BUKU PANDUAN PROGRAM PENGAJIAN PRASISWAZAH

UNDERGRADUATE STUDY PROGRAMME HAND BOOK

UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

SESI AKADEMIK
ACADEMIC SESSION
2017/2018

FAKULTI PERUBATAN DAN SAINS KESIHATAN

FACULTY OF MEDICINE AND HEALTH SCIENCES

FAKULTI PERUBATAN DAN SAINS KESIHATAN

Maklumat Am

Fakulti Perubatan dan Sains Kesihatan (FPSK) ditubuhkan pada 1 Ogos 1996 melalui tiga (3) penggabungan Jabatan Sains Bioperubatan dari Fakulti Kedoktoran Veterinar dan Sains Penternakan dengan Jabatan Pemakanan dan Kesihatan Komuniti dari Fakulti Ekologi Manusia dan perwujudan jabatan baru iaitu Jabatan Sains Perubatan. Pada peringkat awal penubuhannya Fakulti ini dikenali dengan nama Fakulti Bioperubatan dan Sains Kesihatan. Pada bulan September 1997, Fakulti Bioperubatan dan Sains Kesihatan dengan rasminya ditukar nama kepada Fakulti Perubatan dan Sains Kesihatan. Fakulti ini telah dirasmikan pada 4 Ogos 1998 oleh Yang Berhormat Dato' Seri Mohd. Najib bin Tun Haji Abdul Razak, Menteri Pendidikan Malaysia ketika itu.

Pada 18 Jun 2006, FPSK telah berpindah ke kompleks baru yang telah dibangunkan bersebelahan dengan Hospital Serdang. Kompleks ini dilengkapi dengan pelbagai kemudahan dan fasiliti termasuk kawasan kediaman pelajar sebanyak 4 blok dengan kapasiti 2000 orang pelajar, pusat pelajar, medan selera, surau dan 2 buah rumah pengetua. Kawasan fakulti pula terbahagi kepada 3 blok yang terdiri daripada bangunan pentadbiran dan perpustakaan, bangunan dewan kuliah dan bilik tutorial serta bangunan makmal.

Pada masa ini, fakulti menawarkan enam (6) program prasiswazah diperingkat bacelor iaitu Doktor Perubatan, Bacelor Sains (Sains Bioperubatan), Bacelor Sains (Pemakanan dan Kesihatan Komuniti), Bacelor Sains (Kesihatan Persekitaran dan Pekerjaan), Bacelor Kejururawatan dan Bacelor Sains (Dietetik).

FACULTY OF MEDICINE AND HEALTH SCIENCES

General Information

The Faculty of Medicine and Health Sciences (FMHS) was established on August 1, 1996 through a merger of (3) departments i.e. the Department of Biomedical Sciences from the Faculty of Veterinary Medicine and Husbandry Sciences, the Department of Nutrition and Community Health from the Faculty of Human Ecology and the newly created Department of Medical Sciences. At the early stages of its formation it was known as the Faculty of Biomedical and Health Sciences. In September 1997, the Faculty of Biomedical and Health Sciences was officially renamed the Faculty of Medicine and Health Sciences. The faculty was officially inaugurated on August 4th, 1998 by the Honourable Dato 'Seri Mohd. Najib bin Tun Haji Abdul Razak, the Minister of Education, Malaysia.

On June 18, 2006, FMHS moved to a new complex developed adjacent to the Serdang Hospital. The complex is equipped with a variety of amenities and facilities including a student residential area encompassing 4 blocks with residential capacity of 2000 students, student center, food court, prayer room(surau) and two housing units for principals. The Faculty area is divided into three blocks which comprise the administration and library building, lecture halls and tutorial rooms, and laboratories.

At present, the faculty offers six (6) undergraduate programs at the Bachelor’s degree level i.e. Doctor of Medicine, Bachelor of Science (Biomedical Sciences), Bachelor of Science (Nutrition and Community Health), Bachelor of Science (Environmental and Occupational Health), Bachelor of Nursing and Bachelor of Science (Dietetics).

Pengurusan Fakulti

Dekan/Dean
Prof. Dato' Dr. Abdul Jalil Nordin

Timbalan Dekan (Akademik: Perubatan)
Deputy Dean (Academic : Medicine)
Prof. Dr. Zamberi Sekawi

Timbalan Dekan (Akademik : Sains Kesihatan dan Hal Ehwal Pelajar)
Deputy Dean (Academic: Health Sciences and Student's Affair)
Prof. Madya Dr. Norhaizan Mohd Esa

Timbalan Dekan (Penyelidikan dan Antarabangsa)
Deputy Dean (Research And Internationalization)
Prof. Madya Dr. Normala Ibrahim

Timbalan Dekan (Siswazah dan JINM)
Deputy Dean (Postgraduate and JINM)
Prof. Madya Dr. Shamsul Bahri Md Tamrin

Ketua Jabatan Perubatan
Head Department of Medicine
Prof. Dr. Hamidon Basri

Ketua Jabatan Surgeri
Head Department of Surgery
Prof. Madya Dato' Dr. Khairul Asri Mohd Ghani@Mamat

Ketua Jabatan Psikiatri
Head Depatrment of Psychiatry
Dr. Zubaidah Jamil @ Osman

Ketua Jabatan Ortopedik
Head Department of Orthopaedics
Prof. Dr. Manohar Arumugam

Ketua Jabatan Pediatrik
Head Department of Pediatrics
Prof. Madya Dr. Intan Hakimah Ismail

Ketua Jabatan Obstetrik dan Ginekologi
Head Department of Obstetrics and Gynaecology
Dr. Maiza Tusimin

Ketua Jabatan Pengimejan
Head Department of Imaging
Prof. Dr. Ahmad Sobri Muda

Ketua Jabatan Patologi
Head Department of Pathology
Prof. Madya Dr. Norhafizah Mohtarrudin

Ketua Jabatan Mikrobiologi dan Parasitologi Perubatan
Head Department of Medical Microbiology and Parasitology
Prof. Madya Dr. Syafinaz Amin Nordin

Ketua Jabatan Pemakanan dan Dietetik
Head Department of Nutrition and Dietetics
Prof. Madya Dr. Azrina Azlan

Ketua Jabatan Kesihatan Komuniti
Head Department of Community Health
Prof. Madya Dr. Nor Afiah Mohd Zulkefli

Ketua Jabatan Kesihatan Persekitaran dan Pekerjaan
Head Department of Environmental And Occupational Health
Prof. Madya Dr. Juliana Jalaludin

Ketua Jabatan Sains Bioperubatan
Head Department of Biomedical Sciences
Prof. Madya Dr. Latifah Saiful Yazan

Ketua Jabatan Anatomi Manusia
Head Department of Human Anatomy
Prof. Madya Dr. Muhamad Taufik Hidayat Baharuldin

Ketua Jabatan Perubatan Keluarga
Head Department of Family Medicine
Prof. Madya Dr. Sazlina Shariff Ghazali

Ketua Jabatan Kejururawatan dan Rehabilitasi
Head Department of Nursing and Rehabilitation
Prof. Madya. Dr. Soh Kim Lam

Timbalan Pendaftar
Deputy Registrar
Tuan Haji Mohd. Aris Fadzilah Abdullah

Program Prasiswazah yang ditawarkan

1. Doktor Perubatan/ *Doctor of Medicine*
2. Bacelor Sains (Sains Bioperubatan)/ *Bachelor Science (Biomedical Science)*
3. Bacelor Sains (Pemakanan dan Kesihatan Komuniti)/ *Bachelor of Science (Nutrition and Community Health)*
4. Bacelor Sains (Kesihatan Persekitaran dan Pekerjaan)/ *Bachelor of Science (Environmental & Occupational Health)*
5. Bacelor Sains (Dietetik)/ *Bachelor of Science (Dietetics)*
6. Bacelor Kejururawatan/*Bachelor of Nursing*

ELEx PACKAGE STUDY SCHEME FOR DOCTOR OF MEDICINE PROGRAMME (NEW)
(Effective for September 2017 intake and above)

MUET band	Graduation Requirements for 3-years programmes
3 & 4	2 BBI + 2 CEL + 24 LAX points
5 & 6	2 CEL + 36 LAX points

Sem	DOCTOR OF MEDICINE PROGRAMME		
	MUET 3 & 4		MUET 5 & 6
Sem 1	CEL 2102	LAX 2004	LAX 2004
Sem 2	BBI 2423		CEL 2104
Sem 3	BBI 2424		LAX 2006
Sem 4	LAX 2008		LAX 2008
Sem 5	CEL 2106		CEL 2106

SKEMA PENGAJIAN PAKEJ ELEx UNTUK PROGRAM 4 TAHUN BERKUATKUASA UNTUK AMBILAN SEPTEMBER 2017 DAN SETERUSNYA
ELEx SCHEME FOR 4 YEARS PROGRAMMES FROM SEPTEMBER INTAKE 2017 ONWARDS

MUET Band	TOEFL/IELTS Score	CIEP Level	Graduation Requirements for 4-year programmes
1 & 2	-	107	3 BBI + 3 CEL + 24 LAX points
3 & 4	TOEFL 500 - 599 IELTS 5.5 - 6.5	108 – 109	2 BBI + 2 CEL + 24 LAX points
5 & 6	TOEFL 600 - 677 IELTS 7.0 - 9.0	-	2 BBI + 1 CEL + 24 LAX points OR 1 BBI + 1 CEL + 24 LAX points (with global language)

Sem	4 - Years Programme			
	MUET/UTEIS 1 & 2 CIEP 107		MUET 3 & 4 CIEP 108 - 109 TOEFL 500 - 599 IELTS 5.5 - 6.5	MUET/UTEIS 5 & 6 TOEFL 600 - 677 IELTS 7.0 - 9.0
Sem 1	BBI2422		6 LAX points	6 LAX points
Sem 2	6 LAX points	CEL2102	BBI2423	CEL2103
Sem 3	BBI2423		BBI2424	BBI2425
Sem 4	BBI2424		6 LAX points	6 LAX points
Sem 5	12 LAX points		Cel2103	BBI2426/Global language
Sem 6	CEL2103		*Choose* ONE : CEL2102/2105/2106/2107	6 LAX points
Sem 7	*Choose* ONE : CEL2105/2106/2107		6 LAX points	6 LAX points
Sem 8	6 LAX points		6 LAX points	-

Note:

Students must follow the prescribed scheme of study based on their MUET results (or equivalent) every semester.

- MUET Band 5 and 6 students can choose to enrol in either one or two BBI courses.
  If they choose to do one BBI course, they must also enrol in one global language.

- Students who are away on Industrial Training in any semester do have not to enrol in any course or LAX activity for that particular semester. However, they must enrol in a course or LAX activity in the prior or subsequent semester (subject to course pre-requisites).

ELEx Package Information

I. BBI Courses [(2+1) credits]

- BBI 2422 (Reading for Academic Purposes)
- BBI 2423 (Academic Interaction and Presentation)
- BBI 2424 (Academic Writing)
- BBI 2425 – for MUET Band 5 & 6 students only
- BBI 2426 – for MUET Band 5 & 6 students only

Note: If students fail in a BBI course, they must repeat and pass the course before they can enrol in a subsequent BBI course.

II. CEL Courses

- CEL 2102 (Effective Listening and Speaking)
- CEL 2103 (Writing Academic Texts)
- CEL 2105 (Spoken Communication for the Workplace)
- CEL 2106 (Communication for Professional Development)
- CEL 2107 (Written Business Communication)

Note: If students obtain LEVEL 1, they must repeat and pass the course (LEVEL 2 and above).

III. LAX

- LAX (6 points or 12 points); 1 point = 2 hours per week
- 6-point LAX = 6 weeks x 2 hours per week
- 12-point LAX = 12 weeks x 2 hours per week

Note: If students obtain TM (*Tidak Memuaskan*/Unsatisfactory), they must enrol in the same or different LAX activity to replace the failed points. Students must ensure that they fulfil the required number of LAX points for graduation.

IV. Pre-requisites for courses

- BBI 2422: MUET Band 1 – 2/equivalent
- BBI 2423: CEL 2102 Level 2 or MUET Band 3 – 4/equivalent
- BBI 2424: Passed BBI 2423
- CEL 2103: Passed BBI 2424 or MUET Band 5 – 6/equivalent
- CEL 2102, 2105, 2106, 2107: No pre-requisite required

STRUKTUR KURIKULUM/ *CURRICULUM STRUCTURE*

Nama Program : **Doktor Perubatan/ *Doctor of Medicine***

Jumlah Kredit Bergraduat :

Tempoh Pengajian : **10 Semester/ *Semesters* (5 Tahun/ *Years*)**

Matlamat Program :

1. Melahirkan doktor terlatih dan pengetahuan dan kemahiran yang mantap untuk membolehkannya berkhidmat kepada individu yang memerlukan dan juga kepada bangsa dan negara
2. Melahirkan doktor terlatih dan mampu melaksanakan tanggungjawab secara cekap dan berkesan tanpa mengira tempat berkhidmat iaitu sama ada di bandar atau pedalaman
3. Melahirkan doktor terlatih dan mempunyai sikap yang positif dan penyayang terhadap pesakit dan masyarakat umum
4. Melahirkan doktor terlatih dan terlatih dalam melaksanakan rawatan dan pencegahan penyakit
5. Melahirkan doktor terlatih dan menyedari tanggungjawab perundangan dan etika sebagai seorang doktor
6. Melahirkan doktor terlatih dan membudayakan aktiviti pembelajaran perubatan sepanjang hayat

RINGKASAN HASIL PEMBELAJARAN PROGRAM

Program	Pengetahuan	Kemahiran Teknikal/Praktikal/ Psikomotor	Pendekatan Kemahiran Berfikir dan Saintifik	Kemahiran Berkomunikasi	Kemahiran Sosial dan Bertanggungjawab	Professionalisme, Nilai, Sikap dan Etika	Pendidikan Sepanjang Hayat dan Pengurusan Informasi	Kemahiran Pengurusan dan Keusahawanan	Kemahiran Kepimpinan
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Doktor Perubatan	35	12	50	18	8	29	30	1	2

1. Kursus Universiti/ *University Courses*(14 Minggu/ *Weeks*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0	Tiada/ *None*
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0	Tiada/ *None*
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0	Tiada/ *None*
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0	Tiada/ *None*

MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1	Tiada/ *None*
BBI2423	*Academic Interaction and Presentation*	3	2	1	
BBI2424	*Academic Writing*	3	2	1	
CEL2102	*Effective Listening and Speaking*	2	2	0	
CEL2104	*Oral Presentation*	2	2	0	

2. Kursus Teras/ *Core Courses*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Jam Kontak	SLT	Jangkamasa Perlaksanaan	PRASYARAT/ *PREREQUISITE*
SPP3212	Sel dan Tisu Peka Rangsang/ *Cell and Excitable Tissue*	67 jam	182 jam	6 Minggu	Tiada/ *None*
SPP3222	Anatomi Am dan Embriologi/ *General Anatomy And Embryology*	27 jam	88 jam		Tiada/ *None*
SPP3231	Perubatan Berasaskan Molekul/ *Molecular-Based Medicine*	43 jam	125 jam	6 Minggu	Tiada/ *None*
SPP3273	Farmakologi Am dan Biokimia/ *General and Biochemical Pharmacology*	22 jam	75 Jam		Tiada/ *None*
SPP3241	Ekspresi Gen/ *Gene Expression*	14 jam	50 jam		Tiada/ *None*
SPP3251	Genetik Manusia/ *Human Genetics*	18 jam	60 jam		Tiada/ *None*

Samb./ *Cont.*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Jam Kontak	SLT	Jangkamasa Perlaksanaan	PRASYARAT/ *PREREQUISITE*
SPP3321	Patologi Am/ *General Pathology*	35 jam	103 jam	9 Minggu	Tiada/ *None*
SPP3351	Mikrobiologi Perubatan/ *Medical Microbiology*	52 jam	146 jam		Tiada/ *None*
SPP3371	Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology*	37 jam	105 jam		Tiada/ *None*
SPP3341	Imunologi/ *Immunology*	39 jam	116 jam	5 Minggu	Tiada/ *None*
SPP3311	Hematologi/ *Haematology*	45 jam	127 jam		Tiada/ *None*
SPP3532	Sistem Kardiovaskular/ *Cardiovascular System*	79 jam	211 jam	6 Minggu	Tiada/ *None*
SPP3542	Sistem Respiratori/ *Respiratory System*	47 jam	136 jam		Tiada/ *None*
SPP3522	Sistem Urinari/ *Urinary System*	55 jam	157 jam	6 Minggu	Tiada/ *None*
SPP3552	Sistem Aliment dan Nutrisi/	84 jam	232		Tiada/ *None*

	Alimentary System and Nutrition		jam		
SPP3562	Sistem Endokrin/ *Endocrine System*	46 jam	138 jam	7 Minggu	Tiada/ *None*
SPP3572	Sistem Reproduktif/ *Reproductive System*	60 jam	160 jam		Tiada/ *None*
SPP3512	Sistem Muskuloskeletal/ *Musculoskeletal System*	94 jam	245 jam	8 Minggu	Tiada/ *None*
SPP3582	Sistem Saraf Pusat/ *Central Nervous System*	96 jam	264 jam		Tiada/ *None*
SPP3424	Perubatan Kesihatan Awam/ *Public Health Medicine*	27 jam	88 jam	8 Minggu	Tiada/ *None*
SPP3425	Epidemiologi/ *Epidemiology*	46 jam	127 jam		Tiada/ *None*
SPP3613	Statistik Perubatan/ *Medical Statistics*	48 jam	129 jam		Tiada/ *None*
SPP3131	Sains Perlakuan/ *Behavioural Science*	21 jam	69 jam	5 Minggu	Tiada/ *None*
SPP3111	Pembangunan Profesional/ *Professional Development*	10 jam	36 jam		Tiada/ *None*
SPP3121	Kemahiran Komunikasi/ *Communication Skills*	9 jam	29 jam		Tiada/ *None*
SPP3621	Projek dan Kaedah Penyelidikan/ *Research Methodology and Project*	400 jam	517 jam	10 Minggu	Tiada/ *None*
SPK3011	Pengalaman Awal Klinikal/ *Early Clinical Experience* (I,II,III,IV)	37 jam	74 jam	Dijalankan serentak pada setiap semester berkenaan	Tiada/ *None*
SPP3591	Pembelajaran Berasaskan Masalah/ *Problem Based Learning* (I,II,III,IV)	66 jam	132 jam	Dijalankan serentak pada setiap semester berkenaan	Tiada/ *None*

Samb./ *Cont.*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Jam Kontak	SLT	Jangkamasa Perlaksanaan	PRASYARAT/ *PREREQUISITE*
SPK3921	Perubatan Pengenalan/ *Introductory Medicine*	189 jam	560 jam	14 Minggu	Tiada/ *None*
SPK3931	Surgeri Pengenalan/ *Introductory Surgery*	173 jam	560 jam	14 Minggu	Tiada/ *None*
SPK3933	Otorinolaringologi/ *Otorhinolaryngology*	43 jam	120 jam	3 Minggu	Tiada/ *None*
SPK3934	Oftalmologi/ *Ophthalmology*	63 jam	120 jam	3 Minggu	Tiada/ *None*
SPK3923	Penjagaan Kesihatan Warga Tua/ *Health Care of the Elderly*	105 jam	120 jam	3 Minggu	Tiada/ *None*
SPK3924	Radiologi/ *Radiology*	26 jam	40 jam	1 Minggu	Tiada/ *None*
SPK3971	Perubatan Keluarga Pengenalan/ *Introductory Family Medicine*	54 jam	80 jam	2 Minggu	Tiada/ *None*
SPK3937	Sokongan Hayat Asas/ *Basic Life Support*	8 jam	20 jam	8 jam	Tiada/ *None*
SPK3991	Latihan Klinikal/ *Clinical Attachment*	50 jam	80 jam	2 Minggu	Tiada/ *None*
SPK3961	Psikiatri Pengenalan/ *Introductory Psychiatry*	195 jam	320 jam	8 Minggu	Tiada/ *None*
SPK3914	Ortopedik Pengenalan**/** *Introductory Orthopaedics*	32 jam	80 jam	2 Minggu	Tiada/ *None*
SPK3972	Perubatan Keluarga Lanjutan/ *Senior Family Medicine*	93 jam	160 jam	4 Minggu	Tiada/ *None*
SPK3981	Perubatan Komuniti/ *Community Medicine*	227 jam	240 jam	6 Minggu	Tiada/ *None*
SPK3951	Obstetrik dan Ginekologi Pengenalan/ *Introductory Obstetrics and Gynaecology*	209 jam	400 jam	10 Minggu	Tiada/ *None*
SPK3941	Pediatrik Pengenalan/ *Introductory Pediatrics*	288 jam	400 jam	10 Minggu	Tiada/ *None*
SPK3982	Lawatan Susulan Komuniti/ *Community Follow-Up*	96 jam	60 jam	20 Minggu (dijalankan serentak dengan posting yang lain)	Tiada/ *None*
SPK4922	Perubatan Lanjutan/ *Senior Medicine*	206 jam	400 jam	10 Minggu	Tiada/ *None*
SPK4932	Surgeri Lanjutan/ *Senior Surgery*	125 jam	320 jam	8 Minggu	Tiada/ *None*
SPK4962	Psikiatri Lanjutan/ *Senior Psychiatry*	35 jam	80 jam	2 Minggu	Tiada/ *None*
SPK4912	Ortopedik Lanjutan/ *Senior Orthopedics*	186 jam	280 jam	7 Minggu	Tiada/ *None*
SPK4952	Obstetrik dan Ginekologi Lanjutan/ *Senior Obstetrics and Gynaecology*	164 jam	200 jam	5 Minggu	Tiada/ *None*
SPK4942	Pediatrik Lanjutan/ *Senior Pediatrics*	136 jam	200 jam	5 Minggu	Tiada/ *None*

Samb./ *Cont.*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Jam Kontak	SLT	Jangkamasa Perlaksanaan	PRASYARAT/ *PREREQUISITE*
SPK4935	Perubatan Forensik/ *Forensic Medicine*	80 jam	-	40 Minggu (dijalankan serentak dengan posting yang lain)	Tiada/ *None*
SPK4936	Anestesiologi/ *Anaesthesiology*	29 jam	40jam	1 Minggu	Tiada/ *None*
SPK4913	Kemalangan dan Kecemasan/ *Accident and Emergency*	31 jam	40 jam	1 Minggu	Tiada/ *None*
SPK4925	Perubatan Sukan/ *Sports Medicine*	28 jam	40 jam	1 Minggu	Tiada/ *None*

Nota/ Notes : Kr = Jam Kredit/ Credit Hour, K = Kuliah/ Lecture, A = Amali/ Laboratory, T = Tutorial

Nota Penting/*Notes* :

1. Pelajar diwajibkan memilih **2 kredit** daripada **kursus kokurikulum** yang ditawarkan oleh universiti/ It is *compulsory for students to take* ***2 credits of co-curriculum courses*** *offered by the university*
2. *Pelajar perlu melengkapkan pakej keperluan bahasa inggeris seperti jadual di bawah :*
   (Butiran lanjut mengenai CEL dan LAX sila rujuk di muka surat belakang buku panduan ini)
   Students need to complete the english package as the table below : For more details on CEL and LAX please refer to the back/last page of this book.

MUET band	**Graduation Requirements for 3-years programmes**
3 & 4	2 BBI + 2 CEL + 24 LAX points
5 & 6	2 CEL + 36 LAX points

SKEMA PENGAJIAN/ *STUDY SCHEME*

TAHUN 1/ *1ST YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr/ Jam Kontak/ *Contact Hour*	K	A/T
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0
CEL2102	*Effective Listening and Speaking*	2	2	0
LAX2004	*Problem-based Learning in Medicine I*			
SPP3212	Sel dan Tisu Peka Rangsang/ *Cell and Excitable Tissue*	67 jam		
SPP3223	Anatomi Am dan Embriologi/ *General Anatomy And Embryology*	27 jam		
SPP3231	Perubatan Berasaskan Molekul/ *Molecular-Based Medicine*	43 jam		
SPP3273	Farmakologi Am dan Biokimia/ *General and Biochemical Pharmacology*	22 jam		
SPP3241	Ekspresi Gen/ *Gene Expression*	14 jam		
SPP3251	Genetik Manusia/ *Human Genetics*	17 jam		
SPP3321	Patologi Am/ *General Pathology*	35 jam		
SPP3351	Mikrobiologi Perubatan/ *Medical Microbiology*	52 jam		
SPP3371	Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology*	37 jam		
SPK3011A	Pengalaman Awal Klinikal/ *Early Clinical Experience* II	4 jam		
SPP3591A	Pembelajaran Berasaskan Masalah/ *Problem Based Learning* II	12 jam		

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr/ Jam Kontak/ *Contact Hours*	K	A/T
SKP 2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0
MGM 3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1
BBI 2423	*Academic Interaction and Presentation*	3	2	1
LAX 2006	*Problem-based Learning in Medicine II*			
SPP3341	Imunologi/ *Immunology*	39 jam		
SPP3311	Hematologi/ *Haematology*	45 jam		
SPP3532	Sistem Kardiovaskular/ *Cardiovascular System*	79 jam		
SPP3542	Sistem Respiratori/ *Respiratory System*	47 jam		
SPP3522	Sistem Urinari/ *Urinary System*	55 jam		
SPP3552	Sistem Alimentari dan Nutrisi/ *Alimentary System and Nutrition*	84 jam		
SPK3011B	Pengalaman Awal Klinikal II/ *Early Clinical Experience II*	12 Jam/ *Hours*		
SPP3591B	Pembelajaran Berasaskan Masalah II/ *Problem Based Learning II*	12 Jam/ *Hours*		

TAHUN 2/ *2ND YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr/ Jam Kontak/ *Contact Hour*	K	A/T
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0
BBI2424	*Academic Writing*	3	2	1
LAX2008	*Problem-based Learning in Medicine III*			
SPP3562	Sistem Endokrin/ *Endocrine System*	46 jam		
SPP3572	Sistem Reproduktif/ *Reproductive System*	60 jam		
SPP3512	Sistem Muskuloskeletal/ *Musculoskeletal System*	94 jam		
SPP3582	Sistem Saraf Pusat/ *Central Nervous System*	96 jam		
SPP3424	Perubatan Kesihatan Awam/ *Public Health Medicine*	27 jam		
SPP3425	Epidemiologi/ *Epidemiology*	46 jam		
SPP3613	Statistik Perubatan/ *Medical Statistics*	48 jam		
SPK3011C	Pengalaman Awal Klinikal III/ *Early Clinical Experience III*	12 Jam/ *Hours*		
SPP3591C	Pembelajaran Berasaskan Masalah III/ *Problem Based Learning III*	18 Jam/ *Hours*		

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr / Jam Kontak/ Contact Hour/Minggu/ Weeks	K	A/T
CEL 2104	*Oral Presentation*	2	2	0
LAX 2010	*Problem-based Learning in Medicine IV*			
SPP3131	Sains Perlakuan/ *Behavioural Science*	21 Jam/ *Hours*		
SPP3111	Pembangunan Profesional/ *Professional Development*	10 Jam/ *Hours*		
SPP3121	Kemahiran Komunikasi/ *Communication Skills*	9 Jam/ *Hours*		
SPP3621	Projek dan Kaedah Penyelidikan/ *Research Methodology and Project*	400 Jam/ *Hours*		
SPK3011D	Pengalaman Awal Klinikal IV/ *Early Clinical Experience IV*	9 Jam/ *Hours*		
SPP3591D	Pembelajaran Berasaskan Masalah IV/ *Problem Based Learning IV*	24 Jam/ *Hours*		

TAHUN 3/ *3RD YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr / Minggu/ Weeks	K	A/T
SPK3921	Perubatan Pengenalan/ *Introductory Medicine*	14 Minggu/ Weeks		
SPK3931	Surgeri Pengenalan/ *Introductory Surgery*	14 Minggu/ Weeks		
SPK3933	Otorinolaringologi/ *Otorhinolaryngology*	3 Minggu/ Weeks		
SPK3934	Oftalmologi/ *Ophthalmology*	3 Minggu/ Weeks		

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr / Minggu/ Weeks	K	A/T
SPK3923	Penjagaan Kesihatan Warga Tua/ *Health Care of the Elderly*	3 Minggu/ Weeks		
SPK3924	Radiologi Pengenalan/ *Introductory Radiology*	1 Minggu/ Weeks		
SPK3971	Perubatan Keluarga Pengenalan/ *Introductory Family Medicine*	2 Minggu/ Weeks		
SPK3937	Sokongan Hayat Asas/ *Basic Life Support*	1 Minggu/ Weeks		

TAHUN 4/ *4TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr/ Minggu/ Weeks	K	A/T
SPK3961	Psikiatri Pengenalan/ *Introductory Psychiatry*	8 Minggu/ Weeks		
SPK3914	Ortopedik Pengenalan*/ Introductory Orthopaedics*	2 Minggu/ Weeks		
SPK3972	Perubatan Keluarga Lanjutan/ *Senior Family Medicine*	4 Minggu/ Weeks		
SPK3981	Perubatan Komuniti/ *Community Medicine*	6 Minggu/ Weeks		

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr/ Minggu/ Weeks	K	A/T
SPK3951	Obstetrik dan Ginekologi Pengenalan/ *Introductory Obstetrics and Gynaecology*	10 Minggu/ Weeks		
SPK3941	Pediatrik Pengenalan/ *Introductory Pediatrics*	10 Minggu/ Weeks		
SPK3982	Lawatan Susulan Komuniti/ *Community Follow-Up*	20 Minggu/ Weeks		
SPK3991	Latihan Klinikal/ *Clinical Attachment*	2 Minggu/ Weeks		

TAHUN 5/ *5TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr / Minggu/ Weeks	K	A/T
SPK4922	Perubatan Lanjutan/ *Senior Medicine*	10 Minggu/ Weeks		
SPK4932	Surgeri Lanjutan/ *Senior Surgery*	8 Minggu/ Weeks		
SPK4962	Psikiatri Lanjutan/ *Senior Psychiatry*	2 Minggu/ Weeks		
SPK4912	Ortopedik Lanjutan/ *Senior Orthopedics*	7 Minggu/ Weeks		
SPK4952	Obstetrik dan Ginekologi Lanjutan/ *Senior Obstetrics and Gynaecology*	5 Minggu/ Weeks		

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr / Minggu/ Weeks	K	A/T
SPK4942	Pediatrik Lanjutan/ *Senior Pediatrics*	5 Minggu/ Weeks		
SPK4935	Perubatan Forensik/ *Forensic Medicine*	40 Minggu/ Weeks		
SPK4936	Anestesiologi/ *Anaesthesiology*	1 Minggu/ Weeks		
SPK4913	Kemalangan dan Kecemasan/ *Accident and Emergency*	1 Minggu/ Weeks		
SPK4925	Perubatan Sukan/ *Sports Medicine*	1 Minggu/ Weeks		

STRUKTUR KURIKULUM/ *CURRICULUM STRUCTURE*

Nama Program	**:**	**Bacelor Sains (Sains Bioperubatan)/ *Bachelor Science (Biomedical Sciences)***
Jumlah Kredit Bergraduat	**:**	**145 Jam Kredit/ *Credit Hours***
Tempoh Pengajian	**:**	**8 Semester/ *Semesters* (4 Tahun/ *Years*)**

Matlamat Program :

1. Menyediakan graduan dengan pengetahuan asas yang mencukupi dalam bidang Sains Kesihatan dengan menitikberatkan kepentingan prosedur dalam makmal
2. Melahirkan graduan yang kreatif dan inovatif serta sensitif dan bertanggungjawab terhadap masyarakat, budaya dan persekitaran
3. Melahirkan graduan yang berupaya untuk bekerja dalam bidang berkaitan dengan sains perubatan dalam membentuk masyarakat yang sihat selaras dengan pembangunan dan kemajuan negara

RINGKASAN HASIL PEMBELAJARAN PROGRAM

Program	Pengetahuan	Kemahiran Teknikal/Praktikal/ Psikomotor	Pendekatan Kemahiran Berfikir dan Saintifik	Kemahiran Berkomunikasi	Kemahiran Sosial dan Bertanggungjawab	Professionalisme, Nilai, Sikap dan Etika	Pendidikan Sepanjang Hayat dan Pengurusan Informasi	Kemahiran Pengurusan dan Keusahawanan	Kemahiran Kepimpinan
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Bacelor Sains (Sains Bioperubatan)	9	9	33	28	16	22	19	5	6

1. Modul Wajib/ *Compulsory Modul*(18 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0	Tiada/ *None*
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0	Tiada/ *None*
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0	Tiada/ *None*
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1	Tiada/ *None*
BBI2423	*Academic Interaction and Presentation*	3	2	1	CEL2102
BBI2424	*Academic Writing*	3	2	1	BBI2423
PRT2008	Pertanian dan Manusia/ *Agriculture and*	2	2	0	Tiada/ *None*

	Human

2. Modul Asas/ *Basic Modul* (27 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SBP3201	Asas Biokimia Perubatan/ *Basic medical biochemistry*	3	2	1	Tiada/ *None*
SBP3401	Hematologi/ *Hematology*	3	2	1	Tiada/ *None*
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1	Tiada/ *None*
SBP3301	Farmakologi/ *Pharmacoloy*	3	2	1	Tiada/ *None*
SBP3112	Sistem Integumen, Rangka dan Otot/ *Integument, Skeletal and Muscle Systems*	2	1	1	Tiada/ *None*
SBP3113	Sistem Saraf, Kardiovaskular, Limfatik dan Endokrin/ *Nervous, Cardiovascular, Lymphatic and Endocrine Systems*	3	2	1	Tiada/ *None*
SBP3114	Sistem Respiratori, Pencernaan dan Persekitaran/ *Respiratory, Digestive and Environmental Systems*	2	1	1	Tiada/ *None*
SBP3115	Sistem Pembiakan dan Urinari/ *Reproductive and Urinary Systems*	2	1	1	Tiada/ *None*
SBP3507	Genetik Asas*I Basic Genetics*	3	2	1	Tiada/ *None*
PKK3302	Epidemiologi Asas/ *Basic Epidemiology*	3	3	0	Tiada/ *None*

3. Modul Profesional/ *Profesional Modul* (73 kredit/ credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SBP3202	Biokimia Klinikal/ *Clinical Biochemistry*	3	2	1	Tiada/ *None*
SBP3404	Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology*	3	2	1	Tiada/ *None*
SBP3502	Genetik Manusia/ *Human Genetics*	3	2	1	Tiada/ *None*
SBP3503	Biologi Molekul Gunaan/ *Applied Molecular Biology*	3	2	1	Tiada/ *None*
SBP4999	Projek Ilmiah Tahun Akhir/ *Final Year Research Project*	8	0	8	Tiada/ *None*
SBP3302	Toksikologi/ *Toxicology*	3	2	1	Tiada/ *None*
SBP4108	Radiobiologi/ *Radiobiology*	3	2	1	Tiada/ *None*
SBP 3405	Patologi/ *Pathology*	3	2	1	Tiada/ *None*
SBP3002	Kaedah Penyelidikan Bioperubatan/ *Biomedical Research Methodology*	2	2	0	Tiada/ *None*
SBP3003	Statistik Bioperubatan*I Biomedical Statistics*	2	1	1	Tiada/ *None*
SBP3004	Pengurusan Haiwan Makmal*I Laboratory Animal Management*	3	2	1	Tiada/ *None*
SBP3005	Pengurusan Makmal*I Laboratory Management*	2	2	0	Tiada/ *None*

SBP3006	Sains Makmal dan Instrumentasi/ *Laboratory Science and Instrumentation*	3	2	1	Tiada/ *None*
SBP3007	Tajuk Khas Dalam Sains Bioperubatan*I Special Topic in Biomedical Sciences*	2	1	1	Tiada/ *None*
SBP3008	Kajian Kes/Penyelesaian Masalah / *Case study/Problem Solving*	3	3	0	Tiada/ *None*
SBP3407	Sains Transfusi dan Bank Darah*I Blood Transfusion and Blood Bank*	3	2	1	Tiada/ *None*
SBP3408	Imunologi Asas*I Basic Immunology*	2	2	0	Tiada/ *None*
SBP3409	Immunologi Lanjutan*I Advanced Immunology*	2	1	1	SBP3408
SBP3410	Kultur Sel dan Tisu*I Cell and Tissue Culture*	3	2	1	Tiada/ *None*
SBP3510	Bioinformatik Asas/ *Basic Bioinformatics*	3	2	1	Tiada/ *None*
SBP4401	Mikrobiologi Perubatan Lanjutan/ *Advanced Medical Microbiology*	3	2	1	Tiada/ *None*
FCE3204	Kemahiran Berfikir*I Thinking Skills*	2	2	0	Tiada/ *None*
SKJ3307	Sains Tingkahlaku*I Behavioural Science*	3	3	0	Tiada/ *None*
BBM3401	Bahasa Melayu Tinggi/ *Advanced Malay Language*	3	2	1	Tiada/ *None*
SKP2501	Pengantar Psikologi*I Introduction to Psychology*	3	3	0	Tiada/ *None*

4. Latihan Industri/ *Industrial Training* (12 kredit/ credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SBP4901	Latihan Industri/ *Industrial Training*	4	0	4	Tiada/ *None*
SBP4902	Praktikum Bioperubatan	8	0	8	Tiada/ *None*

5. Modul Pilihan/ *Option Modul* (15 kredit/ credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SBP3303	Toksikologi Molekul/ *Molecular toxicology*	3	3	0	Tiada/ *None*
SBP3504	Teknologi Sitogenetik Gunaan/ *Applied Cytogenetic Technology*	3	2	1	Tiada/ *None*
SBP4301	Kimia Farmaseutikal/ *Pharmaceutical Chemistry*	3	2	1	Tiada/ *None*
SBP4302	Etnofarmakologi/ *Ethnopharmacology*	3	3	0	SBP3301
SBP4402	Pengisyaratan Sel dan Transduksi Isyarat/ *Cell Signaling & Signal Transduction*	2	2	0	Tiada/ *None*
SBP4501	Bioinformatik dan Sumber Bioperubatan/ *Bioinformatic and biomedical sources*	3	2	1	Tiada/ *None*
SBP4502	Forensik Asas*I Basic Forensic*	3	2	1	Tiada/ *None*

SBP4503	Aspek Sosial dalam Genetik dan Bioteknologi/ *Social Aspects of Genetics and Biotechnology*	2	2	0	Tiada/ *None*
SBP4504	Variasi dan Evolusi Manusia*l Human variation and evolution*	3	3	0	Tiada/ *None*
SBP4603	Bioteknologi Perubatan*l Medical Biotechnology*	3	2	1	Tiada/ *None*
EOH3101	Prinsip Kesihatan Persekitaran/ *Principles of Environmental Health*	3	3	0	Tiada/ *None*
EOH3102	Kesihatan Komuniti dan Pencemaran/ *Community Health and Pollution*	3	2	1	Tiada/ *None*
EOH3401	Prinsip Kesihatan/ *Principles of Health*	3	3	0	Tiada/ *None*
EOH3402	Pengurusan Program Kesihatan Komuniti/ *Community Health Program Management*	3	3	0	Tiada/ *None*
PKK3107	Keselamatan Makanan untuk Kesihatan Pengguna/ *Food Safety for Consumer Health*	3	2	1	SBP3403
PKK3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0	Tiada/ *None*
PKK3202	Pemakanan dan Metabolisme/ *Nutrition and Metabolism*	3	3	0	PKK3200
PKK4401	Kesihatan dan Pemakanan Geriatrik/ *Geriatric Health and Nutrition*	3	3	0	PKK3200

Nota/ Notes : Kr = Jam Kredit/ Credit Hour, K = Kuliah/ Lecture, A = Amali/ Laboratory, T = Tutorial

Nota Penting/*Notes* :

1. Pelajar diwajibkan memilih **2 kredit** daripada **kursus kokurikulum** yang ditawarkan oleh universiti/ It is *compulsory for students to take **2 credits of co-curriculum courses** offered by the university*
2. *Pelajar perlu melengkapkan pakej keperluan bahasa inggeris seperti jadual di bawah :*
   (Butiran lanjut mengenai CEL dan LAX sila rujuk di muka surat belakang buku panduan ini)
   Students need to complete the english package as the table below : For more details on CEL and LAX please refer to the back/last page of this book.

MUET Band	TOEFL/IELTS Score	CIEP Level	Graduation Requirements for 4-year programmes
1 & 2	-	107	3 BBI + 3 CEL + 24 LAX points
3 & 4	TOEFL 500 - 599 IELTS 5.5 - 6.5	108 – 109	2 BBI + 2 CEL + 24 LAX points
5 & 6	TOEFL 600 - 677 IELTS 7.0 - 9.0	-	2 BBI + 1 CEL + 24 LAX points OR 1 BBI + 1 CEL + 24 LAX points (with global language)

SKEMA PENGAJIAN/ *STUDY SCHEME*

TAHUN 1/ *1ST YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP3112	Sistem Integumen, Rangka Dan Otot/ *Integument, Skeletal And Muscle Systems*	2	1	1
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1
SBP3507	Genetik Asas*l Basic Genetics*	3	2	1
BBI2423	*Academic Interaction and Presentation*	3	2	1
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0
	Ko-kurikulum	1	0	1
	JUMLAH	**16**	**11**	**5**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP3113	Sistem Saraf, Kardiovaskular, Limfatik Dan Endokrin/ *Nervous, Cardiovascular, Lymphatic and Endocrine Systems*	3	2	1
SBP3004	Pengurusan Haiwan Makmal*l Laboratory Animal Management*	3	2	1
SBP3201	Asas Biokimia Perubatan/ *Basic medical biochemistry*	3	2	1
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0
BBI2424	*Academic Writing*	3	2	1
SBP4902A*	Praktikum Bioperubatan	4	0	4
	Ko-kurikulum	1	0	1
	JUMLAH	**22**	**13**	**9**

***dilaksanakan semasa cuti semester**

TAHUN 2/ *2ND YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP3114	Sistem Respiratori, Pencernaan dan Persekitaran/ *Respiratory, Digestive and Environmental Systems*	2	1	1
SBP3401	Hematologi/ *Hematology*	3	2	1
SBP3503	Biologi Molekul Gunaan/ *Applied Molecular Biology*	3	2	1
SBP3502	Genetik Manusia/ *Human Genetics*	3	2	1
FCE3204	Kemahiran Berfikir*I Thinking Skills*	2	2	0
SBP3410	Kultur Sel dan Tisu*I Cell and Tissue Culture*	3	2	1
	JUMLAH	**16**	**11**	**5**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP3115	Sistem Pembiakan dan Urinari/ *Reproductive and Urinary Systems*	2	1	1
SBP3408	Imunologi Asas*I Basic Immunology*	2	2	0
SBP3301	Farmakologi/ *Pharmacoloy*	3	2	1
PKK3302	Epidimiologi Asas/ *Basic Epidemiology*	3	3	0
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0
BBM3401	Bahasa Melayu Tinggi/ *Advanced Malay Language*	3	2	1
SBP4902B*	Praktikum Bioperubatan	4	0	4
	JUMLAH	**20**	**13**	**7**

***dilaksanakan semasa cuti semester**

TAHUN 3/ *3RD YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP4401	Mikrobiologi Perubatan Lanjutan/ *Advanced Medical Microbiology*	3	2	1
SBP3202	Biokimia Klinikal/ *Clinical Biochemistry*	3	2	1
SBP3404	Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology*	3	2	1
SBP3405	Patologi/ *Pathology*	3	2	1
SBP3002	Kaedah Penyelidikan Bioperubatan/ *Biomedical Research Methodology*	2	2	0
SBP4108	Radiobiologi/ *Radiobiology*	3	2	1
	JUMLAH	**17**	**12**	**5**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP3302	Toksikologi/ *Toxicology*	3	2	1
SBP3003	Statistik Bioperubatan*l Biomedical Statistics*	2	1	1
SBP3409	Immunologi Lanjutan*l Advanced Immunology*	2	1	1
SBP3407	Sains Transfusi dan Bank Darah*l Blood Transfusion and Blood Bank*	3	2	1
SBP3510	Bioinformatik Asas/ *Basic Bioinformatics*	3	2	1
SBP4903*	Latihan Industri/ *Industrial Training*	5	0	5
SBP3006	Sains Makmal dan Instrumentasi/ *Laboratory Science and Instrumentation*	3	2	1
SBP3005	Pengurusan Makmal*l Laboratory Management*	2	2	0
	JUMLAH	**22**	**12**	**10**

***dilaksanakan semasa cuti semester**

TAHUN 4/ *4TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP4990A	Projek Ilmiah Tahun Akhir/ *Final Year Research Project*	4	0	4
SKJ3307	Sains Tingkahlaku*l Behavioural Science*	3	3	0
SBP3007	Tajuk Khas Dalam Sains Bioperubatan*l Special Topic in Biomedical Sciences*	2	1	1
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1
	Elektif/*Elective*	6		
	JUMLAH	**18**	**12**	**6**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SBP4990B	Projek Ilmiah Tahun Akhir/ *Final Year Research Project*	4	0	4
SBP3008	Kajian Kes/Penyelesaian Masalah / *Case study/Problem Solving*	3	3	0
	Elektif/ *Elective*	9	6	3
	JUMLAH	**16**	**9**	**7**

STRUKTUR KURIKULUM/ *CURRICULUM STRUCTURE*

Nama Program : **Bacelor Sains (Dietetik)/ *Bachelor of Science (Dietetics)***

Jumlah Kredit Bergraduat : **137 Jam Kredit/ *Credit Hours***

Tempoh Pengajian : **8 Semester/ *Semesters* (4 Tahun/ *Years*)**

Matlamat Program :

1. Untuk memberikan pendidikan yang komprehensif dalam konsep sains asas, sains sosial, sains tingkahlaku, makanan dan pemakanan
2. Untuk melahirkan graduan terlatih dan profesional dalam bidang pemakanan klinikal, pengurusan perkhidmatan makanan institusi dan pemakanan komuniti agar dapat berperanan sebagai dietitian dengan berkesan
3. Untuk mempertingkatkan penyelidikan dalam bidang dietetik supaya dapat menyumbang kepada pengetahuan terkini di peringkat domestik dan antarabangsa

RINGKASAN HASIL PEMBELAJARAN PROGRAM

Program	Pengetahuan	Kemahiran Teknikal/Praktikal/ Psikomotor	Pendekatan Kemahiran Berfikir dan Saintifik	Kemahiran Berkomunikasi	Kemahiran Sosial dan Bertanggungjawab	Professionalisme, Nilai, Sikap dan Etika	Pendidikan Sepanjang Hayat dan Pengurusan Informasi	Kemahiran Pengurusan dan Keusahawanan	Kemahiran Kepimpinan
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Bacelor Sains (Dietetik)	10	18	19	14	12	21	20	4	4

1. Modul Wajib/ *Compulsory Modul* (21 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
BBI2423	*Academic Interaction and Presantation*	3	2	1	CEL2102
BBI2424	*Academic Writing*	3	2	1	BBI2423
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1	Tiada/ *None*
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0	Tiada/ *None*
SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology and Its Applications*	3	2	1	Tiada/ *None*
SKP2101	Kenegaraan Malaysia/ *Malaysian*	3	3	0	Tiada/ *None*

	Nationhood				
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0	Tiada/ *None*
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0	Tiada/ *None*

2. Modul Asas/ *Basic Modul* (21 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SBP3201	Asas Biokimia Perubatan/ *Basic medical biochemistry*	3	2	1	Tiada/ *None*
SBP3110	Pengenalan kepada fisiologi manusia/ *Introduction to Human Physiology*	3	3	0	Tiada/ *None*
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1	Tiada/ *None*
SBP3502	Genetik Manusia/ *Human Genetics*	3	2	1	Tiada/ *None*
DTK3205	Imunologi Pemakanan/ *Nutritional Immunology*	3	3	0	Tiada/ *None*
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0	Tiada/ *None*
ANA3101	Anatomi Manusia/ *Human Anatomy*	3	2	1	Tiada/ *None*

3. Modul Profesional/ Profesional Modul (63 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
DTK3100	Prinsip Penyediaan Makanan/ *Principles of Food Preparation*	3	2	1	PKK3200
DTK3101	Eksperimen Makanan/ *Experimental Foods*	3	2	1	DTK3100
DTK3102	Pengurusan Perkhidmatan Makanan Institusi I/ *Institutional Foodservice Management I*	3	3	0	DTK3101
DTK3103	Pengurusan Perkhidmatan Makanan Institusi II/ *Institutional Foodservice Management II*	3	1	2	DTK3102
DTK3200	Pemakanan Klinikal/ *Clinical Nutrition*	4	3	1	SBP3201
DTK3203	Interaksi Drug-Nutrien/ *Drug-Nutrient Interaction*	3	3	0	DTK3202
DTK3206	Terapi Pemakanan Perubatan I/ *Medical Nutrition Therapy I*	4	3	1	DTK3200
DTK3207	Terapi Pemakanan Perubatan II/ *Medical Nutrition Therapy II*	4	3	1	DTK3206
DTK3001	Perkembangan Terkini dalam Dietetik/	2	1	1	Tiada/ *None*

	Current Development in Dietetics				
DTK3002	Kaunseling Pemakanan dan Pendidikan Pesakit/ *Nutrition Counseling and Patient Education*	4	3	1	DTK3206
PKK3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0	Tiada/ *None*
PKK3202	Pemakanan dan Metabolisme/ *Nutrition and Metabolism*	3	3	0	PKK3200
PKK3203	Pemakanan Sepanjang Kitaran Hidup/ *Nutrition Throughout the Life Cycle*	3	3	0	PKK3200
PKK3302	Epidemiologi Asas/ *Basic Epidemiology*	3	3	0	Tiada/ *None*
PKK3403	Penggalakan Pemakanan dan Kesihatan/ *Nutrition and Health Promotion*	3	2	1	Tiada/ *None*
PKK3401	Penilaian Taraf Pemakanan dan Kesihatan *Assessment of Nutritional and Health Status*	3	2	1	PKK3200
PKK3100	Makanan, Masyarakat dan Budaya/ *Food, Society and Culture*	3	3	0	Tiada/ *None*
DTK4999	Projek Ilmiah Tahun Akhir/ *Final Year Project*	6	0	6	Tiada/ *None*
PKK3002	Biostatistik dan Kaedah Penyelidikan Pemakanan/ *Biostatistics and Research Methodology in Nutrition*	3	2	1	Tiada/ *None*

4. Modul Latihan Industri/ *Industrial Traning Modul* (23 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
DTK4200	Latihan Profesional Dietetik Pesakit Luar/ *Out-Patient Dietetic Professional Training*	4	0	4	DTK3002
DTK4100	Latihan Profesional Pengurusan Perkhidmatan Makanan Institusi/ *Institutional Food Service Management Professional Training*	4	0	4	DTK3103
DTK4300	Latihan Profesional Dietetik Komuniti/ *Community Dietetic Professional Training*	3	0	3	PKK3403
DTK4201	Latihan Profesional Dietetik Pesakit Dalam/ *In-patient Dietetic Professional Training*	9	0	9	DTK3207
DTK4202	Latihan Profesional Dietetik Unit Khusus/ *Special Unit Dietetic Professional Training*	3	0	3	DTK3206

5. Modul Elektif/ *Elective Modul* (11 kredit/ *credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
	Elektif/*Elective*	9			

Ko-kurikulum	2

Nota/ Notes : Kr = Jam Kredit/ Credit Hour, K = Kuliah/ Lecture, A = Amali/ Laboratory, T = Tutorial l

Nota Penting/*Notes* :

1. Pelajar diwajibkan memilih **2 kredit** daripada **kursus kokurikulum** yang ditawarkan oleh universiti/ It is *compulsory for students to take* ***2 credits of co-curriculum courses*** *offered by the university*
2. *Pelajar perlu melengkapkan pakej keperluan bahasa inggeris seperti jadual di bawah :*
   (Butiran lanjut mengenai CEL dan LAX sila rujuk di muka surat belakang buku panduan ini)
   Students need to complete the english package as the table below : For more details on CEL and LAX please refer to the back/last page of this book.

MUET Band	**TOEFL/IELTS Score**	**CIEP Level**	**Graduation Requirements for 4-year programmes**
1 & 2	-	107	3 BBI + 3 CEL + 24 LAX points
3 & 4	TOEFL 500 - 599 IELTS 5.5 - 6.5	108 – 109	2 BBI + 2 CEL + 24 LAX points
5 & 6	TOEFL 600 - 677 IELTS 7.0 - 9.0	-	2 BBI + 1 CEL + 24 LAX points OR 1 BBI + 1 CEL + 24 LAX points (with global language)

SKEMA PENGAJIAN/ *STUDY SCHEME*

TAHUN 1/ *1ST YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0
SBP3201	Asas Biokimia Perubatan/ *Basic medical biochemistry*	3	2	1
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0
SBP3110	Pengenalan Kepada Fisiologi Manusia/ *Introduction to Human Physiology*	3	3	0
ANA3101	Anatomi Manusia/ *Human Anatomy*	3	2	1
	JUMLAH	**19**	**17**	**2**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3203	Pemakanan Sepanjang Kitaran Hidup/ *Nutrition Throughout the Life Cycle*	3	3	0
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1
DTK3100	Prinsip Penyediaan Makanan/ *Principles of Food Preparation*	3	2	1
BBI2423	*Academic Interaction and Presentation*	3	2	1
SBP3502	Genetik Manusia/ *Human Genetics*	3	2	1
PKK3401	Penilaian Taraf Pemakanan dan Kesihatan/ *Assessment of Nutritional and Health Status*	3	2	1
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0
	JUMLAH	**21**	**16**	**5**

TAHUN 2/ *2ND YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3202	Pemakanan dan Metabolisme/ *Nutrition and Metabolism*	3	3	0
DTK3200	Pemakanan Klinikal/ *Clinical Nutrition*	4	3	1
BBI2424	*Academic Writing*	3	2	1

DTK3101	Eksperimen Makanan/ *Experimental Foods*	3	2	1
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1
	Elektif/*Elective*	3	3	0
	JUMLAH	**21**	**17**	**4**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
DTK3205	Imunologi Pemakanan/ *Nutritional Immunology*	3	3	0
PKK3002	Biostatistik dan Kaedah Penyelidikan Pemakanan/ *Biostatistics and Research Methodology in Nutrition*	3	2	1
DTK3102	Pengurusan Perkhidmatan Makanan Institusi I/ *Institutional Foodservice Management I*	3	3	0
PKK3403	Penggalakan Pemakanan dan Kesihatan/ *Nutrition and Health Promotion*	3	2	1
DTK3206	Terapi Pemakanan Perubatan I/ *Medical Nutrition Therapy I*	4	3	1
PKK3100	Makanan, Masyarakat dan Budaya/ *Food, Society and Culture*	3	3	0
PKK3302	Epidemiologi Asas/ *Basic Epidemiology*	3	3	0
	JUMLAH	**22**	**19**	**3**

TAHUN 3/ 3RD YEAR

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
DTK3207	Terapi Pemakanan Perubatan II/ *Medical Nutrition Therapy II*	4	3	1
DTK3002	Kaunseling Pemakanan dan Pendidikan Pesakit/ *Nutrition Counseling and Patient Education*	4	3	1
DTK3103	Pengurusan Perkhidmatan Makanan Institusi II/ *Institutional Foodservice Management II*	3	1	2
DTK4999A	Projek Ilmiah Tahun Akhir/ *Final Year Project*	3	0	3
	Elektif/*Elective*	3	2	1
	JUMLAH	**17**	**9**	**8**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
DTK3001	Perkembangan Terkini dalam Dietetik/ *Current Development in Dietetics*	2	1	1
SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology And Its Applications*	3	2	1
DTK4999B	Projek Ilmiah Tahun Akhir/ *Final Year Project*	3	0	3
DTK3203	Interaksi Drug-Nutrien/ *Drug-Nutrient Interaction*	3	3	0
DTK4100	Latihan Professional Pengurusan Perkhidmatan Makanan / *Food Service Management Professional Training***	4	0	4
	Elektif/*Elective*	3	2	1
	JUMLAH	**18**	**8**	**10**

TAHUN 4/ *4TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
DTK4200	Latihan Profesional Dietetik Pesakit Luar/ *Out-Patient Dietetic Professional Training*	4	0	4
DTK4201A	Latihan Profesional Dietetik Pesakit Dalam/ *In-patient Dietetic Professional Training*	4	0	4
	JUMLAH	**8**	**0**	**8**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
DTK4201B	Latihan Profesional Dietetik Pesakit Dalam/ *In-patient Dietetic Professional Training*	5	0	5
DTK4202	Latihan Profesional Dietetik Unit Khusus/ *Special Unit Dietetic Professional Training*	3	0	3
DTK4300	Latihan Profesional Dietetik Komuniti/ *Community Dietetic Professional Training*	3	0	3
	JUMLAH	**11**	**0**	**11**

STRUKTUR KURIKULUM/ *CURRICULUM STRUCTURE*

Nama Program	**:**	**Bacelor Sains (Pemakanan dan Kesihatan Komuniti)/ *Bachelor of Science (Nutrition and Community Health)***
Jumlah Kredit Bergraduat	**:**	**139 Jam Kredit/ *Credit Hours***
Tempoh Pengajian	**:**	**8 Semester/*Semesters* (4 Tahun/*Years*)**

Matlamat Program :

1. Untuk menyediakan graduan dengan pengetahuan, kemahiran, kepakaran dan pengalaman dalam bidang pemakanan dan kesihatan komuniti
2. Untuk melahirkan graduan yang kreatif dan inovatif serta sensitif, bertanggungjawab dan beretika terhadap masyarakat, budaya dan persekitaran
3. Untuk melahirkan graduan yang mahir dari aspek pengurusan, komunikasi dan motivasi untuk merancang dan melaksanakan program bagi meningkatkan status pemakanan dan kesihatan komuniti
4. Untuk melahirkan graduan yang berkemampuan tinggi yang dapat mengendalikan penyelidikan dan perundingan berkualiti di peringkat tempatan dan antarabangsa

RINGKASAN HASIL PEMBELAJARAN PROGRAM

Program	Pengetahuan	Kemahiran Teknikal/Praktikal/ Psikomotor	Pendekatan Kemahiran Berfikir dan Saintifik	Kemahiran Berkomunikasi	Kemahiran Sosial dan Bertanggungjawab	Professionalisme, Nilai, Sikap dan Etika	Pendidikan Sepanjang Hayat dan Pengurusan Informasi	Kemahiran Pengurusan dan Keusahawanan	Kemahiran Kepimpinan
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Bacelor Sains (Pemakanan dan Kesihatan Komuniti)	22	15	15	14	17	20	22	3	2

1. Modul Wajib/ *Compulsory Modules* (21 Kredit/*Credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SSK3000	Teknologi Maklumat dan Penggunaan/*Information Technology and Its Applications*	3	2	1	Tiada/ *None*
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0	Tiada/ *None*
SKP2203	Tamadun Islam dan Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0	Tiada/ *None*
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0	Tiada/ *None*

PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0	Tiada/ *None*
BBI2423	*Academic Interaction and Presentation*	3	2	1	CEL2102
BBI2424	*Academic Writing*	3	2	1	BBI2423
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1	Tiada/ *None*

2. Modul Asas/ *Basic Modules* (21 Kredit/Credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
PKK4201	Pemakanan Terapi/ *Therapeutic Nutrition*	3	2	1	PKK3202
DTK3205	Imunologi Pemakanan/ *Nutritional Immunology*	3	3	0	Tiada/ *None*
ANA3101	Anatomi Manusia/ *Human Anatomy*	3	2	1	Tiada/ *None*
SBP3110	Pengenalan kepada Fisiologi Manusia/ *Introduction to Human Physiology*	3	3	0	Tiada/ *None*
SBP3201	Asas Biokimia Perubatan/ *Basic Medical Biochemistry*	3	2	1	Tiada/ *None*
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1	Tiada/ *None*
SBP3502	Genetik Manusia/ *Human Genetics*	3	2	1	Tiada/ *None*

3. Modul Profesional/ *Professional Modul* (74 Kredit/ *Credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
PKK3001	Seminar: Isu Semasa dalam Pemakanan dan Kesihatan/ *Seminar: Current Issues in Nutrition and Health*	2	1	1	Tiada/ *None*
PKK3002	Biostatistik dan Kaedah Penyelidikan Pemakanan/ *Biostatistics and Research Methodology in Nutrition*	3	2	1	Tiada/ *None*
PKK3100	Makanan, Masyarakat dan Budaya/ *Food, Society and Culture*	3	3	0	Tiada/ *None*
PKK3102	Prinsip Analisis Nutrien/ *Principles of Nutrient Analysis*	3	2	1	Tiada/ *None*
PKK3103	Asas Perkhidmatan Makanan Institusi/ *Basic Institutional Foodservice*	3	3	0	Tiada/ *None*
PKK3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0	Tiada/ *None*
PKK3202	Pemakanan dan Metabolisme/ *Nutrition and Metabolism*	3	3	0	PKK3200
PKK3203	Pemakanan dalam Kitaran Hidup/ *Nutrition Throughout the Life Cycle*	3	3	0	PKK3200

PKK3302	Epidemiologi Asas/ *Basic Epidemiology*	3	3	0	
PKK3303	Kesihatan Ibu dan Anak/ *Maternal and Child Health*	3	2	1	SBP3110
PKK3304	Tingkahlaku dan Kesihatan/ *Behaviour and Health*	3	3	0	Tiada/ *None*
PKK3400	Kajian Kependudukan : Perspektif Kesihatan/ *Population Studies: Health Perspective*	3	3	0	Tiada/ *None*
PKK3401	Penilaian Taraf Pemakanan dan Kesihatan*/ Assessment of Nutritional and Health Status*	3	2	1	PKK3200
PKK3402	Pemakanan dan Kesihatan Komuniti/ *Community Nutrition and Health*	3	3	0	PKK3401
PKK3404	Promosi Pemakanan dan Kesihatan I/ *Nutrition and Health Promotion I*	3	3	0	PKK3402
PKK3405	Promosi Pemakanan dan Kesihatan II/ *Nutrition and Health Promotion II*	3	1	2	PKK3404
PKK4200	Biokimia Gangguan Pemakanan/ *Biochemistry of Nutritional Disorders*	3	3	0	PKK3202
PKK4204	Pemakanan, Aktiviti Fizikal dan Kesihatan/ *Nutrition, Physical Activities and Health*	3	2	1	PKK3203
PKK4999	Projek Ilmiah Tahun Akhir/ *Final Year Project*	12	0	12	Tiada/ *None*
DTK3000	Kaunseling Pemakanan/ *Nutrition Counseling*	3	2	1	KOH3433
DTK3100	Prinsip Persediaan Makanan/ *Principles of Food Preparation*	3	2	1	PKK3200
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0	Tiada/ *None*

4. Modul Latihan Industri/ *Industrial Training Modules* (6 Kredit/ *Credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
PKK4901	Latihan Industri/ *Industrial Training*	6	0	6	Tiada/ *None*

5. Modul Lain/ *Others Modules* (17 Kredit/ *Credits*)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
	Elektif/ *Elective*	15			
	Ko-kurikulum/ *Co-curriculum*	2			

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Nota Penting/*Notes* :

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3 & 4	TOEFL 500 - 599 IELTS 5.5 - 6.5	108 – 109	2 BBI + 2 CEL + 24 LAX points
5 & 6	TOEFL 600 - 677 IELTS 7.0 - 9.0	-	2 BBI + 1 CEL + 24 LAX points OR 1 BBI + 1 CEL + 24 LAX points (with global language)

SKEMA PENGAJIAN/ *STUDY SCHEME*

TAHUN 1/ *1ST YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0
SBP3110	Pengenalan kepada Fisiologi Manusia/ *Introduction to Human Physiology*	3	3	0
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0
SBP3201	Asas Biokimia Perubatan/ *Basic Medical Biochemistry*	3	2	1
PKK3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0
	JUMLAH	**19**	**17**	**2**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3203	Pemakanan dalam Kitaran Hidup/ *Nutrition Throughout the Life Cycle*	3	3	0
DTK3100	Prinsip Persediaan Makanan/ *Principles of Food Preparation*	3	2	1
ANA3101	Anatomi Manusia/ *Human Anatomy*	3	2	1
SBP3502	Genetik Manusia/ *Human Genetics*	3	2	1
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0
	JUMLAH	**17**	**14**	**3**

TAHUN 2/ *2ND YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3103	Asas Perkhidmatan Makanan Institusi/ *Basic Institutional Foodservice*	3	3	0
PKK3202	Pemakanan dan Metabolisme/ *Nutrition and Metabolism*	3	3	0
PKK3400	Kajian Kependudukan : Perspektif Kesihatan/ *Population Studies: Health Perspective*	3	3	0
PKK3401	Penilaian Taraf Pemakanan dan Kesihatan/ *Assessment of Nutritional and Health Status*	3	2	1
SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology and Its Applications*	3	2	1
BBI2423	*Academic Interaction and Presentation*	3	2	1
	JUMLAH	**18**	**15**	**3**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3302	Epidemiologi Asas/ *Basic Epidemiology*	3	3	0
PKK3102	Prinsip Analisis Nutrien/ *Principles of Nutrient Analysis*	3	2	1
PKK3303	Kesihatan Ibu dan Anak/ *Maternal and Child Health*	3	2	1
PKK3402	Pemakanan dan Kesihatan Komuniti/ *Community Nutrition and Health*	3	3	0
PKK4200	Biokimia Gangguan Pemakanan/ *Biochemistry of Nutritional Disorders*	3	3	0
BBI2424	*Academic Writing*	3	2	1
	JUMLAH	**18**	**15**	**3**

TAHUN 3/ *3RD YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3304	Tingkahlaku dan Kesihatan/ *Behaviour and Health*	3	3	0
PKK3404	Promosi Pemakanan dan Kesihatan I/ *Nutrition and Health Promotion I*	3	3	0
PKK4201	Pemakanan Terapi/ *Therapeutic Nutrition*	3	2	1
PKK4204	Pemakanan, Aktiviti Fizikal dan Kesihatan/ *Nutrition, Physical Activities and Health*	3	2	1
	Elektif/ *Elective*	3	3	0
	JUMLAH	**15**	**13**	**2**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3002	Biostatistik dan Kaedah Penyelidikan Pemakanan/ *Biostatistics and Research Methodology in Nutrition*	3	2	1
PKK3405	Promosi Pemakanan dan Kesihatan II/ *Nutrition and Health Promotion II*	3	1	2
PKK4901	Larihan Industri/ *Industrial Training*	6	0	6
DTK3000	Kaunseling Pemakanan/ *Nutrition Counseling*	3	2	1
DTK3205	Imumunologi Pemakanan/ *Nutritional Immunology*	3	3	0
	JUMLAH	**18**	**8**	**10**

TAHUN 4/ *4TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK4999A	Projek Ilmiah Tahun Akhir/ *Final Year Project*	6	0	6
PKK3001	Seminar: Isu Semasa dalam Pemakanan dan Kesihatan/ *Seminar: Current Issues In Nutrition and Health*	2	1	1
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1
	Elektif/ *Elective*	6	6	0
	JUMLAH	**17**	**9**	**8**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK4999B	Projek Ilmiah Tahun Akhir/ *Final Year Project*	6	0	6
PKK3100	Makanan, Masyarakat dan Budaya/ *Food, Society and Culture*	3	3	0
	Elektif/ *Elective*	6	6	0
	JUMLAH	**15**	**9**	**6**

Nota/Notes : Pelajar diwajibkan memilih 2 kredit daripada kursus kokurikulum yang ditawarkan oleh universiti/ *Students are required to take 2 credits of co-curriculum courses offered by the university*

STRUKTUR KURIKULUM/ *CURRICULUM STRUCTURE*

Nama Program	**:**	**Bacelor Sains (Kesihatan Persekitaran dan Pekerjaan)/ *Bachelor of Science (Environmental and Occupational Health)***
Jumlah Kredit Bergraduat	**:**	**129 Jam Kredit/ *Credit Hours***
Tempoh Pengajian	**:**	**8 Semester (4 Tahun)**

Matlamat Program **:**

1. Untuk melahirkan graduan dengan pengetahuan dan kepakaran dalam penjagaan kesihatan masyarakat melalui kelestarian dan peningkatan kualiti alam sekitar dan tempat kerja serta kualiti kehidupan bermasyarakat
2. Untuk melahirkan graduan yang mahir, inovatif dan peka dalam menangani masalah kesihatan persekitaran masyarakat, tempat kerja serta nilai dan budaya negara
3. Untuk melahirkan graduan yang berkemampuan tinggi serta dapat mengendalikan penyelidikan dan perundingan berkualiti di peringkat kebangsaan dan antarabangsa

RINGKASAN HASIL PEMBELAJARAN PROGRAM

Program	Pengetahuan	Kemahiran Teknikal/Praktikal/ Psikomotor	Pendekatan Kemahiran Berfikir dan Saintifik	Kemahiran Berkomunikasi	Kemahiran Sosial dan Bertanggungjawab	Professionalisme, Nilai, Sikap dan Etika	Pendidikan Sepanjang Hayat dan Pengurusan Informasi	Kemahiran Pengurusan dan Keusahawanan	Kemahiran Kepimpinan
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Bacelor Sains (Kesihatan Persekitaran dan Pekerjaan)	9	15	18	21	16	21	18	8	11

1. Kursus Wajib/ *Compulsory Courses*(18 Kredit credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0	Tiada/ *None*
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0	Tiada/ *None*
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0	Tiada/ *None*
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1	Tiada/ *None*

SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology and Its Applications*	3	2	1	Tiada/ *None*
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0	Tiada/ *None*
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0	Tiada/ *None*

2. Kursus Asas/ *Basic Courses* (23 Kredit credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
SBP3111	Fisiologi Manusia/*Human Physiology*	4	3	1	Tiada/ *None*
CHM3201	Kimia Organik I/ *Organic Chemistry*	4	3	1	Tiada/ *None*
SBP3201	Asas Biokimia Perubatan/ *Basic medical biochemistry*	3	2	1	Tiada/ *None*
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1	Tiada/ *None*
BBI2423	*Academic Interaction and Presentation*	3	2	1	CEL2102
BBI2424	*Academic Writing*	3	2	1	BBI2423
EOH3303	Biostatistik Kesihatan Persekitaran dan Pekerjaan/ *Environmental and Occupational Health Biostatistics*	3	3	0	Tiada/ *None*

3. Kursus Profesional/ *Profesional courses (61 kredit/ credits)*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
EOH3000	Seminar/*Seminar*	1	0	1	Tiada/ *None*
EOH3101	Prinsip Kesihatan Persekitaran/ *Principles of Environmental Health*	3	3	0	Tiada/ *None*
EOH3102	Kesihatan Komuniti dan Pencemaran/ *Community Health and Pollution*	3	2	1	Tiada/ *None*
EOH3202	Kesihatan Pekerjaan/ *Occupational Health*	3	3	0	Tiada/ *None*
EOH3203	Higen Industri/ *Industrial Hygiene*	3	0	3	Tiada/ *None*
EOH3206	Keselamatan Industri dan Tindakan Kecemasan/ *Industrial Safety and Emergency Response*	4	4	0	Tiada/ *None*
EOH3302	Pengurusan dan Keselamatan Bahan Toksik/ *Management and Safety of Toxic Substances*	3	3	0	EOH3304
EOH3304	Perundangan dan Etika Profesional Kesihatan Persekitaran dan Pekerjaan/ *Environmental and Occupational Health Laws and Professional Ethics*	4	4	0	Tiada/ *None*
EOH3401	Prinsip Kesihatan/ *Principles of Health*	3	3	0	Tiada/ *None*

EOH4101	Pemantauan dan Analisis dalam Kesihatan Persekitaran/ *Environmental Health Monitoring and Analysis*	3	2	1	EOH3102
EOH4201	Ergonomik/ *Ergonomics*	3	3	0	EOH3203
EOH4202	Sistem Pengurusan Keselamatan dan Kesihatan Pekerjaan/ *Occupational Safety and Health Management System*	3	3	0	EOH3202
EOH4301	Toksikologi Industri dan Persekitara/ *Industrial and Environment Toxicology*	3	3	0	Tiada/ *None*
EOH4302	Epidemiologi Persekitaran dan Pekerjaan/ *Environmental and Occupational Epidemiology*	3	3	0	Tiada/ *None*
EOH4304	Penilaian Pendedahan dan Risiko Kesihatan Bahan Kimia/ *Assessment of Exposure and Health Risk*	3	3	0	EOH4301
EOH4306	Kaedah Penyelidikan Kesihatan/ *Health Research Methodology*	4	3	1	EOH3303
EOH4307	Penilaian Impak Kesihatan/ *Health Impact Assessment*	3	2	1	EOH4301 dan EOH4302
EOH4999A/B	Projek Ilmiah Tahun Akhir/ *Final Year Project*	6	0	6	EOH4306
PKK3107	Keselamatan Makanan untuk Kesihatan Pengguna/ *Food Safety for Consumer Health*	3	2	1	SBP3403

4. Latihan Industri/ *Industrial Training (9 kredit/credits)*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
EOH4902	Latihan Industri Kesihatan Persekitaran/ *Environmental Health Industrial Training*	2	0	2	Tiada/ *None*
EOH4903	Latihan Industri Kesihatan Komuniti/ *Community Health Industrial Training*	2	0	2	Tiada/ *None*
EOH4904	Latihan Industri Kesihatan Pekerjaan/ *Occupational Health Industrial Training*	5	0	5	Tiada/ *None*

5. Kursus Elektif/ *Elective Courses(Minimum 18 kredit/credits)*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
EOH3402	Pengurusan Program Kesihatan Komuniti/ *Community Health Program Management*	3	3	0	EOH3401
EOH3403	Kawalan dan Pengurusan Penyakit Berjangkit/ *Control and Management of Communicable Diseases*	3	3	0	EOH3401
EOH3404	Kawalan dan Pengurusan Penyakit Tidak Berjangkit/ *Control and Management of Non-Infectious Diseases*	3	3	0	EOH3401
EOH3405	Parasitologi Persekitaran/ *Environmental Parasitology*	3	3	0	Tiada/ *None*

EOH4102	Kualiti Air dalam Kesihatan Persekitaran *(Water Quality in Environmental Health*	3	3	0	EOH3102
EOH4103	Polisi dan Perancangan Kesihatan Persekitaran*l Environmental Health Policy and Planning*	3	3	0	EOH3304

Nota/ Notes : Kr = Jam Kredit/ Credit Hour, K = Kuliah/ Lecture, A = Amali/ Laboratory, T = Tutorial

Nota Penting/*Notes* :

1. Pelajar diwajibkan memilih **2 kredit** daripada **kursus kokurikulum** yang ditawarkan oleh universiti/ It is *compulsory for students to take* ***2 credits of co-curriculum courses*** *offered by the university*
2. *Pelajar perlu melengkapkan pakej keperluan bahasa inggeris seperti jadual di bawah :*
   (Butiran lanjut mengenai CEL dan LAX sila rujuk di muka surat belakang buku panduan ini)
   Students need to complete the english package as the table below : For more details on CEL and LAX please refer to the back/last page of this book.

MUET Band	**TOEFL/IELTS Score**	**CIEP Level**	**Graduation Requirements for 4-year programmes**
1 & 2	-	107	3 BBI + 3 CEL + 24 LAX points
3 & 4	TOEFL 500 - 599 IELTS 5.5 - 6.5	108 – 109	2 BBI + 2 CEL + 24 LAX points
5 & 6	TOEFL 600 - 677 IELTS 7.0 - 9.0	-	2 BBI + 1 CEL + 24 LAX points OR 1 BBI + 1 CEL + 24 LAX points (with global language)

SKEMA PENGAJIAN/ *STUDY SCHEME*

TAHUN 1/ *1ST YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0
SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology And Its Applications*	3	2	1
EOH3401	Prinsip Kesihatan/ *Principles of Health*	3	3	0
CHM3201	Kimia Organik I/ *Organic Chemistry*	4	3	1
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0
BBI2423	*Academic Interaction and Presentation*	3	2	1
	Kokurikulum/ *Co-curriculum*	1	0	1
	JUMLAH	**19**	**15**	**4**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SKP2203	Tamadun Islam dan Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0
SBP3111	Fisiologi Manusia/*Human Physiology*	4	3	1
SBP3201	Asas Biokimia Perubatan/ *Basic Medical Biochemistry*	3	2	1
EOH3101	Prinsip Kesihatan Persekitaran/ *Principles of Environmental Health*	3	3	0
BBI2421	*General Writing Skills*	3	2	1
EOH4902	Latihan Industri Kesihatan Persekitaran/ *Environmental Health Industrial Traning*	2	0	2
	Kokurikulum/ *Co-curriculum*	1	0	1
	JUMLAH	**20**	**14**	**6**

TAHUN 2/ *2ND YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1
EOH3102	Kesihatan Komuniti dan Pencemaran/ *Community Health and Pollution*	3	2	1
EOH3202	Kesihatan Pekerjaan/ *Occupational Health*	3	3	0
EOH3304	Perundangan dan Etika Profesional Kesihatan Persekitaran dan Pekerjaan/ *Environmental and Occupational Health Laws and Professional Ethics*	4	4	0
	JUMLAH	**16**	**13**	**3**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3	3	0
EOH4301	Toksikologi Industri dan Persekitaran/ *Industrial and Environment Toxicology*	3	3	0
EOH4302	Epidemiologi Persekitaran dan Pekerjaan/ *Environmental and Occupational Epidemiology*	3	3	0
EOH3206	Keselamatan Industri dan Tindakan Kecemasan/ *Industrial Safety and Emergency Response*	4	4	0
EOH3302	Pengurusan dan Keselamatan Bahan Toksik/ *Management and Safety of Toxic Substances*	3	3	0
EOH4903	Latihan Industri Kesihatan Komuniti/ *Community Health Industrial Traning*	2	0	2
	JUMLAH	**18**	**16**	**2**

TAHUN 3/ *3RD YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
EOH3203	Higen Industri/ *Industrial Hygiene*	3	0	3
EOH3303	Biostatistik Kesihatan Persekitaran dan Pekerjaan/ *Environmental and Occupational Health Biostatistics*	3	3	0
EOH4202	Sistem Pengurusan Keselamatan dan Kesihatan Pekerjaan/ *Occupational Safety and Health Management System*	3	3	0
EOH4304	Penilaian Pendedahan dan Risiko Kesihatan Bahan Kimia/ *Assessment of Exposure and Health Risk*	3	3	0
	Elektif/ *Elective*	3	3	0
	JUMLAH	**15**	**12**	**3**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3107	Keselamatan Makanan untuk Kesihatan Pengguna/ *Food Safety for Consumer Health*	3	2	1
EOH4101	Pemantauan dan Analisis dalam Kesihatan Persekitaran/ *Environmental Health Monitoring and Analysis*	3	2	1
EOH4306	Kaedah Penyelidikan Kesihatan/ *Health Research Methodology*	4	3	1
EOH4904	Latihan Industri Kesihatan Pekerjaan/ *Occupational Health Industrial Traning*	5	0	5
	JUMLAH	**15**	**7**	**8**

TAHUN 4/ *4TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
EOH4307	Penilaian Impak Kesihatan/ *Health Impact Assessment*	3	2	1
EOH4999A	Projek Ilmiah Tahun Akhir/ *Final Year Project*	3	0	3
	Elektif/ *Elective*	9	9	0
	JUMLAH	**15**	**11**	**4**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
EOH3000	Seminar/ *Seminar*	1	0	1
EOH4999B	Projek Ilmiah Tahun Akhir/ *Final Year Project*	3	0	3
EOH4201	Ergonomik/ *Ergonomics*	3	3	0
	Elektif/ *Elective*	6	6	0
	JUMLAH	**13**	**9**	**4**

STRUKTUR KURIKULUM/ *CURRICULUM STRUCTURE*

Nama Program : **Bacelor Kejururawatan/ *Bachelor of Nursing***

Jumlah Kredit Bergraduat : **141 Jam Kredit/ *Credit Hours***

Tempoh Pengajian : **8 Semester (4 Tahun)**

Matlamat Program :

1. menyediakan pendidikan kejururawatan komprehensif yang diperkukuhkan dengan sains asas, pengenalan ke bidang kemahiran, informasi, teknologi dan penyelidikan
2. menyediakan graduan dengan pengetahuan, kemahiran, pengalaman dan sikap perikemanusiaan serta prihatin dalam bidang kejururawatan klinikal dan komuniti
3. melahirkan anggota kejururawatan yang berpengetahuan, berkemahiran tinggi dan beretika serta berkemampuan tinggi untuk mengendalikan penyelidikan
4. melengkapkan pelajar dengan ilmu dan kemahiran bagi persediaan untuk melanjutkan pengajian ke peringkat pasca siswazah

RINGKASAN HASIL PEMBELAJARAN PROGRAM

Program	Pengetahuan	Kemahiran Teknikal/Praktikal/ Psikomotor	Pendekatan Kemahiran Berfikir dan Saintifik	Kemahiran Berkomunikasi	Kemahiran Sosial dan Bertanggungjawab	Professionalisme, Nilai, Sikap dan Etika	Pendidikan Sepanjang Hayat dan Pengurusan Informasi	Kemahiran Pengurusan dan Keusahawanan	Kemahiran Kepimpinan
	P1	P2	P3	P4	P5	P6	P7	P8	P9
Bacelor Kejururawatan	20	27	16	15	15	28	21	1	4

1. Kursus Universiti/ University Courses(21 Kredit credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
BBI2423	*Academic Interaction and Presentation*	3	2	1	CEL2102
BBI2424	*Academic Writing*	3	2	1	BBI2423
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1	Tiada/ *None*
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0	Tiada/ *None*
SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology And Its Applications*	3	2	1	Tiada/ *None*

SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0	Tiada/ *None*
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0	Tiada/ *None*
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0	Tiada/ *None*

2. Kursus Teras/ Core Courses (112 Kredit credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	PRASYARAT/ *PREREQUISITE*
NUR3001	Penyelidikan dan Statistik/ *Research and Statistic*	3	2	1	Tiada/ *None*
NUR3002	Pendidikan dalam Kejururawatan/ *Teaching in Nursing*	2	1	1	Tiada/ *None*
NUR3003	Perspektif Teori Kejururawatan/ *Perspective of Nursing Theories*	2	2	0	Tiada/ *None*
NUR4999	Projek Ilmiah Tahun Akhir/ *Final Year Project*	6	0	6	NUR3001
SBP3110	Pengenalan kepada Fisiologi Manusia/ *Introduction to Human Physiology*	3	3	0	Tiada/ *None*
ANA3101	Anatomi Manusia/ *Human Anatomy*	3	2	1	Tiada/ *None*
NUR3104	Biokimia dan Farmakologi/ *Biochemistry and Pharmacology*	3	2	1	Tiada/ *None*
SBP3401	Hematologi/ *Hematology*	3	2	1	Tiada/ *None*
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1	Tiada/ *None*
SBP3404	Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology*	3	2	1	Tiada/ *None*
SBP3405	Patologi/ *Pathology*	3	2	1	Tiada/ *None*
NUR3201	Konsep dan Amalan Kejururawatan I/ *Nursing Concepts and Practice I*	3	2	1	Tiada/ *None*
NUR3202	Konsep dan Amalan Kejururawatan II/ *Nursing Concepts and Practice II*	3	2	1	Tiada/ *None*
NUR3203	Jagarawatan Klien Dewasa I/ *Adult Client Care I*	3	2	1	Tiada/ *None*
NUR3204	Jagarawatan Klien Dewasa II *Adult Client Care II*	3	2	1	Tiada/ *None*
NUR3207	Jagarawatan Klien Dewasa III/ *Adult Client Care III*	3	2	1	Tiada/ *None*
NUR3208	Penilaian Klinikal/ *Clinical Assessment*	3	2	1	Tiada/ *None*
NUR3308	Perkembangan Peribadi dan Profesional Kejururawatan/ *Personal and Professional Development in Nursing*	3	3	0	Tiada/ *None*
NUR3307	Sains Tingkahlaku Manusia/ *Human Behavioral Science*	3	3	0	Tiada/ *None*
NUR3403	Perawatan Kesihatan Komuniti/	3	2	1	Tiada/ *None*

	Community Health Care				
NUR3404	Jagarawatan Kesihatan Primer dan Promosi Kesihatan/ *Primary Health Care and Health Promotion*	3	2	1	Tiada/ *None*
NUR3405	Intervensi Kesihatan Komuniti/ *Community Health Intervention*	3	1	2	Tiada/ *None*
NUR3503	Jagarawatan Kanak-Kanak Sakit/ *Care of the Sick Child*	3	2	1	Tiada/ *None*
NUR3504	Jagaan Klien Kritikal/ *Care of the Critical Client*	3	2	1	Tiada/ *None*
NUR3506	Obstetrik dan Ginekologi/ *Obstetric and Gynaecology*	3	2	1	Tiada/ *None*
NUR3520	Perawatan Kesihatan Mental/ *Mental Health Care*	2	1	1	Tiada/ *None*
NUR3521	Jagarawatan Warga Emas/ *Care of The Older Person*	3	2	1	Tiada/ *None*
NUR3512	Jagarawatan Klien Kenser dan HIV/ *Care Of Cancer and HIV Clients*	2	1	1	Tiada/ *None*
NUR3911	Latihan Klinikal I/ *Clinical Practice I*	3	0	3	NUR3201
NUR3912	Latihan Klinikal II/ *Clinical Practice II*	3	0	3	NUR3911
NUR3913	Latihan Klinikal III/ *Clinical Practice III*	3	0	3	NUR3912
NUR3914	Latihan Klinikal IV/ *Clinical Practice IV*	3	0	3	NUR3913
NUR3915	Latihan Klinikal V/ *Clinical Practice V*	4	0	4	NUR3914
NUR3916	Latihan Klinikal VI/ *Clinical Practice VI*	4	0	4	NUR3915
NUR3917	Latihan Klinikal VII/ *Clinical Practice VII*	3	0	3	NUR3916
NUR3918	Latihan Klinikal VIII/ *Clinical Practice VIII*	3	0	3	NUR3917
PKK 3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0	Tiada/ *None*

3. Kursus Elektif/ Elective Courses (8 Kredit credits)

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T	
NUR3508	Kanak-Kanak Sakit dan Jagarawatan Kesihatan I/ *The Sick Child and Health Care I*	4	1	3	Tiada/ *None*
NUR3509	Kanak-Kanak Sakit dan Jagarawatan Kesihatan II/ *The Sick Child and Health Care II*	4	1	3	NUR3508
NUR3510	Kesihatan Umum dan Jagaan Kesihatan Umum Komuniti/ *Community Health and Community Healthcare*	4	1	3	Tiada/ *None*
NUR3511	Program Kesihatan dan Isu Jagaan Kesihatan Komuniti/ *Health Programme and Community Health Care Issues*	4	1	3	NUR3510
NUR3516	Jagarawatan Kritikal I/ *Critical Care I*	4	1	3	Tiada/ *None*
NUR3517	Jagarawatan Kritikal II/ *Critical Care II*	4	1	3	NUR3516
NUR3518	Jagarawatan Medikal Surgikal I/ *Medical-Surgical Care I*	4	1	3	Tiada/ *None*
NUR3519	Jagarawatan Medikal Surgikal II/ *Medical-Surgical Care I*	4	1	3	NUR3518

Nota/ Notes : Kr = Jam Kredit/ Credit Hour, K = Kuliah/ Lecture, A = Amali/ Laboratory, T = Tutorial

Nota Penting/*Notes* :

3. Pelajar diwajibkan memilih **2 kredit** daripada **kursus kokurikulum** yang ditawarkan oleh universiti/ It is *compulsory for students to take **2 credits of co-curriculum courses** offered by the university*
4. *Pelajar perlu melengkapkan pakej keperluan bahasa inggeris seperti jadual di bawah :*
   (Butiran lanjut mengenai CEL dan LAX sila rujuk di muka surat belakang buku panduan ini)
   Students need to complete the english package as the table below : For more details on CEL and LAX please refer to the back/last page of this book.

MUET Band	**TOEFL/IELTS Score**	**CIEP Level**	**Graduation Requirements for 4-year programmes**
1 & 2	-	107	3 BBI + 3 CEL + 24 LAX points
3 & 4	TOEFL 500 - 599 IELTS 5.5 - 6.5	108 – 109	2 BBI + 2 CEL + 24 LAX points
5 & 6	TOEFL 600 - 677 IELTS 7.0 - 9.0	-	2 BBI + 1 CEL + 24 LAX points OR 1 BBI + 1 CEL + 24 LAX points (with global language)

SKEMA PENGAJIAN/ *STUDY SCHEME*

TAHUN 1/ *1ST YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
BBI2423	*Academic Interaction and Presentation*	3	2	1
SBP3110	Pengenalan kepada Fisiologi Manusia/ *Introduction to Human Physiology*	3	3	0
SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3	3	0
ANA3101	Anatomi Manusia/ *Human Anatomy*	3	2	1
SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2	2	0
NUR3201	Konsep dan Amalan Kejururawatan I/ *Nursing Concepts and Practice I*	3	2	1
NUR3911	Latihan Klinikal I/ *Clinical Practice I*	3	0	3

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SKP2204	Hubungan Etnik/ *Ethnic Relations*	2	2	0
BBI2424	*Academic Writing*	3	2	1
NUR3104	Biokimia dan Farmakologi/ *Biochemistry and Pharmacology*	3	2	1
SBP3401	Hematologi/ *Hematology*	3	2	1
PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2	2	0
NUR3202	Konsep dan Amalan Kejururawatan II	3	2	1
NUR3003	Perspektif Teori Kejururawatan/ *Perspective of Nursing Theories*	2	2	0
NUR3912	Latihan Klinikal II/ *Clinical Practice II*	3	0	3

TAHUN 2/ *2ND YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology And Its Applications*	3	2	1
SBP3404	Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology*	3	2	1
SBP3403	Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology*	3	2	1
SBP3405	Patologi/ *Pathology*	3	2	1
NUR3203	Jagarawatan Klien Dewasa I/ *Adult Client Care I*	3	2	1
NUR3913	Latihan Klinikal III/ *Clinical Practice III*	3	0	3
	JUMLAH	**18**	**10**	**8**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
PKK3200	Prinsip Pemakanan Manusia/ *Principles of Human Nutrition*	3	3	0
NUR3307	Sains Tingkahlaku Manusia/ *Human Behavioral Science*	3	3	0
NUR3208	Penilaian Klinikal/ *Clinical Assessment*	3	2	1
NUR3404	Jagarawatan Kesihatan Primer dan Promosi Kesihatan/ *Primary Health Care and Health Promotion*	3	2	1
NUR3204	Jagarawatan Klien Dewasa II *Adult Client Care II*	3	2	1
NUR3915	Latihan Klinikal V/ *Clinical Practice V*	4	0	4
	JUMLAH	**19**	**12**	**7**

TAHUN 3/ *3RD YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3	2	1
NUR3207	Jagarawatan Klien Dewasa III	3	2	1
NUR3506	Obstetrik dan Ginekologi/ *Obstetric and Gynaecology*	3	2	1
NUR3405	Intervensi Kesihatan Komuniti/ *Community Health Intervention*	3	1	2
NUR3002	Pendidikan dalam Kejururawatan/ *Teaching in Nursing*	2	1	1
NUR3914	Latihan Klinikal IV/ *Clinical Practice IV*	3	0	3
	JUMLAH	**17**	**8**	**9**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
NUR3001	Penyelidikan dan Statistik/ *Research and Statistic*	3	2	1
NUR3403	Perawatan Kesihatan Komuniti/ *Community Health Care*	3	2	1
NUR3503	Jagarawatan Kanak-Kanak Sakit/ *Care of the Sick Child*	3	2	1
NUR3504	Jagaan Klien Kritikal/ *Care of the Critical Client*	3	2	1
NUR3916	Latihan Klinikal VI/ *Clinical Practice VI*	4	0	4
NUR3917	Latihan Klinikal VII/ *Clinical Practice VII*	3	0	3
	JUMLAH	**19**	**8**	**11**

TAHUN 4/ *4TH YEAR*

SEMESTER 1/ *1ST SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
NUR4999	Projek Ilmiah Tahun Akhir/ *Final Year Project*	2	0	2
NUR3308	Perkembangan peribadi dan profesional kejururawatan/ *Personal and Professional Development in Nursing*	3	3	0
NUR3520	Perawatan Kesihatan Mental/ *Mental Health Care*	2	1	1
NUR3522	Jagarawatan Klien Kenser dan HIV/ *Care Of Cancer and HIV Clients*	2	1	1
	Elektif/ *Elective*	4	1	3
	JUMLAH	**14**	**3**	**11**

SEMESTER 2/ *2ND SEMESTER*

Kod Kursus/ *Course Code*	Nama Kursus/ *Course Name*	Kr	K	A/T
NUR4999	Projek Ilmiah Tahun Akhir/ *Final Year Project*	4	0	4
NUR3521	Jagarawatan Warga Emas/ *Care of The Older Person*	3	2	1
NUR3918	Latihan Klinikal VIII/ *Clinical Practice VIII*	3	0	3
	Elektif/ *Elective*	4	1	3
	JUMLAH	**14**	**3**	**11**

SINOPSIS KURSUS/ *COURSE SYNOPSIS*

Jabatan Kesihatan Persekitaran dan Pekerjaan/ *Department of Environment and Occupational Health*

EOH3000 Seminar/ *Seminar* 1 (0+1)

Prasyarat : Pelajar Tahun Akhir

Pelajar tahun akhir akan memilih satu isu di dalam bidang kesihatan pekerjaan, kesihatan persekitaran atau kesihatan masyarakat sebagai topik khas seminar. Pelajar akan membentangkan topik tersebut dalam bentuk poster dan pembentangan lisan

Final year student will choose an issue in occupational health, environmental health or public health as a special topic for seminar. The student will present their topic in the form of poster and oral presentation

EOH3101 Prinsip Kesihatan Persekitaran/ *Principles of Environmental Health* 3 (3+0)

Prasyarat : Tiada

Kursus ini menumpukan kepada prinsip salingkait kesihatan dan persekitaran, impak pembangunan fizikal dan cara gaya hidup terhadap kesihatan, perubahan tren dan keadaan penyakit dan kepentingan pembangunan kekalan di dalam pencegahan dan pengawalan masalah kesihatan persekitaran

This course focuses on the principles in interrelationship of health and the environment, impact of development, physical environment and life styles and health, changes in disease trend and state and the importance of sustainable development in the prevention and control of environmental health

EOH3102 Kesihatan Komuniti dan Pencemaran/ *Community Health and Pollution* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi proses-proses kimia dan fizikal yang menyumbang terhadap pencemaran udara serta air dan kesan pencemaran terhadap kesihatan manusia secara terperinci dari sudut epidemiologi dan kesihatan awam. Kesan kepada kesihatan komuniti akut dan kronik dari ramalan model pencemaran turut dibincangkan

This course encompasses on chemical and physical processes that contribute to air and water pollution and the effect of pollution from epidemiological and public health perspectives. Acute and chronic public health effect predicted from pollution models will also be discussed

EOH3202 Kesihatan Pekerjaan/ *Occupational Health* 3 (3+0)

Prasyarat : Tiada

Kursus ini meliputi perbincangan mengenai kesihatan, keselamatan dan kebajikan pekerja serta organisasi dan fungsinya. Masalah kesihatan yang disebabkan oleh agen penyakit yang berkait dengan pelbagai jenis pekerjaan akan diterangkan dengan mendalam. Kursus ini juga memberi pendedahan kepada isu pampasan pekerja serta tekanan dan keganasan di tempat kerja. Selain itu, prinsip kesihatan pekerjaan, prinsip pencegahan dan langkah pengawalan akan dibincangkan

This course covers discussions regarding health, safety, and welfare of workers and organization and its function's. Health problems which arise from various work related disease agents will be explained in detail. This course also provides exposure on workers compensation job stress and violence. In addition this course will describe the principles of occupational health and principles of prevention and control

EOH3203 Higen Industri/ *Industrial Hygiene* 3 (0+3)

Prasyarat : Tiada

Kursus ini merangkumi pengenalan kepada prinsip, teori dan alatan yang biasa digunakan di dalam pemantauan hazad di dalam bidang Kesihatan Pekerjaan, latihan meliputi kaedah penggunaan yang betul bagi alatan di dalam makmal serta ketika menjalankan kerja lapangan

This course encompasses introduction to the principles, theories and common instruments used to monitor hazard in occupational health, the training includes the correct usage of equipment in a laboratory setting and during field-work

EOH3206 Keselamatan Industri Dan Tindakan Kecemasan/ *Industrial Safety and Emergency Response* 4 (4+0)

Prasyarat : Tiada

Kursus ini merangkumi konsep dan pengurusannya keselamatan, amalan serta budaya kerja selamat di pelbagai industri menerusi kaedah pengenalpastian, penilaian dan kawalan hazad di tempat kerja yang berbeza termasuklah penyiasatan dan analisis kemalangan di dalam industri yang mengintegrasi keselamatan dan pencegahan kebakaran di tempat kerja serta persediaan tindakan kecemasan

This course encompasses concepts of safety and its management, best practices as well as safety cultures/ behaviour in various offshore and onshore industries through different method in identification, evaluation and control of work place hazards as well as industrial accident investigation and analysis which integrate workplace fire safety and prevention and emergency response preparedness

EOH3302 Pengurusan dan Keselamatan Bahan Toksik/ *Management and Safety of Toxic Substances* 3 (3+0)

Prasyarat : EOH3304

Kursus ini merangkumi pengurusan bahan toksik di dalam dan luar tempat kerja untuk kepentingan peningkatan kesihatan dan keselamatan pekerja dan komuniti. Penggunaan bahan kimia, pengurusan secara sistematik, langkah pengawalan yang bersesuaian dan maklumat ketoksikan bahan-bahan kimia ditumpukan untuk mencegah pendedahan yang akut dan kronik serta kemalangan.

This course encompasses management of toxic substances and outside workplace essential for the promotion of health and safety of workers and community. The use of chemicals in industries, systematic management, appropriate control measures and information on the toxicology of these chemicals are the focus to prevent acute and chronic exposures as well as accidents

EOH3303 Biostatistik Kesihatan Persekitaran dan Pekerjaan/ *Environmental and Occupational Health Biostatistics* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi pengenalan kepada penggunaan analisis-analisis tertentu untuk bentuk data yang berbeza. Penerangan kepada perbezaan dan perkaitan dalam kajian. Pemilihan saiz sampel dan bentuk kajian yang sesuai serta ujian yang penting di dalam statistik

This course covers the usage of analysis for different types of data. Explanation to differences and relationships in research. Sample size estimation and correct type of research including important tests in statistics

EOH3304 Perundangan Dan Etika Profesional Kesihatan Persekitaran Dan Pekerjaan/ *Environmental and Occupational Health Laws and Professional Ethics* 4 (4+0)

Prasyarat : Tiada

Kursus ini merangkumi akta dan peraturan yang berkaitan dengan kesihatan persekitaran dan pekerjaan; membincangkan struktur dan kandungan akta, rangka perundangan dan pematuhan peraturan yang berkaitan; teknik mentadbir dan kemahiran sosial dalam pengawalan persekitaran masyarakat dan tempat kerja

This course encompasses the acts and regulations pertaining to environmental and occupational health; discussion on the structure and content of the act, legal framework and compliance of related regulations; administrative techniques and social skill in controlling community and working environment

EOH3401 Prinsip Kesihatan/ *Principles of Health* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi definisi dan konsep kesihatan, proses kejadian penyakit, prinsip asas dan strategi pencegahan penyakit; pengaruh faktor persekitaran, faktor risiko, agen penyebab, carahidup dan tingkah laku, patofisiologi, rawatan serta strategi tindakan pencegahan dan penjagaan kesihatan akan dibincangkan dengan mengambil contoh penyakit berjangkit, penyakit tidak berjangkit, kanser dan gangguan mental

This course covers the concept and definition of health, wellness,disease processes, principles and strategies for disease prevention; the influence of environmental factors, risk factors, causative agents, lifestyles and behavioral factors, patho-physiology, treatment and prevention strategies are discussed by giving examples of infectious diseases, non-infectious diseases, cancer and mental disorders

EOH3402 Pengurusan Program Kesihatan Komuniti/ *Community Health Program Management* 3 (3+0)

Prasyarat : EOH3401

Kursus ini merangkumi prinsip asas, unsur dan urutan langkah yang penting dalam pengurusan program kesihatan komuniti. Model membuat keputusan, fungsi dan strategi pengurusan dalam perancangan, pelaksanaan, penilaian berkualiti program kesihatan komuniti, metodologi penganalisisan dan jenis sistem kesihatan sebagai asas kepada pengurusan program akan dibincangkan. Program kawalan dan pencegahan penyakit akan diguna sebagai contoh pengurusan program kesihatan komuniti

This course covers the basic principles, essential elements and sequential steps required in community health program management. Decision making model, quality management function and strategies in planning, implementation, evaluation of community health program, analysis methodology and types of health care system as a basis for the program management will be discuss. Disease control and prevention, will be used as an example of community health program management

EOH3403 Kawalan dan Pengurusan Penyakit Berjangkit/ *Control and Management of Communicable Diseases* 3 (3+0)

Prasyarat : EOH3401

Kursus ini merangkumi pengenalan kepada prinsip epidemiologi dan survelans penyakit berjangkit bawaan vektor, udara, air, makanan dan tularan seks. Skop pembelajaran meliputi aspek asas klinikal, cara penularan, saringan, diagnosis, notifikasi dan pelaporan. Penekanan diberi kepada pengurusan epidemik termasuk promosi, pencegahan, dan kawalan wabak

This course encompasses introduction to principles of epidemiology and surveillance of communicable diseases including vector-borne diseases, food and waterborne, airborne diseases and sexually transmitted diseases. The scope includes basic clinical aspect, mode of transmission, screening, diagnosis, notification and reporting. Emphasized are given to epidemic management including promotion, prevention and control of outbreak

EOH3404 Kawalan dan Pengurusan Penyakit Tidak Berjangkit/ *Control and Management of Non-Infectious Diseases* 3 (3+0)

Prasyarat : EOH3401

Kursus ini merangkumi epidemiologi penyakit tidak berjangkit seperti penyakit kardiovaskular, diabetes melitus, kanser, penyakit pernafasan kronik dan kemalangan jalan raya. Faktor risiko, ujian saringan, rawatan dan pencegahan akan dibincangkan. Implikasi diagnosis penyakit dan rawatan terhadap gaya hidup pesakit, ahli keluarga dan pekerjaan akan turut dibincangkan

This course encompasses the epidemiology of non-communicable diseases such as cardiovascular disease, diabetes mellitus, cancer, chronic respiratory diseases and road traffic accidents. The risk factors, screening tests, treatment and preventive measures will be discussed. The implication of diagnosis and treatment to patient's lifestyle, family members and occupation will also be discussed

EOH3405 Parasitologi Persekitaran/ *Environmental Parasitology* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi asas parasitologi dan entomologi dalam kesihatan persekitaran serta peranan parasit dan artropod terhadap kesihatan manusia. Aplikasi pencegahan penyakit dalam mempromosi kesihatan komuniti akan turut dibincangkan

This course covers the basic of parasitology and entomology in environmental health, as well as the role of parasites and arthropods toward human health. The application of disease prevention in the promotion of community health will also be discussed

EOH4999A/B Projek Ilmiah Tahun Akhir/ *Final Year Project* 6 (0+6)

Prasyarat : EOH4306

Kursus ini merangkumi penyediaan cadangan projek, pelaksanaan, pengumpulan dan analisis data dengan mengambilkira isu etika penyelidikan. Pelajar perlu membentangkan hasil penyelidikan dan menyediakan kertas ilmiah

This course encompasses the preparation of the research proposal, implementation collection and analysis of data with ethical issue taken into consideration. The student are required to present the research finding and produce the dissertation

EOH4101 Pemantauan dan Analisis dalam Kesihatan Persekitaran/ *Environmental Health Monitoring and Analysis* 3 (2+1)

Prasyarat : EOH3102

Kursus ini merangkumi pengenalan kepada prinsip dan teknik pemantauan, kaedah piawaian, kawalan kualiti dan penganalisaan sampel dari sumber hazad fizikal, kimia dari alam persekitaran dan biologikal dari manusia. Pelajar akan dapat menginterpretasi hasil analisis untuk impak kesihatan persekitaran terhadap masyarakat

This course encompasses the principles and techniques of monitoring, standard method, quality control and analysis for physical, chemical originated from environmental sources and biological samples from human. Student will be able to interpret the result of the analysis for environmental health impact on the community

EOH4102 Kualiti Air Dalam Kesihatan Persekitaran/ *Water Quality In Environmental Health* 3 (3+0)

Prasyarat : EOH3102

Definisi dan konsep kualiti air dan kepentingan bekalan air yang selamat dan mencukupi dari segi kesihatan komuniti. Pengenalan kepada teori dan aplikasi strategi persekitaran dan pencemaran dari aspek objektif kualiti persekitaran dan amalan opsyen praktikal terbaik. Pemprosesan air kumbahan. Parameter air yang mesti ditentukan untuk membuat kesimpulan berkenaan kualiti air. Pencemaran air bawah tanah, marin, pesisir pantai, muara dan sungai juga diberi penekanan. Lawatan juga diadakan.

Definition and concept of water quality and on the importance of safe and adequate water supply. Water quality and pollution in terms of public health. Introduction to the theory and application of environmental and pollution strategies in the aspects of environmental quality and best practice environmental options. Water parameters that must be determined to make informed judgments about water quality. Wastewater treatment. Groundwater, marine, coastal, estuarine and river pollution are also covered. Visits will be arranged

EOH4103 Polisi Dan Perancangan Kesihatan Persekitaran/ *Environmental Health Policy And Planning* 3 (3+0)

Prasyarat : EOH3304

Kursus ini merangkumi pengenalan kepada merumus polisi kesihatan persekitaran melalui penyediaan teras bagi perancangan dan penilaian program intervensi kesihatan persekitaran; di samping itu penekanan terhadap konsep asas dan kemahiran untuk merangka perjanjian yang berkaitan isu alam sekitar bagi mengekalkan kelestarian manusia dan sumber alam semulajadi secara global. Kursus ini juga memberi penekanan kepada cabaran semasa serta kaedah menyelesaikan isu alam sekitar dan kesihatan manusia yang dihadapi oleh pegawai kerajaan, penggubal polisi dan pihak berkepentingan samada di Malaysia dan di arena antarabangsa

This course provides an introduction to the formulation of environmental health policies through providing a foundation for planning and evaluation of environmental health interventions program; in addition fundamental conceptand skills in developing agreement related to environmental issues for preserving human sustainability and environmental resources globally.This course will addressess the ongoing challenges and methods in solving environmental issues and human health faced by governmental officials, policy makers, and stakeholders in Malaysia and international arena

EOH4201 Ergonomik/ *Ergonomics* 3 (3+0)

Prasyarat : EOH3203

Kursus ini merangkumi konsep dan kaedah ergonomik industri dan kegunaannya di dalam proses penyesuaian tugasan dan persekitaran kerja kepada manusia melalui pemahaman fisiologi, biologi manusia, biomekanik dan psikologi

This course encompasses on industrial ergonomics concepts and methods and its applications in the process of adapting work tasks and environment to human through the understanding of human physiology, human biology, biomechanics and psychology

EOH4202 Sistem Pengurusan Keselamatan dan Kesihatan Pekerjaan/ *Occupational Safety and Health Management System* 3 (3+0)

Prasyarat : EOH3202

Kursus ini merangkumi pengenalan kepada prinsip pengurusan kesihatan dan keselamatan di tempat kerja berserta peruntukan yang terdapat di dalam SPKKP berdasarkan piawaian kebangsaan dan antarabangsa. Perbandingan di antara SPKKP yang diamalkan di pelbagai tempat kerja serta prinsip pengauditan sistem pengurusan tersebut juga dibincangkan

This course encompasses the principles of managing health and safety in an occupational setting including elements of OHSMS based on national and international standards. Comparisons of OHSMS in various work places as well as the principles of management system auditing are also discussed

EOH4301 Toksikologi Industri dan Persekitaran/ *Industrial and Environment Toxicology* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi prinsip toksikologi dan mekanisma tindakbalas sistem tubuh terhadap proses asas penyakit di dalam sistem manusia dan pelbagai agen penyebab penyakit yang boleh memberi kesan kepada kesihatan pekerja dan masyarakat

This course encompasses mechanism of toxicological principles and the body response towards disease development process and various causative agents in human among workers and general public

EOH4302 Epidimiologi Persekitaran dan Pekerjaan/ *Environmental and Occupational Epidemiology* 3 (3+0)

Prasyarat : Tiada

Kursus ini akan mendedahkan pelajar kepada pendekatan epidemiologi dalam memahami penyebab dan jenis penyakit yang berpunca dari pendedahan di persekitaran dan tempat kerja, peranan penyelidikan epidemiologi dalam bidang kesihatan persekitaran dan pekerjaan dan kesesuaian rekabentuk kajian dalam kajian kes yang berkaitan dengan kesihatan persekitaran dan pekerjaan

This course will expose student to epidemiological approaches in understanding the causation and type of diseases as a result of environmental and occupational exposure, the role of epidemiological research in environmental and occupational health field and the suitability of research design for case studies related to environmental and occupational health

EOH4304 Penilaian Pendedahan dan Risiko Kesihatan Bahan Kimia/ *Assessment of Exposure and Health Risk* 3 (3+0)

Prasyarat : EOH4301

Kursus ini merangkumi konsep dan kaedah penilaian pendedahan dan risiko kesihatan tempat kerja di dalam membuat keputusan bagi organisasi dan masyarakat. Pengetahuan dan kemahiran untuk penilaian dan perhitungan risiko kimia di tempat kerja dan strategi kawalan pencegahan akan dibincangkan

This course encompasses the concept and methods of risk exposure and risk assessment in decision making for an organization and community. Knowledge and skills for the assessment and quantification of risk in the workplace and strategies for prevention will be discussed

EOH4306 Kaedah Penyelidikan Kesihatan/ *Health Research Methodology* 4 (3+1)

Prasyarat : EOH3303

Kursus ini merangkumi penggunaan prinsip biostatistik, prinsip penyelidikan dan teknik persampelan dalam bidang kesihatan persekitaran dan pekerjaan dalam membangunkan kertas cadangan penyelidikan

This course encompasses the use of biostatistics principles, research principles and sampling techniques in developing research proposal in the field of environmental and occupational health

EOH4307 Penilaian Impak Kesihatan/ *Health Impact Assessment* 3 (2+1)

Prasyarat : EOH4301 dan EOH4302

Kursus ini meliputi analisis hazad, pendedahan manusia, dos-tindakbalas serta ciri-ciri risikonya dari pelbagai komponen persekitaran dan keperluan untuk melakukan penilaian impak kesihatan (PIK) serta rasionalnya dengan memberi penekanan kepada projek pembangunan

This course encompasses analysis of hazards, human exposure, dose-response as well as their risk characterization from various environmental components and the requirements for carrying out a health impact assessment (HIA) and its rationale with emphasis on development projects

EOH4902 Latihan Industri Kesihatan Persekitaran/ *Environmental Health Industrial Traning* 2 (0+2)

Prasyarat : Tiada

Kursus ini memberi pendedahan awal kepada pelajar tugas Pihak Berkuasa Tempatan dalam melaksanakan aktiviti berkaitan dengan bidang kesihatan persekitaran dibawah Akta Kecil Kerajaan Tempatan. Semasa penempatan ini, pelajar dapat pengalaman mengenai cara perlaksanaan dan penguatkuasaan undang-undang di bawah tanggungjawab PBT. Satu laporan serta pembentangan perlu disiapkan oleh pelajar di akhir kursus ini

This course gives initial exposure to students the roles of Local Council in implementing activities related to the field of environmental health under the Local Council Act. During the attachment, the students will able to experience, the implementation and enforcement by the Local Councils in executing laws under their jurisdiction. A final report and presentation is prepared by the student at the end of this course

EOH4903 Latihan Industri Kesihatan Komuniti/ *Community Health Industrial Traning* 2 (0+2)

Prasyarat : Tiada

Kursus ini mendedahkan pelajar kepada aktiviti di Pejabat Kesihatan Daerah, Kementerian Kesihatan yang berkaitan dengan bidang kesihatan persekitaran dan kesihatan komuniti. Semasa penempatan ini, pelajar dapat pengalaman mengenai peranan Kementerian Kesihatan dalam penguatkuasaan undang-undang di bawah tanggungjawabnya. Satu laporan serta pembentangan perlu disiapkan oleh pelajar di akhir kursus ini.

This course exposes students to activities in District Health Office, Ministry of Health related to the field of environmental and community. During the attachment, the students will be able to experience, the roles of Ministry of Health in enforcing laws under their jurisdiction. A final report and presentation is prepared by the student at the end of this course

EOH4904 Latihan Industri Kesihatan Pekerjaan/ *Occupational Health Industrial Traning* 5 (0+5)

Prasyarat :

Kursus ini mendedahkan pelajar kepada aktiviti di swasta yang berkaitan dengan bidang pekerjaan. Semasa penempatan ini, pelajar dapat mengetahui peranan agensi swasta terhadap perlaksanaan undangundang di bawah tanggungjawabnya. Satu laporan serta pembentangan perlu disiapkan oleh pelajar di akhir kursus ini

This course exposes students to activities in private companies related to the field of occupational health. During the attachment, the students acquire the experience on how private companies implement laws under their jurisdiction. A final report and presentation is prepared by the student at the end of this course

Jabatan Pemakanan dan Dietetik/ *Department of Nutrition and Dietetics*

ANA3101 Anatomi Manusia/ *Human Anatomy* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep asas anatomi manusia. Penekanan diberi kepada penghuraian, perkaitan dan perbezaan anatomi organ mengikut jantina

This course encompasses the basic concepts of human anatomy. Elaboration, relationship and the anatomical differences in organs of different genders are emphasized

DTK3000 Kaunseling Pemakanan/ *Nutrition Counseling* 3 (2+1)

Prasyarat : KOH3432

Kursus ini merangkumi prinsip dan teori asas dalam perubahan tingkahlaku, komunikasi berkesan, menemuduga dan kemahiran kaunseling. Kaunseling individu dan kelompok dijalankan. Kursus ini juga membincangkan etika dan tingkahlaku profesional dalam bidang pemakanan

This course encompasses basic principles and theories in behavior modification, effective communication, interviewing and counseling skills. Individual and group counseling are conducted. This course also discusses ethics and professional behavior in nutrition

DTK 3001 Perkembangan Terkini dalam Dietetik/ *Current Development in Dietetics* 2 (1+1)

Prasyarat : Tiada

Kursus ini meliputi penyediaan dan pengorganisasian maklumat saintifik berasaskan penyelidikan dan perkembangan terkini dalam bidang dietetik. Pengulasan kritis dan perbincangan ke atas penulisan terkini yang diterbitkan dalam jurnal mengenai bidang yang spesifik dalam dietetik ditekankan. Penyampaian seminar saintifik berkaitan isu dietetik terkini turut dijalankan

This course includes preparation and organization of scientific information based on research and new developments in the field of dietetics. Critical review and discussion of current literature published in peer-reviewed journals on specific areas of dietetics are emphasized. Presentation of scientific seminar on recent issues of dietetics are also conducted

DTK3002 Kaunseling Pemakanan Dan Pendidikan Pesakit/ *Nutrition Counseling and Patient Education* 4 (3+1)

Prasyarat : DTK3206

Kursus ini merangkumi prinsip dan teori kaunseling, komunikasi berkesan, menemuduga dan kemahiran kaunseling. Kaunseling individu dan kelompok dijalankan berdasarkan model proses penjagaan pemakanan dan teori perubahan tingkahlaku. Teknik pendidikan pesakit turut ditekankan. Kursus ini juga membincangkan etika dan tingkahlaku profesional dalam pemakanan dan dietetik

This course encompasses principles and theories of counseling, effective communication, interviewing and counseling skills. Individual and group counseling are conducted based on standardised nutrition care process model and theories of behavior modification. Techniques in patient education are emphasized. This course also discusses ethics and professional behavior in nutrition and dietetics

DTK3100 Prinsip Persediaan Makanan/ *Principles of Food Preparation* 3 (2+1)

Prasyarat : PKK3200

Kursus ini merangkumi pengenalan kepada asas makanan, konsep asas persediaan makanan serta kesan perubahan fizikal, kimia dan nilai pemakanan pada makanan yang dimasak. Kursus ini turut menekankan prosedur makmal dalam mengaplikasi prinsip semasa persediaan makanan

This course includes introduction to the fundamentals of foods, concepts of basic food preparation as well as effect of physical, chemical and nutritional changes in cooked foods. This course also emphasizes laboratory procedures in applying the principles studied to the preparation of foods

DTK3101 Eksperimen Makanan/ *Experimental Foods* 3 (2+1)

Prasyarat : DTK3100

Kursus ini merangkumi fungsi kumpulan makanan dan interaksi dengan bahan makanan lain. Ia menggunakan pendekatan secara eksperimen mengenai kaedah penyediaan dan penggantian bahan ke dalam produk makanan. Teknik mengukur perubahan dalam makanan melalui kaedah objektif dan penilaian deria dalam penyediaan produk baharu turut dijalankan

This course includes functions of major food groups and their interactions with other food ingredients. It also covers experimental approaches in preparation methods and ingredient substitutions in food products. Technique of measuring changes in food by objective and sensory evaluation methods in preparation of new products are also conducted

DTK3102 Pengurusan Perkhidmatan Makanan Institusi I/ *Institutional Foodservice Management I* 3 (3+0)

Prasyarat : DTK3101

Kursus ini meliputi sistem perkhidmatan makanan. Prinsip dan konsep pengurusan: asas fungsi pengurusan, mengurus perubahan organisasi dan penilaian keberkesanan pengurusan. Perancangan menu. Perolehan, penerimaan, penyimpanan dan kawalan inventori ke atas barangan.

This course includes systems in foodservice management. It encompases principles and concepts of managing various foodservice operations. Important components in a foodservice system, beginning from menu planning to purchasing. Entrepreneurial opportunities in foodservice are exposed

DTK3103 Pengurusan Perkhidmatan Makanan Institusi II/ *Institutional Foodservice Management II* 3 (1+2)

Prasyarat : DTK3102

Kursus ini adalah lanjutan dari Pengurusan Perkhidmatan Makanan Institusi I. Ia menekankan latihan amali pengeluaran makanan berkuantiti yang berkualiti dan selamat dengan pengawalan kos dan penjanaan pendapatan. Pendedahan kepada sistem perkhidmatan makanan pelbagai institusi turut ditekankan.

This course is a continuation from Institutional Fooservice Management I. It emphasises on practical training on quality and safe quantity production of foods with a control on cost and garnering income. Exposure to various institutional foodservice systems are also emphasised

DTK3200 Pemakanan Klinikal/ *Clinical Nutrition* 4 (3+1)

Prasyarat : SBP3201

Kursus ini meliputi epidemiologi dan aspek patofisiologi penyakit berkaitan pemakanan. Ia menghubungkait status klinikal dan status pemakanan pesakit dalam penjagaan pemakanan. Teknik dokumentasi maklumat berkaitan status pemakanan pesakit turut dibincangkan

This course includes epidemiology and patho-physiological aspects of nutrition-related diseases. It relates clinical status and nutritional status of patients in nutritional care. Documentation technique is also discussed

DTK3203 Interaksi Drug-Nutrien/ *Drug-Nutrient Interaction* 3 (3+0)

Prasyarat : DTK3202

Kursus ini merangkumi asas farmakologi, peranan pemakanan dalam tindakbalas farmakologi drug dan nutrien. Penekanan diberi kepada implikasi interaksi drug-nutrien dalam keadaan normal, berpenyakit dan ke atas status pemakanan. Perkaitan di antara makanan, keadaan berpenyakit dan status pemakanan terhadap keberkesanan terapi drug turut dibincangkan. Aplikasi interaksi drug-nutrien pada fasa kritikal kitaran hidup juga ditekankan

This course covers the basics in pharmacology, role of nutrition in pharmacological response of drugs and nutrient. The implications of drug-nutrient interactions on normal and diseased conditions as well as on nutritional status are emphasised. The inter-relationships between foods, diseased states and nutritional status on the efficacy of therapeutic drugs are discussed. Drug-nutrient interaction during critical stages in life cycle is emphasised

DTK3205 Imunologi Pemakanan/ *Nutritional Immunology* 3 (3+0)

Prasyarat : Tiada

Kursus ini meliputi pengenalan kepada konsep imuniti dan sistem imun. Kesan imuno-nutrient ke atas sel dan molekul imun turut diperincikan. Ia menekankan konsep mengenai peranan sistem imun terhadap penyakit berjangkit dan auto-imun, alergi dan kanser. Kesan pemakanan dan aktiviti fizikal terhadap sistem imun turut dibincangkan

The course includes introduction to the concept of immunity and the immune system. The effect of immuno-nutrients on cells and molecules are detailed. It emphasises the concept on the roles of the immune system in infectious and auto-immune diseases, food allergy and cancer. Effects of nutrition and physical activity on immune responses are discussed

DTK3206 Terapi Pemakanan Perubatan I/ *Medical Nutrition Therapy I* 4 (3+1)

Prasyarat : DTK3200

Kursus ini merupakan pengenalan kepada terapi pemakanan perubatan. Penekanan diberi kepada hubungkait antara penyakit dengan prinsip modifikasi diet terapeutik sebagai komponen penting dalam pengurusan pesakit. Kajian kes yang merangkumi perancangan, penyediaan dan penilaian diet terapeutik turut dijalankan

This course is an introduction to medical nutrition therapy. It focuses on the relationship between diseases and the principles of therapeutic dietary modification as an essential component of patient management. Case study that includes planning, preparation and evaluation of therapeutic diets is conducted

DTK3207 Terapi Pemakanan Perubatan II/ *Medical Nutrition Therapy II* 4 (3+1)

Prasyarat : DTK3206

Kursus ini memberi penekanan kepada hubungkait antara penyakit yang lebih kompleks dengan prinsip modifikasi diet terapeutik sebagai komponen penting dalam pengurusan pesakit. Kajian kes berdasarkan model penjagaan pemakanan turut ditekankan

This course emphasises on relationship between complex diseases and the principles of therapeutic dietary modification as an essential component of patient management. Case study based on model of nutrition care process is emphasised

DTK4100 Latihan Profesional Pengurusan Perkhidmatan Makanan Institusi/ *Institutional Food Service Management Professional Training* 4 (0+4)

Prasyarat : DTK3103

Kursus ini merangkumi latihan dan pengalaman bekerja di pelbagai operasi perkhidmatan makanan institusi. Ia bertujuan memberi pendedahan dan aplikasi pengetahuan saintifik secara beretika dan profesional terhadap pengurusan perkhidmatan makanan institusi

This course encompasses training and work experience in various institutional food service operations. It aims to give exposure and application of scientific knowledge in ethical and professional manner in the management of institutional foodservices

DTK4200 Latihan Profesional Dietetik Pesakit Luar/ *Out-Patient Dietetic Professional Training* 4 (0+4)

Prasyarat : DTK3002

Kursus ini meliputi latihan profesional dietetik pesakit luar. Ia menekankan kemahiran terapi pemakanan perubatan termasuk penilaian status pemakanan, perancangan, implementasi dan pemantauan penjagaan pemakanan pesakit. Kemahiran kaunseling secara individu dan kelompok yang berkesan turut ditekankan

This course includes out-patient dietetic professional training. It emphasises on skills in medical nutrition therapy which includes nutritional status assessment, planning, implementation and evaluation of patient nutritional care. Effective counseling skills are also emphasised

DTK4201 Latihan Profesional Dietetik Pesakit Dalam/ *In-patient Dietetic Professional Training* 9 (0+9)

Prasyarat : DTK3207

Kursus ini meliputi latihan profesional dietetik pesakit dalam wad. Ia menekankan kemahiran terapi pemakanan perubatan termasuk penilaian status pemakanan, perancangan, implementasi dan pemantauan penjagaan pemakanan pesakit. Kemahiran kaunseling yang berkesan turut ditekankan

This course includes in-patient dietetic professional training. It emphasises on skills in medical nutrition therapy which includes nutritional status assessment, planning, implementation and evaluation of patient nutritional care. Effective counseling skills are also emphasised

DTK4202 Latihan Profesional Dietetik Unit Khusus/ *Special Unit Dietetic Professional Training* 3 (0+3)

Prasyarat : DTK3206

Kursus ini meliputi latihan profesional dietetik unit khusus di institusi kesihatan. Ia menekankan kemahiran terapi pemakanan perubatan termasuk penilaian status pemakanan, perancangan, implementasi dan pemantauan penjagaan pemakanan pesakit. Kemahiran kaunseling yang berkesan turut ditekankan

This course includes special units dietetic professional training in health institutions. It emphasises on skills in medical nutrition therapy which includes nutritional status assessment, planning, implementation and evaluation of patient nutritional care. Effective counseling skills are also emphasised

DTK4300 Latihan Profesional Dietetik Komuniti/ *Community Dietetic Professional Training* 3 (0+3)

Prasyarat : PKK3403

Kursus ini meliputi latihan profesional dietetik komuniti yang menekankan kepada penilaian keperluan dan pengurusan program intervensi pemakanan dan kesihatan. Kemahiran merancang, menjalankan intervensi dan menilai program dietetik komuniti turut ditekankan

This course includes community dietetics professional training which emphasises on assessment of nutritional needs and management of nutrition and health intervention programs. Skills in planning, intervention and evaluation of community dietetics programs are also emphasised

DTK4999 Projek Ilmiah Tahun Akhir/ *Final Year Project* 6 (0+6)

Prasyarat : Tiada

Kursus ini merangkumi perancangan penyelidikan, pengumpulan, analisis dan tafsiran data, penyediaan dan pembentangan tesis. Penekanan diberi kepada kaedah saintifik dan etika profesional dalam penyelidikan

This course encompasses planning of research, collection, analysis and interpretation of data, preparation and presentation of thesis. Emphasis is on scientific research approach and professional ethics in research

PKK3001 Seminar: Isu semasa dalam Pemakanan dan Kesihatan/ Seminar: *Current Issues In Nutrition And Health* 2 (1+1)

Prasyarat : Tiada

Kursus ini merangkumi penerangan umum penyelidikan dan perkembangan di dalam bidang pemakanan dan kesihatan. Ini termasuklah pengulasan kritis dan perbincangan ke atas penulisan terkini mengikut topik khusus. Pelajar turut menyediakan kertas kerja akademik yang bermutu untuk pembentangan seminar

This course encompasses an overview of research and development in the fields of nutrition and health. It also includes critical reviews and discussions on current literature based on specialized topics. Students will prepare scholarly papers to be presented in seminars

PKK3002 Biostatistik dan Kaedah Penyelidikan Pemakanan/ *Biostatistics and Research Methodology in Nutrition* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi asas biostatistik dalam penyelidikan saintifik dalam bidang pemakanan dan kesihatan komuniti. Rekabentuk dan perancangan penyelidikan, menganalisis dan menginterpretasi data, penulisan dan penyampaian hasil kajian dibincangkan

This course encompasses the basics of biostatistics in scientific research in the field of nutrition and community health. Research design and planning, data analysis and interpretation, report writing and presentation of research findings are discussed

PKK3100 Makanan, Masyarakat dan Budaya/ *Food, Society and Culture* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi warisan makanan dan pengertian makanan dalam pelbagai budaya termasuk pengelasan makanan, kepercayaan, pantang larang dan simbolisme makanan. Ia juga meliputi asal usul dan evolusi pola makanan termasuk pola pemerolehan dan penyediaan makanan. Faktor-faktor yang mempengaruhi pemilihan dan pola pengambilan makanan dalam pelbagai bangsa dan komuniti dan implikasinya terhadap pemakanan dan kesihatan turut dibincangkan

This course encompasses food heritage and the meaning of foods in different cultures, including food classification, food beliefs, food taboos and symbolism. It also covers the origin and evolution of food patterns including patterns of food procurement and preparation. Factors influencing food choices and food consumption patterns in different cultures and communities and their implications on nutrition and health are discussed

PKK3102 Prinsip Analisis Nutrien/ *Principles of Nutrient Analysis* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi ciri fisiko-kimia makanan dan perubahan nilai pemakanan. Kaedah yang ditekankan adalah persampelan, kawalan kualiti, dan penentuan kandungan nutrien makro dan mikro

This course encompasses physico-chemical of foods and changes in nutritional values. The emphasized techniques are sampling, quality control, and the determinations of macro- and micronutrients in foods

PKK3103 Asas Perkhidmatan Makanan Institusi/ *Basic Institutional Foodservice* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi konsep pengurusan sistem perkhidmatan makanan dalam pengeluaran makanan yang berkuantiti dan berkualiti secara komersial dan bukan komersial. Komponen penting dalam pengeluaran makanan yang bermula dari perancangan menu kepada perolehan bahan ditekankan. Penjagaan kebersihan premis dalam memastikan keselamatan makanan juga didedahkan

This course encompasses the concepts of foodservice system management in producing quantity and quality of commercial and non-commercial foods. The important components in food production beginning from menu planning to ingredients purchasing are emphasized. Sanitary premise maintenance to ensure food safety are also emphasized

PKK3107 Keselamatan Makanan untuk Kesihatan Pengguna/ *Food Safety for Consumer Health* 3 (2+1)

Prasyarat : SBP3403

Kursus ini merangkumi aspek keselamatan makanan meliputi keracunan makanan, pengendalian, pemprosesan dan penyimpanan dalam perkhidmatan makanan. Analisis Bahaya Titik Kawalan Kritikal (HACCP), aditif makanan, pelabelan pemakanan, peranan agensi kerajaan, industri makanan dan pengguna dalam memastikan makanan yang selamat turut dibincangkan

This course discusses food safety aspects includes food poisoning, handling, preparation, processing and storage in food services. Hazard Analysis Critical Control Point (HACPP), food additives and nutritional labeling, roles of government agencies, food industries and consumers in ensuring safe foods are discussed

PKK3200 Prinsip Pemakanan Manusia/ *Principles of Human Nutrition* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi prinsip biokimia dan fisiologi pemakanan untuk manusia. Masalah kesihatan yang berkaitan dengan nutrien dan kepentingan Saranan Pengambilan Nutrien (RNI), Piramid Makanan dan Panduan Diet Malaysia diberi penekanan

This course covers the principles of biochemical and physiological of human nutrition. Health problems related to nutrients and the importance of Recommended Nutrient Intake (RNI), Food Pyramid and Malaysian Dietary Guidelines are emphasized

PKK3202 Pemakanan dan Metabolisme/ *Nutrition and Metabolism* 3 (3+0)

Prasyarat : PKK3200

Kursus ini merangkumi biokimia dan metabolisme nutrien dan perkaitannya di dalam memiara homeostasis tubuh. Ketidakseimbangan nutrien dan kesan ke atas metabolisme tubuh, petunjuk biokimia di dalam gangguan pemakanan dan metabolisme akan diberi penekanan

This course encompasses biochemistry and metabolism of nutrients and their interactions in maintaining body homeostasis. Nutrient imbalance and its effect on body metabolism, biochemical indicators of nutritional disorders and inborn errors of metabolism are emphasized

PKK3203 Pemakanan Dalam Kitaran Hidup/ *Nutrition Throughout the Life Cycle* 3 (3+0)

Prasyarat : PKK3200

Kursus ini merangkumi keperluan pemakanan dari peringkat persenyawaan sehingga dewasa, implikasi malnutrisi dari segi biologi dan tingkahlaku terhadap pertumbuhan dan perkembangan

This course encompasses the nutrition requirements from conception to adulthood, biological and behavioral implications of malnutrition on growth and development

PKK3302 Epidemiologi Asas/ *Basic Epidemiology* 3 (3+0)

Prasyarat : Tiada

Kursus ini mengandungi prinsip asas epidemiologi dalam kesihatan komuniti dan klinikal, kaedah epidemiologi dalam penyelidikan dan kaedah statistik yang digunakan dalam epidemiologi

This course covers the basic principles of epidemiology in community and clinical health, epidemiologic methods in research and statistical methods used in epidemiology

PKK3303 Kesihatan Ibu dan Anak/ *Maternal and Child Health* 3 (2+1)

Prasyarat : SBP3110

Kursus ini merangkumi kesihatan ibu dan anak termasuk kesalinggantungan antara ibu dan anak, pertumbuhan dan perkembangan yang optimum bagi kanak-kanak melalui pemakanan dan kesihatan. Keperluan perkhidmatan dan program di peringkat kebangsaan dan antarabangsa untuk meningkat status kesihatan ibu dan anak turut dibincangkan

This course encompasses maternal and child health which includes the interdependence between mothers and children, optimal growth and development of children through nutrition and health. The need for maternal and child health services and programmes at national and international levels to improve their health status are discussed

PKK3304 Tingkahlaku dan Kesihatan/ *Behaviour and Health* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi pengetahuan perkaitan di antara tingkah laku dan kesihatan. Ia juga memberi fokus terhadap faktor yang mempengaruhi, membolehkan dan memperkukuhkan tingkahlaku. Kaedah penyelidikan tingkahlaku dan kesihatan serta perkaitan di antara faktor tingkahlaku dan status kesihatan juga ditekankan

This course encompasses knowledge on the relationship between behavior and health conditions. It will also focus on predisposing, enabling and reinforcing factors to behavior. Research methods in health and behavior and associations between behavioral factor and health status are emphasized

PKK3400 Kajian Kependudukan : Perspektif Kesihatan/ *Population Studies: Health Perspective* 3 (3+0)

Prasyarat : Tiada

Kursus ini memberi pendedahan tentang proses dan dinamik perubahan kependudukan. Polisi dan program-program kependudukan turut dibincangkan dalam konteks implikasi perkembangan kependudukan terhadap status kesihatan dan pemakanan penduduk

This course exposes to the processes and dynamics of population change. Policies and programmes in population are discussed in the context of the implications of population development on the health and nutritional status of the people

PKK3401 Penilaian Taraf Pemakanan dan Kesihatan/ *Assessment of Nutritional and Health Status* 3 (2+1)

Prasyarat : PKK3200

Kursus ini merangkumi penilaian taraf kesihatan dan pemakanan individu, kumpulan dan populasi. Ukuran antropometri, analisis sampel biologi, pemeriksaan klinikal, kajian diet dan kajian pengaruh persekitaran, penilaian kuantitatif dan kualitatif turut ditekankan

This course encompasses the assessments of health and nutritional status of individuals, groups and populations. Anthropometric measurements, analysis of biological samples, clinical examination, dietary methods and study of environmental influences, the quantitative and qualitative assessments are emphasized

PKK3402 Pemakanan dan Kesihatan Komuniti/ *Community Nutrition and Health* 3 (3+0)

Prasyarat : PKK3401

Kursus ini merangkumi prinsip dan konsep kesihatan masyarakat. Isu dan petunjuk taraf kesihatan dan pemakanan masyarakat, analisis faktor sosio-ekonomi, budaya, persekitaran, perkhidmatan dan program kesihatan dan pemakanan turut ditekankan

This course encompasses the principles and concepts of community health. Issues and indicators of community health and nutrition, the analysis of socio-economic, cultural, environmental, services and programs in community health and nutrition are emphasized

PKK3404 Promosi Pemakanan dan Kesihatan I/ *Nutrition and Health Promotion I* 3 (3+0)

Prasyarat : PKK3402

Kursus ini merangkumi konsep, definisi dan perkembangan promosi kesihatan, serta proses perancangan, pelaksanaan dan penilaian program promosi pemakanan dan kesihatan

This course encompasses concepts, definitions and development of health promotion, as well as planning, implementation and evaluation processes of *nutrition and health promotion programs*

PKK3405 Promosi Pemakanan dan Kesihatan II/ *Nutrition and Health Promotion II* 3 (1+2)

Prasyarat : PKK3404

Kursus ini merangkumi konsep, prinsip dan fungsi utama pengurusan program promosi pemakanan dan kesihatan. Pelajar akan merancang, melaksana dan menilai program promosi pemakanan dan kesihatan di sekolah, komuniti dan tempat kerja

This course encompasses of concepts, principles and main functions of management of nutrition and health program. Students will carry out the planning, implementation and evaluation of nutrition and health promotion programs in schools, communities and work sites

PKK4901 Latihan Industri/ *Industrial Training* 6 (0+6)

Prasyarat : Tiada

Kursus ini mengandungi pengetahuan mengenai masalah pemakanan dan kesihatan komuniti dan mengenalpasti cara untuk mengatasinya. Pelajar ditempatkan di agensi yang berkaitan dengan program pemakanan dan kesihatan komuniti serta diberi pengalaman bekerja agar pelajar dapat memahami dan boleh menjalankan aktiviti yang dirancang oleh agensi/organisasi berkenaan

This course encompasses knowledge on problems of the community and to identify means of overcoming them. Students will be placed in agencies related with nutritional and health community programs and be given work experiences so that students have an understanding and will be able to carry out activities that have been planned by the agency/organization

PKK4999 Projek Ilmiah Tahun Akhir/ *Final Year Project* 12 (0+12)

Prasyarat : Pelajar Tahun Akhir/ *Final Year Student*

Kursus ini meliputi pengetahuan dan pengalaman kepada pelajar untuk merancang dan menjalankan projek penyelidikan dalam bidang pemakanan dan kesihatan komuniti menggunakan data primer. Kemahiran dalam penulisan proposal, rekabentuk penyelidikan, pembentukan instrumentasi, pengumpulan, analisis dan tafsiran data ditekankan. Hasil penyelidikan ditulis dalam bentuk laporan atau tesis serta dibentangkan. Kursus ini dilaksanakan dalam dua semester

This course covers knowledge and experiences for students to plan and do research projects in the fields of nutrition and community health using primary data. Skills in proposal writing, research design, design of instrumentation, data collection, analysis and interpretation are emphasized. Research results will be written in the form of a report or thesis and presented. This course is carried out in two semesters

PKK4200 Biokimia Gangguan Peakanan/ *Biochemistry of Nutritional Disorders* 3 (3+0)

Prasyarat : PKK3202

Kursus ini merangkumi pengetahuan mengenai metabolisme manusia dalam keadaan berpenyakit disebabkan oleh gangguan pemakanan. Perubahan pemakanan dan kesanya ke atas metabolik dan fisiologi tubuh turut dibincangkan

This course encompasses knowledge on human metabolism in diseased states caused by nutritional disorders. Nutritional changes and its effects on human metabolic and physiological are discussed

PKK4201 Pemakanan Terapi/ *Therapeutic Nutrition* 3 (2+1)

Prasyarat : PKK3202

Kursus ini merangkumi aspek fisiologi penyakit yang berkaitan dengan pemakanan dan perkaitan di antara penyakit dan nutrien yang terlibat. Prinsip dan konsep pemakanan terapi sebagai panduan di dalam perancangan sajian terapi turut dibincangkan

This course encompasses physiological aspects of nutrition-related diseases and the relationship between disease and nutrient involved. Principles and concepts of nutritional therapy as guidelines in the planning of therapeutic diets are discussed

PKK4204 Pemakanan, Aktiviti Fizikal dan Kesihatan/ *Nutrition, Physical Activities and Health* 3 (2+1)

Prasyarat : PKK3203

Kursus ini merangkumi aspek kecergasan dan aktiviti fizikal, dan perkaitannya dengan pemakanan dan kesihatan. Penilaian tahap aktiviti fizikal dan gaya hidup kumpulan yang terpilih dilakukan. Isu dan kontroversi berkaitan dengan pemakanan, aktiviti fizikal dan kesihatan dinilai secara kritis.

This course encompasses the aspects of physical activity and fitness and their relationship to nutrition and health. Assessment of physical activity levels of selected groups will be carried. Issues and controversies related to nutrition, physical activity and health are critically evaluated

PKK4401 Kesihatan dan Pemakanan Geriatrik/ *Geriatric Health and Nutrition* 3 (3+0)

Prasyarat : PKK3200

Kursus ini meliputi pengetahuan tentang proses penuaan dan faktor yang mempengaruhi status pemakanan dan kesihatan warga tua. Masalah kesihatan yang berkaitan dengan pemakanan yang utama serta keperluan nutrien dan taraf pemakanan turut dipelajari. Langkah-langkah untuk memperbaiki taraf pemakanan dan menggalakkan penuaan yang sihat dan produktif turut dibincangkan

This course covers knowledge on the aging process and factors affecting the nutritional and health status of the elderly. Problems related to health and nutrition-related issues, nutritional requirements and assessment of nutritional status as well as strategies to improve the nutritional status and to promote healthy and productive aging are also be discussed

PKK4402 Teknik dalam Penyelidikan Pemakanan/ *Techniques in Nutritional Research* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep dan teknik di dalam penyelidikan makmal. Pelajar akan melakukan pensampelan, kawalan kualiti, merekod, menganalisis data. Prinsip dan aplikasi pelbagai instrumen juga dibincangkan

This course encompasses the concepts and techniques in laboratory research. Students will carry out sampling, quality control, keeping record and data analysis. The principles and application of various instrumentations are also discussed

Jabatan Perubatan/ *Department of Medicine*

SPK3011 Pengalaman Awal Klinikal (I , II, III, IV) 37 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi aplikasi sains perubatan asas kepada pengambilan riwayat pesakit, pemeriksaan fizikal yang juga melibatkan kemahiran komunikasi dan klinikal, prinsip prosedur wad dan pengurusan pesakit di wad

This course encompasses the application of basic medical sciences on patient history taking, physical examination which also incorporates communication and clinical skills, the principles of ward procedures and patient management in the ward

SPK3914 Ortopedik Pengenalan/ *Introductory Orthopaedics* 2 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi asas pengambilan riwayat pesakit ortopedik mengikut bahagian anggota yang terlibat dan pemeriksaan klinikal sistem muskuloskeletal. Ia juga meliputi pendekatan diagnosis yang yang tepat, merancang penyiasat yang relevan dan perawatan pesakit

This course encompasses basic history taking of orthopaedic patients based on the part of the limb involved and physical examination of the musculoskeletal system. It also covers the approach of accurate diagnosis, relevant investigations and treatment of patient

SPK3972 Perubatan Keluarga Lanjutan/ *Senior Family Medicine* 4 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi amalan perubatan di peringkat rawatan primer melalui penempatan pembelajaran bersama anggota-anggota kesihatan primer berpengalaman di klinik kesihatan primer

This course encompasses a practice of medicine in primary care setting through attachment with experienced primary health care providers in primary care clinics

SPK4912 Ortopedik Lanjutan/ *Senior Orthopedics* 7 Minggu/ Weeks

Prasyarat : Tiada

Dalam tahun 5, pelajar akan ditempatkan dalam posting Ortopedik lanjutan. Pusingan posting ini adalah selama 8 minggu. Pengajaran dalam kursus ini mengandungi syarahan, seminar, pengajaran di samping pesakit di wad, rondaan wad, sesi klinik di klinik pesakit luar Ortopedik dan sesi pembedahan di dewan bedah. Pelajar juga dikehendaki menjalani kerja-kerja di wad di bawah pengawasan. Semasa posting ini, pelajar juga dikehendaki mengikuti posting di Jabatan Kemalangan dan Kecemasan, Fisioterapi, Pemulihan Carakerja dan Jabatan Ortotik. Pelajar akan di awasi oleh pensyarah dari Jabatan Ortopedik, UPM dan Pegawai Perubatan/ Pakar / Perunding dari Institut Ortopedik, Hospital Serdang

In the fifth year, the students will be posted to the Senior Orthopaedicss. The rotation is of 8 weeks duration. Teaching in this course will consist of lectures, seminars, bedside teaching, ward rounds, clinical sessions in Orthopaedic outpatient clinic and observing procedures in operation theatres. Students are also expected to perform ward work under supervision. During this rotation, the student will also be posted to the Accident & Emergency,Physiotherapy, Occupational Therapy and Orthotic Departments. Students will be supervised by the lecturers from the Orthopaedic Department, UPM and Medical Officers/ Specialists/Consultants of Institute Orthopaedic and Traumatology, Serdang Hospital

SPK4913 Kemalangan dan Kecemasan/ *Accident and Emergency* 1 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi prinsip pengurusan awal kes kecemasan seperti trauma, asma akut dan serangan sakit jantung, dan kecemasan bencana. Ia juga meliputi kepentingan pengurusan segera kes kecemasan supaya keadaan pesakit tidak menjadi semakin tenat, komunikasi dan kesinambungan pengurusan dengan unit klinikal lain

This course encompasses the principles of early management of emergency cases e.g. trauma, acute asthma, acute myocardial infarction and disaster emergency. It also covers the importance of immediate management of emergency cases to prevent worsening of the patient's condition, communication and continuity of management with other clinical units

SPK4925 Perubatan Sukan/ *Sports Medicine* 1 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pelbagai aspek perubatan sukan (kecederaan sukan, rawatan dan pemulihan) dan sains sukan (fisiologi senaman, pemakanan sukan, psikologi sukan dan latihan fizikal)

The course encompasses the broad spectrum of sports medicine (sports injuries, treatment and rehabilitation) and sports science (exercise physiology, sports nutrition, sports psychology and physical conditioning

SPK3921 Perubatan Pengenalan/ *Introductory Medicine* 14 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengambilan riwayat pesakit dengan baik, pemeriksaan sistematik sistem saraf pusat dan periferi, sistem respiratori, sistem gastrousus, sistem urinari, sistem kardiovaskular dan sendi. Prosedur wad asas seperti punktur vena, memasang drip and merekodkan elektrokardiografi juga disentuh

The course encompasses good history taking and systematic examination of the central and peripheral nervous system, the respiratory system, the gastrointestinal system, the urinary system, the cardiovascular system, the endocrine system and the joints. Basic ward procedures such as performing venepuncture, setting up a drip and recording ECGs are also covered

SPK4922 Perubatan Lanjutan/ *Senior Medicine* 10 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini meliputi latihan dalam aspek yang lebih mendalam mengenai pengambilan riwayat pesakit dan pemeriksaan fizikal, pendekatan yang rasional dalam penyelesaian dan pengendalian masalah klinikal, aspek terapeutik bidang perubatan dan prosedur rawatan di dalam wad.

The course encompasses finer aspects of history taking and physical examination, rational approach on investigation and management of clinical problems, therapeutic aspects of medical practice and therapeutic procedures in the wards

SPK3923 Penjagaan Kesihatan Warga Tua/ *Health Care of the Elderly* 3 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi demografi proses penuaan, penilaian pesakit tua, prinsip perubatan geriatrik, masalah psikologi warga tua, jatuh, kelumpuhan dan rehabilitasi, kematian dan proses kematian. Ia juga meliputi etika dan profesionalisma dalam menangani masalah warga tua serta kepentingan proses penuaan yang sihat.

This course encompasses aging demography, assessment of elderly patients, principles of geriatric medicine, psychological problems in the elderly, falls, immobility and rehabilitation, death and dying. It also covers ethics and professionalism in managing the elderly as well as the importance of healthy ageing

SPK3924 Radiologi/ *Radiology* 1 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi asas modaliti pengimejan yang berbeza, termasuk bahaya sinaran dan perlindungan sinaran, aspek prosedur pemeriksaan, indikasi klinikal dan kontraindikasi. Ia juga meliputi pentafsiran imej radiologi yang normal dan tidak normal.

The course encompasses the basics in different imaging modalities which include radiation hazards and protection, the aspect of examination procedures, their clinical indications and contraindications. It also covers the interpretation of both normal and abnormal radiological images

SPK3937 Sokongan Hayat Asas/ *Basic Life Support* 20 Jam/ *Hours*

Prasyarat : Tiada

Kursus ini merangkumi aspek asas pemulihan kardiopulmonari untuk dewasa dan kanak-kanak. Pelajar juga mempelajari ubat-ubat dan peralatan yang digunakan untuk resuscitasi di hospital
This course encompasses basic aspects of cardiopulmonary resuscitation in adults and children. Students also learn the use of medications and equipment for resuscitation in a hospital setting

SPK3961 Psikiatri Pengenalan/ *Introductory Psychiatry* 8 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengetahuan asas dan aspek klinikal gangguan psikiatri, teknik temuduga dan pengambilan riwayat pesakit, mengenal pasti simptom gangguan psikiatri yang utama dan memahami faktor yang menyumbang kepada sebab terjadinya gangguan pskiatri tersebut, formulasi dan pengurusan kes

This course encompasses fundamental knowledge and clinical aspects of psychiatric disorders, interview techniques and history taking, recognition of symptoms of major psychiatric disorders and understanding of factors contributing to the cause of mental illness, case formulation and management.

SPK3971 Perubatan Keluarga Pengenalan/ *Introductory Family Medicine* 2 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini memperkenalkan amalan, spektrum penyakit dan jenis pesakit diperingkat primer serta prinsip-prinsip perubatan keluarga
This course introduces a practice of primary care medicine, the spectrum of diseases and patients seen in primary care setting and principles of family medicine

SPK3991 Latihan Klinikal/ *Clinical Attachment* 2 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi attachment di disiplin yang diminati dalam bidang kesihatan atau hospital untuk mendapatkan pengalaman bagi pembangunan peribadi dan professional

This course encompasses attachment to discipline of interest in health or hospital settings to gain experience for personal and professional development

SPK3931 Surgeri Pengenalan/ *Introductory Surgery* 14 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi prinsip amalan pembedahan dalam persekitaran hospital, aspek klinikal, diagnosis, penyiasatan dan penyakit surgeri yang lazim seperti penyakit abdomen, penyakit vaskular periferi, payu dara, kelenjar tiroid, sistem genito-urinari dan penyakit pembedahan am

This course encompasses principles of surgical practice within a hospital setting, clinical aspects, diagnosis, investigations and management of common surgical disorders such as abdominal, peripheral vascular disease, breast, thyroid, genito-urinary, and general surgical diseases

SPK4932 Surgeri Lanjutan/ *Senior Surgery* 8 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini meliputi latihan dalam aspek yang lebih mendalam mengenai pengambilan riwayat pesakit dan pemeriksaan fizikal, cara yang rasional dalam penyelesaian dan pengendalian masalah klinikal, aspek terapeutik bidang surgeri dan prosedur rawatan di klinik dan wad pembedahan

The course encompasses finer aspects of history taking and physical examination, rational approach on investigation and management of clinical problems, therapeutic aspects of surgical practice and therapeutic procedures in the clinics, wards and operation theatres

SPK3933 Otorinolaringologi/ *Otorhinolaryngology* 3 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi anatomi dan fisiologi kepala dan leher, penyakit telinga, penyakit hidung dan sinus paranasal, penyakit farinks dan larinks, penyakit leher dan kaviti oral dan alahan

This course encompasses the anatomy and physiology of the head and neck, diseases of the ear, diseases of the nose and paranasal sinuses, diseases of pharynx and larynx, diseases of the neck and oral cavity, and allergies

SPK3934 Oftalmologi/ *Ophthalmology* 3 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengambilan riwayat pesakit, pemeriksaan fizikal dan pengurusan masalah mata yang lazim ditemui, termasuk yang disebabkan oleh jangkitan kuman, kecederaan, penyakit keturunan, katarak, glaukoma dan keabnormalan retina.

This course encompasses history taking, physical examination and management of common ocular problems, including those caused by infection, trauma, hereditary disorders, cataract, glaucoma and retinal abnormalities

SPK4935 Perubatan Forensik/ *Forensic Medicine* 40 Minggu/

Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengetahuan asas bidang forensik dan garis panduan dalam melakukan bedah-siasat dalam kes lazim seperti kematian mengejut, kemalangan, asfiksia serta kes medikolegal, menulis laporan kes medikolegal dan menghadiri mahkamah latihan

This course encompasses basic knowledge on forensic pathology and guidelines to perform autopsy on common cases such as sudden death, accidents, asphyxia as well as medicolegal cases, preparing medicolegal case report and attending mock court

SPK4936 Anestesiologi/ *Anaesthesiology* 1 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi aspek klinikal anestesiologi asas, penyediaan pesakit pra-pembiusan, perubatan penjagaan rapi dan perubatan kesakitan dengan penekanan aspek etika perubatan dan profesionalisme. Ia juga meliputi pengendalian pesakit di waktu perioperatif secara menyeluruh serta memberikan rawatan asas untuk pesakit yang kritikal

This course encompasses basic clinical aspects of anaesthesiology, pre-anaesthetic preparation of patients, critical care medicine and pain medicine, with attention to ethics and professionalism. It also covers the management of patients in the perioperative period as a whole and basic management for the critically ill

SPK3941 Pediatrik Pengenalan/ *Introductory Pediatrics* 10 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengenalan kepada pediatrik am, kemahiran asas pengambilan riwayat perubatan dan pemantapan teknik asas pemeriksaan fizikal di dalam konteks pesakit kanak-kanak. Pelajar juga akan didedahkan kepada pelbagai sub-kepakaran pediatrik dan lawatan ke pusat berlandaskan komuniti iaitu klinik kesihatan ibu dan anak

This course encompasses introduction to general paediatrics, basic skills of history taking and reinforcement of basic examination techniques in the context of paediatric patients. The student may also be exposed to various disciplines of paediatric subspecialities and visit to a community-based maternal and child health centre

SPK4942 Pediatrik Lanjutan/ *Senior Pediatrics* 5 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengambilan sejarah pesakit, pemeriksaan fizikal pesakit am pediatrik, pendekatan yang rasional terhadap penyiasatan dan pengendalian masalah klinikal serta prosedur terapeutik di klinik dan wad pediatrik. Kursus ini juga merangkumi bidang neonatologi

The course encompasses history taking, physical examination of paediatric patients, rational approach on investigation as well as management of clinical problems and therapeutic procedures in the clinics and general paediatric wards. The course also covers areas of neonatology

SPK3951 Obstetrik dan Ginekologi Pengenalan/ *Introductory Obstetrics and Gynaecology* 10 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi pengambilan sejarah pesakit, pemeriksaan fizikal pesakit, pendekatan yang relevan dalam penyiasatan, pengendalian masalah klinikal serta prosedur terapeutik di klinik, wad obstetrik & ginekologi, bilik bersalin dan dewan bedah

This course encompasses of history taking, physical examination of patient, relevant approach of investigation, management of clinical situation with therapeutic procedure in clinic, antenatal ward, gynaecological ward, labor room and operative room

SPK4952 Obstetrik dan Ginekologi Lanjutan/ *Senior Obstetrics and Gynaecology* 5 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi aspek yang lebih mendalam mengenai pengambilan riwayat pesakit dan pemeriksaan fizikal pada pesakit obstetrik dan ginekologi, penyiasatan dan pengendalian masalah klinikal obstetrik dan ginekologi yang rasional, aspek terapeutik dalam bidang amalan obstetrik dan ginekologi dan prosedur rawatan di klinik, wad, bilik bersalin dan dewan bedah

The course encompasses finer aspects of history taking and physical examination of obstetrics and gynaecology patients, rational approach on investigation and management of clinical problems in obstetrics and gynaecology, therapeutic aspects of obstetrics and gynaecology practice and therapeutic procedures in the clinics, wards, labour rooms and operation theatres

SPK4962 Psikiatri Lanjutan/ *Senior Psychiatry* 2 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi aspek psikososial penyakit fizikal melalui psikiatri perundingan, pengendalian pesakit yang menghadapi saat kematian dan menguruskan kes psikiatri kecemasan. Kursus ini juga meliputi konsep psikiatri perundingan dan menekankan peranan pasukan pelbagai disiplin dalam pengurusan pesakit dan pembangunan perkhidmatan Psikiatri Perundingan di hospital.

This course encompassses psychosocial aspects of physical illnesses through liaison psychiatry, managing dying patients and handle cases in emergency psychiatry. It also covers the concept of liason psychiatry and emphasises on the role of multidisciplinary teams in managing patients and in the development of Liason Psychiatry services in hospitals

SPK3981 Perubatan Komuniti/ *Community Medicine* 6 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi amalan dan aktiviti perubatan kesihatan awam di peringkat klinik kesihatan, pejabat kesihatan daerah dan hospital daerah dari segi kawalan pencegahan penyakit, promosi kesihatan dan penjagaan pesakit. Ianya juga meliputi penilaian taraf kesihatan komuniti dan pengendalian program intervensi kesihatan

The course encompasses the practices and activities of public health medicine activities in health clinic, District Health Office and District Hospital which include disease prevention, health promotion and patient care. Evaluation of the community health status and implementation of health intervention programme will also be covered in this course

SPK3982 Lawatan Susulan Komuniti/ *Community Follow-Up* 20 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi kesan penyakit terhadap aspek fizikal, sosial dan psikologi pesakit, keluarga pesakit dan komuniti dengan berlandaskan etika dan profesionalisme perubatan dalam penjagaan pesakit. Ia juga meliputi penglibatan agensi luar dalam aspek penjagaan pesakit

This course covers the impact of illness to the physical, social and psychological well being of the patient, their family and the community at large which is based on medical ethics and professionalism in the patient's management. It also covers the involvement of external agencies in the aspect of patient care

SPP3111 Pembangunan Profesional/ *Professional Development* 10 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi peranan sosial dan professional seorang doktor serta kepentingan kemahiran professional dalam perubatan, melibatkan hubungan doktor-pesakit, hubungan professional dengan yang lain, budaya korporat dalam Kementerian Kesihatan Malaysia, bekerja dengan jantina berlainan, penilaian holistik, serta isu etika dan budaya dalam perubatan

This course encompasses the social and professional roles of a doctor as well as the importance of professional skills in medicine, involving doctor-patient relationship, professional relationship with others, corporate culture in the Ministry of Health, working with other genders, holistic assessment, as well as ethical and cultural issues in medicine

SPP3121 Kemahiran Komunikasi/ *Communication Skills* 9 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi konsep teras komunikasi berkesan sebagai seorang doktor termasuk pendidikan pesakit. Pengendalian komunikasi dengan pesakit dengan penyakit terminal serta ahli keluarga mereka juga ditekankan

This course encompasses core concepts of effective communication as a doctor including patient education. Handling communication with terminally ill patients as well as their family members is also emphasized

SPP3131 Sains Perlakuan/ *Behavioural Science* 21 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi perkembangan normal manusia melalui perspektif psikologi dari peringkat bayi baru lahir sehingga tua, kesan psikososial oleh penyakit kronik, peranan keluarga, tekanan dan proses aktiviti mental seperti daya ingatan, tanggapan, tidur, motivasi, pengubahsuaian dan emosi

This course encompasses the normal human development through a psychological perspective from the stages of infancy to elderly, psychosocial effects of chronic illness, the role of family, stress and the process of mental activities such as memory, perception, sleep, motivation, conditioning and emotion

SPP3212 Sel dan Tisu Peka Rangsang/ *Cell and Excitable Tissue* 67 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi organisasi, fungsi asas tisu dan organ serta komunikasi sel. Ia juga termasuk kesan farmakologi ke atas neurotransmiter

The course encompasses the organization, basic functions of tissues and organs, as well as cellular communication. It also includes pharmacological effects on neurotransmitters

SPP3223 Anatomi Am dan Embriologi/ *General Anatomy And Embryology* 27 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi aspek gros dan histologi sistem otot-rangka, sistem peredaran yang termasuk sistem kardiovaskular dan limfa, sistem saraf pusat, sistem saraf periferi dan sistem saraf autonomik serta embriologi am.

This course encompasses the gross and histological aspects of musculoskeletal system, circulatory system which includes cardiovascular and lymphatic systems, central nervous system, peripheral nervous system and autonomic nervous system, as well as general embryology

SPP3231 Perubatan Berasaskan Molekul/ *Molecular-Based Medicine* 43 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi biokimia asas protein dan enzim yang terlibat di dalam jaringan metabolik utama, serta penyakit yang disebabkan oleh kekurangan enzim metabolik, dan hubungan di antara kestabilan protein dan aktiviti biologik. Kursus ini meliputi metabolisma pertengahan dan tenaga. Gangguan metabolisma dan kesan klinikal berkaitan juga diberi tumpuan.

This course encompasses the basic biochemistry of proteins and enzymes involved in major metabolic pathways, as well as diseases caused by metabolic enzyme deficiencies and the relationship between protein stability and biological activity. This course also covers intermediate and energy metabolisms. Disorders of metabolism and their related clinical significance is also focused on

SPP3241 Ekspresi Gen/ *Gene Expression* 14 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi struktur dan fungsi gen mekanisma replikasi DNA, transkripsi mRNA, pemisahan gen dan translasi protein, mutasi dan agen mutagenik dan pengaruh mereka ke atas DNA dan sel, serta aspek aplikasi teknik biologi molekul dalam diagnostik klinikal

The course encompasses the structure and functions of genes, mechanisms of DNA replication, mRNA transcription, gene splicing and protein translation, mutations and mutagenic agents and their influence on DNA and the cell, as well as aspects on application of molecular biology techniques in clinical diagnostics

SPP3251 Genetik Manusia/ *Human Genetics* 18 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi konsep asas dan kemajuan teknologi terkini di dalam pengajian bidang genetik manusia berkaitan bidang perubatan termasuk sitogenetik, genetik molekul, genetik biokimia, genetik klinikal, isu berkaitan etika dan kaunseling genetik. Aplikasi kaedah genetik menggunakan analisis *linkage*, analisis mutasi dan analisis *pedigree* dengan menggunakan kumpulan penyakit genetik spesifik sebagai contoh juga diketengahkan.

This course encompasses the fundamental concepts and technological advances in the study of human genetics pertaining to medical practice, which includes cytogenetics, molecular genetics, biochemical genetics, clinical genetics, ethical issues and genetic counseling. The use of genetic methods including linkage, mutational and pedigree analyses in a small group of specific diseases as examples are also highlighted

SPP3273 Farmakologi Am dan Biokimia/ *General and Biochemical Pharmacology* 22 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi prinsip am farmakologi, konsep farmakodinamik dan farmakokinetik ubat-ubatan, serta prinsip Amalan Preskripsi Rasional. Kaedah untuk pengujian dan toksisiti ubatan, dan pengaruh genetik ke atas farmakokinetik serta farmakodinamik dihuraikan. Preskripsi ubatan kepada pesakit warga tua dan pediatrik juga diberi tumpuan

This course encompasses the general principles of pharmacology, concepts on drug pharmacodynamics and pharmacokinetics, as well as the principles of Rational Prescribing Practice. The methods for testing toxicity of drugs, and the genetic influences on pharmacokinetics and pharmacodynamics are also described. Prescribing drugs to elderly and pediatric patients are also focused on

SPP3311 Hematologi/ *Haematology* 45 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi perubahan yang berlaku kepada organisasi, fungsi asas dan morfologi sel-sel darah dan komponennya dalam gangguan penyakit hematologi lazim. Kursus ini juga menekankan ujian-ujian diagnostik dan rawatan penyakit tersebut

The course encompasses the changes which occur to the organization, basic function and morphology of blood cells and their components in common haematological disorders. This course also emphasizes diagnostic tests and management of these disorders

SPP3321 Patologi Am/ *General Pathology* 35 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi prinsip asas patologi, dan menghubungkait prinsip berkenaan dengan pengetahuan anatomi, fisiologi, biokimia, mikrobiologi, parasitologi, farmakologi, radiologi dan manifestasi klinikal. Kecederaan tisu lethal dan sublethal, nekrosis dan apoptosis, inflamasi, penyembuhan dan pembaikan tisu, serta sifat-sifat sel neoplastik turut ditekankan

The course encompasses the principles of basic pathology, and relates these principles with the knowledge of anatomy, physiology, biochemistry, microbiology, parasitology, pharmacology, radiology and clinical manifestation. Lethal and sublethal tissue injuries, necrosis and apoptosis, inflammations, tissue healing and repair, as well as the behaviour of neoplastic cells are also emphasised

SPP3341 Imunologi/ *Immunology* 39 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi konsep imuniti, gambaran keseluruhan sistem imun, sifat antigen dan pengenalan sel, peranan sistem imun dalam inflamasi, tindakbalas terhadap patogen, mekanisma kerosakan tisu, alahan, autoimuniti, pemindahan dan penolakan organ, serta akibat imunologi disebabkan kekurangan imuniti

This course encompasses the concept of immunity, an overview of the immune system, the nature of antigen and cell recognition, role of the immune system in inflammation, response to pathogens, mechanisms of tissue damage, allergy, autoimmunity, organ transplantation and rejection, as well as immunological consequences due to immunodeficiencies

SPP3351 Mikrobiologi Perubatan/ *Medical Microbiology* 52 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi pengetahuan asas mikroorganisma penting dari dalam perubatan, strukturnya, bahan genetik dan patogenisiti dalam subbidang bakteriologi, virologi dan mikologi. Ianya juga meliputi pengkelasan, jenis, fungsi dan cara penyebaran mikroorganisma terbabit. Pengenalan tentang agen antimicrobial, serta pencegahan dan kawalan penyakit berjangkit juga disertakan

This course encompasses the basic knowledge of medically important microorganisms, their its structures, genetic materials and pathogenicity in subdisciplines of bacteriology, virology and mycology. It also covers the classification, types, function and transmission of microorganisms. An introduction on antimicrobial agents as well as the prevention and control of infectious diseases are also included

SPP3371 Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology* 37 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi aspek perubatan dan kesihatan awam penyakit parasit dan bawaan vektor, meliputi biologi dan kitar hidup, epidemiologi, patologi, manifestasi klinikal, diagnosa, rawatan, pencegahan dan kawalan jangkitan dalam pesakit individu dan komuniti

This course encompasses the medical and public health aspects of parasitic and vector borne diseases, covering biology and life cycle, epidemiology, pathology, clinical manifestations, diagnosis, treatment, prevention and control of infection in the individual patient and the community

SPP3424 Perubatan Kesihatan Awam/ *Public Health Medicine* 27 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi konsep asas, prinsip dan isu-isu berkaitan dengan kesihatan awam, termasuk pendekatan menyeluruh kepada promosi kesihatan dan penyampaian sistem penjagaan kesihatan.

Penekanan juga diberikan kepada pengaruh dan peranan individu, keluarga dan komuniti terhadap status kesihatan dan corak penyakit

This course encompasses basic concepts, principles and issues related to public health including a holistic approach to health promotion and health care delivery systems.
Emphasis is also given to the influence and roles of the individual, family and community on the health status and disease pattern

SPP3425 Epidemiologi/ *Epidemiology* 46 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi konsep asas dan prinsip epidemiologi untuk diaplikasi dalam pemahaman penyakit seperti penyakit berjangkit, penyakit tidak berjangkit, penyakit baru muncul dan muncul semula, dan kanser. Ia juga meliputi rekabentuk asas kajian epidemiologi dan percubaan klinikal dari segi metodologi, kelebihan dan kekurangan, pengukuran risiko dan kegunaannya, serta penilaian penyebab, bias dan konfoun

This course encompasses the basic concepts and principles of epidemiology for application in understanding diseases such as communicable diseases, non communicable diseases, emerging and re-emerging diseases, and cancers. It also covers basic epidemiological study designs and clinical trials in terms of methodology, advantages and limitations, measurement of risks and its uses, as well as assessment of causation, bias and confounders

SPP3512 Sistem Muskuloskeletal/ *Musculoskeletal System* 94 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi anatomi, fisiologi, patologi, farmakologi dan aspek klinikal sistem otot rangka, yang melibatkan otot, tulang dan sendi. Ia juga meliputi pendekatan kepada membuat diagnosa, dan penafsiran penemuan klinikal seperti kesakitan, patah tulang, kehelan sendi dan kecederaan saraf

The course encompasses the anatomy, physiology, pathology, pharmacology and clinical aspects of the musculoskeletal system, involving the muscles, bones and joints. It also covers the approach to make a diagnosis, and interpretation of clinical findings such as pain, bone fractures, joint dislocations and nerve injuries

SPP3522 Sistem Urinari/ *Urinary System* 55 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi anatomi, fisiologi, patologi dan farmakologi sistem urinari termasuk struktur dan fungsi pelbagai bahagian nefron. Ia juga merangkumi mekanisme hormon yang mempengaruhi fungsi ginjal dan peranan ginjal dalam pengawalan tekanan darah dan keseimbangan asid-bes. Penyakit urinari yang lazim seperti penyakit glomerular, neoplasia dan halangan salur urinari serta rawatan juga disentuh

This course encompasses the anatomy, physiology, pathology and pharmacology of the urinary system, including the structure and functions of various parts of nephron. It also covers the hormonal mechanisms affecting the renal functions, and the role of kidneys in the control of blood pressure and the maintenance of acid-base balance. Common urinary disorders such as glomerular diseases, neoplasia and obstruction of urinary tract and their management are also covered

SPP3532 Sistem Kardiovaskular/ *Cardiovascular System* 79 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi bidang anatomi, fisiologi, patologi, dan farmakologi sistem kardiovaskular. Manifestasi klinikal penyakit kardiovaskular, cara mendapatkan diagnosis, prinsip rawatan dan langkah pencegahan penyakit turut diberi penekanan

This course encompasses the disciplines of anatomy, physiology, pathology, and pharmacology of the cardiovascular system. Clinical manifestations of cardiovascular diseases, approach to diagnosis, principles of treatment and preventive measures of disease are also given emphasis

SPP3542 Sistem Respiratori/ *Respiratory System* 47 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi struktur anatomi dan fungsi sistem respiratori, dan keadaan patologi yang berkaitan seperti hipoksia, kegagalan respiratori dan di persekitaran luar biasa. Ini juga termasuk manifestasi klinikal, diagnosis dan rawatan penyakit berkaitan sistem respiratori

This course encompasses the anatomical structures and functions of the respiratory system, and related pathological conditions such as hypoxia, respiratory failure and in unusual environment. It also includes clinical manifestations, diagnosis and treatment of respiratory system related diseases

SPP3552 Sistem Alimentari dan Nutrisi/ *Alimentary System and Nutrition* 84 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi bidang anatomi, fisiologi, patologi dan farmakologi yang berkaitan dengan sistem alimentari. Manifestasi klinikal, proses pendiagnosan dan prinsip rawatan berkaitan penyakit alimentari turut diberikan penekanan. Kursus ini juga meliputi aspek nutrisi dan kepentingan klinikal nutrien dalam mengekalkan kesihatan optimum

This course encompasses the disciplines of anatomy, physiology, pathology and pharmacology related to the alimentary system. Clinical manifestations, the diagnostic process and principles of treatment related to alimentary diseases are also emphasized. This course also covers nutritional aspects and clinical importance of nutrients in maintaining optimal health

SPP3562 Sistem Endokrin/ *Endocrine System* 46 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi bidang anatomi, histologi, fisiologi, patologi dan farmakologi yang berkaitan dengan sistem endokrin termasuk perkembangan anatomi dan fungsi saling berkaitan antara hipotalamus, pituitari, tiroid, paratiroid dan adrenal. Kursus ini membezakan aspek normal dan abnormal sistem endokrin yang melibatkan rembesan hormon, paksi hormon dan pengawalan pengeluaran hormon

The course encompasses the disciplines of anatomy, histology, physiology, pathology and pharmacology related to the endocrine system, including developmental anatomy and inter-related functions between the hypothalamus, pituitary, thyroid, parathyroid, and adrenal glands. This course also differentiates the normal and abnormal aspects of the endocrine system which involves hormone secretion , hormonal axis, and regulation of hormone release

SPP3572 Sistem Reproduktif/ *Reproductive System* 60 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi pengenalan kepada anatomi, histologi, fisiologi, farmakologi, patologi dan aspek klinikal sistem reproduktif lelaki dan wanita. Aspek berkaitan kelahiran bayi, fisiologi janin, bayi baru lahir, pensenyawaan, pengguguran, kontrasepsi dan penyakit jangkitan kelamin juga ditekankan

The course encompasses the introduction to anatomy, histology, physiology, pharmacology, pathology and clinical aspects of the male and female reproductive system. Aspects related to child birth, foetal physiology, newborn infants, conception, abortion, contraception and sexually transmitted diseases are also emphasized

SPP3582 Sistem Saraf Pusat/ *Central Nervous System* 96 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi anatomi dan fisiologi otak dan saraf tunjang, termasuk fungsi normal dan gangguan yang melibatkan pelbagai bahagiannya pada peringkat sel dan molekul. Ia juga meliputi peneuropancar dan penglibatannya dalam keadaan normal dan gangguan klinikal utama. Kursus ini juga menekankan pengetahuan ubatan untuk rawatan gangguan sistem saraf pusat yang lazim, termasuk mekanisma tindakbalas, efikasi dan had klinikal

This course encompasses the anatomy and physiology of the brain and spinal cord, including their normal functions and the disorders involving their various parts at cellular and molecular levels. It also covers neurotransmitters and their involvement in normal conditions and major clinical disorders. This course also emphasizes the knowledge of drugs for treatment of common CNS disorders, including the mechanisms of action, clinical efficacy and limitations

SPP3591 Pembelajaran Berasaskan Masalah (I, II, III, IV) 66 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi aplikasi pengetahuan dalam sains perubatan asas melalui pembelajaran berasaskan masalah, yang melibatkan pembentukan keupayaan pemikiran kritis, pertimbangan kesimpulan, kerja berpasukan dan perkongsian maklumat

This course encompasses the application of knowledge in basic medical sciences through problem based learning, which include the development of critical thinking abilities, deductive reasoning, team work and information sharing

SPP3613 Statistik Perubatan/ *Medical Statistics* 48 Jam/ Hour

Prasyarat : Tiada

Kursus ini merangkumi prinsip-prinsip asas dalam statistik perubatan, statistik deskriptif, ujian statistik untuk perbandingan min, ujian khi-kuasa dua dan ujian tepat Fisher, ujian korelasi dan regresi linear mudah, dan ujian tidak berparameter

This course encompasses the basic principles in medical statistics, descriptive statistics, statistical tests for comparing means, chi-square tests and Fisher's exact test, correlation and simple linear regression test, and non-parametric tests

SPP3621 Projek dan Kaedah Penyelidikan/ *Research Methodology and Project* 10 Minggu/ Weeks

Prasyarat : Tiada

Kursus ini merangkumi konsep asas projek dan kaedah penyelidikan, termasuk penggunaan biostastistik, rekabentuk penyelidikan, penyediaan proposal, analisis data, penulisan saintifik dan pembentangan projek

This course encompasses the basic concepts of research methodology and project, including the use of biostatistics, research designs, proposal preparation, data analysis, scientific write-up and project presentation

Jabatan Kejururawatan dan Rehabilitasi/ *Department of Nursing and Rehabilitation*

NUR3001 Penyelidikan dan Statistik/ *Research and Statistic* 3(2+1)

Prasyarat : Tiada

Kursus yang berteraskan proses penyelidikan saintifik ini merangkumi konsep, kaedah, dan perlaksanaan penyelidikan secara kuantitatif dan kualitatif. Penekanan juga diberi kepada kepentingan etika, pencarian literatur dan penulisan saintifik

This course, which is based on the scientific research process, encompasses the concepts, methodology, and implementation of quantitative and qualitative researches. The importance of ethics, literature search and scientific writing is emphasised

NUR3002 Pendidikan Dalam Kejururawatan/ *Teaching in Nursing* 2(1+1)

Prasyarat : Tiada

Kursus ini bertujuan menyediakan pelajar kejururawatan dengan kemahiran pengajaran tahap awal agar mereka dapat memenuhi peranan pengajaran dengan berkesan kepada klien, keluarga, rakan sejawatan, pekerja kesihatan yang lain dan komuniti

This course is to equip students of nursing with fundamental teaching skills so that, they may fulfill their teaching role effectively, to clients, their families, colleagues, other health workers and community

NUR3003 Perspektif Teori Kejururawatan/ *Perspective of Nursing Theories* 2(2+0)

Prasyarat : Tiada

Kursus ini merangkumi teori dan proses kejururawatan dalam amalan kejururawatan profesional. Tajuk yang dibincangkan meliputi perkembangan teori kejururawatan dan kaedah pengkritikan teori kejururawatan. Pelajar perlu menghubungkaitkan teori kejururawatan dengan proses jagarawatan

This course encompasses theories and nursing process in professional nursing practice. Topics covered include development of theory in nursing and methods of critique in nursing theories. Students are required to relate nursing theories and nursing process

NUR3104 Biokimia Dan Farmakologi/ *Biochemistry and Pharmacology* 3(2+1)

Prasyarat : Tiada

Kursus ini memperkenalkan pelajar kepada biokimia dan farmakologi. Biokimia merangkumi ciri fisio-kimia, biokimia semulajadi membran dan fungsi sistem bernyawa. Farmakologi merangkumi konsep asas farmakokinetik dan farmakodinamik serta penggunaan ubat-ubatan terkini dalam rawatan

This course introduces the students to biochemistry and pharmacology. Biochemistry covers the biochemical nature of membranes and physio-chemical properties as well as functions of the living system. Pharmacology covers the basic concepts of pharmacokinetic and pharmacodynamic as well as drugs in use currently

NUR3201 Konsep dan Amalan Kejururawatan I/ *Nursing Concepts and Practice I* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep jagarawatan holistik dan menggalak tindak balas fisiologi normal. Pelajar akan mempraktik kemahiran jagarawatan holistik dalam pelbagai lapangan klinikal

This course encompasses the concepts of holistic care and the promotion of normal physiologic responses. Students will practice holistic nursing skills in different clinical settings

NUR3202 Konsep dan Amalan Kejururawatan II/ *Nursing Concepts and Practice II* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep serta amalan dalam pemberian ubat, perawatan luka dan pengurusan respon psikologi klien. Pelajar perlu menunjukkan kemahiran jagarawatan dalam pelbagai situasi klinikal

This course encompasses the concepts and practice of medication administration, wound care and clients psychological responses management. Students need to demonstrate nursing skills in various clinical settings

NUR3203 Jagarawatan Klien Dewasa I/ *Adult Client Care I* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi jagarawatan klien dewasa yang mengalami gangguan sistem kardiovaskular, respiratori, renal dan hematologi. Kursus ini juga menghubungkait proses patofisiologi dan respon psikologi akibat gangguan fungsi sistem. Pelajar akan mengaplikasi teori dalam situasi klinikal

This course encompasses the nursing care of adult clients with altered functions of the cardiovascular, respiratory, renal system and hematology. It also explores the pathophysiological process and psychological responses as a result of the altered functions. Students will then apply theory to practice in the clinical setting

NUR3204 Jagarawatan Klien Dewasa II/ *Adult Client Care II* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi prinsip jagarawatan pra, intra dan pos operatif serta asas kecemasan. Jagarawatan klien yang menghadapi perubahan fungsi pada sistem optalmik, telinga, hidung dan tekak, sistem imun juga dibincangkan

This course encompasses principles of pre, intra and post operative as well as basic emergency care. The nursing care of clients with altered functions of ophthalmic, ear, nose and throat, imune system are also discussed

NUR3207 Jagarawatan Klien Dewasa III/ *Adult Client Care III* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi jagarawatan klien dewasa yang mengalami gangguan sistem muskuloskeletal, gastrousus, saraf dan endokrin. Kursus ini juga menghubungkait proses patofisiologi dan respon psikologi akibat gangguan fungsi sistem

This course encompasses the nursing care of adult clients with altered functions of the musculoskeletal, gastrointestinal, nervous and endocrine system. It also explores the pathophysiological process and psychological responses as a result of the altered functions

NUR3208 Penilaian Klinikal/ *Clinical Assessment* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi kemahiran penilaian kesihatan klien di lapangan klinikal. Pelajar akan menjalankan penilaian kesihatan fizikal secara holistik dengan menggunakan kemahiran komunikasi dan refleksi kritikal. Pelajar juga perlu menyusun atur implimentasi jagarawatan klien berdasarkan tafsiran penemuan dalam penilaian

This course encompasses health assessment skills of clients in the clinical field. Students are required to apply the communication skills and critical reflection when performing a holistic physical health assessment. Students are also required to plan and implement nursing care based on assessment findings

NUR3308 Perkembangan peribadi dan profesional kejururawatan/ *Personal and Professional Development in Nursing* 3(3+0)

Prasyarat : Tiada

Kursus ini menekan aplikasi prinsip kemahiran berkomunikasi, pemikiran kritis dan reflektif di bidang amali kejururawatan. Tajuk yang dibincangkan merangkumi pelbagai peranan jururawat, isu semasa, pengurusan, kepimpinan, kaunseling, etika, peraturan dan undang-undang dalam amalan kejururawatan

This course emphasizes the application on the principles of communication, critical thinking and reflection in the clinical nursing practice. Topics covered include various roles of nurses, current issues, management, leadership, counselling, ethics, rules and law in nursing practice

NUR3307 Sains Tingkahlaku Manusia/ *Human Behavioral Science* 3(3+0)

Prasyarat : Tiada

Kursus ini memperkenalkan prinsip asas sains tingkahlaku yang mempengaruhi tingkahlaku manusia terutamanya dalam konteks perubatan/kejururawatan. Ia merangkumi perkembangan manusia dari peringkat bayi sehingga ke peringkat umur selanjutnya, asas psikologi yang berkaitan serta tingkahlaku individu dan kumpulan

This course introduces the basic principles of behavioural sciences in influencing human behaviour especially in the medical and nursing context. This encompasses human development from the

infancy to elderly stage, related basic psychology and individual and group behavior

NUR3403 Perawatan Kesihatan Komuniti/ *Community Health Care* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi pelbagai aspek kesihatan komuniti dan jagarawatan komprehensif kepada individu, keluarga dan komuniti dari perspektif sepanjang hayat. Isu dalam jagarawatan kehamilan, kanak-kanak dan dewasa dibincangkan. Pelajar mengaplikasikan pengetahuan dan kemahiran dalam jagarawatan kesihatan keluarga di komuniti. Pelajar perlu membuat lawatan dan menyediakan laporan perlaksanaan perkhidmatan kesihatan keluarga di komuniti

This course encompasses various aspects of community health and comprehensive community health nursing practice to individual, family and community through the life span. Issues on the care of antenatal mother, children and adults also discused. Students apply the knowledge and skill in family health nursing. Students are required to visit the community agencies and prepare a report on the services provided

NUR3404 Jagarawatan Kesihatan Primer Dan Promosi Kesihatan/ *Primary Health Care and Health Promotion* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep jagarawatan kesihatan primer dan promosi kesihatan. Tajuk ini membincangkan pembangunan komuniti, dan model tingkahlaku komuniti. Pelajar perlu menyedia bahan pendidikan kesihatan dan menjalankan promosi kesihatan

This course encompasses concepts of primary health care and health promotion. Topics include community development and community behavioural models. Students are required to prepare health educational materials and implement health promotion activities

NUR3405 Intervensi Kesihatan Komuniti/ *Community Health Intervention* 3(1+2)

Prasyarat : Tiada

Kursus ini merangkumi penilaian kesihatan komuniti yang memberi fokus kepada analisis tren penyakit semasa di komuniti, merancang dan melaksana program intervensi kesihatan komuniti. Pelajar perlu mengaplikasi pengetahuan serta menunjukkan kemahiran penyelesaian masalah dan kemahiran kolaborasi dalam kesihatan komuniti

This course encompasses the community health assessment focuses current trends of diseases in community and method of evaluation, plan and implementation the community health intervention. Students are required to demonstrate skills in problem solving and collaboration in community health nursing

NUR3503 Jagarawatan Kanak-Kanak Sakit/ *Care of the Sick Child* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi pengurusan jagarawatan kanak-kanak sakit. Pelajar perlu menggunakan pengetahuan dan kemahiran dengan jagarawatan kanak-kanak yang mengalami pelbagai masalah gangguan sistem badan di lapangan klinikal

This course encompasses the nursing care management of sick children. Students are required to apply theoretical concepts and skills to the care of children with various disorders in clinical field

NUR3504 Jagaan Klien Kritikal/ *Care of the Critical Client* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi jagarawatan kritikal klien yang mengalami gangguan sistem kardiovaskular, respiratori, renjatan sistemik dan jangkitan nosokomial. Komunikasi secara berkesan, berhemah dan beretika turut diberi penekanan

This course encompasses conditions such as cardiovascular, respiratory, shock and nosocomial infection in critical care. The focus will be on communication skill

NUR3506 Obstetrik dan Ginekologi/ *Obstetric and Gynaecology* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi kesihatan reproduktif wanita dan masalah ginekologi. Pelajar mempraktik jagarawatan antenatal, kelahiran, pueperium dan klien yang akan menjalani intervensi ginekologi

This course encompasses women's reprodutive health and gynaecological conditions. Students will provide care to women during antenatal, delivery, puerperium, and those who undergo gyanecological interventions

NUR3520 Perawatan Kesihatan Mental/ *Mental Health Care* 2(1+1)

Prasyarat : Tiada

Kursus ini merangkumi teori kesihatan mental. Tajuk meliputi gangguan kesihatan mental, disfungsi gaya hidup, intervensi terapeutik dan terapi alternatif. Pelajar perlu menjagarawat klien di hospital dan komuniti dengan menerapkan etika dalam jagarawatan

This course encompasses basic theories of mental health care. Topics include mental health disorders, lifestyle dysfunctions, therapeutic interventions and alternative therapy. The students are required to provide nursing care in the hospital and community by applying ethics on mental health care

NUR3508 Kanak-Kanak Sakit dan Jagarawatan Kesihatan I/ *The Sick Child and Health Care I* 4(1+3)

Prasyarat : Tiada

Kursus ini memperkukuhkan peranan jururawat pediatrik dalam menjagarawat klien pediatrik yang mengalami pelbagi ganguan sistem organ berkaitan

This course strengthens the role of paediatric nurses in the care of paediatric clients with various related organ disorder

NUR3509 Kanak-Kanak Sakit dan Jagarawatan Kesihatan II/ *The Sick Child and Health Care II* 4(1+3)

Prasyarat : NUR3508

Kursus ini memperkukuhkan peranan jururawat pediatrik dalam menjagarawat klien pediatrik yang mengalami gangguan sistem berkaitan dan jangkitan

This course strengthens the role of paediatric nurses in the care of paediatric clients with altered function of the related system and infections

NUR3510 Kesihatan Umum dan Jagaan Kesihatan Umum Komuniti/ *Community Health and Community Healthcare* 4(1+3)

Prasyarat : Tiada

Kursus ini merangkumi konsep jagarawatan ibu dan anak di komuniti. Tajuk yang dibincangkan merangkumi jagarawatan ibu mengandung yang berisiko tinggi, penyaringan kesihatan wanita, kesihatan kanak-kanak pra-sekolah, perkhidmatan kesihatan sekolah dan pemakanan ibu dan anak. Pelajar ditempatkan di pusat kesihatan untuk mempraktikkan kemahiran dalam jagarawatan kesihatan ibu dan anak

This course encompasses concepts of maternal and child health nursing. Topics covered include care of high risk mothers, screening in women health, pre-school child health, school health service and maternal and child nutrition. Students will be placed in health centres to practice skills in maternal and child health nursing

NUR3511 Program Kesihatan dan Isu Jagaan Kesihatan Komuniti/ *Health Programme and Community Health Care Issues* 4(1+3)

Prasyarat : NUR3510

Kursus ini memperkukuh pengetahuan dan amali jagarawatan komuniti. Ia merangkumi pelbagai konsep dan perkhidmatan berkaitan isu kesihatan komuniti, program kawalan penyakit berjangkit, kesihatan persekitaran dan pekerjaan. Penjagaan kanak-kanak berkeperluan khas ditekankan. Isu mental dan sosial dalam komuniti juga dibincangkan. Pelajar ditempatkan di pusat kesihatan komuniti untuk mempraktikan kemahiran dalam jagarawatan kesihatan komuniti

This course strengthen the knowledge and practice in community nursing care. It compasses various concepts and services related to community health issues, communicable diseases program, environmental and occupational health. Nursing care of children with special needs is emphasized. Mental and social issue is also discussed. Students will be placed in community health centers to practice related skills

NUR3521 Jagarawatan Warga Emas/ *Care of The Older Person* 3(2+1)

Prasyarat : Tiada

Kursus ini merangkumi proses penuaan dan implikasi perubahan demografi terhadap penjagaan warga emas. Pelbagai isu perubahan warga emas dan implikasi terhadap kesihatan warga emas dibincangkan. Pelajar mengaplikasikan pengetahuan dan kemahiran dalam jagarawatan warga emas di hospital dan komuniti. Pelbagai isu semasa berkaitan perkhidmatan jagarawatan warga emas oleh agensi kerajaan dan bukan kerajaan, penjaga dan komuniti juga dibincangkan

This course encompasses the process of ageing and implications of demography changes on health care of the elderly. Issues on changes and its implications on the health of the elderly are discused. The students apply their knowledge and skills in providing nursing care to the elderly in hospital and community setting. This course critically examines various issues related to nursing care and health provisions by government and non-government agencies, caregivers and the community

NUR3522 Jagarawatan Klien Kenser dan HIV/ *Care Of Cancer and HIV Clients* 2(1+1)

Prasyarat : Tiada

Kursus Ini Merangkumi Jagarawatan Kanser Dan HIV/AIDS. Pelajar Perlu Mengurus Jagarawatan Di Hospital Dan Komuniti

This course encompasses nursing care of cancer, HIV/AIDS. Students are required to manage nursing care at the hospital and community

NUR3516 Jagarawatan Kritikal I/ *Critical Care I* 4(1+3)

Prasyarat : Tiada

Kursus ini memberi penekanan kepada prinsip pengurusan rawatan kritikal yang mengukuhkan kemahiran pelajar dalam jagarawatan klien kritikal, dengan pendekatan psikososial dalam bidang trauma, rawatan rapi dan haemodialisis

This course emphasizes on the principles of critical management that strengthens students' skills in the care of the critical client applying the psychosocial approach in the field of trauma, intensive care and haemodialysis

NUR3517 Jagarawatan Kritikal II/ *Critical Care II* 4(1+3)

Prasyarat : NUR3516

Kursus ini memperkukuhkan Jagarawatan klien kritikal di Jabatan Kecederaan dan Kecemasan, dan di Unit Rawatan Rapi. Pelajar akan didedahkan pada aspek teori dan praktikal jagarawatan pra dan pos pembedahan kardiak

This course strengthens care of the critical in the Accident and Emergency Department and Intensive Care Unit. Students will also be exposed to the theoretical and practical aspects of pre and post cardiac surgery care

NUR3518 Jagarawatan Medikal Surgikal I/ *Medical-Surgical Care I* 4(1+3)

Prasyarat : Tiada

Pelajar mengaplikasikan pengetahuan dan kemahiran mengurus klien melalui amali intensif di wad medikal dan surgikal. Kursus ini memberi tumpuan khusus kepada kemahiran jagarawatan klien yang mengalami kecemasan medikal / surgikal

The student will apply knowledge and skill pertaining to client management through intensive practice in the medical and surgical wards. This course focuses on the care of clients with medical and surgical emergencies

NUR3519 Jagarawatan Medikal Surgikal II/ *Medical-Surgical Care I* 4(1+3)

Prasyarat : NUR3518

Pelajar akan mengaplikasikan pengetahuan dan kemahiran mengurus klien melalui amali intensif di wad medikal dan surgikal. Kursus ini memberi tumpuan khusus kepada kemahiran jagarawatan klien yang mengalami kes kecemasan medikal / surgikal

The student will apply knowledge and skill pertaining to client management through intensive practice in the medical and surgical wards. This course focuses on the care of clients with medical and surgical emergencies

NUR3911 Latihan Klinikal I/ *Clinical Practice I* 3(0+3)

Prasyarat : NUR3201

Latihan klinikal I merangkumi konsep asas jagarawatan holistik klien di hospital. Tajuk yang dibincangkan merangkumi komunikasi terapeutik, kawalan jangkitan dan proses kejururawatan.

This clinical nursing skill I encompasses holistic nursing care in the hospital. Topics covered include therapeutic communication, standard precaution and nursing process

NUR 3912 Latihan Klinikal II/ *Clinical Practice II* 3(0+3)

Prasyarat : NUR3911

Latihan klinikal II merangkumi konsep asas jagarawatan holistik klien di hospital. Tajuk yang dibincangkan merangkumi pemberian ubatan, prinsip aseptik dan asas pengurusan luka.

This clinical nursing skill II encompasses holistic nursing care in the hospital. Topics covered include drug administration, principal of aseptic technique and basic wound management

NUR 3913 Latihan Klinikal III/ *Clinical Practice III* 3(0+3)

Prasyarat : NUR3912

Kursus klinikal III merangkumi jagarawatan klien dewasa yang menghidapi masalah kesihatan berkaitan gangguan sistem kardiovaskular, respiratori, renal dan hematologi. Pelajar perlu mengaplikasi pengetahuan proses patofisiologi dan reaksi tingkahlaku yang bersesuaian dalam jagarawatan klien.

Clinical course III covers nursing care of the adult clients with health problems related to altered cardiovascular, respiratory, renal and hematology systems. Students are required to apply their knowledge of the pathological process and exhibit appropriate behavioral reaction in the care of their clients

NUR3914 Latihan Klinikal IV/ *Clinical Practice IV* 3(0+3)

Prasyarat : NUR3913

Kursus klinikal IV merangkumi jagarawatan klien yang menghidapi gangguan fungsi dalam sistem oftalmik, telinga, hidung, tekak, sistem imun, trauma dan kecemasan. Pelajar perlu mengaplikasikan pengetahuan patofisiologi, sains tingkahlaku dan prinsip pengurusan sakit dalam jagarawatan klien, serta penjagaan klien pra, intra dan pos pembedahan.

Clinical course IV covers the care of clients with altered functions of ophthalmic, ear, nose, throat,immune system,trauma and emergency. Students will be required to apply the knowledge of pathophysiology, behavioral science and the principles of pain management in delivering nursing care. This course also covers care of clients pre, intra and post surgery

NUR3915 Latihan Klinikal V/ *Clinical Practice V* 4(0+4)

Prasyarat : NUR3914

Kursus latihan klinikal ini merangkumi huraian konsep yang berkaitan dengan amalan jagarawatan muskuloskeletal, endokrin, gastrousus, neurologi, obstetrik dan ginekologi

This clinical training course includes a description of the concepts relevant to the nursing care practice client musculoskeletal, endocrine, gastrointestinal, neurological, obstetric and gynaecology

NUR3916 Latihan Klinikal VI/ *Clinical Practice VI* 4(0+4)

Prasyarat : NUR3915

Kursus klinikal ini memberi tumpuan pada jagarawatan klien pediatrik, onkologi, komuniti dan kritikal. Pelajar perlu mempraktikkan kaunseling, pemikiran kritis, kreatif dan reflektif dalam menjalankan jagarawatan klien.

This clinical course focuseson the care of paediatric, oncology, community, and critical client. Students are required to apply counseling, critical thinking, creative and reflection in delivering their nursing care

NUR3917 Latihan Klinikal VII/ *Clinical Practice VII* 3(0+3)

Prasyarat : NUR3916

Kursus klinikal ini memperkukuh kemahiran dalam jagarawatan klien medikal, surgikal, dan psikiatrik.

This clinical course further strengthens the student's nursing care ability in medical, surgical, and psychiatric clients

NUR3918 Latihan Klinikal VIII/ *Clinical Practice VIII* 3(0+3)

Prasyarat : NUR3917

Kursus latihan klinikal ini merangkumi huraian konsep yang berkaitan dengan amalan jagarawatan warga emas. Pelajar perlu melaksanakan pengurusan di wad

This clinical course covers elderly care related concepts. Students are required to practice ward management and care for the elderly

NUR4999 Projek Ilmiah Tahun Akhir/ *Final Year Project* 6(0+6)

Prasyarat : NUR3001

Kursus ini merangkumi penyediaan cadangan projek penyelidikan, perlaksanaan dan analisis data dengan mengambil kira isu etika penyelidikan. Pelajar perlu menyediakan tesis penyelidikan dan membuat pembentangan lisan

This course covered the preparation of a research project proposal, its implementation, and data analysis with research ethics consideration. Students are required to prepare a thesis and make an oral presentation

Jabatan Sains Bioperubatan*/ Department of Biomedical Sciences*

SBP3002 Kaedah Penyelidikan Bioperubatan/ *Biomedical Research Methodology* 2 (2+0)

Prasyarat : Tiada

Kursus ini merangkumi konsep dan kaedah penyelidikan bioperubatan, penentuan saiz sampel, pengumpulan data dan rekabentuk eksperimen

This course comprises the biomedical research concepts and methods, sample size determination, data collection and experimental design

SBP3003 Statistik Bioperubatan*/ Biomedical Statistics* 2 (1+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep asas dan inferens statistik, analisis data, pengujian hipotesis dan membuat kesimpulan berasaskan ujian statistik yang berkenaan

This course comprises the basic concepts of statistics and statistical inferences, data analysis, testing of hypothesis, and making conclusions based on the respective statistical tests

SBP3004 Pengurusan Haiwan Makmal*/ Laboratory Animal Management* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi peraturan dan garispanduan penggunaan dan pengendalian haiwan makmal yang betul serta pengurusan perumahan dan penyakit berdasarkan aspek anatomi dan fisiologi haiwan makmal

This course covers the legislations and guidelines of proper use and handling techniques of lab animals, the management of housing and common diseases in lab animals based on the animal's anatomical and physiological aspects

SBP3005 Pengurusan Makmal*/ Laboratory Management* 2 (2+0)

Prasyarat : Tiada

Kursus ini memberi pendedahan kepada pelajar tentang aspek pengurusan makmal yang baik dan selamat. Komponen penting dalam organisasi dan operasi makmal serta akta berkaitan turut dibincangkan

This course exposes the students to the concept of save and effective laboratory management. The important elements in the organization, laboratory operation and related acts are discussed

SBP3006 Sains Makmal dan Instrumentasi/ *Laboratory Science and Instrumentation* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi pengenalan, pengendalian dan penyelenggaraan peralatan utama di dalam penyelidikan bioperubatan

This course encomposses introduction, handlin and, maintenance of major instruments in biomedical research

SBP3007 Tajuk Khas Dalam Sains Bioperubatan*/ Special Topic in Biomedical Sciences* 2 (1+1)

Prasyarat : Tiada

Kursus ini mendedahkan pelajar kepada isu semasa merangkumi kajian, teknologi dan penemuan dalam bioperubatan. Kemahiran dalam penyampaian maklumat santifik melalui penulisan dan pembentangan lisan juga di tekankan

This course exposes students to the current issues covers research, technology and discovery in biomedical sciences. Skills in the delivery of scientific information through writing and oral presentations are emphasized

SBP3008 Kajian Kes/Penyelesaian Masalah **/** *Case study/Problem Solving* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi integrasi pengetahuan dalam sains bioperubatan melalui pembelajaran berasaskan masalah yang akan membentuk keupayaan pemikiran kritis, kerja berpasukan dan perkongsian maklumat

This course covers the integration of knowledge in biomedical sciences through problem based learning, which include the development of critical thinking abilities, deductive reasoning, team work and information sharing

SBP3112 Sistem Integumen, Rangka Dan Otot/ *Integument, Skeletal And Muscle Systems* 2 (1+1)

Prasyarat : Tiada

Kursus ini merangkumi anatomi dan fisiologi sistem integumen, sistem rangka dan sistem otot dan proses yang berkaitan. Proses persenyawaan dan peringkat awal perkembangan embrio turut dibincangkan

This course encompasses anatomy and physiology of integumen system, skeletal system and muscular system and all related processes. The process of fertilization, early development of embryo are discussed

SBP3113 Sistem Saraf, Kardiovaskular, Limfatik Dan Endokrin/ *Nervous, Cardiovascular, Lymphatic and Endocrine Systems* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi organisasi serta anatomi, fungsi dan peranan sistem saraf, deria khas, endokrin, kardiovaskular dan limfatik

The course encompasses the organization and anatomy, function and role of the nervous system, special senses, endocrine, cardiovascular and lymphatic system

SBP3114 Sistem Respiratori, Pencernaan Dan Persekitaran/ *Respiratory, Digestive and Environmental Systems* 2 (1+1)

Prasyarat : Tiada

Kursus ini merangkumi struktur organisasi, fungsi, perubahan dan gangguan sistem respiratori dan sistem pencernaan. Kursus ini juga membincangkan kesan persekitaran terhadap fisiologi manusia

This course encompasses the structure organization, functions, alteration and disorder of the respiratory and digestive systems. This course also discusses the effects of environment towards human physiology

SBP 3115 Sistem Pembiakan Dan Urinari/ *Reproductive and Urinary Systems* 2 (1+1)

Prasyarat : Tiada

Kursus ini merangkumi struktur, organisasi, fungsi, pengawalaturan sistem pembiakan, urinari, keseimbangan asid-bes. Proses pembiakan dari peringkat persenyawaan dan perkembangan sehingga kelahiran serta penyusuan juga dibincangkan

This course encompasses the structure, organization, functions, regulation of the reproductive, urinary systems and acid-base balance. The reproductive processes from fertilization and development to birth as well as lactation arel also discussed

SBP3201 Asas Biokimia Perubatan/ *Basic medical biochemistry* 3 (2+1)

Prasyarat : Tiada

Kursus ini meliputi perubahan proses biokimia merangkumi struktur, kimia, ciri dan aspek fungsi komponen dalam sel. Metabolisme dan pengawalaturan biomolikul juga turut dibincangkan

This course covers the changes in biochemical processes, including the structural, chemical, properties and functional aspects of cellular constituents. The metabolis and regulatioan of biomolecule are also discussed

SBP3202 Biokimia Klinikal/ *Clinical Biochemistry* 3 (2+1)

Prasyarat : Tiada

Kursus ini membincangkan perubahan parameter biokimia klinikal untuk diagnosis penyakit. Teknik, prinsip analisis sampel klinikal, interpretasi data dan pengesahan untuk diagnosis penyakit turut dibincangkan

The course will discuss the changes in clinical biochemistry parameters for disease diagnosis. Techniques, analysis principles of clinical sample, data interpretation and validation for disease diagnosis are to be discussed

SBP3301 Farmakologi/ *Pharmacoloy* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi prinsip farmakologi dan kegunaan drug dalam rawatan pelbagai penyakit. Penekanan diberikan ke atas mekanisme dan lokasi tindakan, penggunaan terapeutik dan keracunan/ kesan sampingan drug dalam perubatan

This course covers the principles and basis of pharmacology and utilization of drugs for treating various diseases. Emphasis is on the effects of drugs on mechanism, location of action, therapeutic uses and side-effects/adverse effects of drug reactions in medicine

SBP3302 Toksikologi/ *Toxicology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi prinsip toksikologi dan kesan racun terhadap sistem mamalia. Teknik mengenal pasti racun, menganalisa dan interpretasi data toksikologi turut dibincangkan

This course covers the principles in toxicology and the effect of poisons on mammalians system. identification of poisons, technique of analysis and interpretation of the toxicological data also discussed

SBP3303 Toksikologi Molekul/ *Molecular toxicology* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi sitokrom P450 dan enzim metabolisma berkaitan dengan toksisiti. Mekanisma molekul drug dan toksisiti zenobiotik meliputi imunofarmakologi, imunotoksikologi, toksikologi pembiakan dan pertumbuhan, karsinogenesis dan teratogenesis turut dbincangkan

This course covers cytochrome P450 and enzymes in relation to drug toxicity. Molecular mechanism of drug and xenobiotic-induced toxicity in immunopharmacology, immunotoxicology, reproductive and developmental toxicology, carcinogenesis and teratogenesis are discussed

SBP3401 Hematologi/ *Hematology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi pembentukan sel darah dan faktor terlibat. Fungsi sel darah merah, sel darah putih, trombosit, sistem pembekuan, trombosis, kumpulan darah dan transfusi dibincangkan. Tindakbalas sel darah dalam penyakit, pengkelasan gangguan hematologi, ujian diagnosis makmal, amalan makmal yang selamat dan jaminan kualiti turut juga dibincangkan

This course covers the formation of blood cells and factors involved. The functions of red blood cells, white blood cells, thrombocytes, coagulation system, thrombosis, blood groups and blood transfusion are discussed. The response of blood cells in diseases, classification of specific haematological disorders laboratory diagnoses tests, safe laboratory practice and quality assurance are also discussed

SBP3402 Imunologi/ *Immunology* 3 (2+1)

Prasyarat : Tiada

Kursus ini memperkenalkan kepada pelajar konsep keimunan serta penerangan mengenai sel-sel dan molekul-molekul (sitokine, antibodi) dalam respon imun. Kursus ini juga membincangkan mengenai peranan sistem keimunan dalam inflamasi, patogen berjangkit, tumor, autoimuniti, alergi, pemindahan organ dan rejeksi, akibat imunologikal dari keadaan imunodefisiensi dan mekanisme kerosakan tisu.
This course will introduce to the concept of immunity, an overview of the cells and molecules (eg. cytokines, antibodies) in the immune response. This course also discuss on the role of the immune system in response to inflammation, infectious pathogens, tumours, autoimmunity, allergy, organ transplantation and rejection, immunological consequences of immunodeficiency states and mechanisms of tissue damage

SBP3403 Asas Mikrobiologi Perubatan/ *Basic Medical Microbiology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi pengetahuan asas mikrobiologi dan teknik asas pengkulturan dan diagnosis mikrob. Perkembangan kejadian penyakit juga dibincangkan

This course covers basic knowledge of microbiology and basic techniques in microbial cultivation and diagnosis. The development of diseases also will be discussed

SBP3404 Parasitologi dan Entomologi Perubatan/ *Medical Parasitology and Entomology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi patofisiologi, imunologi, diagnosis, kemoterapi dan pencegahan penyakit bawaan parasit. Bahagian entomologi merangkumi atropoda sebagai vektor di dalam transmisi penyakit, serangan dan kecederaan tisu. Kawalan, diagnostis dan pencegahan akan juga dibincangkan

This course encompasses the pathophysiology, immunology, diagnosis, chemotherapy and prevention of parasitic diseases. The entomology section covers arthropods as vectors in disease transmission, their tissue invasion and injuries. Control, diagnosis and prevention will also be discussed

SBP3405 Patologi/ *Pathology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep tindakbalas tisu terhadap kecederaan, perkaitannya dengan penyebab, patogenesis dan diagnosis beberapa penyakit penting. Teknik persampelan tisu, histologi, histokimia dan immunohistokimia dalam diagnosis dan penyelidikan juga dibincangkan

This course covers the concept of tissue reactions to injury, relationship between causes, pathogenesis and diagnosis of important diseases. Tissue's sampling techniques, histology, histochemistry and immunohistochemistry in diagnosis and research also will be discussed

SBP3407 Sains Transfusi dan Bank Darah*I Blood Transfusion and Blood Bank* 3 (2+1)

Prasyarat : SBP 3401

Kursus ini merangkumi kaedah flebotomi, kumpulan dan komponen darah dan ujian berkaitan pretransfusi dan reaksi transfusi

This course encamposses technique of phlebotomy, blood grouping and component and test for pretransfusion and transfusion reaction

SBP3408 Imunologi Asas*I Basic Immunology* 2 (2+0)

Prasyarat : Tiada

Kursus ini merangkumi konsep asas imunologi, mekanisma pengawalan, gangguan sistem imun dan aplikasinya dalam penyakit dan diagnosis

This course covers the fundamental concepts of immunology, mechanisms of control, disorders of the immune system and their application in disease and diagnosis

SBP3409 Immunologi Lanjutan*I Advanced Immunology* 2 (1+1)

Prasyarat : SBP3408

Kursus ini membincangkan butiran perubahan molekul semasa gerakbalas imun. Mekanisma imunopatogenetik penyakit imun, tolerans, keautoimunan dan imunologi tumor turut dibincangkan

This course discusses molecular events during immune response. Immunopathogenetic mechanisms of immune disease, tolerance, autoimmunity and tumour immunology are also discussed

SBP3410 Kultur Sel dan Tisu*I Cell and Tissue Culture* 3 (2+1)

Prasyarat : Tiada

Kursus ini memperkenalkan konsep asas pengkulturan sel dan tisu mamalia. Prosedur pengkulturan termasuk teknik aseptik, sterilisasi, analisa pertumbuhan, pembezaan, kematian dan kontaminasi turut bincngkan

This course introduces the fundamental concepts of mamalian cell and tissue cultur. Cell culturing procedures including matrials, aseptic technique and sterilization, analysis of cell growth, differentiation, death and contamination are also discussed

SBP3501 Sitogenetik/ *Cytogenetics* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi pengenalan kepada sitogenetik, kitaran sel, morfologi kromosom, kelainan kromosom serta implikasi sitogenetik dalam etika perubatan

This course encompasses an introduction to cytogenetics, the cell cycle, morphology of chromosomes, chromosomal aberrations and the implications of cytogenetics in medical ethics

SBP3502 Genetik Manusia/ *Human Genetics* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi undang-undang keturunan yang berlaku terhadap manusia dan untuk mempelajari sifat-sifat warisan. Ini termasuk Mendel dan warisan variasi Mendel, komposisi dan fungsi gen, penyebab dan kesan mutasi, genetik populasi, sitogenetik, sumbangan warisan terhadap perilaku dan kecerdasan, kaunseling genetik, dan kejuruteraan genetik

This course encompasses the laws of heredity as they apply to humans and to the study of inherited traits. This covers Mendelian and Non-Mendelian inheritance, the composition and function of genes, the causes and effects of mutation, population genetics, cytogenetics, the contribution of heredity to behaviour and intelligence, genetic counselling, and genetic engineering

SBP3503 Biologi Molekul Gunaan/ *Applied Molecular Biology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi kaedah, peralatan, aliran dan teknik terkini dalam bidang biologi molekul. Pengklonan gen, manipulasi DNA, pencirian ekspresi gen dan penyaringan perpustakaan gen akan dibincangkan

This course discusses the methods, tools, current trends and techniques in of molecular biology. Gene cloning, DNA manipulation, characterization of gene expression and screening of gene libraries will be discussed

SBP3504 Teknologi Sitogenetik Gunaan/ *Applied Cytogenetic Technology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi teknik diagnosis sitogenetik terkini seperti mekanisme penyusunan semula kromosom, kehilangan, dan duplikasi, klasikal dan ketidaknormalan kromosom yang menyebabkan penyakit, dan teknik molekular sitogenetik

This course encompasses the current cytogenetics diagnostic techniques such as mechanisms of chromosomal rearrangement, loss, and duplication, classical and chromosomal abnormalities leading to disease, and molecular cytogenetics techniques

SBP3506 Kaedah Eksperimen Molekular Transgenik/ *Method of Molecular Experimental Transgenics* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi perkembangan terkini bidang penghasilan transgenik, potensi penggunaan haiwan transgenik dalam penyelidikan bagi kajian penyakit manusia termasuk juga isu etika haiwan modifikasi genetik

This course encompasses recent advances in areas of production of transgenic animals, its potential applications in research to study human diseases. It also includes the ethical issues surrounding genetically modified animals

SBP3507 Genetik Asas*I Basic Genetics* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi genetik klasik dan molekul, prinsip warisan dan alasan bagi variasi dalam semua organisma hidup. Ini termasuk prinsip Mendel, genetik populasi dan molekul, mekanisme penentuan dan pertalian seks, struktur DNA dan fungsi, aberasi dan mutasi kromosom.

This course covers the classical and molecular genetics, the principles of inheritance and the reasons for the variation in living organisms. These include the principles of Mendel, molecular, and population genetics, mechanisms of sex determination and sex linkage, structure and function of DNA, chromosomal aberrations and mutations.

SBP3510 Bioinformatik Asas/ *Basic Bioinformatics* 3 (2+1)

Prasyarat : Tiada

Kursus ini memperkenalkan konsep dan amalan bioinformatik dalam sekitaran maya internet dan entiti komersial. Penekanan adalah kepada aspek teori dan praktikal program untuk menganalisa serta mengolah jujukan asid nukleik dan protein

This course introduces bioinformatics concepts and practice that are available in the virtual environment of the internet and commercial entities. Emphasis will be given to the theory and practical aspects of programs for the analysis and manipulation of nucleic acid and amino acid sequences

SBP4108 Radiobiologi/ *Radiobiology* 3 (2+1)

Prasyarat : Tiada

Kursus ini membincangkan sifat, pengesanan, pengukuran dan pengenalpastian bahan radioaktif dan sinaran mengion. Kesan biologi dan penggunaan bahan radioaktif dan sinaran mengion secara selamat dalam penyelidikan dan perubatan turut dibincangkan

This course discusses the properties, detection, measurement and identification of radioactive materials and ionizing radiation. Biological effects of radioactive materials and ionizing radiation including their safty used in research and medicine are also discussed

SBP4903 Latihan Industri/ *Industrial Training* 4 (0+4)

Prasyarat : Tiada

Kursus ini merangkumi latihan amali di makmal penyelidikan atau diagnostik perubatan di agensi kerajaan atau swasta selama 8 minggu mengikut jam waktu berkerja. Pelbagai aspek dari pengumpulan sampel, analisis, mengesahkan keputusan, kegunaan dan pengurusan peralatan akan dipelajari. Kemahiran asas dalam amalan makmal akan turut diperolehi

This course encompasses practicle training in research or diagnostic laboratories at government or private agencies for the duration of 8 weeks at normal office working hours. Various aspects of sample collection, analysi, result validatio, use and management of equipments will be learned. Students also will obtained basic skills in laboratory practices

SBP4990 Projek Ilmiah Tahun Akhir/ *Final Year Research Project* 8 (0+8)

Prasyarat : Tiada

Kursus ini merangkumi penyediaan cadangan projek, perlaksanaan, pengumpulan dan analisis data dengan mengambil kira isu etika penyelidikan. Pelajar perlu membentangkan hasil penyelidikan dan menyediakan penulisan kertas ilmiah

This course covers the preparation of a research proposal, implementation, collection and analyses of data with ethical issues taken into consideration. Students are required to present their research findings and produce a dissertation

SBP4301 Kimia Farmaseutikal/ *Pharmaceutical Chemistry* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi penggunaan drug sebagai agen terapeutik, mekanisme tindakan, keracunan dan kestabilan drug. Faktor kimia organik, biokimia, asas fisiologi dan farmakologi untuk kumpulan drug dibincangkan. Penekanan diberi kepada penggunaan terapeutik dan kesan spesifik drug.

This course covers usage of drugs as therapeutic agents, mechanism of action, toxicity and drug stability. Factors such organic chemistry, biochemistry and basic physiology and pharmacology of groups of drugs are discussed. Emphasis is given on the therapeutic utilisation and specific actions of drugs

SBP4302 Etnofarmakologi/ *Ethnopharmacology* 3 (3+0)

Prasyarat : SBP3301

Kursus ini merangkumi etnofarmakologi untuk menilai dan memahami kegunaan tumbuhan dalam perubatan. Disiplin terlibat dalam penyelidikan etnofarmakologi berkaitan kesan produk semulajadi, efikasi tumbuhan ubatan dan pembangunan farmaseutikal berasaskan perubatan tradisional turut dibincangkan

This course encompasses ethnopharmacology to evaluate and understand the use of plants in medical systems. Disciplines involved in ethnopharmacological and the effect of natural productse efficacy of medicinal plants and the development of pharmaceuticals based on traditional medicines be discussed

SBP4401 Mikrobiologi Perubatan Lanjutan/ *Advanced Medical Microbiology* 3 (2+1)

Prasyarat : Tiada

Kursus ini membincangkan hubungan mikroorganisma dan persekitaran dengan patogenesis penyakit, epidemiologi dan diagnosis makmal. Strategi kawalan serta pencegahan penyakit berjangkit turut dibincangkan

This course discusses the relationship of microorganisms and environment with pathogenesis of diseases, epidemiology and laboratory diagnosis. Control strategies and prevention of infectious diseases are also discussed

SBP4402 Pengisyaratan Sel dan Transduksi Isyarat/ *Cell Signaling & Signal Transduction* 2 (2+0)

Prasyarat : Tiada

Kursus ini memperkenalkan ciri asas berbagai sistem pengisyaratan ekstrasel dan intrasel dan kepentingannya dalam berbagai sistem biologi. Kursus ini membincangkan komponen utama mekanisme pengisyaratan ekstrasel dan intrasel dan bagaimana komponen utama ini menghasilkan tapak-jalan pengisyaratan. Kursus ini juga memperkenalkan *Cytoscape*, satu perisian bioinformatik sumber terbuka bagi menghasilkan peta jaringan berbagai tapak-jalan pengisyaratan terpilih

The course presents a basic features various extracellur and intracellular signaling systems and the importance in biological systems. The course also discusses the key components of extracellular and intracellular signaling mechanisms and how these components create signaling pathways. The course introduces Cytoscape*, an open source bioinformatics platform for creating network maps of selected signaling pathways*

SBP4501 Bioinformatik dan Sumber Bioperubatan/ *Bioinformatic and biomedical sources* 3 (2+1)

Prasyarat : Tiada

Kursus ini memperkenalkan aturcara komputer dalam biokomputasi internet dan komersial untuk mengenalpasti identiti gen dan membuat perbandingan jujukan asid nukleik dengan protein. Hubungan bioinformatik dengan terapi gen dan perubatan molekul juga akan dibincangkan

This course introduces computer programs for biocomputing in the internet and commercial for identifications of genes, nucleic acid and amino acid sequences. The linkage between bioinformatics to gene therapy and molecular medicine are also discussed

SBP4502 Forensik Asas*I Basic Forensic* 3 (2+1)

Prasyarat : Tiada

Kursus ini meliputi prinsip dan aplikasi ilmu sains dan teknologi bagi menganalisa pelbagai bukti dari tempat kejadian. Ia juga meliputi ujikaji makmal, pemerhatian peribadi, mencatat, membaca dan membuat perhatian terhadap filem yang berunsurkan pendidikan, dan komersial berkaitan dengan ilmu forensik. Keupayaan dan kelayakan pakar penyiasat, keadaan keputusan yang dikeluarkan dari makmal, dan undang-undang yang digunakan dalam memperakukan keputusan ujian juga akan dibincangkan

This will cover the principles and the application of science and technology to various analyses of crime scene evidence. It includes experimentation, personal observation, note taking, reading and attention to educational films, and commercially films related to forensic science. Scope of expert investigation and qualification, the nature of the results which may be expected from the laboratory and the law as it applies to the admission of test results in evidence also will be discussed

SBP4503 Aspek Sosial dalam Genetik dan Bioteknologi/ *Social Aspects of Genetics and Biotechnology* 2 (2+0)

Prasyarat : Tiada

Kursus ini membincangkan aspek sosial dalam bidang bioteknologi dan genetik molekul umpamanya penyelidikan sel stem, pengklonan dan organisma terubahsuai secara genetik. Penekanan di beri kepada kawalan dalam penyelidikan, harta intelek, keizinanan, pemahaman awam terhadap sains, penglibatan awam dan isu-isu persekitaran

This course discusses the social aspects of biotechnology and molecular genetics such as stem cell research, cloning dan genetically modified organisms. Emphasis is given on governance of research, intellectual property rights, informed consent, public understanding of science, public engagement and environmental issues

SBP4504 Variasi dan Evolusi Manusia*I Human variation and evolution* 3 (3+0)

Prasyarat : Tiada

Kursus ini merangkumi pemahaman kepada kepelbagaian manusia secara individu atau populasi dari sudut genetik dan struktur biologi. Penekanan diberi kepada ciri-ciri genotip dan mekanisma yang menyumbangkan kepada kewujudan variasi ini berdasarkan penemuan-penemuan sains didalam bidang genetik manusia. Teknik-teknik terkini untuk mengukur variasi manusia diperkenalkan berserta implikasi perbezaan ini dalam etika perubatan

This course encompasses an understanding of human variation between an individual and populations in term of genetic and biological structure. Emphasis will be given to genetic features and mechanisms that create this variation based on scientific findings in human genetic. Current technologies for measuring this variation will be introduced and the implications of genetic differences in medical ethics

SBP4603 Bioteknologi Perubatan*I Medical Biotechnology* 3 (2+1)

Prasyarat : Tiada

Kursus ini memberi penekanan kepada aspek teknologi DNA dan penggunaannya dalam diagnosis dan penyelidikan. Peranan enzim penghad, jenis dan penggunaan vector, kepentingan teknologi PCR, pencirian pengklonan jujukan DNA, penggunaan bioteknologi dalam penghasilan farmasi, industri makanan dan minuman turut dibincangkan

This course emphasis aspects of DNA technology and its applications in diagnosis and research. Role of restriction enzymes, types of vectors and their uses, the importance of Polymerase Chain Reaction technology, characterization of clone DNA sequence, application of biotechnology to the production of pharmaceutical, food and drink industry are also discussed

SBP4902 Praktikum Bioperubatan*I Practicum Biomedical* 8 (0+8)

Prasyarat : Tiada

Kursus ini merupakan latihan amali untuk meningkatkan kemahiran kerja analisa dimakmal yang merangkumi penyediaan larutan, penyediaan dan analisa sampel serta interpretsi data. Penyelenggaraan mudah alat makmal juga akan dipelajari

This course is the practicel training to increase the students' skill in labarotory analytical work. It inclues preparation of solution, preparation and analysis of samples as well as data interpretation. Simple management of eqiepments also will be learned

KURSUS TAWARAN FAKULTI LAIN

(Sila rujuk sinopsis pada fakulti berkenaan)

1. FAKULTI EKOLOGI MANUSIA

1.1	SKP2203	Tamadun Islam Tamadun Asia/ *Islamic Civilization and Asian Civilization*	2 (2+0)
1.2	SKP2204	Hubungan Etnik/ *Ethnic Relations*	2 (2+0)
1.3	SKP2101	Kenegaraan Malaysia/ *Malaysian Nationhood*	3 (3+0)
1.4	SKP2501	Pengantar Psikologi/ *Introduction to Psychology*	3 (2+1)
1.6	PSP4102	Pengguna dan Kualiti Hidup/ *Consumption And Quality Of Life*	3 (3+0)
1.7	PSP4200	Etika Pengguna dan Peniaga/ *Consumer And Business Ethics*	3 (3+0)
1.8	SKP3102	Masalah Sosial/ *Social Problem*	3 (3+0)
1.9	SKP2102	Pengantar Sosiologi dan Antropologi Sosial/*Introduction to Sociology and Social Anthropology*	3 (3+0)

2. FAKULTI PERTANIAN

2.1	PRT2008	Pertanian dan Manusia/ *Agriculture and Human*	2 (2+0)

3. FAKULTI BAHASA MODEN DAN KOMUNIKASI

3.1	BBI2423	Academic Interaction and Presentation	3 (2+1)
3.2	BBI2424	Academic Writing	3 (2+1)
3.3	KOC3433	Kemahiran Komunikasi Dalam Organisasi/ *Organisational Communication Skills*	3 (3+0)
3.4	KOH3361	Komunikasi Antara Budaya/ *Intercultural Communication*	3 (3+0)
3.5	KOH3401	Komunikasi Kumpulan Kecil/ *Small Group Communication*	3 (3+0)
3.6	KOM3207	Pengenalan Kepada Teori Komunikasi/ *Introduction To Communication Theory*	3 (3+0)
3.7	KOM3305	Media, Teknologi dan Masyarakat/ *Media, Technology And Society*	3 (3+0)
3.8	KOM3403	Pengucapan Awam/ *Public Oration*	3 (3+0)
3.10	KOH3433	Kemahiran Komunikasi Interpersonal/ *Interpersonal Communication Skill*	3 (2+1)
3.11	KOB3201	Pengenalan Kepada Komunikasi Massa/ *Introduction to Mass Communication*	3 (3+0)

4. FAKULTI EKONOMI DAN PENGURUSAN

4.1	MGM3180	Asas Keusahawanan/ *Basic Entrepreneurship*	3 (2+1)
4.2	ACT2131	Perakaunan Kos dan Pengurusan/ *Cost And Management Accounting*	3 (3+0)
4.3	ECN3100	Prinsip Ekonomi/ *Principles Of Economics*	3 (3+0)
4.4	ECN3161	Ekonomi Malaysia/ *Malaysian Economics*	3 (3+0)
4.5	MGM3211	Prinsip Pemasaran/ *Principles Of Marketing*	3 (3+0)

5. FAKULTI SAINS DAN TEKNOLOGI MAKANAN

5.1	FSM3001	Pengenalan Industri Makanan/ *Introduction To Food Industry*	3 (3+0)
5.2	FSM3005	Rekabentuk, Susunatur Peralatan/ *Equipment Layout Design*	3 (3+0)
5.3	FST3001	Pengenalan Kepada Teknologi Pemprosesan Makanan/ *Introduction To Food Processing Technology*	2 (2+0)
5.4	FST3002	Halal dan Haram dalam Pemprosesan Makanan/ *Halal And Haram In Food Processing*	2 (2+0)
5.5	FST3003	Pengenalan Kepada Sains Makanan/ Introduction To Food Science	3 (3+0)
5.6	FST3004	Pengenalan Kepada Sains dan Teknologi Makanan/ *Introduction To Food Science And Technology*	
5.7	FST3108	Perubahan Pemakanan dalam Makanan/ *Nutritional Changes In Food*	3 (3+0)
5.8	FST4806	Kebersihan Makanan dan Sanitasi/ *Food Hygiene And Sanitation*	2 (2+0)
5.9	FST4814	Perundangan Makanan/ Food Laws	2 (2+0)
5.10	FST4904	Pemakanan dan Kesihatan/ *Nutritional And Health*	4 (4+0)

6. FAKULTI PENGAJIAN PENDIDIKAN

6.1	CPE3205	Teori dan Amalan Kaunseling Afektif	3 (3+0)
6.2	CPE3300	Kaunseling Pelbagai Budaya/ *Multicultural Counselling*	3 (3+0)
6.3	CPE3202	Pengantar Bimbingan Dan Kaunseling/ *Introduction To Guidance And Counseling*	3 (3+0)
6.4	CPE3401	Kaunseling Kelompok/ *Group C0unselling*	3 (1+2)
6.5	SPE3303	Kesihatan Komuniti Dan Persekitaran/ *Environment And Community Health*	3 (3+0)
6.8	SPE3306	Kesihatan Keluarga/ *Family Health*	3 (3+0)

7. FAKULTI SAINS KOMPUTER DAN TEKNOLOGI MAKLUMAT

7.1	SMM3001	Teknologi Multimedia/ *Multimedia Technology*	3 (3+0)
7.2	SSK3000	Teknologi Maklumat dan Penggunaan/ *Information Technology And Its Applications*	3 (2+1)

BAHAGIAN KEMASUKAN & BAHAGIAN URUS TADBIR AKADEMIK
ADMISSION DIVISION & ACADEMIC GOVERNANCE DIVISION
UNIVERSITI PUTRA MALAYSIA
43400 UPM SERDANG
SELANGOR DARUL EHSAN
MALAYSIA
Tel: +603 8946 6050 / 6060 / 7822
Faks/Fax : +603 8942 6469

www.akademik.upm.edu.my

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