):e1252-66. doi: 10.3109/0142159X.2013.789132. Review. PMID: 23829342
3. Birden HH, Usherwood T. They liked it if you said you cried": how medical students perceive the teaching of professionalism. Med J Aust. 2013 Sep 16;199(6):406-9.
4. Charles R, Hood B, DeRosier JM, Gosbee JW, Bagian JP, Li Y, Caird MS, Biermann JS, Hake ME. Root Cause Analysis and Actions for the Prevention of Medical Errors: Quality Improvement and Resident Education. Orthopedics. 2017 Apr 24;1-8. doi: 10.3928/01477447-20170418-04.
5. Levy LA1, Mathieson K. Attitudes of Physician Assistant Educators Toward Interprofessional Education and Collaborative Care. J Physician Assist Educ. 2017 Apr 21. doi: 10.1097/JPA.000000000000113.

FFFF3922 ELECTIVE POSTING

It is essential to facilitate student's development in holistic, comprehensive and practical manner, without restricted to formal learning methods inside classroom. In this module, students will be exposed to out-campus learning, especially to facilitate students to adapt and experience broader aspects of life. Students will be guided to participate in any elective posting programme for the minimum period of four weeks (in Malaysia) or two weeks (oversea). The elective posting programmes are chosen by students based on their preference on particular fields such as humanitarian, skills, entrepreneurship and others, subjected to approval by Programme Committee. This is important as preparation for students to enter working environment later on. It is hoped that students can learn to be independent, able to work in a team and communicate effectively especially when dealing with individuals from other organizations.

References :

1. Adams KL, Galanes GJ. 2021. Communicating in Groups: Applications and Skills (Communication). 11 th Edition, McGraw-Hill Education. New York.
2. Baird, BN, Mollen, D. 2019. Internship, Practicum, and Field Placement Handbook. 8 th Edition. Routledge Taylor & Francis Group. New York.
3. Godkin, M., Savageau, J. 2003. The effect of medical students' international experiences on attitudes toward serving underserved multicultural populations. *Family Medicine*. 35(4):273–278
4. Goodheart, W. 2020. Soft Skills for the Workplace. 2 nd Edition. Goodhear Willcox Publisher. USA.
5. Holmes, D., Zayas, L., Koyfman, A. 2012. Student objectives and learning experiences in a global health elective. *Journal of Community Health*. 37(5):927–934.
6. Northouse, PG. 2018. Leadership : Theory and Practice. 8 th Edition. SAGE Publications Inc. USA.
7. Petrosniak, A., McCarthy, A., Varpio, L. 2010. International health electives: thematic results of student and professional interviews. *Medical Education*. 44(7):683–689.
8. Sweitzer, HF, King, MA. 2019. The Successful Internship: Personal, Professional and Civic Development in Experiential Learning. 5 th Edition. Cengage Learning Inc. USA.
9. Thompson, M. et al. 2003. Educational effects of international health electives on U S and Canadian medical students and residents: a literature review. *Acad Med*. 78(3):342–347.
10. Wood, TH. 2019. Interpersonal Communication: Everyday Encounters. 9 th Edition, Cengage Learning, USA

5.1.4 YEAR 4

General Objectives

At the end of Year 4, the students should be able to :

1. perform history taking, physical examination, formulate provisional and differential diagnoses, justify relevant investigations and plan patient management utilizing hospital information system, taking into consideration principle of growth and development, needs of patients and their families in relation to emergency, death and dying as well as uncertainties, medico-legal and ethical issues.
2. apply knowledge and skills in forensic medicine competently as to comply with relevant legislation.
3. function as an effective leader and demonstrate a sense of responsibility in self and professional development and life long learning ability as a junior doctor.

Specific Objectives

At the end of Year 4, the students should be able to :

1. demonstrate complete history taking relevant to the respective discipline.
2. perform complete examination relevant to the respective discipline.
3. formulate Provisional Diagnosis and Differential Diagnosis.
4. identify and justify the relevant investigations, cost consideration and interpretations of the result
5. perform common relevant procedures correctly.
6. explain relevant procedures including their indications and complications.
7. differentiate between normal psychological responses and disorders.
8. relate the knowledge of normal growth, physical and emotional development to clinical disorders
9. plan the basic principles in the management of patients in the respective disciplines.
10. apply the pharmacological knowledge of drugs commonly used in terms of efficacy, safety, suitability and cost
11. demonstrate good communication skills appropriate to the situation.
12. explain the impact of illness on the community.
13. recommend health education program to individual, family and community eg immunization, exercise, nutrition and prevention of blindness.
14. apply basic life support (BLS) methods in the appropriate situations and be certified in the Newborn Resuscitation Programme (NRP).
15. explain the needs of patients and their families in relation to difficult situations such as emergencies, dying, death and uncertainties.
16. apply knowledge and skill of forensic medicine (pathology & psychiatry) competently as to comply with relevant legislation.
17. apply knowledge in biomedical science gained in earlier years to the various clinical situations in the respective disciplines
18. evaluate the ethical issues that arise in common clinical situations.
19. plan pre- and postoperative care including postoperative pain relief.

FFFF4118 PSYCHIATRY

This module covers the clinical approach to various syndromes and disorders in psychiatry. By applying basic and clinical sciences, the students learn through an integrated approach of core clinical and PPD components to gain adequate knowledge and skills as well as proper attitude and conduct for a holistic management of patients.

References :

1. American Psychiatric Association. (2013). Desk reference to the diagnostic criteria from DSM-5. Washington, DC, American Psychiatric Publishing
2. Benjamin, J.S., Sadock, V.A and Ruiz, P. (2014). Kaplan & Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. Eleventh Edition, WoltersKluwer.
3. British Association of Psychopharmacology (2017): <http://www.bap.org.uk/docsbycategory.php?docCatID=2>
4. Cowen, P., Harrison, P. and Burns, T. Sixth Edition. (2012). Shorter Oxford Textbook of Psychiatry. Oxford University Press, Oxford.
5. Flash cards for undergraduate psychiatry (2017): <http://www.cram.com/tag/mbbs-psychiatry>
6. Malaysian CPG: <http://www.acadmed.org.my/index.cfm?&menuid=67>
7. Resources prepared by University of Newcastle for medical students: <https://fms-teaching.ncl.ac.uk/psy/>

FFFF4127 PAEDIATRICS I

During this 8 weeks paediatric posting the students will be exposed to various aspects of clinical training in paediatrics and neonatology including history taking, physical examination and assessment of developmental milestones.

References :

1. Janet M Rennie. 2013. Rennie & Robertson's Textbook of Neonatology. 5th edition. Churchill Livingstone.
2. Janet M Rennie, Giles S Kendall. 2013. A Manual of Neonatal Intensive Care. 5th edition. CRC Press, Taylor & Francis Group
3. Karen J Marcdante, Robert M Kliegman. 2014. Nelson's Essential of Pediatrics. 7th edition. Elsevier Health
4. Robert M Kliegman, Bonita M.D. Stanton, Joseph St. Geme. 2015. Nelson Textbook of Pediatrics. 20th edition. Elsevier Health
5. Tom Lissauer, Graham Clayden. 2017. Illustrated Textbook of Paediatrics. 5th edition. Mosby-Elsevier
6. Tricia Lange Gomella, M Douglas Cunningham. Fabien G Eyal. 2013. Neonatology. 7th edition. McGraw-Hill Education-Lange
7. Wayne Harris. 2010. Examination Paediatrics. Elsevier Health

FFFF4212 ORL-HNS

The aim of this module is to give a knowledge regarding common ear, nose, throat, head & neck (ORL-H&S) diseases. This module also will teach students regarding basic ORL-H&S examinations. Students will be taught regarding emergency cases that need to be referred to Otorhinolaryngology. At the end of this module, students should be able to explain the diagnosis and provide principal of management of common ORL-H&S diseases.

References :

1. Dhingra, P.L., Dhingra, S. 2016. Diseases of Ear, Nose & Throat. 6th Edition.
2. Ear, Nose and Throat and Head and Neck Surgery. 4th Edition. 2013
3. KJ Lee's. 2016. Essential Otolaryngology. 11th edition.
4. Melissa A. Scholes ,Vijay R Ramakrishnan. 2016. ENT Secrets. 4th Edition.
5. Mohan Bansal. 2016. Essentials of Ear, Nose & Throat

FFFF4229 ORTHOPAEDICS

This will be an 8 weeks posting whereby students will be exposed to common orthopedics disorders and orthopedics emergencies, including history taking, physical examination and basic procedures. This serves as a preparatory year before entering the senior clerkship in the final year and eventually nurtures them into competent house-officers upon entering the first year of working in medical service.

References :

1. Solomon L, Warwick D, Selvadurai N. Apley's and Solomon's Concise System of Orthopaedics and Trauma. Taylor & Francis Group, 2014 (Fourth Edition)
2. Thompson J. Netter's Concise Atlas of Orthopaedic Anatomy. Saunders Elsevier, 2015 (2nd Edition – Updated Edition)
3. White T, Mackenzie S, Gray Alasdair. McRae's Orthopaedic Trauma and Emergency Fracture Management. Elsevier 2015 (3rd Edition)
4. Egol K, Koval K, Zuckerman J. Handbook of Fractures. Wolters Kluwer Health 2015 (5th edition)
5. Cleland J, Koppenhaver S, Su J. Netter's Orthopaedic Clinical Examination. An Evidence-Based Approach. Elsevier 2016 (3rd Edition)

FFFF4322 OPHTHALMOLOGY

The aim of this course is to provide students with an exposure and understanding to common ocular diseases. Students will be taught on how to make a diagnosis for various ocular diseases, relevant investigations and latest management options. They will also be exposed to the management of patients as a whole including their psychosocial care. The duration of this course is 2 weeks.

References :

1. J Bruce, B Anthony, Manoj V. Parulekar. 2016. Lecture Notes Ophthalmology. 12th Revised Edition. Blackwell Publishing
2. J Oliver, L Cassidy, G Jutley, L Crawley. 2014. Ophthalmology at A Glance. Blackwell Science Ltd
3. JJ Kanski, B Bowling. 2005. Elsevier. Ophthalmology In Focus. Churchill Livingstone
4. John V Forrester, Andrew D. Dick, Paul G McMenamin, Fiona Roberts, Eric Pearlman. 2015. The Eye: Basic Sciences in Practice. 4th edition; Saunders Ltd.
5. Kanski's Clinical Ophthalmology. 2015. A Systematic Approach. Brad Bowling. 8th edition. Saunders Ltd
6. M Batterrury, B Bowling, C Murphy. 2009. Ophthalmology: An Illustrated Colour Text. Livingstone
7. Timothy L Jackson. 2014. Moorfields Manual of Ophthalmology. 2nd edition. JP Medical Ltd

FFFF4422 ANAESTHESIOLOGY

The aim of this 2-week module is to introduce the students to the basic principles of general and regional anaesthesia, as well as intensive care. They will also learn the skills of airway management and basic life support course (BLS). This module also includes patient safety related to anaesthesia.

References :

1. Barrett K, et al. 2016. Ganong's Review of Medical Physiology. 25th Edition. McGraw-Hill.
2. Dept. of Anaesthesiology and Intensive Care, PPUKM. 2011. Basic Life Support Course Manual. An Introduction to Cardiopulmonary Resuscitation, Basic Airway Management and Defibrillation.
3. Gwinnutt M, Gwinnutt C. 2017. Clinical Anaesthesia (Lecture Notes). 5th Edition. John Wiley & Sons
4. Katzung B, et al. 2015. Basic and Clinical Pharmacology. 13th Edition. McGraw-Hill.
5. Yentis S, et al. 2013. Anaesthesia and Intensive Care A-Z. 5th Edition. Churchill Livingstone.

FFFF4618 OBSTETRICS & GYNAECOLOGY I

This module will allow students to apply their basic medical science knowledge learnt in the preclinical years (year 1 and 2) and relate them to the pathogenesis of diseases in O&G, to formulate diagnoses. Students will be trained to obtain medical history and perform relevant physical examination in O&G. In this module, they will also be taught to formulate provisional and differential diagnoses of common O&G conditions. Students are subsequently expected to identify, justify, perform and interpret relevant which students are also expected to apply their basic science knowledge, including investigations in O&G. Basic principles of patient management will be discussed during pharmacological knowledge of commonly used drugs in regards to efficacy, safety, suitability and cost. They will be introduced to common procedures and surgery in O&G, and will have opportunities to perform some basic O&G and common clinical procedures. They will be expected to observe normal deliveries and suturing of episiotomy at the completion of the module, students should be able to demonstrate effective O&G clerkship and communication skills which includes history taking, physical examination, investigations and patient management.

References :

1. Arulkumaran Sabaratnam, V. Sivanesaratnam, Alokendu Chatterjee, Pratap Kumar (Eds) & Shirish S. Shet. 2016. *Essentials of Obstetrics*. 3rd. Edition. Jaypee Brothers Medical Publishers (P) Ltd.
2. Catrina Bain, Kevin Burton, Jay McGavigan. 2011. *Gynaecology Illustrated*. 6th Edition. Churchill Livingstone
3. Jeremy J N Oats, Suzanne Abraham. 2016. *Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology*. 10th Edition. Elsevier
4. Kevin P. Hanretty. 2009. *Obstetrics Illustrated*. 7th Edition. Churchill Livingstone
5. Kulenthiran Arumugam. 2012. *A Practical Approach To Problems in Gynaecology for the Undergraduate*. 5th Edition. University of Malaya Press
6. Lee Say Fatt. 2007. *Quick Management Guide in Gynaecology*. 1st Edition. University of Malaya Press
7. Louise Kenny, Helen Bickerstaff. 2017. *Gynaecology by Ten Teachers*. 20th Edition. CRC Press
8. Louise Kenny, Jenny Myers. 2017. *Obstetrics by Ten Teachers*. 20th Edition. CRC Press
9. Marlene M. Corton, Kenneth Leveno, Catherine Y. Spong, Jodi Dashe. 2014. *Williams Obstetrics*. 24th Edition. Churchill Livingstone

FFFF4622 RADIOLOGY II

The radiology mini strand will be integrated into the clinical years in Year 4 Paediatrics and Orthopaedics postings. The aim of the undergraduate radiology teaching is to equip students with the knowledge and interpretational skills required to practice safely and appropriately in their early career. Students will also be given knowledge base of the principles of radiology on which to build as their career develops. Last but not least, the module aims to ensure that medical graduates are fully aware of their legal responsibilities with regard to patient care and safety as influenced by radiology.

References :

1. Frank H. Netter, MD. 2011. *Atlas of Human Anatomy*. 5th edition.
2. Jamie Weir, Peter H. Abrahams, Jonathan D. Spratt, Lonie R. Salkowski. 2011. *Imaging Atlas of Human Anatomy*. 4th edition.
3. Gerald de Lacey, Simon Morley, Laurence Berman. 2008. *The Chest X-ray: A Survival Guide*. 1st edition.
4. Nigel Raby, Laurence Berman, Simon Morley, Gerald de Lacey. 2015. *Accident and Emergency Radiology: A Survival Guide*. 3rd edition.
5. William Herning. 2016. *Learning Radiology: Recognizing the basic*. 2nd edition.
6. Peter Armstrong; Martin L. Wastie; Andrea G. Rockall. 2009. *Diagnostic Imaging*.

FFFF4823 PERSONAL AND PROFESSIONAL ADVANCEMENT IV

The aim of this module is to facilitate further the development of professionalism in clinical work of medical students as part of the preparation to become future clinicians. There is more emphasis given to emphatic skills in doctor-patient relationship, communication skills, teamwork, leadership, and medical ethics. The module will also familiarize the students with the uncertain nature of clinical medicine, such as the challenge in breaking bad news as well as the unpredictable and varied behaviour of patients.

References :

1. Asma Abdullah and Paul B. Pedersen. 2003. Understanding Multicultural Malaysia Delights, Puzzles and Irritations. Petaling Jaya & New York: Pearson Prentice Hall.
2. Bonnie F. Fremgen. 2015. Medical Law & Ethics. Pearson Education.
3. David L. Dotlich, James L. Noel, and Norman Walker. 2004. Leadership Passages: The Personal and Professional Transitions That Make or Break a Leader. San Francisco: Jossey-Bass.
4. Frederick W. Platt and Geoffrey H. Gordon. 2004. Field Guide to the Difficult Patient Interview (2nd ed.). Philadelphia: Lippincott Williams & Wilkins.
5. Margaret Lloyd & Robert Bor. 2009. Communication Skills for Medicine (3rd ed.). Edinburgh & New York: Churchill Livingstone.
6. Freeling and Conrad M. Harris. 1984. The Doctor-Patient Relationship (3rd ed.). Edinburgh, Melbourne, New York : Churchill Livingstone.
7. Paul Ramsden. 2003. Learning to Teach in Higher Education (2nd ed.). London & New York: RoutledgeFalmer.
8. Peter Maguire. 2000. Communication Skills for Doctors :A Guide to Effective Communication with Patients and Families. London: Arnold.
9. Robert M. Veatch. 1989. Medical Ethics. Massachusetts: Jones and Bartlett.
10. Suzanne Kurtz, Jonathan Silverman, and Juliet Draper. 2005. Teaching and Learning Communication Skills in Medicine (2nd ed.). Abingdon, Oxon, UK: Radcliffe.
11. Tony Ghaye and Sue Lilyman. 2010. Reflection: Principles and Practice for Healthcare Professionals (2nd ed.). London: MA Healthcare Ltd.

FFFF4911 FORENSIC PATHOLOGY I

The Forensic Pathology module in year 4 requires the students to learn the subject forensic pathology and observe post-mortem examination under lecturer's supervision and attend moot court video presentation. All student are encourages to complete a cumulative total of 10 (ten) observations.

References :

1. Knight's Forensic Pathology by Bernard Knight & Pekka Saukko, Fourth Edition, Dec 2015, CRC Press
2. Forensic Pathology by Max M Houck, 2017, Elsevier Science Publishing
3. Forensic pathology of Infancy & Childhood By Kim A Collins, Roger W Byard, March 2014, Humana Press
4. Essential Forensic Pathology Gilbert Edward Corrigan, March 2012, CRC Press
5. Gunshot Wounds : Practical Aspects of Firearms, Ballistics and forensic techniques by Vincent JM diMaio, Third Edition, 2016, CRC Press.
6. Color Atlas of Forensic Medicine & Pathology By Charles Catanese, March 2016, CRC Press

FFFF4921 FORENSIC PATHOLOGY II

The Forensic Pathology module in year 4 requires the students to learn the subject forensic pathology and observe postmortem examination under lecturer's supervision and attend moot court video presentation. All student are encourages to complete a cumulative total of 10 (ten) observations.

References :

1. Knight's Forensic Pathology by Bernard Knight & Pekka Saukko, Fourth Edition, Dec 2015, CRC Press
2. Forensic Pathology by Max M Houck, 2017, Elsevier Science Publishing
3. Forensic pathology of Infancy & Childhood By Kim A Collins, Roger W Byard, March 2014, Humana Press
4. Essential Forensic Pathology Gilbert Edward Corrigan, March 2012, CRC Press
5. Gunshot Wounds : Practical Aspects of Firearms, Ballistics and forensic techniques by Vincent JM diMaio, Third Edition, 2016, CRC Press.
6. Color Atlas of Forensic Medicine & Pathology By Charles Catanese, March 2016, CRC Press

FFFF4812 SPECIAL STUDY MODULE I

Special Study Module (SSM) is a pre-requisite for sitting the Final Professional Exam. Students have to conduct medical research which allows them to develop their skills of communication, critical thinking, information and data handling. Students are divided into groups of 5-6 students each and assigned to supervisors from various departments. The groups of students are given the opportunity to choose the type of medical research they wish to do. SSM is conducted throughout year 4 and the first 7 weeks of year 5. The aim of this SSM 1 is to develop a research proposal to be submitted to the medical ethics committee under their supervisor's supervision.

FFFF4812 SPECIAL STUDY MODULE II

Special Study Module (SSM) is a pre-requisite for sitting the Final Professional Exam. Students have to conduct medical research which allows them to develop their skills of communication, critical thinking, information and data handling. Students are divided into groups of 5-6 students each and assigned to supervisors from various departments. The groups of students are given the opportunity to choose the type of medical research they wish to do. SSM is conducted throughout year 4 and the first 7 weeks of year 5. The aim of SSM II is to train students to gain ethics approval from the Medical/Animal Ethics Committee after submitting the research proposal to the committee. Students are also trained to organise the flow of the study before starting the research.

5.1.5 YEAR 5

General Objectives

At the end of Year 5, the students should be able to :

1. Function as a junior doctor under direct supervision of a specialist.
2. Conduct a research project and present the findings
3. communicate effectively as a doctor, team member and assume leadership role in relevant situations.
4. demonstrate life long learning ability as a basis for future development in one's medical career.

Specific Objectives

At the end of Year 5, the students should be able to :

1. describe principles of health management including functions of managers, organizational behaviour and human resource management.
2. describe basic economic issues of healthcare, including cost management, health insurance, managed care and referral system.
3. describe concept, organization, and function of urban health authority.
4. describe occupational accidents, rehabilitation and compensation process, and workplace hazards.
5. prepare a research proposal.
6. perform a research project in a chosen field of health using appropriate methods.
7. apply critical thinking skills throughout the conduct and process of research.
8. present research findings verbally, visually and in writing.
9. relate the various medicolegal aspects to clinical practice.
10. analyze the principles and practice of organizational leadership.
11. apply the dual role of doctors as team leaders and team players.
12. demonstrate good communication skills in special clinical situations such as bereavement, HIV counseling, etc.
13. apply critical thinking and learning skills in the pursuit of life-long learning and continuous professional development
14. apply medical information technology such as Hospital Information System, Electronic Medical Record, Telemedicine, etc
15. apply skills at interviews, preparing resume, and management of self, finances and health.
16. manage common problems that present to primary care practices in an evidence-based and cost-effective manner that utilizes.
17. manage mental health conditions.
18. clerk, perform physical examination, outline management plan on newly admitted patients.
19. assist the ward team in day to day management of patients.
20. assist in basic ward procedures.
21. competent in performing basic clinical procedures and interpretations of basic clinical laboratory results.
22. demonstrate good patient-doctor relationship through fine communication skills, ethical practice, appropriate bedside manners and a high degree of professionalism.
23. recognize the role of epidemiology in health promotion, disease prevention and control.
24. assist in the management of clinical emergencies.
25. assist in taking consent for a procedure and surgery.
26. assist in clinical procedures.
27. carry out patient and family counseling sessions.
28. break bad news.
29. perform on-call duties.
30. perform basic labour room procedures including normal delivery and episiotomy suturing.

FFFF5119 SURGERY II

The students will be posted to the surgical department for a total of nine weeks. They will be exposed to the concept of senior clerkship which serves to prepare the students to become familiar and competent in handling common surgical cases and perform simple day-to-day procedures as surgical house officers. The students will be posted in PPUKM and Hospital Teluk Intan throughout the rotation. The students will be supervised by designated lecturers at PPUKM and Hospital Teluk Intan. The module consist of lectures, seminars, skills workshops, bedside teaching and interprofesional learning. The students will also need to attend clinics, endoscopy and operating theatres. At the end of the posting the students should be able to function as a competent and safe surgical house officer.

References :

1. Clive R. G. Quick, Joanna B Reed, Simon J.F. Harper, Kourosh Saeb-Parsy, Philip J. Deakin. 2013. *Essential Surgery: Problems, Diagnosis and Management With STUDENT CONSULT Online Access*, 5e (Burkitt, *Essential Surgery*). 5th Edition. Churchill Livingstone
2. Kevin G. Burnand, John Black, Steven A. Corbett, William E.G. Thomas. 2014. *Browse's Introduction to the Symptoms & Signs of Surgical Disease*. 5th Edition. CRC Press
3. Nichoals J Talley, Simon O'Connor. 2016. *Examination Medicine: A Guide to Physician Training*. 8th Edition. Elsevier
4. Norman S. Williams, Christopher J. K. Bulstrode, P. Ronan O'Connell. 2013. *Bailey & Love's Short Practice of Surgery (Williams, Bailey and Love's Short Practice of Surgery)*. 26th Edition. CRC Press
5. O. James Garden, Andrew W. Bradbury, John L. R. Forsythe, Rowan W Parks. 2017. *Principles and Practice of Surgery*. 7th Edition. Churchill Livingstone

FFFF5212 EMERGENCY MEDICINE

Emergency Medicine is a rapidly growing specialty, which focuses on early diagnosis and intervention, as well as acute management involving various categories of patients. This module exposes students to clinical case approach and the establishment of effective resuscitation teams. Students are required to complete the rotation and achieve a basic understanding of the principles of pre-hospital care, initial assessment and stabilization of critically ill patients and patients' disposition. This preliminary module only exposes students to part of emergency medicine. However, it is hoped that it can create a different perspective on modern emergency care through various interesting methods of teaching and learning.

References :

1. Jonathan Wyatt, Robin Illingworth, Colin Graham, Kerstin Hogg. 2012. *Oxford Handbook of Emergency Medicine*. 4th Edition. OUP Oxford.
2. Judith E. Tintinalli, Gabor D. Kelen, J. Stephan Stapczynski. 2015. *Emergency Medicine: a comprehensive study guide/American College of Emergency Physicians*. 8th Edition. New York: McGraw Hill.
3. Shirley Ooi, Peter Manning. 2014. *Guide to the essentials in Emergency Medicine* Singapore. McGraw-Hill.
4. Journal Circulation (http://circ.ahajournals.org/content/132/18_suppl_2) - Last visited 3rd August 2016
5. Websites Uptodate online (<http://www.uptodate.com/contents/table-of-contents/emergency-medicine-adult-and-pediatric>) through PPUKM library portal - Last visited 3rd August 2016
6. <http://lifeinthefastlane.com> (medical education blog) - Last visited 3rd August 2016

FFFF5227 PAEDIATRICS II

This is the second paediatric posting in the medical undergraduate program. During this module, the concept of senior clerkship is introduced in order to train and prepare you prior to the internship, so that you are familiar and competent in handling acute and chronic paediatric cases. Five weeks are in PPUKM and two weeks of this posting are spent at a peripheral district hospital. You are expected to perform ward work and attend ward rounds and clinics at these hospitals.

References :

1. Tom Lissaeur, Will Carroll (2021); Illustrated Textbook of Paediatrics; 6th edition; Elsevier.
2. Mary Rudolf, Anthony Luder, Kerry Jeavon (2020); Essential Paediatrics and Child Health, 4th Edition; Wiley-Blackwell
3. Lee Way Seah, Tay Chee Geap, Lum Su Han; Textbook of Paediatrics and Child Health (2019); University of Malaya
4. Sunil Sinha, Lawrence Miall, Luke Jardine (2018); Essential Neonatal Medicine; 6th edition; John Wiley and Sons Ltd.

Reference Book:

1. Karen J Marcdante, Robert M Kliegman (2018) Nelson's Essential of Pediatrics; 8th edition; Elsevier.

FFFF5329 INTERNAL MEDICINE II

The aim of this module is to introduce the concept of senior clerkship which is to train and prepare the final year students prior to their internship. This is to ensure that they are familiar and competent in handling acute and chronic medical cases. At the end of Year 5, the students should be able to function as a junior doctor under direct supervision of a specialist, communicate effectively as a doctor, team member and assume leadership role in relevant situations. They should also be able to demonstrate lifelong learning ability as a basis for future development in one's medical career.

References :

1. Buku Teks
2. Kumar and Clark's Clinical Medicine, 10th Edition. Elsevier. 2020.
3. Harrison's Principles of Internal Medicine, 21st Edition. McGraw Hill / Medical. 2022.
4. Davidson's Principles and Practice of Medicine, 24th Edition. Elsevier. 2022.
5. Talley and O'Connor's Clinical Examination, 9th Edition. Elsevier. 2022.
6. Oxford Handbook of Clinical Medicine, 10th. Oxford University Press. 2022.
7. Malaysian Clinical Practice Guidelines (CPG).acadmed.org.my
8. Website: e-medicine:www.emedicine.com
9. Medscape. <https://emedicine.medscape.com/>
10. UpToDate.

FFFF5419 OBSTETRICS & GYNAECOLOGY II

The final year will be reserved for more direct clinical exposure to prepare them for the first year of working in medical service in Obstetrics & Gynecology, to train them for work as a house officer in O&G. The students will be posted to the O&G department for a duration of seven weeks in the final year. They will be assigned according to the department rotation and supervised by department lecturers. During this attachment, the first two weeks the students will be in UKMMC, following which in the next four weeks they alternate their training in groups of 14 each between UKMMC, Hospital Teluk Intan and Hospital Slim River. They all regroup in the final week of posting back to UKMMC. The module consists of tutorials, clinical workshops, bedside teaching, rotations to relevant wards and clinics in the O&G setup such as labour room, the O&G admitting centre (OGAC), operation theatres, antenatal and postnatal wards, general O&G clinics and relevant subspecialized clinics and ultrasonography rooms in O&G. They have to complete a logbook and a gynaecological case writeup. At the end of the posting, the students should be able to have adequate knowledge, exposure and clinical skills to work as a house officer.

- References**
1. Arulkumaran, S. 2011. Essentials of gynecology. New Delhi: Jaypee Brothers.
 2. Arulkumaran, S. 2016. Essentials of obstetrics. Jaypee Brothers Medical P.
 3. Beers, M. H. 2003. The Merck manual of medical information. Whitehouse Station, NJ: Merck Pub.
 4. Letchumanan, R., Dass, R. H., Lim, Z. S., & Chai, F. X. 2015. Doctrina perpetua: guides on obstetrics. Kuala Lumpur: R & S Publishing House.
 5. Letchumanan, R., Vadiveloo, N., Dass, R. H., & Lim, Z. S. 2015. Doctrina perpetua: guides on gynaecology. Kuala Lumpur: R & S Publishing House.
 6. Nalliah, S., & S. 2015. Clinical protocols in obstetrics and gynaecology for Malaysian hospitals: a must have compendium for practitioners of Obstetrics & Gynaecology. Melaka, Malaysia: Colour Box Publishing House.
 7. Monga, A. K., & Dobbs, S. 2011. Gynaecology by ten teachers. 20th Edition. London: Hodder & Arnold.
 8. Monga, A. K., & Dobbs, S. 2011. Obstetrics by ten teachers. 20th Edition. London: Hodder & Arnold.

FFFF5522 FAMILY MEDICINE II

The objective of this module is to consolidate the application of principles of family medicine in patient management. In this module, students will apply the skills learnt from various disciplines to manage a patient comprehensively and to outline the long term care plan. Students will be exposed to specialised skills such as preparing a discharge summary, referral letter and prescription, as well as management approach for special patient populations such as child and adolescents, and elderly care. It is exercised in 2 weeks.

References :

1. Fallon M, Hanks G. 2013. ABC of Palliative care ABC series. 2nd edition. Wiley.
2. McWhinney, IR. 2016. A Textbook of Family Medicine. 4th edition. Oxford University Press.
3. Murtagh J. 2015. General Practice. 6th Revised edition. McGraw Hill Book Co.
4. Rakel R. Editor. 2015. Textbook of Family Practice. 9th edition. W B Saunders.
5. Taylor R. Editor. 2013. Fundamentals of Family Medicine: The Family Medicine Clerkship Textbook. 3rd edition. Springer Pub. Co.

FFFF5816 SPECIAL STUDY MODULE III

Special Study Module (SSM) is a pre-requisite for sitting the Final Professional Exam. Students have to conduct medical research which allows them to develop their skills of communication, critical thinking, information and data handling. Students are divided into groups of 5-6 students each and assigned to supervisors from various departments. The groups of students are given the opportunity to choose the type of medical research they wish to do. SSM is conducted throughout year 4 and the first 7 weeks of year 5. The aim of SSM III is to train students to collect data, analyse data and draw conclusions from the data. Students are also trained to present their study findings at a scientific conference. Students are also trained to write the study findings in the form of a manuscript for submission to a journal.

References :

Rujukan yang disyorkan bergantung kepada jenis kajian dipilih untuk dijalankan.

FFFF5823 PERSONAL & PROFESSIONAL ADVANCEMENT V

This PPD module is to further facilitate the development of professionalism in clinical work of medical students as part of the preparation to become future clinicians. There is more emphasis given to emphatic skills in doctor-patient relationship, communication skills, teamwork, leadership, and medical ethics. The module will also familiarize the students with the uncertain nature of clinical medicine, such as the challenge in breaking bad news as well as the unpredictable and varied behavior of patients.

References :

1. Skills for Communicating with Patients. Jonathan Silverman, Suzanne Kurtz, Juliet Draper. Florida: CRC Press, 2013.
2. The Doctor's Communication Handbook, Peter Tate, Elizabeth Tate. London: Radcliffe Publishing Ltd, 2014.
3. The Essentials of Patient Safety. Charles Vincent. Wiley-Blackwell. 2012. <http://www.chfg.org/wp-content/uploads/2012/03/Vincent-Essentials-of-Patient-Safety-2012.pdf>
4. Medical Law and Ethics. Jonathan Herring. Oxford: Oxford University Press, 2016. The Spiritual Assessment. Aaron Saguil, Karen Phelps. American Family Physician. 2012;86(6):546-550.

FFFF5911 FORENSIC PATHOLOGY III

The Forensic Pathology module in year 5 requires the students to continue observe and perform postmortem examination under lecturer's supervision, prepare postmortem report and attend moot court video presentation. All student are encourages to complete a cumulative total of 10 (ten) observations before they are allowed to perform 2 (two) postmortem examination in this year. All students are required to submit 2 postmortem reports in either English or Malay language each. An end-posting examination will be held at the end of the posting.

References :

1. Knight's Forensic Pathology by Bernard Knight & Pekka Saukko, Fourth Edition, Dec 2015, CRC Press
2. Forensic Pathology by Max M Houck, 2017, Elsevier Science Publishing
3. Forensic pathology of Infancy & Childhood By Kim A Collins, Roger W Byard, March 2014, Humana Press
4. Essential Forensic Pathology Gilbert Edward Corrigan, March 2012, CRC Press
5. Gunshot Wounds : Practical Aspects of Firearms, Ballistics and forensic techniques by Vincent JM diMaio, Third Edition, 2016, CRC Press.
6. Color Atlas of Forensic Medicine & Pathology By Charles Catanese, March 2016, CRC Press

STUDENT ASSESSMENT

A. GENERAL CRITERIA

1. Assessment

Terminology Year 1, 2 and 4

- Continuous Assessment (CA)
- End Semester I and II Examinations (ESE)
- Remedial / Refer Examination after End Semester II Examination

Year 5

- Continuous Assessment (CA)
- Professional Examination (PE)

2. Eligibility to sit for ESE

- Attendance of 100% in teaching-learning activities
- Fulfill the criteria specified by each module

3. Eligibility to sit for PE

- Minimum attendance of 100% in teaching-learning activities
- Pass Special Study Module and Forensic Pathology

4. Criteria for Progression Year 1 and 2

- Pass ESE, progress to subsequent year
- Fail any module in ESE,
- sit for Remedial
- Fail Remedial / Refer Examination, repeat the year
- Fail Remedial/Refer Examination with CGPA 1.33 and below, exit the programme.
- Composite marks of all components are counted as the final marks

Year 3

- Pass Intermediate Exam (theory and clinical), progress to subsequent year
- Fail Intermediate Exam for Remedial / Refer Examination (one attempt only)
- Fail more than two major modules in EOM, repeat the year
- Fail Remedial / Refer Examination, repeat the year
- In Medicine and Society Module and PPA Module, students must pass both components CA and EOM to pass the module

Year 4

- Pass ESE, progress to subsequent year
- Fail two or less major modules in ESE, refer posting and sit for Remedial / Refer Examination
- Fail more than two major modules in ESE, repeat the year
- Fail Remedial / Refer Examination, repeat the year

Year 5

- Pass the Professional Examination, a student will be awarded with the MD(UKM) degree.
- Pass with distinction in the Professional Examination, a student will be awarded the MD (UKM) degree and the distinction will be recorded in the transcript.
- Pass with distinction in the Professional Examination and fulfill all the criteria for honours, a student will be awarded the MD(Hons) (UKM) degree.
- Fail Professional Examination, repeat Year 5 for 6 months

5. Grades : CGPA System

B. EXAMINATION FORMAT & DISTRIBUTION OF MARKS Year 1 and 2

Biomedical Modules

Examination	Distribution of Marks	Total
CA	PBL – 10% End of Module – 20%	30%
ESE - Theory	MCQ (OBA & EMI) MEQ – 50% - 50%	100% - 50% - 70%
ESE - OSPE	≥ 5 stations – 10% ≥ 8 stations – 20%	10% - 20%

Clinical Sciences Modules

Examination	Distribution of Marks		Total
Year 1 Semester II	CA – 60%	ESE – OSCE 40%	100%
Year 2 Semester I	CA – 60%	ESE – OSCE 70%	100%
Year 2 Semester II	CA – 60%	ESE – OSCE 70%	100%

Year 3

Clinical Modules * (Medicine I, Surgery I, Family Medicine, Medicine & Society III)

Examination	Assessment Method	Distribution of Marks
CA	MLC, Mini-CEX, CBD Log Book, Case report, Supervisor report	30%
Summative Assessment	MCQ (OBA & EMI) KFQ, OSCE	70%

*Excluding Medicine & Society, FM, PPA and Radiology Module

Year 4

Clinical Modules * (O & G I, Orthopaedics, Paediatrics I, Psychiatry)

Examination	Distribution of Marks	Total
CA	30%	30%
ESE - Theory	MCQ (OBA & EMI) MEQ – 35%	35%
ESE - OSCE	35%	35%
		100%

Clinical Modules * (ORL – HNS, Ophthalmology, Anesthesiology)

Examination	Distribution of Marks	Total
CA	30%	30%
ESE - Theory	MCQ (OBA & EMI) MEQ – 35%	35%
ESE - OSCE	35%	35%
		100%

Personal & Professional Modules

Examination	Distribution of Marks	Total
CA	70%	70%
ESE - Theory	30%	50%
		100%

Year 5**Clinical Modules * (Medicine II, O & G II, Surgery II, Orthopaedics, Paediatrics II, Family Medicine, Emergency Medicine)**

Examination	Distribution of Marks	Total
CA	30%	30%
FPE - Theory	MCQ I & II (OBA & EMI) – 20% KFQ – 15%	35%
FPE - Clinical	Long Case – 30% OSCE – 70%	35%

Forensic Pathology & Special Study Module (Pre-requisite to sit for the PE)

Examination	Grading
Assessment throughout the modules in Year 4 & 5	Pass or Fail

Note :

CA – Continuous Assessment ESE – End Semester Examination

FPE – Final Professional

***Major clinical modules**

**** Minor clinical modules**

Refer Study Guides for more detailed information

**PERATURAN - PERATURAN
FAKULTI PERUBATAN**

**DI BAWAH PERUNTUKAN
PERATURAN-PERATURAN
UNIVERSITI KEBANGSAAN MALAYSIA
(PENGAJIAN SARJANA MUDA) 2020**

**PERATURAN-PERATURAN
UNIVERSITI KEBANGSAAN MALAYSIA
(PENGAJIAN SARJANA MUDA) 2020**

Pada menjalankan kuasa yang diberi oleh perenggan 38 Perlembagaan Universiti Kebangsaan Malaysia 2010, Senat Universiti Kebangsaan Malaysia membuat peraturan seperti berikut;

1. Nama, Mula Berkuatkuasa, Pemakaian dan Tafsiran

- 1.1 Peraturan ini dinamakan Peraturan-peraturan Universiti Kebangsaan Malaysia (Pengajian Sarjana Muda) 2020 dan hendaklah mula berkuat kuasa selepas tarikh permulaan kuat kuasa Peraturan-peraturan ini.
- 1.2 Peraturan ini hendaklah terpakai bagi semua pelajar yang mula mengikuti sesuatu program yang mengurniakan suatu Ijazah selepas tarikh Peraturan ini mula berkuatkuasa.

2. Syarat-syarat Penerimaan Masuk

2.1. Syarat Am Universiti

2.1.1. Sijil Pelajaran Malaysia

Calon-calon mestilah lulus peperiksaan Sijil Pelajaran Malaysia (SPM) atau peperiksaan yang setaraf dengannya serta lulus dengan kepujian dalam mata pelajaran Bahasa Melayu/Bahasa Malaysia atau Bahasa Melayu/Bahasa Malaysia Kertas Julai dan Lulus mata pelajaran Sejarah dalam Peperiksaan SPM

2.1.2. Sijil Tinggi Persekolahan Malaysia atau yang setaraf

2.1.2.1. Calon-calon mestilah lulus peperiksaan STPM dengan mendapat sekurang-kurangnya PNGK 2.00 dan mendapat sekurang-kurangnya :

- i. Gred C (NGMP 2.00) dalam mata pelajaran Pengajian Am ; dan
- ii. Gred C (NGMP 2.00) dalam dua mata pelajaran lain dan mendapat sekurang-kurangnya Tahap 1 (Band 1) dalam Peperiksaan Malaysian University English Test (MUET)

2.2. Syarat Khas Program (Calon Tempatan)

2.2.1. Sijil Matrikulasi

Calon Matrikulasi KPM/Asasi

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.80 pada peringkat Matrikulasi KPM /Asasi;

DAN

Mendapat sekurang-kurangnya Gred B (NGMP 3.00) pada peringkat Matrikulasi/Asasi dalam mata pelajaran berikut :-

- Biologi
- Kimia
- Matematik/Fizik

DAN

Mendapat sekurang-kurangnya Gred B/4B pada peringkat SPM dalam mata pelajaran berikut:-

- Biologi
- Kimia
- Fizik
- Matematik/Matematik Tambahan
- Satu (1) mata pelajaran lain kecuali Seni /KSI

DAN

Mendapat sekurang-kurangnya Band 4.0 dalam Malaysian University English Test (MUET) untuk peperiksaan yang bermula sesi 1 tahun 2021 ATAU Band 4 untuk peperiksaan sehingga tahun 2020 mengikut tempoh sah laku pada tarikh permohonan;

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

Calon ASASI Pintar

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.80 pada peringkat ASASI Pintar;

DAN

Memperolehi sekurang-kurangnya Gred B (NGMP 3.00 daripada 4.0) dalam tiga (3) mata pelajaran berikut:-

- Biologi
- Kimia
- Fizik
- Matematik / Matematik Tambahan
- Satu (1) mata pelajaran lain kecuali Seni /KSI

DAN

Mendapat sekurang-kurangnya Band 4.0 dalam Malaysian University English Test (MUET) untuk peperiksaan yang bermula sesi 1 tahun 2021 ATAU Band 4 untuk peperiksaan sehingga tahun 2020 mengikut tempoh sah laku pada tarikh permohonan;

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

Calon STPM

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.80 pada peringkat STPM;

DAN

Mendapat sekurang-kurangnya Gred B (NGMP 3.00) pada peringkat STPM dalam mata pelajaran berikut:

- Biologi
- Kimia
- Matematik T / Matematik M / Fizik

DAN

Mendapat sekurang-kurangnya Band 4.0 dalam Malaysian University English Test (MUET) untuk peperiksaan yang bermula sesi 1 tahun 2021 ATAU Band 4 untuk peperiksaan sehingga tahun 2020 mengikut tempoh sah laku pada tarikh permohonan;

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

2.2.3 Diploma / Setaraf**Calon Diploma International Baccalaureate (IB) / Setaraf**

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Memperoleh 37 mata dengan minimum 2 mata pelajaran Sains atau Matematik di peringkat “Higher Level (HL)” dan 1 mata pelajaran Sains di peringkat “Standard Level (SL)”.

DAN

Memperolehi sekurang-kurangnya skor 4 dalam mata pelajaran berikut:

- Biologi
- Kimia
- Fizik/Matematik

DAN

Mendapat sekurang-kurangnya Gred B/4B pada peringkat SPM dalam mata pelajaran berikut:-

- Biologi
- Fizik
- Kimia
- Matematik/Matematik Tambahan dan
- Satu (1) mata pelajaran lain

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

Calon General Certificate of Education (Advanced ('A') Level

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Memperolehi sekurang-kurangnya Gred AAB atau ABB dalam 3 mata pelajaran berikut :-

- Biologi
- Kimia
- Fizik/Matematik

DAN

Lulus ujian dan /atau temuduga yang ditetapkan oleh Fakulti.

2.2.4 Calon Lulusan Ijazah

Bidang Sains Kesihatan atau Sains Tulen atau Sains Gunaan

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.30 (daripada 4.00) atau setara.

DAN

Mendapat sekurang-kurangnya Band 4.0 dalam Malaysian University English Test (MUET) untuk peperiksaan yang bermula sesi 1 tahun 2021 ATAU Band 4 untuk peperiksaan sehingga tahun 2020 mengikut tempoh sah laku pada tarikh permohonan;

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

Bidang Sains Sosial atau Sains Kemasyarakatan

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.50 (daripada 4.00) atau setara.

DAN

Mendapat sekurang-kurangnya Kepujian pada peringkat SPM dalam mata pelajaran berikut:-

- Biologi
- Kimia

DAN

Mendapat sekurang-kurangnya Band 4.0 dalam Malaysian University English Test (MUET) untuk peperiksaan yang bermula sesi 1 tahun 2021 ATAU Band 4 untuk peperiksaan sehingga tahun 2020 mengikut tempoh sah laku pada tarikh permohonan;

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

2.3. Syarat Khas Program (Calon Antarabangsa)

2.3.1 Diploma / Setaraf

Calon Diploma International Baccalaureate (IB) / Setaraf

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Memperoleh 37 mata dengan minimum 2 mata pelajaran Sains atau Matematik di peringkat ‘Higher Level (HL)’ dan 1 mata pelajaran Sains di peringkat ‘Standard Level (SL)’

DAN

Memperoleh sekurang-kurangnya skor 4 dalam mata pelajaran berikut :-

- Biologi
- Kimia
- Fizik / Matematik

DAN

Mendapat sekurang-kurangnya Gred B pada peringkat General Certificate of Education Ordinary ('O') Level dalam mata pelajaran berikut:-

- Biologi
- Kimia
- Fizik
- Matematik / Matematik Tambahan; dan
- Satu (1) mata pelajaran lain

DAN

Mendapat sekurang-kurangnya IELTS (Band 6.0) / TOEFL (Skor 550).

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

*Calon antarabangsa wajib mengambil kursus Bahasa Melayu sepanjang pengajian sebagai syarat bergraduasi.

Calon General Certificate of Education (Advanced ('A') Level

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Memperoleh sekurang-kurangnya Gred AAB atau ABB dalam 3 mata pelajaran berikut :-

- Biologi
- Kimia
- Fizik / Matematik

DAN

Mendapat sekurang-kurangnya IELTS (Band 6.0) /TOEFL (Skor 550)

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

*Calon antarabangsa wajib mengambil kursus Bahasa Melayu sepanjang pengajian sebagai syarat bergraduasi.

Calon Higher/Upper Secondary School Certificate / Kelayakan Antarabangsa Setaraf

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Memperoleh Higher/Upper School Certificate di negara asal yang disenaraikan dalam MQA (The List Of Entry Qualifications For International Student) bagi 12 tahun persekolahan;

DAN

Memperoleh sekurang-kurangnya Gred AAB atau ABB dalam 3 mata pelajaran berikut :-

- Biologi
- Kimia
- Fizik / Matematik

DAN

Mendapat sekurang-kurangnya IELTS (Band 6.0) /TOEFL (Skor 550).

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

*Calon antarabangsa wajib mengambil kursus Bahasa Melayu sepanjang pengajian sebagai syarat bergraduasi.

2.3.2 Calon Lulusan Ijazah

Bidang Sains Kesihatan atau Sains Tulen atau Sains Gunaan

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.30 (daripada 4.00) atau setara.

DAN

Mendapat sekurang-kurangnya IELTS (Band 6.0) / TOEFL (Skor 550).

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

*Calon antarabangsa wajib mengambil kursus Bahasa Melayu sepanjang pengajian sebagai syarat bergraduasi.

Bidang Sains Sosial atau Sains Kemasyarakatan

Berumur sekurang-kurangnya 18 tahun pada tarikh pendaftaran program.

DAN

Mendapat sekurang-kurangnya PNGK 3.50 (daripada 4.00) atau setara.

DAN

Mendapat sekurang-kurangnya Gred C pada peringkat General Certificate of Education Ordinary ('O') Level dalam mata pelajaran berikut:-

- Biologi
- Kimia

DAN

Mendapat sekurang-kurangnya IELTS (Band 6.0) / TOEFL (Skor 550).

DAN

Lulus ujian dan /atau temu duga yang ditetapkan oleh Fakulti.

*Calon antarabangsa wajib mengambil kursus Bahasa Melayu sepanjang pengajian sebagai syarat bergraduasi.

2.4. Syarat-syarat Masuk Yang Lain

Calon-calun mestilah juga :

- 2.4.1. Dapat memuaskan Senat tentang kecekapan mereka bertutur dalam Bahasa Malaysia ;
- 2.4.2. mengambil apa-apa ujian serta menghadiri temuduga seperti yang ditentukan oleh Senat untuk menilai kelayakan mereka mengikuti kursus di Universiti ;
- 2.4.3. menunjukkan lazimnya bahawa mereka berumur tujuh belas tahun atau lebih pada hari pertama tahun akademik yang mereka mohon masuk ;
- 2.4.4. menunjukkan bukti dalam borang yang disediakan oleh Universiti bahawa mereka adalah cukup sihat dan berupaya untuk mengikuti kursus pengajian di universiti ; dan
- 2.4.5. memenuhi apa-apa syarat lain yang ditetapkan oleh Senat dari semasa ke semasa.

2.5. Penerimaan masuk calon ke Fakulti bergantung kepada budi bicara Senat.

3. Struktur Pengajian

3.1. Kursus

3.1.1. Fakulti

Calon-calun dikehendaki mengikuti semua kursus yang ditetapkan oleh Fakulti. Semua kursus Fakulti adalah kursus wajib. Calon- calon di peringkat klinikal dikehendaki mengikuti kesemua program kepaniteraan atau posting yang ditentukan.

3.1.2. Citra UKM

Calon-calun dikehendaki mengikuti kursus-kursus Citra UKM dengan jumlah 22 jam kredit seperti yang ditetapkan berikut :

3.1.2.1 SEPULUH (10) jam kredit untuk kursus WAJIB UNIVERSITI.

3.1.2.2 DUA BELAS (12) jam kredit untuk kursus Citra Universiti

Manakala bagi kursus Bahasa Inggeris, pelajar perlu mengambil sebanyak 5 jam kredit semasa di Tahun 1 dan Tahun 2 pengajian.

**** Bagi pelajar-pelajar perubatan, Kursus Citra UKM tidak dikira di dalam pengiraan PNGK.***

3.2. Tempoh Pengajian

3.2.1. Calon-calun mesti mengikuti kursus ijazah Doktor Perubatan tidak melebihi tujuh (7) sesi di mana pengajian Tahun 1 dan 2 ditetapkan tidak melebihi 3 sesi dan Peperiksaan Ikhtisas Akhir boleh diambil tidak melebihi 3 kali tertakluk kepada tempoh pengajian tujuh (7) sesi. Walau bagaimanapun, pelajar boleh merayu untuk dibenarkan menduduki Peperiksaan Ikhtisas (Ulangan) satu (1) kali lagi tertakluk kepada persetujuan Fakulti dan Senat. (Senat Ke-307 - 16 Julai 2003)

3.2.2 Calon-calun program berkembar Ijazah Doktor Perubatan mesti mengikuti kursus tidak melebihi sembilan (9) sesi di mana pengajian Tahun 1, 2 dan 3 adalah ditetapkan tidak melebihi 4 sesi dan sesi pengajian Tahun 3, 4 dan 5 tidak melebihi 5 tahun.

3.2.3 Peperiksaan Ikhtisas Akhir boleh diambil tidak melebihi 3 kali tertakluk kepada tempoh pengajian sembilan (9) sesi. Walau bagaimanapun, pelajar boleh merayu untuk dibenarkan menduduki Peperiksaan Ikhtisas (Ulangan) satu (1) kali lagi tertakluk kepada persetujuan Fakulti dan Senat.

3.2.4 Calon-calun yang dikecualikan daripada sebilangan unit kursus semasa penerimaan masuk, tempoh minimum yang dikenakan untuk menyelesaikan kursus pengajian bagi ijazah bergantung kepada bilangan kursus/tahun yang dikecualikan. Bagi calon-calun yang memenuhi syarat pengecualian ini, tempoh minimum untuk mengikuti kursus perubatan adalah selama 3 tahun di peringkat klinikal tertakluk kepada perakuan Fakulti.

3.3 Pendaftaran Kursus

- 3.3.1 Pelajar dikehendaki mendaftar kursus-kursus yang diambil pada setiap semester. Pendaftaran kursus-kursus tersebut hendaklah dilakukan mengikut syarat-syarat yang ditetapkan oleh Fakulti. Pendaftaran untuk semester ke-3 adalah opsional;
- 3.3.2 Pelajar dikehendaki mendaftar tidak kurang dua belas (12) kredit dan tidak lebih daripada dua puluh (20) kredit pada tiap-tiap semester. Pendaftaran kurang daripada dua belas (12) kredit atau lebih daripada dua puluh (20) kredit hanya dibenarkan dengan kelulusan daripada Dekan. Untuk semester ketiga, pelajar dikehendaki mendaftar tidak kurang daripada satu (1) kursus dan tidak lebih daripada tiga (3) kursus;
- 3.3.3 Penukaran kursus yang didaftarkan boleh dilakukan hanya dalam tempoh dua (2) minggu pertama permulaan tiap-tiap semester. Untuk semester ke-3 calon tidak dibenarkan menukar atau tambah kursus setelah semester bermula;
- 3.3.4 Pengguguran kursus yang didaftarkan boleh dilakukan dalam tempoh empat (4) minggu pertama penilaian tiap-tiap semester. Pengguguran selepas minggu ke-4 sehingga akhir minggu ke-8 akan diberikan gred TD. Kursus yang digugurkan ini tidak akan diambil kira di dalam Purata Nilai Gred. Untuk semester ke-3 calon dibenarkan menarik diri dari sesuatu kursus dan akan diberi gred TD.
- 3.3.5 Pelajar yang tidak mendaftar dalam tempoh empat minggu selepas semester bermula tanpa mendapatkan kebenaran secara bertulis untuk menangguhkan pengajian daripada Dekan akan diberi status “Diberhentikan sebab tidak mendaftar”.
- 3.3.6 Proses pengguguran kursus hendaklah mematuhi keperluan jam kredit minimum dan maksimum yang perlu diambil pada setiap semester seperti dinyatakan pada Perkara 3.4.2.
- 3.3.7 Permohonan bagi pertukaran taraf kursus hendaklah mendapat kelulusan Fakulti pemilik kursus. Bagi permohonan tukar taraf kursus ke taraf kursus audit (U), permohonan hendaklah dikemukakan selewat-lewatnya pada minggu keempat (ke-4) semester pengajian.

3.4 Pemindahan Kredit

- 3.4.1 Pemindahan kredit secara menegak boleh dilakukan oleh pelajar lepasan institusi pasca pendidikan menengah berasaskan pemetaan mata pelajaran yang sesuai jika:
 - 3.4.1.1 Kredit yang dipindahkan tidak boleh melebihi 30 peratus daripada jumlah keseluruhan kredit bagi satu program tertentu. Bagi pelajar lepasan diploma (Tahap 4, Kerangka Kelayakan Malaysia), pemindahan kredit boleh diberikan sehingga maksimum 50 peratus;
 - 3.4.1.2 Pelajar yang berkenaan hendaklah mendapat gred tidak kurang dari C atau yang setara dengannya. Bagi pelajar lepasan diploma (Tahap 4, Kerangka Kelayakan Malaysia) hendaklah mendapat gred C atau yang setara dengannya ($\leq 30\%$) dan gred B atau setara dengannya (31 – 50%);
 - 3.4.1.3 Hasil pembelajaran dan/atau kandungan kursus tersebut mempunyai persamaan dengan kursus-kursus di UKM tidak kurang daripada 80%.

- 3.4.1.4 Perbezaan magnitud kredit yang hendak dipindahkan itu hendaklah tidak melebihi 10% daripada kursus setara yang ada di UKM. Oleh kerana takrif kredit mungkin berbeza-beza dari satu institusi dengan institusi yang lain, perbandingan magnitud kredit boleh dilakukan melalui Masa Pembelajaran Pelajar (MPP). Jika MPP tidak dapat ditentukan, jumlah kredit untuk menamatkan pengajian boleh digunakan untuk melakukan perbandingan;
- 3.4.1.5 Kredit yang dipindahkan hendaklah daripada program yang mendapat akreditasi daripada Agensi Kelayakan Malaysia (MQA), badan profesional berautoriti atau agensi jaminan kualiti di negara berkenaan;
- 3.4.1.6 Kredit yang dipindahkan diambil kira untuk bergraduat tetapi tidak digunakan dalam pengiraan Purata Nilai Gred (PNG) Semester dan Purata Nilai Gred Kumulatif (PNGK);
- 3.4.1.7 Kredit yang dipohon hendaklah tidak melebihi lima (5) tahun dari tarikh permohonan.
- 3.4.2 Pemindahan kredit secara mendatar boleh dilakukan oleh pelajar apabila pelajar bertukar program pengajian dari dalam atau luar Universiti dan/atau pelajar yang menyertai program mobiliti tertakluk kepada:
 - 3.4.2.1 Hasil pembelajaran dan/atau kandungan kursus yang dipadankan dalam kedua-dua program itu mestilah mempunyai persamaan tidak kurang daripada 80%;
 - 3.4.2.2 Pelajar yang hendak memindahkan kredit satu-satu kursus mestilah mendapat gred tidak kurang dari C.
 - 3.4.2.3 Kredit yang dipohon hendaklah tidak melebihi lima (5) tahun dari tarikh permohonan.
 - 3.4.2.4 Tiada had kredit tetapi pelajar adalah tertakluk kepada tempoh bermastautin seperti perkara 3.2.1 dan 3.2.2
- 3.4.3 Pelajar yang ingin mendapat pemindahan kredit hendaklah mengemukakan permohonan rasmi kepada dekan fakulti masing-masing atau kepada wakil yang diberi kuasa.
- 3.4.4 Permohonan pemindahan kredit hendaklah disahkan oleh Mesyuarat Fakulti setelah mendapat perakuan jawatankuasa khas yang ditetapkan.
- 3.4.5 Kursus yang telah diluluskan pemindahan kredit tidak boleh ditarik balik oleh pelajar.
- 3.4.6 Keputusan permohonan pemindahan kredit pelajar akan dimaklumkan oleh Pendaftar/ Dekan Fakulti.

4. Struktur Penilaian*

- 4.1. Pemberian markah dan gred bagi setiap semester atau sesi adalah untuk setiap kursus dan penilaian-penilaian lain yang diadakan di sepanjang semester, peperiksaan akhir semester dan peperiksaan ikhtisas.
- 4.2. Pemberian markah dan gred untuk sesuatu kursus Fakulti tanpa peperiksaan akhir semester adalah dengan cara penilaian berasaskan kepada kerjakursus dan/atau penilaian lain yang diadakan sepanjang semester.* (SSM/CLERKSHIP-TAHUN 5)
- 4.3. Markah dan gred (serta nilai gred) yang diberikan kepada sesuatu kursus adalah seperti berikut: (KURSUS TAHUN 1-5)

Markah (%)	Gred	Nilai Gred	Taraf
80 ke atas	A	4.00	Cemerlang
75 - 79	A-	3.67	
70 – 74	B+	3.33	Kepujian
65 – 69	B	3.00	
60 – 64	B-	2.67	
55 – 59	C+	2.33	Lulus
50 – 54	C	2.00	
45 – 49	C-	1.67	Gagal
40 – 44	D+	1.33	
35 – 39	D	1.00	
0 - 34	E	0.00	

Gred

L	Lulus
G	Gagal
TL	Tidak Lengkap
SM	Sedang Maju
U	Audit
TD	Tarik Diri
TP	Tangguh Peperiksaan
PK	Pindah Kredit

- 4.4 Gred-gred berikut diberikan tanpa markah atau gred/nilai gred :
- 4.4.1 L/G (Lulus/Gagal) iaitu gred yang diberikan kepada pelajar-pelajar yang mengambil kursus yang keputusannya tidak digredkan tetapi hanya diberikan catatan “lulus” atau “gagal” sahaja.
- 4.4.2 TL (Tidak Lengkap) iaitu gred yang diberikan dengan kebenaran Fakulti kepada pelajar yang tidak dapat menyelesaikan sekurang- kurangnya 70% daripada keperluan kursus atas alasan yang munasabah. Pelajar perlu melengkapkan tugas tersebut selewat-lewatnya dua (2) minggu selepas pendaftaran semester berikutnya untuk mendapat penilaian penuh dan gred.

- 4.4.3 SM (Sedang Maju) iaitu gred yang digunakan bagi sesuatu kerja atau projek yang melebihi satu semester untuk disiapkan. Ia tidak diberi mata nilai tetapi unit baginya hanya dikira untuk penentuan unit umum bagi sesuatu semester dan bukan untuk keperluan penilaian untuk mendapatkan ijazah. Unit dan nilai gred bagi kerja atau projek tersebut hanya diambil kira bagi maksud pengiraan jumlah unit untuk keperluan ijazah dan purata nilai apabila simbol SM digantikan dengan gred.
- 4.4.4 U (audit) iaitu gred yang diberikan kepada pelajar yang mendaftar, menghadiri kursus dan mengambil peperiksaan bagi sesuatu kursus itu tetapi nilai gred tidak diberikan dan lulus peperiksaan kursus itu.
- 4.4.5 TD (Tarik Diri) iaitu gred yang diberikan kepada pelajar yang menarik diri bagi sesuatu kursus dengan kebenaran pensyarah dan Dekan Fakulti selepas minggu ke 4 hingga ke 10 sesuatu semester.
- 4.4.6 TP (Tangguh Peperiksaan) iaitu gred yang diberikan kepada pelajar yang memohon untuk menangguhkan peperiksaan di bawah perenggan 7.3. Peperiksaan gantian diadakan semasa Peperiksaan Ulangan Semester.
- 4.4.7 PK (Pindah Kredit) iaitu gred diberikan kepada pelajar yang diluluskan pemindahan kredit secara menegak atau mendatar. Kredit kursus yang dipindahkan diambil kira dalam kredit bergraduasi tetapi gred kursus tidak diambil kira dalam pengiraan PNG dan PNGK pelajar.

5. Sistem Penilaian

- 5.1. Semua kursus akan diambil kira untuk mengira Purata Markah dan Gred Semester/Sesi kecuali kursus Universiti seperti pada perenggan 3.1
- 5.2. Kursus-kursus yang mendapat gred gagal juga diambil kira untuk menentukan Purata Gred/Markah bagi Semester/Sesi berkenaan.
- 5.3. Gred bagi Peperiksaan Ulangan Semester akan diberi taraf lulus sahaja (setaraf gred C) dan diambil kira untuk menentukan Purata Gred/Markah bagi pelajar-pelajar mengulang tertakluk kepada perenggan 8.1.

5.4. PNG akan ditentukan mengikut kaedah di bawah :

5.4.1 Purata Nilai Gred (PNG) Semester

Jumlah Nilai Gred (nilai gred X jam kredit) untuk semua kursus dibahagikan dengan jumlah jam kredit bagi semua kursus yang diambil pada sesuatu semester seperti pada perenggan 5.1 dan 5.3; Rumus pengiraan PNG adalah seperti berikut:

Fakulti dibenar memasukkan pemberat dalam pengiraan Purata Nilai Gred Kumulatif (PNGK) Fakulti masing-masing untuk tujuan pengurniaan ijazah tertakluk kepada kelulusan Senat.

$$\text{PNG} = \frac{\sum_{i=1}^n G_i U_i}{\sum_{i=1}^n G_i}$$

yang mana

G = Nilai gred kursus

ke-i U = Jam Kredit

ke-i

n = Bilangan kursus yang telah diikuti pada semester

Contoh:

Semester I

Kursus	Gred	Nilai Gred	Jam Kredit	Nilai Gred X Jam Kredit
XA1013	A	4.00	3	12.00
XB1013	B+	3.33	3	9.99
XC1013	A-	3.67	3	11.01
XD1512	E	0.00	2	0.00
XE1512	D	1.00	2	2.00
Jumlah			13	35.00
PNG Semester =			35.00	
			13	
			=	2.69

Purata Nilai Gred Kumulatif (PNGK)

Jumlah Nilai Gred (nilai gred X jam kredit) untuk semua kursus dibahagikan dengan jumlah jam kredit bagi semua kursus yang telah diikuti tertakluk kepada perenggan 5.1 dan 5.3. Rumus pengiraan PNGK sama seperti rumus pengiraan PNG.

Contoh:

Semester I

Kursus	Gred	Nilai Gred	Jam Kredit	Nilai Gred X Jam Kredit
XA1013	A	4.00	3	12.00
XB1013	B+	3.33	3	9.99
XC1013	A-	3.67	3	11.01
XD1512	E	0.00	2	0.00
CE1512	D	1.00	2	2.00
	Jumlah Kecil		13	35.00

Semester II

Kursus	Gred	Nilai Gred	Jam Kredit	Nilai Gred X Jam Kredit
XA1113	A	4.00	3	12.00
XB1313	B+	3.33	3	9.99
XC1153	C+	2.33	3	6.99
XD1363	A	4.00	3	12.00
XE1512	D	1.00	2	2.00
	Jumlah Kecil		14	42.98
	Jumlah Besar		27	77.98
PNGK	=	77.98		
		27		
	=	2.88		

6. Syarat-syarat Kelayakan Meneruskan Pengajian

6.1. Taraf Lulus : Seseorang calon dianggap lulus dan dibenar meneruskan pengajian jika lulus semua kursus yang ditetapkan oleh Fakulti. Markah lulus sesuatu kursus adalah 50% dan ke atas atau nilai yang ditentukan melalui kaedah 'Standard Setting' yang dipersetujui dalam Mesyuarat Jawatankuasa PraPemeriksa Kursus/Modul.

6.2 Taraf Gagal : Seseorang calon dianggap gagal sesuatu kursus jika tidak memenuhi syarat 6.1., atau dilarang menduduki peperiksaan kerana tidak memenuhi syarat untuk menduduki peperiksaan sesuatu kursus seperti syarat 9.1., atau tidak menghadiri peperiksaan sesuatu kursus tanpa sebarang sebab yang munasabah.

6.2.1. Taraf Gagal Tahun 1 dan Tahun 2

6.2.1.1. Pelajar yang gagal mana-mana modul Peperiksaan Akhir Semester 1 dan Peperiksaan Akhir Semester 2 layak menduduki peperiksaan ulangan Seseorang calon dianggap gagal dan diberhentikan jika :

6.2.1.1.1. gagal Peperiksaan Ulangan Semester semasa dalam tahun ulangan, atau

6.2.1.1.2. telah menghabiskan tempoh maksimum tiga (3) sesi pengajian pada Tahun 1 & 2 seperti pada syarat 2.2, atau

6.2.1.1.3. gagal Peperiksaan Ulangan Semester dengan Purata Nilai Gred Keseluruhan (PNGK) kurang atau sama 1.33.

(Senat ke – 385 – 20 Feb 2013)

6.2.2. Taraf Gagal Tahun 3

6.2.2.1. Seseorang calon yang gagal peperiksaan Akhir Modul dikehendaki menduduki kursus ulangan dan peperiksaan ulangan Modul dalam tempoh yang ditentukan. Calon dibenarkan untuk menduduki peperiksaan ulangan Modul sekali sahaja pada sesi yang sama.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.2.2.2. Seseorang calon dianggap gagal tahun pengajian sekiranya gagal Peperiksaan Ulangan Modul.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.2.3. Taraf Gagal Tahun 4

6.2.3.1. Seseorang calon dianggap gagal tahun pengajian dan dikehendaki mengulang tahun pada sesi berikutnya sekiranya gagal.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.2.3.2. Seseorang calon dikehendaki menduduki kursus ulangan dan Peperiksaan Ulangan Semester dalam tempoh yang ditentukan bagi kursus yang gagal sama ada :

- satu (1) kursus Major atau
- satu (1) kursus Major dan satu (1) kursus Minor atau
- satu (1) kursus Major dan dua (2) kursus Minor atau
- satu (1) Major dan tiga (3) Minor atau
- dua (2) kursus Major atau
- tiga (3) kursus Minor

Calon dibenarkan untuk menduduki Peperiksaan Ulangan Semester sekali sahaja.

Calon dikehendaki mengulang tahun sekiranya gagal mana- mana kursus dalam peperiksaan ulangan.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.2.3.3 Seseorang calon dikehendaki mengulang tahun pada sesi berikutnya sekiranya gagal:

- dua (2) Major dan satu (1) Minor atau
- dua (2) Major dan dua (2) Minor atau
- dua (2) Major dan tiga (3) Minor atau
- tiga (3) kursus Major atau lebih

Kebenaran untuk mengulang tahun hanya diberi kepada seseorang calon yang berjaya melengkapkan semua kursus pada tahun calon gagal.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.2.3.4 Calon yang Berjaya melengkapkan semua kursus dan lulus 'Continuous Assessment' (CA) akan dikecualikan daripada menyediakan *case write-up* di tahun mengulang.

6.2.4 Taraf Gagal Tahun 5

6.2.4.1 Seseorang calon dianggap gagal dan diberhentikan jika telah menghabiskan tempoh maksimum lima (5) sesi pengajian di Tahun 3,4, dan 5 atau menghabiskan tempoh maksimum tujuh (7) sesi pengajian (syarat 2.2.).

6.3 Taraf Mengulang Tahun

6.3.1 Taraf Mengulang Tahun 1 dan 2

Seseorang calon yang memenuhi syarat 3.2 dan mempunyai PNGK lebih daripada 1.33 dibenarkan mengulang tahun jika:

6.3.1.1 Gagal Peperiksaan Ulangan Semester

Peluang seseorang pelajar untuk mengulang tahun adalah juga tertakluk kepada keputusan fakulti.

(Senat ke-385 – 20 Feb 2013)

6.3.2 Taraf Mengulang Tahun 3

Seseorang calon yang memenuhi syarat 2.2 dibenarkan mengulang tahun jika:

6.3.2.1 Seseorang calon dikehendaki mengulang tahun pada sesi berikutnya sekiranya gagal:

- dua (2) Major dan satu (1) Minor atau
- dua (2) Major dan dua (2) Minor atau
- dua (2) Major dan tiga (3) Minor atau
- tiga (3) kursus Major

6.3.2.2 Gagal dalam mana-mana kursus dalam peperiksaan ulangan Modul

'Lulus Mesyuarat Fakulti 387 (6 Oktober 2021) ; tertakluk kepada kelulusan Senat'

6.3.3 Taraf Mengulang Tahun 4

Seseorang calon yang memenuhi syarat 2.2 dibenarkan mengulang tahun jika:

6.3.3.1 gagal Peperiksaan Ulangan Semester,

6.3.3.2 gagal 3 atau lebih kursus semasa Peperiksaan Akhir Semester(rujuk 5.2.3.2)

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.3.4 Taraf Mengulang Tahun 5

6.3.4.1. Seseorang calon yang memenuhi syarat 2.2. dibenarkan mengulang 6 bulan jika :

6.3.4.1.1. Tidak dibenarkan menduduki Peperiksaan Ikhtisas Akhir kerana tidak memenuhi perkara 6.1. atau

6.3.4.1.2. gagal Peperiksaan Ikhtisas Akhir

6.3.4.2 Seseorang calon yang memenuhi syarat 2.2 dibenarkan mengulang 1 tahun akademik jika:

6.3.4.2.1 tidak memenuhi peraturan 8.1.1

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.4 Taraf Diberhentikan Daripada Mengikuti Program

6.4.1. Seseorang calon Tahun 1 dan 2 dianggap gagal dan diberhentikan daripada mengikuti program jika gagal Peperiksaan Ulangan Semester dengan PNGK kurang atau sama 1.33.

6.4.2. Seseorang calon Tahun 3, 4 dan 5 dianggap gagal dan diberhentikan daripada pengajian jika gagal melengkapkan semua kursus semasa berada dalam tahun ulangan.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

6.4.3. Seseorang calon dianggap gagal dan diberhentikan daripada mengikuti program jika gagal Peperiksaan Ulangan Semester semasa berada dalam tahun ulangan.

6.4.4. Seseorang calon diberhentikan jika disahkan oleh Lembaga Perubatan Pelajar Fakulti Perubatan (LPPFP) menghidap penyakit mental yang menjejaskan kemampuan untuk berfungsi sebagai seorang pelajar perubatan dan doktor.

7. Syarat Dibenarkan Menduduki Peperiksaan Ikhtisas Akhir

7.1. Seseorang calon layak menduduki Peperiksaan Ikhtisas Akhir jika :

7.1.1. tidak melanggar peraturan 9.1

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

7.2. Seorang calon layak menduduki Peperiksaan Ikhtisas Akhir jika :

7.2.1 Lulus kursus Kajian Khusus

7.2.2 Lulus kursus Patologi Forensik

8. Penilaian Mendapat Ijazah

8.1. Seseorang calon mesti memenuhi semua syarat berikut untuk dikurniakan Ijazah Doktor Perubatan :

8.1.1 Lulus Peperiksaan Ikhtisas Kedua dengan mendapat markah 50% dan ke atas atau nilai yang ditentukan melalui kaedah 'Standard Setting' yang dipersetujui dalam Mesyuarat Jawatankuasa Pemeriksa PraPemeriksa di dalam :

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

8.1.1.1 keseluruhan peperiksaan

8.1.1.2 Peperiksaan Klinikal

8.2. Seseorang calon layak dianggap cemerlang dalam Peperiksaan Ikhtisas Akhir jika mendapat markah 75% (bersamaan Nilai Gred 3.67) dan ke atas ATAU nilai lain yang dipersetujui dalam Mesyuarat Jawatankuasa Pemeriksa.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

8.3 Seseorang calon layak dikurniakan Ijazah Doktor Perubatan (Kepujian) tertera pada transkrip, jika lulus Peperiksaan Ikhtisas Akhir dengan :

8.3.1 mendapat markah 75% dan ke atas atau nilai yang dipersetujui dalam Mesyuarat Jawatankuasa Pemeriksa pada

8.3.1.1 keseluruhan peperiksaan

8.3.1.2 peperiksaan klinikal dan

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

8.3.2 tidak pernah gagal mana-mana kursus sepanjang mengikuti program pengajian perubatan dan;

8.3.3 mendapat sekurang-kurangnya gred B (65% dan ke atas) dalam semua kursus yang diambil dalam semua peperiksaan sepanjang mengikuti program perubatan (Senat Ke-330 – 16 Mei 2007)

8.4 Tiada peruntukan untuk lulus bersyarat atau 'redeemable' di dalam Peperiksaan Ikhtisas Akhir.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

8.5 Ijazah boleh dikurniakan kepada calon yang telah :

8.5.1 memenuhi semua kehendak dan Akta Pengajian Sarjanamuda;

8.5.2 memenuhi semua kehendak Peraturan ini;

8.5.3 diperakui supaya diberi ijazah berkenaan oleh Jawatankuasa Pemeriksa dan disahkan oleh Senat.

8.5.4 menjelaskan segala bayaran yang telah ditetapkan

9. Peruntukan-Peruntukan Lain

- 9.1. Seseorang pelajar tidak akan dibenarkan mengambil peperiksaan sesuatu kursus/ikhtisas akhir sekiranya Dekan telah memperakui bahawa calon berkenaan sama ada:
- 9.1.1. telah tidak mengikuti 100% daripada keperluan kursus tersebut seperti yang ditetapkan oleh Fakulti dan/atau tidak memenuhi syarat-syarat lain yang ditetapkan oleh sesuatu kursus atau;
 - 9.1.2. telah memplagiat atau menipu apa-apa bentuk penilaian (seminar, laporan, penulisan kes, buku log) yang ditetapkan dalam sesuatu kursus atau;
 - 9.1.3. tidak memenuhi syarat-syarat lain yang ditetapkan oleh sesuatu kursus atau;
 - 9.1.4. menghadapi tindakan tatatertib berat misalnya terlibat dengan kesjenayah dan lain-lain tindakan yang boleh menjejaskan profesyen kedokteran atau;
 - 9.1.5. mempunyai sikap yang tidak bersesuaian sebagai seorang pelajar perubatan dan menjejaskan profesyen kedokteran.
(Senat Ke-335 – 19 Mac 2008).

Rujuk :

1. Akta Universiti dan Kolej Universiti 1971. Kaedah-kaedah Universiti Kebangsaan Malaysia (Tatatertib pelajar) 1999

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'
 2. Peraturan Tatatertib Pelajar Fakulti Perubatan UKM 2016

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'
- 9.2. Pelajar yang telah dikenal pasti oleh Fakulti untuk diberi bimbingan tambahan adalah diwajibkan menghadiri sesi bimbingan yang diatur oleh Fakulti masing-masing dan kegagalan menghadirinya boleh menjejaskan peluang mereka untuk mengambil peperiksaan.
- 9.3. Anugerah Dekan
- 9.3.1. Anugerah Dekan diberi kepada pelajar yang telah menunjukkan kejayaan dalam bidang akademik semasa menjalani pengajian di UKM.
 - 9.3.2. Syarat dan Kelayakan.
 - 9.3.2.1. Pelajar mencapai Purata Nilai Gred (PNG) Semester sekurang-kurangnya 3.67, bagi minimum 12 kredit bagi sesuatu semester pengajian atau seperti kriteria yang ditetapkan oleh Fakulti berkaitan yang telah diluluskan oleh Senat;
 - 9.3.2.2. Pelajar tidak pernah dikenakan apa-apa tindakan tatatertib;
 - 9.3.2.3. Berdaftar secara rasmi sebagai pelajar UKM bagi menjalani sebarang program ijazah yang ditawarkan oleh mana-mana Fakulti dalam Universiti ini;
 - 9.3.2.4. Pelajar telah menjelaskan segala hutang dan bayaran kepada Universiti pada waktu pemilihan; dan

9.3.2.5 Diperakui oleh Fakulti bahawa pelajar itu adalah layak untuk dicalonkan berdasarkan kriteria-kriteria yang diperuntukkan berhubung dengan peraturan ini.

9.3.3 Proses Pemilihan

9.3.3.1 Pemilihan Anugerah Dekan akan ditentukan dalam Mesyuarat Fakulti berdasarkan kepada syarat-syarat kelayakan seperti pada perkara 7.5.2 dalam peraturan ini;

9.3.3.2 Penerima Anugerah Dekan tidak dihadkan kepada seorang sahaja bagi setiap Fakulti; dan

9.3.3.3 Sijil anugerah disampaikan kepada pelajar yang berjaya pada masa yang ditetapkan oleh Fakulti.

9.3.4. Bentuk Penghargaan

9.3.4.1. Penganugerahan adalah dalam bentuk sijil oleh Fakulti.

10. Penangguhan Pendaftaran/Pengajian, Kebenaran Tidak Mendaftar Dan Penangguhan Peperiksaan

10.1. Pertimbangan Untuk Penangguhan Pengajian/ Pendaftaran

10.1.1. Seseorang pelajar yang sakit boleh diberi penangguhan pengajian untuk semester tertentu oleh Dekan Fakulti dan disahkan oleh Mesyuarat Fakulti. Dalam kes-kes seperti ini perakuan daripada doktor yang terdiri daripada Doktor Kerajaan, Pegawai Perubatan Universiti, Doktor Panel Universiti atau Ahli Psikologi Klinikal atau Kaunselor bertauliah adalah diperlukan. Perakuan yang bukan daripada doktor Kerajaan, Pegawai Perubatan Universiti, Doktor Panel atau Ahli Psikologi Klinikal atau Kaunselor bertauliah boleh dipertimbangkan dalam kes-kes tertentu selepas pelajar berkenaan telah menjalani rawatan doktor berkenaan terlebih dahulu. Dalam kes sakit jiwa, kebenaran untuk mendaftar semula tertakluk kepada perakuan doktor yang berkenaan.

10.1.2. Seseorang pelajar yang menghadapi masalah lain daripada perenggan 10.1.1 di atas boleh juga diberi penangguhan pengajian untuk sesuatu semester oleh Dekan Fakulti dan disahkan oleh Mesyuarat Fakulti tertakluk kepada Dekan Fakulti berpuas hati bahawa masalahnya itu akan menjejaskan pembelajarannya pada semester berkenaan. Selain itu, seseorang pelajar juga boleh memohon penangguhan pengajian untuk mengikuti Tahun Berjeda (Gap Year).

10.1.3. Permohonan penangguhan pengajian bagi pelajar yang tidak mendaftar diri hendaklah dibuat dalam tempoh empat (4) minggu daripada tarikh sesuatu semester bermula. Bagi pelajar yang mendaftar diri, permohonan penangguhan pengajian hendaklah dilakukan sehingga minggu ke sepuluh (ke 10). Permohonan selepas minggu ke sepuluh (ke 10) tidak akan dipertimbangkan tetapi pelajar hendaklah memohon untuk menangguh peperiksaan.

- 10.1.4. Seseorang pelajar baharu yang telah diterima masuk tetapi belum mendaftar disebabkan sakit atau menghadapi masalah lain yang boleh menjejaskan pembelajarannya, dibenarkan membuat penangguhan pendaftaran/pengajian diri sebagai pelajar dengan syarat ia memohon secara bertulis kepada Dekan Fakulti dengan mengemukakan alasannya selewat-lewatnya dua (2) minggu dari tarikh kuliah bermula. Apabila diluluskan oleh Dekan Fakulti, calon dikehendaki membayar wang proses permohonan penangguhan pendaftaran diri. Tempoh maksimum yang dibenarkan penangguhan pendaftaran diri adalah dua (2) semester kecuali atas sebab-sebab kesihatan. Tempoh tersebut tidak diambil kira sebagai sebahagian daripada keperluan maksimum yang dibenarkan bagi melayakkan diri untuk mendapatkan sesuatu ijazah.
- 10.1.5. Seseorang pelajar boleh memohon penangguhan pendaftaran/ pengajian kepada Dekan Fakulti untuk mengikuti program Tahun Berjeda (Gap Year). Permohonan hanya boleh dilakukansatu kali sahaja iaitu selepas satu tahun pengajian di universiti. Tempoh maksimum yang dibenarkan adalah dua (2) semester sahaja. Tempoh penangguhan pengajian ini tidak diambil kira sebagai sebahagian daripada keperluan maksimum pengajian.

10.2. Pertimbangan Untuk Tidak Mendaftar

- 10.2.1. Calon-calun yang telah mendapat pengesahan daripada doktor bahawa ia telah hamil antara 6 – 7 bulan pada waktu pendaftarandinasihatkan tidak mendaftar pada semester tersebut.
- 10.2.2. Seseorang calon boleh dibenarkan oleh Dekan Fakulti untuk tidak mendaftar pada sesuatu semester dengan syarat ia memohon secara bertulis kepada Dekan dengan mengemukakan alasannya.

10.3. Pertimbangan Bagi Penangguhan Peperiksaan

- 10.3.1. Calon-calun yang sakit atau menghadapi gangguan-gangguan lain sewaktu peperiksaan boleh memohon kepada Dekan Fakulti dan disahkan oleh mesyurat Fakulti untuk menangguhkan pengambilan peperiksaan berkenaan. Permohonan untuk menangguhkan peperiksaan untuk kursus berkenaan hendaklah dibuat dalam tempoh 48 jam selepas peperiksaan itu diadakan.
- 10.3.2. Permohonan untuk menangguhkan pengambilan peperiksaan semester atas sebab-sebab kesihatan hendaklah disertakan dengan pengesahan doktor yang merawat calon berkenaan seperti pada perenggan 10.1.1 di atas. Permohonan atas sebab- sebab lain boleh dipertimbangkan atas budi bicara Fakulti. Peperiksaan gantian diadakan semasa Peperiksaan Ulangan Semester.

10.4. Status Sebagai Seorang Pelajar Universiti

- 10.4.1. Calon-calun yang telah diberi penggantungan pendaftaran dan kebenaran tidak mendaftar akan hilang tarafnya sebagai pelajarUniversiti dan dengan demikian beliau tidak berhak mendapat atau menggunakan kemudahan-kemudahan Universiti yang diberikan kepada calon-calun sehingga beliau mendaftar semulaselepas tempoh berkenaan.

10.5. Tempoh Pendaftaran Semester Semasa Penangguhan Pengajian/Tidak Mendaftar

- 10.5.1. Tempoh yang terlibat dengan penangguhan pengajian/tidak mendaftar atas sebab-sebab kesihatan dan mengikuti program Tahun Berjeda (Gap Year) tidak diambil kira sebagai sebahagian daripada tempoh pengajian maksimum yang dibenarkan.
- 10.5.2. Tempoh semester yang terlibat dengan penangguhan pengajian/ tidak mendaftar atas sebab-sebab selain daripada sebab-sebab kesihatan dan program Tahun Berjeda (Gap Year) diambil kira sebagai sebahagian daripada tempoh pengajian maksimum yang dibenarkan kecuali bagi tempoh dua semester yang pertama.
- 10.5.3. Tempoh penangguhan pengajian tidak boleh melebihi dua semester berturut-turut setiap kali kecuali atas sebab-sebab kesihatan. Tempoh maksimum yang dibenarkan untuk menangguhkan pendaftaran ialah sebanyak empat (4) semester kecuali atas sebab-sebab kesihatan.

11. Penyimpanan Kertas-Kertas Jawapan Peperiksaan Dan Rayuan-Rayuan Terhadap Keputusan Peperiksaan

11.1. Kertas-kertas Jawapan Peperiksaan

- 11.1.1. Semua skrip jawapan calon-calon bagi sebarang peperiksaan Universiti hendaklah diserahkan kepada Ketua Jabatan untuk disimpan.
- 11.1.2. Ketua Jabatan hendaklah menyimpan dengan selamat skrip jawapan itu untuk tempoh selama sekurang-kurangnya satu (1) tahun selepas pemberitahuan mengenai keputusan peperiksaan berkenaan dikeluarkan oleh Pendaftar.
- 11.1.3. Tertakluk kepada perenggan 11.1.4., semua skrip jawapan peperiksaan hendaklah dimusnahkan dengan secepat mungkin selepas genap tempoh satu (1) tahun seperti yang tersebut dalam Peraturan-peraturan di atas.
- 11.1.4. Dalam kes-kes yang rayuan terhadap keputusan peperiksaan yang dibuat oleh seseorang calon, skrip-skrip jawapan berkenaan tidak boleh dimusnahkan kecuali selepas Fakulti telah mengesahkan keputusan penyemakan semula.

11.2. Rayuan Untuk Menyemak Semula Keputusan Penilaian Kursus

- 11.2.1. Sesuatu rayuan untuk menyemak semula keputusan penilaian kursus hendaklah disampaikan secara bertulis kepada Pendaftar oleh calon yang berkenaan dalam masa dua (2) hingga empat (4) minggu kalendar selepas keputusan peperiksaan diumumkan. Sebarang rayuan yang diterima selepas tempoh ini tidak boleh diberi pertimbangan.
- 11.2.2. Setiap rayuan yang dikemukakan hendaklah menyatakan kursus atau kursus-kursus yang diminta disemak semula.

- 11.2.3. Bayaran yuran mengikut jumlah yang ditetapkan bagi tiap-tiap satu kursus yang diminta disemak semula hendaklah disertakandengan rayuan berkenaan. Bayaran ini tidak boleh dituntut balik.

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

- 11.2.4. Apabila diterima sesuatu rayuan, Pendaftar hendaklah merujukannya kepada Dekan Fakulti berkenaan. Dekan Fakulti selepas berunding dengan Ketua Jabatan berkenaan boleh melantik suatu panel pemeriksa bagi menyemak semula keputusan penilaian kursus berkenaan.
- 11.2.5. Panel pemeriksa hendaklah terdiri daripada Ketua Jabatan, pemeriksa asal kursus berkenaan dan sekurang-kurangnya seorang pemeriksa lain yang bidangnya sama atau hampir samadengan bidang berkenaan.
- 11.2.6. Perakuan-perakuan panel pemeriksa hendaklah dikemukakan bagi pertimbangan mesyuarat Fakulti. Keputusan Fakulti mengenai penilaian semula kursus-kursus berkenaan hendaklah dikemukakan bagi pengesahan Senat sebelum disampaikan kepada calon berkenaan, sekiranya ada perubahan.
- 11.2.7. Setiap keputusan yang dibuat oleh Fakulti menurut kaedah ini dan disahkan oleh Senat adalah muktamad dan sebarang rayuan selanjutnya terhadap keputusan tersebut tidak boleh dilayan.

11.3. Rayuan Untuk Meneruskan Semula Pengajian

- 11.3.1. Seseorang calon yang mendapat keputusan “Gagal dan diberhentikan” oleh sebab gagal memenuhi syarat-syarat untuk meneruskan pengajian boleh mengemukakan rayuan terhadap keputusan tersebut.

11.3.1.1. Permohonan dalam Fakulti/ Program yang sama akan hanya dipertimbangkan jika pelajar mengalami masalah kesihatan yang disahkan oleh Doktor Pakar Kerajaan.

11.3.1.2 Bagi permohonan rayuan ke Fakulti/ Program lain perlu memenuhi syarat-syarat berikut:

- mendapat Purata Nilai Gred Kumulatif (PNGK) tidak kurang daripada 1.9.
- menunjukkan prestasi Purata Nilai Gred (PNG) Semester yang meningkat dalam dua semester terakhir.
- mempunyai kelayakan masuk yang setara dengan pelajar sedia ada di Fakulti/ Program.
- penawaran masuk bergantung kepada kekosongan tempat.
- pertukaran hanya dibenarkan sekali sahaja.
- pemindahan kredit tidak dibenarkan.

- 11.3.2. Setiap rayuan hendaklah dikemukakan kepada Pendaftar dalam tempoh empat (4) minggu selepas pengumuman rasmi keputusan peperiksaan dan setiap rayuan hendaklah disertai dengan bayaran yang ditetapkan. Bayaran ini tidak boleh dituntut balik. Sebarang rayuan yang diterima selepas tempoh tersebut tidak boleh diberikan pertimbangan..

'Lulus Mesyuarat Fakulti 382 (16 Disember 2020) ; tertakluk kepada kelulusan Senat'

- 11.3.3. Apabila diterima sesuatu rayuan, Pendaftar hendaklah merujukkannya kepada Dekan Fakulti berkenaan. Dekan Fakulti hendaklah melantik suatu Jawatankuasa Rayuan untuk mempertimbangkannya.

- 11.3.4. Jawatankuasa Rayuan tersebut hendaklah terdiri daripada Dekan sebagai Pengerusi, Timbalan Dekan yang berkaitan dengan Hal Ehwal Akademik Pelajar, Ketua Jabatan yang berkenaan dan sekurang-kurangnya seorang ahli Fakulti yang berkaitan dengan pengajaran/pembelajaran bagi pelajar serta Pendaftar atau wakilnya sebagai Setiausaha.

- 11.3.5. Jawatankuasa tersebut hendaklah mempunyai kuasa-kuasa berikut:

11.3.5.1. menerima atau menolak sesuatu rayuan;

11.3.5.2. membuat keputusan terhadap semua rayuan yang dipertimbangkan ;

11.3.5.3. memperakukan kepada Fakulti keputusan yang telah dicapai terhadap semua rayuan yang dipertimbangkan dan memperakukan, jika ada, rayuan yang tidak layak dipertimbangkan.

- 11.3.6. Perakuan yang dibuat oleh Fakulti mengenai perkara tersebut hendaklah dikemukakan kepada Senat untuk pengesahan.

- 11.3.7. Setiap keputusan yang dibuat oleh Fakulti menurut peraturan ini dan disahkan oleh Senat adalah muktamad dan sebarang rayuan selanjutnya tidak akan dipertimbangkan.

- 11.4. Rayuan untuk meneruskan semula pengajian setelah “Diberhentikan sebab tidak mendaftar”

- 11.4.1. Seseorang pelajar yang diberhentikan kerana tidak mendaftar boleh mengemukakan rayuan untuk meneruskan pengajian secara bertulis kepada Pendaftar dalam tempoh tidak melebihi dua (2) semester dengan dikenakan bayaran proses dan denda lewat mendaftar seperti yang ditetapkan. Apabila diterima sesuatu rayuan, permohonan tersebut hendaklah dikemukakan kepada Fakulti untuk kelulusan.

- 11.4.2. Tempoh tidak mendaftar tidak dikira sebagai sebahagian keperluan maksimum Rayuan Tambah Masa Pengajian

- 11.4.3 Seseorang pelajar boleh memohon tambah masa pengajian selepas tempoh maksimum dengan mengemukakan rayuan secara bertulis kepada Pendaftar tertakluk kepada maksimum dua (2) semester dengan dikenakan bayaran proses seperti yang ditetapkan. Apabila diterima sesuatu rayuan, permohonan tersebut hendaklah dikemukakan kepada Fakulti untuk kelulusan yang dibenarkan untuk mendapat sesuatu ijazah.

12. Umum

- 12.1. Senat berhak untuk mengambil tindakan yang wajar termasuk menggantung atau memberhentikan seseorang pelajar pada bila-bila masa jika pelajar didapati:
- 12.1.1. Memberi maklumat palsu berkenaan syarat kemasukan atausepanjang tempoh pengajiannya atau bagi tujuan mendapatkan Ijazah;
 - 12.1.2. Dalam keadaan ketidakupayaan mental atau fizikal yang disahkan oleh pakar perubatan;
 - 12.1.3. Melebihi tempoh pengajian yang dibenarkan di bawah subperaturan 2.2.1.
- 12.2. Fakulti diberi kuasa menerima masuk seseorang sebagai Pelajar Tanpa Ijazah tertakluk kepada syarat yang ditetapkan oleh Fakulti.
- 12.3. Senat boleh membenarkan apa-apa pengecualian yang difikirkan sesuai daripada kehendak-kehendak Peraturan ini.
- 12.4. Fakulti boleh membuat apa-apa garis panduan sebagaimana perlu bagi maksud melaksanakan peruntukan peraturan ini dengan kelulusan Senat. Sekiranya terdapat apa-apa percanggahan di antara garis panduan dan Peraturan ini, peruntukan garis panduan yang bercanggah itu hendaklah terbatal setakat percanggahan itu.
- 12.5. Peraturan ini dan semua tafsiran mengenainya yang dibuat oleh Senat dari semasa ke semasa hendaklah berkuat kuasa terhadap pelajar yang bendaftar pada dan selepas tarikh berkuat kuasa Peraturan-peraturan ini.
- 12.6. Setiap pelajar adalah tertakluk kepada Akta Universiti dan Kolej Universiti 1971, Perlembagaan Universiti Kebangsaan Malaysia, statut, kaedah-kaedah dan peraturan-peraturan lain yang sedia terpakai di Universiti termasuk Kaedah-Kaedah Universiti Kebangsaan Malaysia (Tatatertib Pelajar-pelajar) 1999.
- 12.7. Peraturan-peraturan Universiti Kebangsaan Malaysia (Pengajian Sarjana Muda) 1990 adalah dimansuhkan.



**AHLI JAWATANKUASA PENERBITAN
BUKU PANDUAN PRASISWAZAH
FAKULTI PERUBATAN**

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Reka bentuk dan Foto

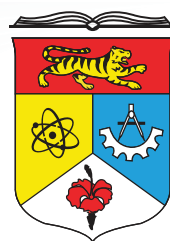
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