

FAKULTI PERUBATAN VETERINAR

Maklumat Am

Fakulti Perubatan Veterinar, Universiti Putra Malaysia (UPM) ditubuhkan pada tahun 1973. Pada masa itu UPM dikenali sebagai Universiti Pertanian Malaysia dan Fakulti sebagai Fakulti Kedokteran Veterinar dan Sains Peternakan. Fakulti kini dibentuk oleh 6 jabatan, tiga daripadanya baru diwujudkan pada tahun 2013. Tiga jabatan asal ialah Jabatan Sains Prakilinikal Veterinar yang menumpu kepada sains veterinar asas dan produksi haiwan, Jabatan Patologi dan Mikrobiologi Veterinar kepada sains parakilinikal dan Jabatan Pengajian Klinikal Veterinar kepada sains klinikal. Tiga jabatan baharu iaitu Jabatan Diagnosis Makmal Veterinar, Jabatan Perubatan dan Pembedahan Haiwan Kesayangan dan Jabatan Perubatan dan Pembedahan Haiwan Ladang dan Eksotik yang menumpu kepada perkhidmatan dan amalan klinikal.

Fakulti juga mempunyai sebuah Hospital Veterinar Universiti (UVH) yang terulung di negara ini. Hospital ini serba lengkap dan moden, memberi perkhidmatan diagnosis, rawatan, pembedahan dan penjagaan semua jenis haiwan kepada masyarakat. Kes yang dirujuk kepada UVH juga merupakan sumber untuk pengajaran pelajar program Doktor Perubatan Veterinar.

Fakulti adalah institusi pengajian tinggi pertama yang memperolehi persijilan ISO 9001 komprehensif dalam pengajaran, penyelidikan dan perkhidmatan profesional pada 7 Julai 2000. Fakulti juga diakreditasi dengan ISO 17250 untuk beberapa ujian makmal. Untuk kekal relevan dan selaras dengan era pencerantauan dan globalisasi Fakulti sedang berusaha untuk memperolehi akreditasi antarabangsa untuk program Doktor Perubatan Veterinarnya.

FACULTY OF VETERINARY MEDICINE

General Information

The Faculty of Veterinary Medicine, Universiti Putra Malaysia (UPM) was established in 1973. Then UPM was known as Universiti Putra Malaysia and the Faculty as Faculty of Veterinary Medicine and Animal Science. Currently the Faculty is composed of six departments, three of which were created in 2013. The three original departments are Department of Veterinary Preclinical Sciences focusing on basic veterinary sciences and animal production, Department of Veterinary Pathology and Microbiology on paraclinical sciences, and Department of Veterinary Clinical Studies on clinical sciences. The three new departments are Department of Veterinary Laboratory Diagnosis, Department of Small Animal Medicine and Surgery, and Department of Large and Exotic Animal Medicine and Surgery all focusing on clinical practice and service.

The Faculty also has the one and only University Veterinary Hospital (UVH) in the country. This hospital is well-equipped and modern, offering diagnostic, treatment, surgical and care services for all kinds of animal for the society. The cases referred to UVH are also sources of teaching material for the Doctor of Veterinary Medicine students.

The Faculty is the first institution of higher learning to be awarded a comprehensive ISO 9001 certification for teaching, research and professional services on 7 July, 2000. The Faculty is also accredited with ISO 17025 for several laboratory tests. To remain relevant and consistent with era of regionalisation and globalisation, the Faculty is currently in the process of acquiring international accreditation for its Doctor of Veterinary Medicine programme.

Pengurusan Fakulti/ Faculty Management

Dekan/Dean

Prof. Dr. Mohd Hair Bejo

Timbalan Dekan (Akademik & Hal Ehwal Pelajar)

Deputy Dean (Academic & Student Affairs)

Prof. Madya Dr. Siti Suri Arshad

Timbalan Dekan (Hospital Veterinar)

Deputy Dean (Veterinary Hospital)

Prof. Madya Dr. Gurmeet Kaur Dhaliwal

Timbalan Dekan (Penyelidikan & Pengajian Siswazah)

Deputy Dean (Research & Postgraduate)

Prof. Madya Dr. Zunita Zakaria

Ketua Jabatan Sains Praktikal Veterinar

Head of Department Veterinary Preclinical Sciences

Prof. Madya Dr. Goh Yong Meng

Ketua Jabatan Pengajian Klinikal Veterinar

Head of Department Veterinary Clinical Studies

Prof. Madya Dr. Jalila Abu

Ketua Jabatan Patologi dan Mikrobiologi Veterinar

Head of Department Veterinary Pathology & Microbiology

Prof. Dr. Noordin Mohamed Mustapha

Ketua Jabatan Diagnosis Makmal Veterinar

Head of Department Veterinary Laboratory Diagnosis

Prof. Madya Dr. Latiffah Hassan

Ketua Jabatan Perubatan dan Pembedahan Haiwan Kesayangan

Head of Department Small Animal Medicine and Surgery

Dr. Loqman Mohamad Yusof

Ketua Jabatan Perubatan dan Pembedahan Haiwan Besar dan Eksotik

Head of Department Large and Exotic Animal Medicine and Surgery

Dr Noraniza Mohd Adzahan

Ketua Penolong Pendaftar/Chief Assistant Registrar

En. Julbakar Tajudin

Penolong Pendaftar Kanan/ Senior Assistant Registrar

Pn. Salinah Junid

Penolong Pendaftar (Pengajian Prasiswazah)/ Assistant Registrar (Undergraduate Studies)

Pn. Rita Anak Bajat

Penolong Pendaftar (Pengajian Siswazah)/ Assistant Registrar (Graduate Studies)

En Amirudin Yusof

Program Prasiswazah yang ditawarkan
Bachelor/ *Bachelor*

1. Doktor Perubatan Veterinar/ *Doctor of Veterinary Medicine*

STRUKTUR KURIKULUM/ CURRICULUM STRUCTURE

Nama Program : Doktor Perubatan Veterinar/ *Doctor of Veterinary Medicine*
Jumlah Kredit Bergraduasi : 188 Jam Kredit/ *Credit Hours*
Tempoh Pengajian : 10 Semester/ *Semesters* (5 Tahun/ *Years*)

1. Kursus Universiti/ *University Courses* (22 Kredit/ *credits*)

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
SKP2203	Tamadun Islam dan Tamadun Asia/ <i>Asian and Islamic Civilization</i>	2	2	0
SKP2204	Hubungan Etnik / <i>Ethnic Relation</i>	2	2	0
SKP2101	Kenegaraan Malaysia/ <i>Malaysian Nationhood</i>	3	3	0
PRT2008	Pertanian dan Manusia/ <i>Agriculture and Man</i>	2	2	0
FCE3204	Kemahiran Berfikir/ <i>Thinking Skills</i>	2	2	0
KOM3403	Pengucapan Awam/ <i>Public Oration</i>	3	2	1
BB12423	Academic Interaction and Presentation	3	2	1
BB12424	Academic Writing	3	2	1
QKSXXX	Kokurikulum	2	0	2
ELEx				

2. Kursus Teras/ *Core Courses* (161 kredit/ *credits*)

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPP3021	Biokimia Veterinar/ <i>Veterinary Biochemistry</i>	3	2	1
SHW3002	Pertanian Ternakan/ <i>Animal Agriculture</i>	3	2	1
SHW3101	Produksi Ruminan/ <i>Ruminant Production</i>	3	2	1
VPP3130	Pemakanan Veterinar/ <i>Veterinary Nutrition</i>	3	2	1
VPP3140	Genetik Veterinar/ <i>Veterinary Genetics</i>	3	2	1
VPP3160	Statistik Gunaan dan Kaedah Penyelidikan/ <i>Applied Statistics & Research Methods</i>	3	2	1
VPP3170	Perniagaan Veterinar/ <i>Veterinary Business</i>	3	2	1
VPP3211	Anatomi Veterinar I/ <i>Veterinary Anatomy 1</i>	4	2	2
VPP3212	Anatomi Veterinar II/ <i>Veterinary Anatomy II</i>	4	2	2
VPP3213	Anatomi Veterinar III/ <i>Veterinary Anatomy III</i>	4	2	2
VPP3231	Fisiologi Veterinar I/ <i>Veterinary Physiology I</i>	3	2	1
VPP3232	Fisiologi Veterinar II/ <i>Veterinary Physiology II</i>	3	2	1
VPP3233	Fisiologi Veterinar III/ <i>Veterinary Physiology III</i>	3	2	1
VPP3251	Farmakologi dan Toksikologi Veterinar / <i>Veterinary Pharmacology And Toxicology</i>	4	3	1
VPP3271	Jurisprudens, Etologi Dan Kebajikan Haiwan/ <i>Jurisprudence Ethology And Animal Welfare</i>	2	2	0
VPM3301	Bakteriologi Dan Mikologi Veterinar/ <i>Veterinary Bacteriology and Mycology</i>	3	2	1
VPM3340	Virologi Veterinar/ <i>Veterinary Virology</i>	3	2	1

VPM3351	Parasitologi Veterinar I/ <i>Veterinary Parasitology I</i>	3	2	1
VPM3352	Parasitologi Veterinar II/ <i>Veterinary Parasitology II</i>	2	2	0
VPM3361	Jangkitan dan Keimunan/ <i>Infection and Immunity</i>	2	1	1
VPM3415	Patologi Veterinar I/ <i>Veterinary Pathology I</i>	3	2	1
VPM3416	Patologi Veterinar II/ <i>Veterinary Pathology II</i>	4	3	1
VPM3417	Patologi Veterinar III/ <i>Veterinary Pathology III</i>	4	3	1
VPM4430	Patologi Klinikal Veterinar/ <i>Veterinary Clinical Pathology</i>	3	2	1
VPM4500	Kesihatan Awam Veterinar/ <i>Veterinary Public Health</i>	4	3	1
VPK3702	Anestesiologi dan Bedah Am/ <i>General Surgery and Anaesthesiology</i>	4	2	2
VPK3712	Bedah Veterinar Sistem Badan/ <i>Veterinary Surgery of the Body Systems</i>	4	3	1
VPK3612	Kemahiran Klinikal Veterinar I/ <i>Veterinary Clinical Skills</i>	2	1	1
VPK3613	Perubatan Klinikal Veterinar I / <i>Veterinary Clinical Medicine I</i>	2	2	0
VPK3614	Perubatan Klinikal Veterinar II/ <i>Veterinary Clinical Medicine II</i>	3	2	1
VPK3750	Pengimejan Diagnosis Veterinar/ <i>Veterinary Diagnostic Imaging</i>	2	1	1
VPK3801	Teriogenologi / <i>Theriogenology</i>	2	2	0
VPK3910	Pengenalan Profesi Veterinar/ <i>Introduction to the Veterinary Profession</i>	1	0	1
VPK3931	Amalan Klinikal dan Diagnosis I / <i>Clinical Practice and Diagnosis I</i>	2	0	2
VPK3932	Amalan Klinikal dan Diagnosis II / <i>Clinical Practice and Diagnosis II</i>	2	0	2
VPK4620	Epidemiologi Veterinar/ <i>Veterinary Epidemiology</i>	3	2	1
VPK4640	Perubatan Felin dan Kanin/ <i>Feline and Canine Medicine</i>	3	3	0
VPK4650	Perubatan Ekuin/ <i>Equine Medicine</i>	2	2	0
VPK4660	Perubatan Ruminan/ <i>Ruminant Medicine</i>	3	3	0
VPK4670	Penyakit Babi/ <i>Pig Medicine</i>	2	2	0
VPK4680	Perubatan Burung/ <i>Avian Medicine</i>	2	2	0
VPK4692	Kesihatan Dan Pengurusan Haiwan Akuatik/ <i>Aquatic Animal Health and Management</i>	3	2	1
VPK4695	Perubatan Haiwan Eksotik & Hidupan Liar/ <i>Exotic Animal and Wildlife Medicine</i>	2	2	0
VPK4943	Amalan Klinikal Veterinar I/ <i>Veterinary Clinical Practice I</i>	6	0	6
VPK4944	Amalan Klinikal Veterinar II/ <i>Veterinary Clinical Practice II</i>	9	0	9
VPD3932	Orientasi Profesional Veterinar/ <i>Veterinary Professional Orientation</i>	3	0	3
VPD3933	Pengurusan Haiwan Ternakan I/ <i>Management of Livestocks I</i>	2	0	2

VPD3934	Pengurusan Haiwan Ternakan II/ <i>Management of Livestocks II</i>	2	0	2
VPD3935	Orientasi Klinik/ <i>Clinical Orientation</i>	1	0	1
VPD4941	Amalan Luar (Makmal Diagnosis)/ <i>Extramural Laboratory Diagnostic Practice</i>	1	0	1
VPD4945	Amalan Luar (Klinik) / <i>Extramural Clinical Practice</i>	2	0	2
VPD4970	Siasatan Masalah Veterinar/ <i>Veterinary Problem Investigation</i>	1	0	1
VPD4971	Penyelesaian Masalah Penyakit/ <i>Problem Solving in Disease</i>	1	0	1
VPD4999	Projek Ilmiah Tahun Akhir/ <i>Final Year Academic Project</i>	3	0	3
VPD4990	Sains Veterinar Gunaan/ <i>Applied Veterinary Science</i>	3	0	3

3. Elektif/ *Elective* - Bukan Berkaitan Haiwan/ *Non-Animal Related* (6 kredit/ *credits*)

KOD KURSUS/ <i>COURSE CODE</i>	NAMA KURSUS/ <i>COURSE NAME</i>	Kr	K	A/T
SSK3000	Teknologi Maklumat dan Penggunaannya/ <i>Information Technology And Its Applications</i>	3	2	1
MGM3101	Prinsip Pengurusan/ <i>Principles of Management</i>	3	3	0
ANT2001	Masyarakat dan Perubahan/ <i>Society and Change</i>	2	2	0
DCE3406	Kepimpinan dalam Pengembangan dan Pembangunan Masyarakat/ <i>Leadership In Extension & Community Development</i>	3	3	0
KOM2231	Prinsip Asas Komunikasi/ <i>Basic Communication Principles</i>	3	3	0
KOH3333	Perubahan dan Komunikasi/ <i>Changes and Communication</i>	3	3	0
KOH3401	Komunikasi Kumpulan Kecil/ <i>Small Group Communication</i>	3	3	0
KOC3433	Kemahiran Komunikasi keorganisasian/ <i>Organisational Communication Skills</i>	3	3	0
KOH3462	Debat dan Penghujahan/ <i>Argumentation and Debate</i>	3	3	0
ECN3100	Prinsip Ekonomi/ <i>Principles Of Economics</i>	3	3	0
ECN3161	Ekonomi Malaysia/ <i>Malaysian Economics</i>	3	3	0
PPT4701	Keusahawanan Perniagaan/ <i>Agribusiness Entrepreneurship</i>	3	3	0
AKU3201	Prinsip Akuakultur/ <i>Principles Of Aquaculture</i>	3	2	1
BTC 3001	Pengenalan kepada Bioteknologi/ <i>Introduction To Biotechnology</i>	2	2	0
EMG 3001	Manusia dan Alam Sekitar/ <i>Man And Environment</i>	3	3	0

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

Nota/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 4-year programmes
1 & 2	3 BBI + 3 CEL + 24 LAX points
3 & 4	2 BBI + 2 CEL + 36 LAX points
5 & 6	3 CEL + 36 LAX points

SKEMA PENGAJIAN/ STUDY SCHEMETAHUN 1/ 1ST YEARSEMESTER 1/ 1ST SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
SKP2203	Tamadun Islam dan Tamadun Asia/ <i>Asian and Islamic Civilization</i>	2	2	0
SKP2204	Hubungan Etnik / <i>Ethnic Relation</i>	2	2	0
VPP3021	Biokimia Veterinar/ <i>Veterinary Biochemistry</i>	3	2	1
SHW3002	Pertanian Ternakan/ <i>Animal Agriculture</i>	3	2	1
VPK3910	Pengenalan Profesyen Veterinar/ <i>Introduction to the Veterinary Profession</i>	1	0	1
SSK3000	Teknologi Maklumat dan Penggunaanya/ Information Technology and its Application	3	2	1
BBi	ELEx	3	2	1
VPD3932	Orientasi Profesional Veterinar/ <i>Veterinary Professional Orientation</i>	2	0	2
QKxxxx	Kokurikulum/ Co-curriculum	1	0	1
JUMLAH/ TOTAL		20	12	8

SEMESTER 2/ 2ND SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
SKP2101	Kenegaraan Malaysia/ <i>Malaysian Nationhood</i>	3	3	0
PRT2008	Pertanian dan Manusia/ <i>Agriculture and Man</i>	2	2	0
VPP3211	Anatomi Veterinar I/ <i>Veterinary Anatomy 1</i>	4	2	2
VPP3231	Fisiologi Veterinar I/ <i>Veterinary Physiology I</i>	3	2	1
VPP3130	Pemakanan Veterinar/ <i>Veterinary Nutrition</i>	3	2	1
MGM3101	Prinsip Pengurusan/ <i>Principles of Management</i>	3	3	0
BBi	ELEx	3	2	1
QKxxxx	Kokurikulum/ Co-curriculum	1	0	1
JUMLAH/ TOTAL		22	16	6

TAHUN 2/ 2ND YEARSEMESTER 1/ 1ST SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPP3212	Anatomi Veterinar II/ <i>Veterinary Anatomy II</i>	4	2	2
VPP3232	Fisiologi Veterinar II/ <i>Veterinary Physiology II</i>	3	2	1
SHW3101	Produksi Ruminan/ <i>Ruminant Production</i>	3	2	1
SHW3202	Produksi Bukan Ruminan/ <i>Non-ruminant Production</i>	4	3	1
VPP3271	Jurisprudens, Etologi Dan Kebajikan Haiwan/ <i>Jurisprudence Ethology And Animal Welfare</i>	2	2	0

VPP3140	Genetik Veterinar/ <i>Veterinary Genetics</i>	3	2	1
CEL/LAX	ELEx	DK		
VPD3933	Pengurusan Haiwan Ternakan I/ <i>Management of Livestock Animals I</i>	2	0	2
JUMLAH/ TOTAL		21	13	8

SEMESTER 2/ 2ND SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPP3213	Anatomi Veterinar III/ <i>Veterinary Anatomy III</i>	4	2	2
VPM3415	Patologi Veterinar I/ <i>Veterinary Pathology I</i>	3	2	1
VPM3301	Bakteriologi Dan Mikologi Veterinar/ <i>Veterinary Bacteriology and Mycology</i>	3	2	1
VPP3233	Fisiologi Veterinar III/ <i>Veterinary Physiology III</i>	3	2	1
VPM3351	Parasitologi Veterinar I/ <i>Veterinary Parasitology I</i>	3	2	1
CEL/LAX	ELEx	DK		
FCE3204	Kemahiran Berfikir/ <i>Thinking Skills</i>	2	2	0
KOM3403	Pengucapan Awam/ <i>Public Oration</i>	3	2	1
JUMLAH/ TOTAL		21	14	7

TAHUN 3/ 3RD YEAR

SEMESTER 1/ 1ST SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPM3352	Parasitologi Veterinar II/ <i>Veterinary Parasitology II</i>	2	2	0
VPP3251	Farmakologi dan Toksikologi Veterinar / <i>Veterinary Pharmacology And Toxicology</i>	4	3	1
VPM3416	Patologi Veterinar II/ <i>Veterinary Pathology II</i>	4	3	1
VPM3340	Virologi Veterinar/ <i>Veterinary Virology</i>	3	2	1
VPM3361	Jangkitan dan Keimunan/ <i>Infection and Immunity</i>	2	1	1
VPD4970	Siasatan Masalah Veterinar/ <i>Veterinary Problem Investigation</i>	1	0	1
CEL/LAX	ELEx	DK		
VPD3934	Pengurusan Haiwan Ternakan II/ <i>Management of Livestocks II</i>	3	0	3
JUMLAH/ TOTAL		19	11	8

SEMESTER 2/ 2ND SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPK3612	Kemahiran Klinik Veterinar / <i>Veterinary Clinical Skills</i>	2	1	1
VPK3613	Perubatan Klinik Veterinar I / <i>Veterinary Clinical Medicine I</i>	2	2	0
VPM3417	Patologi Veterinar III/ <i>Veterinary Pathology III</i>	4	3	1
VPK3702	Anestesiologi dan Operasi Am/ <i>General Surgery and Anaesthesiology</i>	4	2	2

VPK3750	Pengimejan Diagnosis Veterinar/ <i>Veterinary Diagnostic Imaging</i>	2	1	1
VPM4430	Patologi Klinikal Veterinar/ <i>Veterinary Clinical Pathology</i>	3	2	1
VPK4680	Perubatan Avian/ <i>Avian Medicine</i>	2	2	0
CEL/LAX	ELEx	DK		
VPD3935	Orientasi Klinikal/ <i>Clinical Orientation</i>	1	0	1
JUMLAH/ TOTAL		20	12	8

TAHUN 4/ 4TH YEAR

SEMESTER 1/ 1ST SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPK3614	Perubatan Klinikal Veterinar II/ <i>Veterinary Clinical Medicine II</i>	3	2	1
VPK3712	Surgeri Veterinar Sistem Badan/ <i>Veterinary Surgery of the Body Systems</i>	4	3	1
VPK3801	Teriogenologi / <i>Theriogenology</i>	2	2	0
VPK3931	Amalan Klinikal dan Diagnosis II/ <i>Clinical Practice and Diagnosis I</i>	2	0	2
VPK4695	Perubatan Haiwan Eksotik & Hidupan Liar/ <i>Exotic Animal and Wildlife Medicine</i>	2	2	0
VPP3160	Statistik Gunaan dan Kaedah Penyelidikan/ <i>Applied Statistics & Research Methods</i>	3	2	1
VPK4692	Kesihatan Dan Pengurusan Haiwan Akuatik/ <i>Aquatic Animal Health and Management</i>	3	2	1
VPD4941	Amalan Luar (Makmal Diagnosis)/ <i>Extramural Laboratory Diagnostic Practice</i>	1	0	1
VPD4945	Amalan Luar (Klinik) / <i>Extramural Clinical Practice</i>	2	0	2
JUMLAH/ TOTAL		22	13	9

SEMESTER 2/ 2ND SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPM4500	Kesihatan Awam Veterinar/ <i>Veterinary Public Health</i>	4	3	1
VPK4670	Penyakit Babi/ <i>Pig Medicine</i>	2	2	0
VPK4640	Perubatan Felin dan Kanin/ <i>Feline and Canine Medicine</i>	3	3	0
VPK3932	Amalan Klinikal dan Diagnosis II/ <i>Clinical Practice and Diagnosis II</i>	2	0	2
VPK4620	Epidemiologi Veterinar/ <i>Veterinary Epidemiology</i>	3	2	1
VPK4650	Perubatan Ekuin/ <i>Equine Medicine</i>	2	2	0
VPK4660	Perubatan Ruminan/ <i>Ruminant Medicine</i>	3	3	0
CEL/LAX	ELEx	DK		
JUMLAH/ TOTAL		19	15	4

TAHUN 5/ 5TH YEAR
SEMESTER 1/ 1ST SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPD4999	Projek Ilmiah Tahun Akhir/ <i>Final Year Project</i>	3	0	3
VPK4943	Amalan Klinik Veterinar I/ <i>Veterinary Clinical Practice I</i>	6	0	6
VPP3170	Perniagaan Veterinar/ <i>Veterinary Business</i>	3	2	1
VPD4971	Penyelesaian Masalah Penyakit/ <i>Problem Solving in Disease</i>	1	0	1
JUMLAH/ TOTAL		13	2	11

SEMESTER 2/ 2ND SEMESTER

KOD KURSUS/ COURSE CODE	NAMA KURSUS/COURSE NAME	Kr	K	A/T
VPD4990	Sains Veterinar Gunaan/ <i>Applied Veterinary Science</i>	3	0	3
VPK4944	Amalan Klinik Veterinar II/ <i>Veterinary Clinical Practice II</i>	9	0	9
JUMLAH/ TOTAL		12	0	12

Nota/Notes : Pelajar diwajibkan memilih 2 kredit daripada kursus kokurikulum, 10 kredit kursus elektif yang terdiri daripada 4 kursus berkaitan haiwan dan 6 kursus tidak berkaitan dengan haiwan yang ditawarkan oleh universiti/ *Students are required to take 2 credits of co-curriculum courses, and 10 elective courses comprises of 4 credits of animal related courses and 6 credits of non-animal related courses offered by the university.*

SINOPSIS KURSUS/ COURSE SYNOPSIS

Jabatan Sains Praktikal Veterinar/ Department of Veterinary Preclinical Sciences

VPP3021 Biokimia Veterinar/ *Veterinary Biochemistry* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi aspek biokimia asas termasuk mekanismanya dalam metabolisme sel, tisu dan organ dalam badan haiwan normal dan abnormal untuk menghubungkan kait dengan pengawalan badan haiwan normal dan memahami peranannya dalam penyakit haiwan dan diagnosa penyakit.

This course covers aspects of basic biochemistry which include its mechanisms in the cell, tissue and organ metabolism in the normal and abnormal animal body and to link with regulation of the normal animal body and understanding their roles in animal disease and diagnosis

VPP3130 Pemakanan Veterinar/ *Veterinary Nutrition* 3 (2+1)

Prasyarat : VPP3020

Kursus ini merangkumi ciri dan kepentingan nutrien dalam pemakanan haiwan, pengambilan rela serta keperluan nutrien oleh pelbagai jenis haiwan bela-jinak, haiwan makmal dan eksotik. Keseimbangan dan metabolisme tenaga makanan, kaedah merumus rangsum dan penentuan nilai cerna bahan makanan dibincangkan.

This course encompasses the characteristics and importance of nutrients in animal nutrition, voluntary intake as well as nutrient requirements of domesticated, laboratory and exotic animals. Food energy metabolism and balance, feed formulation and digestibility determination techniques are discussed.

VPP3140 Genetik Veterinar/ *Veterinary Genetics* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi prinsip pewarisan genetik dan genetik populasi dan kuantitatif untuk pembiakbakaan dan pemilihan haiwan bela jinak. Keadah pemilihan, sistem pembiakbakaan dan kecacatan genetik dibincang.

This course encompasses the principles of genetic inheritance and population and quantitative genetics in the breeding and selection of domestic animals. Selection methods, crossbreeding systems and genetic defects are discussed.

VPP3160 Statistik Gunaan dan Kaedah Penyelidikan/ *Applied Statistics and Research Methods* 3 (2+1)

Prasyarat : Tiada

Kursus ini meliputi perancangan, pengurusan sumber, pelaksanaan serta tafsiran hasil penyelidikan. Penekanan akan diberikan kepada pembinaan kerangka penyelidikan yang tahan-uji dan penilaian kebolehpercayaan penyelidikan.

This course covers planning, resource management, execution as well as interpretation of research outcomes. Emphasis will be placed on understanding of the requirements for constructing defensible research projects as well as being able to assess the validity of research reports.

VPP3170	Perniagaan Veterinar/ <i>Veterinary Business</i>	3 (2+1)
Prasyarat : Tiada		
Kursus ini meliputi konsep, prinsip, pengetahuan dan aplikasi pengurusan dalam perniagaan veterinar. Topik merangkumi pengagihan sumber, prinsip ekonomi, kos penyakit dan kesihatan dalam pengurusan dan produksi haiwan, kaedah ekonometri, analisis kos-faedah, analisis keputusan dan perancangan perniagaan veterinar.		
<i>This course covers concepts, principles, knowledge and application of management in veterinary business. Topics include resource allocation, economic principles, cost of diseases and health in animal management and production, econometric methods, cost-benefit analysis, decision analysis, and veterinary business planning.</i>		
VPP3211	Anatomi Veterinar I/ <i>Veterinary Anatomy 1</i>	4 (2+2)
Prasyarat : Tiada		
Kursus ini merangkumi pelbagai istilah yang sering digunakan dalam anatomi, histologi dan embriologi veterinar. Pembentukan awal embrio, struktur sel, struktur histologi empat tisu asas, tisu hemopoetik dan anatomi topografi haiwan domestik dihurairkan.		
<i>This course encompasses various terminologies commonly used in veterinary anatomy, histology and embryology. The development of early embryo, cell structure, histological structure of four basic tissues, hemopoetic tissue and the topographic anatomy of domestic animal are explained.</i>		
VPP3212	Anatomi Veterinar II/ <i>Veterinary Anatomy II</i>	4 (2+2)
Prasyarat : VPP3211		
Kursus ini merangkumi pembentukan, struktur histologi dan anatomi sistem kardiovaskular, pencernaan, urinari dan pernafasan. Kelas amali merangkumi diseksi, pemeriksaan spesimen segar dan diawet serta pemeriksaan slaid histologi sistem tersebut diatas organ badan. Penekanan diberikan kepada hubungkait struktur dan fungsi sistem yang berkenaan.		
<i>This course encompasses the development, histological and anatomical structures of the cardiovascular, digestive, urinary and respiratory systems. Practical classes encompass dissection, examination of fresh and fixed specimens and examination of histological slides of the systems mentioned above. Emphasis is given to the structure and functional relationship of the above systems.</i>		
VPP3213	Anatomi Veterinar III/ <i>Veterinary Anatomy III</i>	4 (2+2)
Prasyarat : VPP3212		
Kursus ini merangkumi pembentukan, anatomi kasar dan histologi bagi pembiakan, integumen, endokrina dan organ-organ deria dengan memberi penekanan kepada hubungkait struktur dan fungsi sistem tersebut di atas.		
<i>This course encompasses the development, gross anatomical structures and histology of the nervous, reproductive, integument, endocrine systems and the sense organs with emphasis on the structural-functional relationship of the above systems.</i>		
VPP3231	Fisiologi Veterinar I/ <i>Veterinary Physiology I</i>	3 (2+1)
Prasyarat : Tiada		
Kursus ini merangkumi fungsi sel dan tisu boleh uja, serta menghuraikan fungsi sistem hemopoiesis dan imun. Prinsip-prinsip yang diikuti dalam kuliah akan diperjelaskan dalam kelas amali.		

This course encompasses the functions of the cell and excitable tissues and also describes the functions of the haemopoietic and immune systems. The principles followed in the lectures will be illustrated in laboratory classes.

VPP3232 Fisiologi Veterinar II/ *Veterinary Physiology II* 3 (2+1)

Prasyarat : VPP3231

Kursus ini merangkumi fungsi, mekanisme pengawalan, pengawalaturan dan penyelarasan sistem kardiovesel, pencernaan, renal dan pernafasan haiwan. Tumpuan akan diberikan kepada aplikasi pengetahuan, fungsi dan peranan sistem tersebut dalam senggaraan homeostasis.

This course encompasses the functions, mechanisms of control, regulation and coordination of the animal cardiovascular, digestive, renal and respiratory systems. The application of the knowledge, functions and roles of the systems mentioned in the maintenance of homeostasis are emphasized.

VPP3233 Fisiologi Veterinar III/ *Veterinary Physiology III* 3 (2+1)

Prasyarat : VPP3232

Kursus ini merangkumi fungsi, mekanisme pengawalan, pengawalaturan dan penyelarasan sistem saraf, endokrin, pembiakan haiwan serta prinsip asas fisiologi persekitaran dan tegasan. Tumpuan diberi kepada aplikasi pengetahuan, fungsi dan peranan sistem tersebut dalam senggaraan homeostasis.

This course encompasses the functions, mechanisms of control, regulation and coordination of the animal nervous, endocrine, reproductive systems as well as basic principles of environmental and stress physiology. The application of the knowledge, functions and roles of the systems mentioned in the maintenance of homeostasis is emphasized.

VPP3251 Farmakologi dan Toksikologi Veterinar / *Veterinary Pharmacology And Toxicology* 4 (3+1)

Prasyarat : VPP3232, VPP3233

Kursus ini merangkumi penggunaan drug berdasarkan prinsip farmakologi dan toksikologi dengan keutamaan kepada kesan drug dan racun terhadap sistem biologi, mekanisme dan tapak tindakan haiwan. Aplikasi terapeutik, kesan ketoksikan, perbezaan respon perumah kepada agen terapeutik, faktor mempengaruhi keberkesanan drug, ketoksikan dan prinsip umum rawatan keracunan.

This course covers use of drugs based on principles of pharmacology and toxicology with emphasis given to effects of drugs and poisons on biologic systems, their mechanisms and sites of action. Therapeutic applications, toxicity effects, differences in host response to therapeutic agents, factors influencing the effectiveness, toxicity and the general principles of treatment of poisoning.

VPP3271 Jurisprudens, Etologi Dan Kebajikan Haiwan/ *Jurisprudence Ethology And Animal Welfare* 2 (2+0)

Prasyarat : Tiada

Kursus ini merangkumi aspek tingkah laku haiwan, penyebab tingkah laku dan implikasinya ke atas pengurusan, produksi, kesihatan dan kebajikan. Undang-undang dan peraturan yang mengawal selia pemeliharaan haiwan dan perkhidmatan veterinar di Malaysia juga dibincangkan.

This course encompasses aspects of animal behaviour, causes of behaviour and their implications on animal management, production, health and welfare. The laws and regulations that govern animal husbandry and veterinary service in Malaysia are also discussed

Jabatan Pengajian Klinikal Veterinar/ Department of Veterinary Clinical Studies

VPK3612 Kemahiran Klinikal Veterinar / *Veterinary Clinical Skills* 2 (1+1)

Prasyarat : Tiada

Kursus ini merangkumi kemahiran mendapatkan sejarah kesihatan pesakit, kaedah pemeriksaan fizikal menyeluruh, merekod dan menilai penemuan serta mengenal pasti dan membezakan berbagai status sistemik umum dalam haiwan yang berpenyakit. Kaedah pengekangan, pengubatan dan penjagaan kesihatan pesakit diberi penekanan.

This course encompasses the skills in obtaining patient medical history, performing complete physical examination, recording and evaluating the findings as well as identifying and distinguishing between various general systemic states common in diseased animals. Restraining techniques, treatment and health care for patients are emphasized

VPK3613 Perubatan Klinikal Veterinar I / *Veterinary Clinical Medicine I* 4 (2+2)

Prasyarat : VPK3612

Kursus ini memperkenalkan konsep proses penyakit dalam disfungsi sistem badan haiwan. Manifestasi penyakit, patogenesis, diagnosis, rawatan dan pengurusan klinikal termasuk surgery dan penggunaan drug yang bersesuaian dibincangkan.

This course introduces the concepts of disease processes in the dysfunction of body systems of animals. Disease manifestation, pathogenesis, diagnosis, treatment and clinical management of diseases including surgery and the appropriate use of drugs agents are discussed

VPK3614 Perubatan Klinikal Veterinar II/ *Veterinary Clinical Medicine II* 4 (2+2)

Prasyarat : VPK3612

Kursus ini memperkenalkan konsep proses penyakit dalam disfungsi sistem badan haiwan bela jinak. Manifestasi, patogenesis, diagnosis, rawatan dan pengurusan klinikal penyakit termasuk surgery dan penggunaan agen kemoterapi dibincangkan

This course introduces the concept of disease processes in the body systems dysfunction of domestic animals. Disease manifestation, pathogenesis, diagnosis, treatment and clinical management of diseases including surgery and the use of chemotherapeutic agents are discussed

VPK3702 Anestesiologi dan Surgery Am/ *General Surgery and Anaesthesiology* 4 (2+2)

Prasyarat : VPP3213 dan VPP3251

Kursus ini merangkumi asas surgery am dan anestesiologi veterinar. Seliotomi dan pengkajian pada anjing atau kucing digunakan untuk latihan surgery dan anestesia. Teknik surgery yang melibatkan sistem integumen turut dibincangkan.

This course encompasses the basics of veterinary surgery and anaesthesiology. Celiotomy and neuter in dogs or cats are used to practise the surgical and anaesthetic procedures. Surgical techniques involving the integument system are discussed.

VPK3712 *Surgeri Veterinar Sistem Badan/ Veterinary Surgery of the Body Systems* 4 (3+1)

Prasyarat : VPK3702

Kursus ini merangkumi pelbagai keutamaan pada sistem badan haiwan kesayangan dan haiwan besar dan pengurusan surgeri.

This course deals with the various affections of the different body systems of small and large animals and their surgical management.

VPK3750 *Pengimejan Diagnosis Veterinar/ Veterinary Diagnostic Imaging* 2 (1+1)

Prasyarat : VPP3213

Kursus ini membekalkan pengenalan am fizik sinaran, prinsip keselamatan sinaran, teknik pengambilan dan pemprosesan radiograf. Penekanan diberi kepada kemahiran asas dan pentafsiran radiograf. Ciri-ciri radiologi lazim pelbagai penyakit haiwan akan dibincang. Teknik pengimejan alternatif veterinar seperti *ultrasound*, tomografi berkomputer (CT), pengimejan resonans magnet (MRI) dan perubatan nuklear diperkenalkan.

This course provides a general introduction to the physics of radiation, principles of radiation safety, techniques of taking and processing radiographs. The basic skills of radiography and the interpretation of radiographs are emphasized. Common radiological features of various diseases in domestic animals are discussed. Veterinary alternative imaging techniques such as (ultrasound, computed tomography (CT), magnetic resonance imaging (MRI) and nuclear medicine are introduced.

VPK3801 *Teriogenologi / Theriogenology* 2 (2+0)

Prasyarat : VPM3417

Kursus ini merangkumi kajian tentang pembiakan; fisiologi dan patologi sistem pembiakan haiwan jantan dan betina. Penekanan diberikan kepada obstetrik, andrologi dan ketidaksuburan.

This course encompasses studies on reproduction, including the physiology and pathology of the male and female reproductive systems. Emphasis is given to obstetrics, andrology and infertility

VPK3910 *Pengenalan Profesyen Veterinar/ Introduction to the Veterinary Profession* 1 (0+1)

Prasyarat : Tiada

Kursus ini memperkenalkan profesion veterinar, sejarahnya, badan profesional veterinar kebangsaan dan antarabangsa, pelbagai pekerjaan dalam profesion peranan, etika profesional serta peluang dan tanggungjawab berkaitan. Spesies haiwan lazim, baka, keperluan asas, kebajikan dan organisasi kebajikan haiwan, pengendalian serta ikatan manusia-haiwan diperkenalkan.

This course introduces the veterinary profession, its history, the main international and national professional bodies, the diversity of occupations within the profession and the professional roles and ethics of veterinarians as well as the associated opportunities and responsibilities. The common animal species, breeds, their basic needs, welfare, animal-welfare organizations, handling as well as the human-animal bond are introduced.

VPK3931 Amalan Klinikal dan Diagnosis I/ *Clinical Practice and Diagnosis I* 2 (0+2)

Prasyarat : VPK3610/VPK3612

Kursus ini memberi pengenalan kepada aktiviti rutin serta pengurusan amalan klinik dan makmal diagnosa veterinar dimana pelajar digilirkan. Pelajar mengambil bahagian dalam aktiviti amalan klinik atau makmal, dan merekodkan pelaksanaan prosedur yang tersenarai dalam portfolio amalan. Penekanan diberikan kepada pengendalian, pemeriksaan fizikal dan rawatan pada haiwan, serta kemahiran berkomunikasi.

This course introduces the routines and management of veterinary clinical practice and diagnostic laboratories where students are rotated. Students participate in the daily activities of the clinics and laboratories, and keep record of the procedures carried out in their clinical practice portfolio. Emphasis is given on animal handling, physical examination and medication, as well as communication skills.

VPK3932 Amalan Klinikal dan Diagnosis II/ *Clinical Practice and Diagnosis II* 2 (0+2)

Prasyarat : VPK3610/VPK3931

Kursus ini memberi pengenalan kepada aktiviti rutin serta pengurusan amalan klinik dan makmal diagnosa veterinar dimana pelajar digilirkan. Pelajar mengambil bahagian dalam aktiviti amalan klinik atau makmal, dan merekodkan pelaksanaan prosedur yang tersenarai dalam portfolio amalan. Penekanan diberikan kepada pengendalian, pemeriksaan fizikal dan rawatan pada haiwan, serta kemahiran berkomunikasi.

This course introduces the routines and management of veterinary clinical practice and diagnostic laboratories where students are rotated. Students participate in the daily activities of the clinics and laboratories, and keep record of the procedures carried out in their clinical practice portfolio. Emphasis is given on animal handling, physical examination and medication, as well as communication skills.

VPK4620 Epidemiologi Veterinar/ *Veterinary Epidemiology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep dan prinsip epidemiologi dan kebolehan mengaplikasikannya untuk menyiasat isu-isu kesihatan haiwan melalui penilaian atau analisis kritikal kajian epidemiologi.

This course covers concepts and principles of epidemiology and ability to apply this to investigation of animal health issues and critical evaluation or analysis of epidemiological studies.

VPK4640 Perubatan Felin dan Kanin/ *Feline and Canine Medicine* 3 (3+0)

Prasyarat : VPK3611/VPK3614

Kursus ini merangkumi etiologi, epidemiologi, patogenesis, petanda klinikal, diagnosis, rawatan, kawalan, pencegahan bagi sindrom klinikal dan penyakit kanin dan felin yang lazim dan penting. Tindakan dan penggunaan ubat yang berkaitan untuk rawatan serta penjagaan kesihatan diulaskan.

This course encompasses the aetiology, epidemiology, pathogenesis, clinical signs, diagnosis, treatment, control, prevention and prophylaxis of common and important canine and feline clinical syndromes and diseases. Relevant drugs for treatment as well as patient nursing care are reviewed.

VPK4650 Perubatan Ekuin/ *Equine Medicine* 2 (2+0)

Prasyarat : VPK3611/VPK3614

Kursus ini merangkumi pendekatan secara sistematik ke atas penyiasatan sindrom klinikal pada ekuin. Etiologi, epidemiologi, patogenesis, petanda klinikal, diagnosis, rawatan, kawalan, pencegahan dan profilaksis penyakit dihuraikan. Tindakan dan penggunaan ubat yang sesuai untuk rawatan serta penjagaan kesihatan diliputi.

This course covers systematic approaches to investigate clinical syndromes in equine. The aetiology, epidemiology, pathogenesis, clinical signs, diagnosis, treatment, control, prevention and prophylaxis of these diseases are described. Actions and uses of relevant drugs for treatment as well as nursing care are reviewed.

VPK4660 Perubatan Ruminan/ *Ruminant Medicine* 3 (3+0)

Prasyarat : VPK3611/VPK3614

Kursus ini merangkumi etiologi, epidemiologi, patogenesis, petanda klinikal, diagnosis, rawatan, kawalan, pencegahan bagi sindrom klinikal dan penyakit ruminan yang lazim dan penting. Tindakan dan penggunaan ubat yang berkaitan untuk rawatan serta penjagaan kesihatan diulaskan.

This course encompasses the aetiology, epidemiology, pathogenesis, clinical signs, diagnosis, treatment, control, prevention and prophylaxis of common and important ruminant clinical syndromes and diseases. Relevant drugs for treatment as well as patient nursing care are reviewed.

VPK4670 Penyakit Babi/ *Pig Medicine* 2 (2+0)

Prasyarat : VPK3611/VPK3614

Kursus ini merangkumi penyiasatan sindrom klinikal pada babi, termasuk penyakit yang lazim dan penting, dengan penekanan terhadap penyakit yang terdapat di Malaysia. Etiologi, epidemiologi, patogenesis, petanda klinikal, diagnosis, rawatan, kawalan, cara pencegahan dan profilaksis penyakit dibincangkan.

This course encompasses investigation of clinical syndromes in pigs, including common and important diseases, with emphasis to diseases found in Malaysia. Etiology, epidemiology, pathogenesis, clinical symptoms, diagnosis, treatment, control, prevention and prophylaxis of diseases are discussed.

VPK4680 Perubatan Avian/ *Avian Medicine* 2 (2+0)

Prasyarat : VPK3611/VPK3614

Kursus ini merangkumi etiologi, epidemiologi, patogenesis, petanda klinikal, diagnosis, rawatan, kawalan, pencegahan bagi sindrom klinikal dan penyakit avian yang lazim dan penting. Tindakan dan penggunaan ubat yang berkaitan untuk rawatan serta penjagaan kesihatan diulaskan.

This course encompasses the aetiology, epidemiology, pathogenesis, clinical signs, diagnosis, treatment, control, prevention and prophylaxis of common and important avian clinical syndromes and diseases. Relevant drugs for treatment as well as patient nursing care are reviewed.

VPK4692	Kesihatan Dan Pengurusan Haiwan Akuatik/ <i>Aquatic Animal Health and Management</i>	3 (2+1)
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Prasyarat : Tiada

Kursus ini merangkumi pelbagai aspek pengurusan kesihatan haiwan akuatik yang dikultur, dimana penekanan khusus dalam spesis ikan. Perkaitan di antara agen penyakit, perubahan klinikal dan patologi dan persekitaran akan dibincangkan. Prosedur makmal, rawatan, anestesia, pembedahan, ujian diagnosis cepat, strategi pemvaksin, dan penggunaan pengimmunorangsangan dan fungsi probiotik dalam memperbaiki persekitaran juga dipertengahan

This course encompasses various aspects of management of cultured aquatic animals with special emphasize on fish species. The relationship between the disease agents, clinical and pathological changes and environment will be discussed. Laboratory procedures, treatment, anesthesia, rapid diagnostic tests, vaccination strategies and the use of immunostimulant and probiotics to improve the environment will be highlighted

VPK4695	Perubatan Haiwan Eksotik & Hidupan Liar/ <i>Exotic Animal and Wildlife Medicine</i>	2 (2+0)
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Prasyarat : Tiada/VPK3614

Kursus ini merangkumi asas saintifik pemuliharaan, pengurusan dan rawatan penyakit berjangkit dan bukan berjangkit hidupan liar lepas bebas dan hidupan liar tangkapan termasuk unggas, primat bukan manusia, rodent dan haiwan eksotik.

This course covers the scientific basis of conservation, management, as well as treatment of infectious and non-infectious diseases of captive and free-ranging wildlife which includes avian, non-human primates, rodents and exotic animals

VPK4941	Amalan Veterinar I/ <i>Veterinary Practice I</i>	3 (0+3)
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Prasyarat : VPK3931/Tiada

Kursus ini berorientasikan pusingan amalan untuk pelajar tahun lima yang terdiri daripada aktiviti mendiagnosis, merawat dan mengawal pelbagai penyakit. Pusingan ini merangkumi amalan di klinik dan hospital haiwan kesayangan, haiwan besar, babi, ekuin dan avian; makmal patologi klinik, bakteriologi dan post-mortem. Amalan ini memberi pendedahan, kecekapan dan keyakinan dalam menangani masalah sebenar bidang perubatan veterinar.

This course is a practice-oriented rotation for final year students comprising diagnosis, treatment and control of diseases. The rotations include clinic and hospital practices for small and large animals, swine, equine and avian; laboratories such as clinical pathology, bacteriology and post-mortem. These practices provide exposure, competency and development of confidence in solving real life problems in veterinary medicine.

VPK4943	Amalan Klinikal Veterinar I/ <i>Veterinary Clinical Practice I</i>	6 (0+6)
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Prasyarat : VPK3932

Kursus ini merupakan putaran berorientasikan amalan yang merangkumi diagnosis, rawatan dan kawalan penyakit. Putaran klinik ini merangkumi amalan di klinik dan hospital haiwan kesayangan, haiwan besar, babi, ekuin, akuatik dan avian; makmal seperti patologi klinikal, bakteriologi dan post-mortem. Amalan ini memberi pendedahan, kecekapan dan keyakinan dalam pengurusan kes veterinar.

This course is a practice-oriented rotation encompassing diagnosis, treatment and control of diseases. The rotations include clinic and hospital practices for small and large animals, swine, equine, aquatic and avian; laboratories such as clinical pathology, bacteriology and post-mortem. These practices provide exposure, competency and confidence in managing veterinary cases.

Prasyarat : VPK4943

Kursus ini merupakan putaran berorientasikan amalan yang merangkumi diagnosis, rawatan dan kawalan penyakit. Putaran klinik ini merangkumi amalan di klinik dan hospital haiwan kesayangan, haiwan besar, babi, ekuin, akuatik dan avian; makmal seperti patologi klinikal, bakteriologi dan post-mortem. Amalan ini memberi pendedahan, kecekapan dan keyakinan dalam pengurusan kes veterinar.

This course is a practice-oriented rotation encompassing diagnosis, treatment and control of diseases. The rotations include clinic and hospital practices for small and large animals, swine, equine, aquatic and avian; laboratories such as clinical pathology, bacteriology and post-mortem. These practices provide exposure, competency and confidence in managing veterinary cases

Jabatan Patologi dan Mikrobiologi Veterinar/ Department of Veterinary Pathology & Microbiology

VPM3301 Bakteriologi Dan Mikologi Veterinar/ *Veterinary Bacteriology and Mycology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep dan prinsip dalam bidang bakteriologi dan mikologi serta peranan bakteria dan kulat dalam menyebabkan penyakit. Penekanan diberikan kepada ciri khusus organisma, mekanisme menyebabkan penyakit, penyebaran penyakit, diagnosis makmal dan cara pencegahan dan pengawalan penyakit.

This course encompasses the concepts and principles in bacteriology and mycology and the role of bacteria and fungi in causing diseases. Emphasis is given to special characteristics of the organisms, their mechanism for causing diseases, transmission of the disease, laboratory diagnosis and, methods for the control and prevention of diseases

VPM3340 Virologi Veterinar/ *Veterinary Virology* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi konsep dan prinsip dalam bidang virologi, peranan virus dalam menyebabkan penyakit, jenis virus yang menyebabkan penyakit pada haiwan serta penekanan terhadap diagnosis penyakit virus.

This course encompasses the concepts and principles in virology, the role of virus in causing diseases, types of viruses that cause disease in animals and diagnosis of common viral diseases are emphasized.

VPM3351 Parasitologi Veterinar I/ *Veterinary Parasitology I* 3 (2+1)

Prasyarat : Tiada

Kursus ini merangkumi pengenalan parasit yang penting pada haiwan domestik, kitaran hidup kumpulan parasit, kesan patologi parasit, patogenesis dan diagnosis penyakit parasit yang biasa ditemui diberi penekanan.

This course encompasses identification of important parasites found in domestic animals, the life cycles of groups of parasites, pathological effects of parasites, pathogenesis and diagnosis of common parasitic diseases are emphasized.

VPM3352 Parasitologi Veterinar II/ *Veterinary Parasitology II* 2 (2+0)

Prasyarat : VPM3351

Kursus ini merangkumi masalah parasit yang biasa berlaku, pertalian antara perumah, parasit dan persekitaran, tindakbalas perumah terhadap parasit dan ketahanan parasit terhadap drug, mengurangkan kesan parasit dengan menyepadukan epidemiologi dan pengurusan ternakan

This course encompasses common parasitic problems, relationship between host, parasite and environment, host immune response against the parasites and parasite resistance against drugs, minimising the effects of parasites through integration of epidemiology and husbandry.

VPM3415 Patologi Veterinar I/ *Veterinary Pathology I* 3 (2+1)

Prasyarat : VPP3211, VPP3231

Kursus ini merangkumi konsep proses penyakit dan tindakbalas tisu terhadap kecederaan, lesi makroskopi dan mikroskopi pelbagai kumpulan dan jenis lesi. Perkembangan setiap lesi dan patogenesis penyakit akan dibincangkan serta pendedahan kepada "hands-on" teknik post mortem.

This course encompasses the concept of disease process and tissue reactions to injury, gross and microscopic lesions of the various groups and types of lesions. The development of each lesion and pathogenesis of disease will be discussed as well as exposure to hands-on post mortem techniques.

VPM3416 Patologi Veterinar II/ *Veterinary Pathology II* 4 (3+1)

Prasyarat : VPM3415

Kursus ini merangkumi perhubungan lesi makroskopi dan mikroskopi penting dalam penyakit sistem pernafasan, pencernaan, saraf, hemopoiesis serta endokrin serta penyebab dan petanda klinikal. Patogenesis, patofisiologi dan diagnosis bagi penyakit/keadaan dan pendedahan kepada teknik post mortem secara *hands-on* bagi setiap sistem.

This course encompasses the relationship of the important macroscopic and microscopic lesions, aetiology and clinical signs in diseases of the respiratory, digestive, nervous, haemopoietic and endocrine systems. The pathogenesis, pathophysiology and diagnosis of the disease/condition will also be discussed as well as hands-on exposure to post mortem techniques in each system.

VPM3417 Patologi Veterinar III/ *Veterinary Pathology III* 4 (3+1)

Prasyarat : VPM3416

Kursus ini merangkumi perhubungan lesi makroskopi dan mikroskopi penting dengan penyakit yang berlaku dalam sistem integumentari, urinari, kardiovesel, pembiakan serta muskuloskeletal dengan penyebab dan petanda klinikal. Patogenesis, patofisiologi, diagnosis bagi penyakit/keadaan juga dibincangkan dan pemeriksaan post mortem.

This course encompasses the relationship of the important macroscopic and microscopic lesion, aetiology and clinical signs in disease occurrence in the integumentary, urinary, cardiovascular, reproductive and musculoskeletal systems. The pathogenesis, pathophysiology and diagnosis of the disease/condition are also discussed and hands-on post mortem examination.

VPM3361 Jangkitan dan Keimunan/ *Infection and Immunity* 2 (1+1)

Prasyarat : VPM3231, VPM3300

Kursus ini merangkumi gerak balas imun terhadap pelbagai agen berjangkit, sel barah, tindak balas kehiperpekaan, penyakit autoimun dan peranan keimunan teraruh vaksin bagi beberapa penyakit haiwan penting serta pengetahuan dalam pembangunan vaksin dan juga beberapa prinsip asas teknik serologi.

This course encompasses immune responses against various infectious agents, cancer cells, hypersensitivity reactions, autoimmune diseases and role of vaccine induced immunity in several important animal diseases with information related to vaccine development and basic principals in serological techniques.

VPM4430 Patologi Klinikal Veterinar/ *Veterinary Clinical Pathology* 3 (2+1)

Prasyarat : VPM3415

Kursus ini merangkumi penafsiran parameter hematologi, biokimia klinikal, urinalisis dan sitologi dalam membantu diagnosis penyakit. Kes klinikal digunakan sebagai bahan dalam penafsiran dan penyelesaian masalah.

This course encompasses interpretation of parameters in haematology, clinical biochemistry, urinalysis and cytology to assist in the diagnosis of disease. Clinical cases are used as material in interpretation and problem solving.

VPM4500 Kesihatan Awam Veterinar/ *Veterinary Public Health* 4 (3+1)

Prasyarat : VPM3300, VPM3340, VPM3351

Kursus ini meliputi penyakit zoonosis dan penyakit bawaan makanan, keselamatan makanan, pemeriksaan daging, residu serta jaminan kualiti makanan berasal haiwan dan prinsip makanan halal dan memberi kemahiran dalam pemeriksaan mikrobiologi daging dan susu.

This course covers zoonoses and foodborne diseases, food safety, meat inspection and residues as well as quality assurance of food of animal origin and principles of 'halal' food, and provides skills in microbiological examination of meat and milk.

Pejabat Dekan/ Dean Office

VPD3932 Orientasi Profesional Veterinar/ *Veterinary Professional Orientation* 2 (0+2)

Prasyarat : Tiada

Latihan amali ini merangkumi pendedahan awal kepada amalan rutin dan etika kerja pengamal veterinar, pengurusan di klinik, peralatan yang digunakan serta pendedahan kepada kemahiran asas dalam amalan veterinar. Nilai etika dan profesionalisme pengamal veterinar akan ditekankan. Latihan ini melibatkan penempatan pelajar di klinik veterinar, Zoo, Taman Pertanian Universiti (TPU), Hospital Veterinar Universiti (UVH) dan pusat perlindungan haiwan terbiar yang dioperasikan oleh SPCA dan PAWS.

This practical training encompasses the early exposure to regular routines and ethics of practicing veterinarians, management of clinics, equipment used and exposure to basic skills in veterinary practice. The ethical values and professionalism of veterinary practitioners will be emphasized. The training involved student attachments at veterinary clinics, zoos, University Agriculture Park (TPU), University Veterinary Hospital (UVH) and animal shelters operated by SPCA and PAWS

VPD3933 Pengurusan Haiwan Ternakan I/ *Management of Livestocks I* 2 (0+2)

Prasyarat : Tiada

Latihan amali ini merangkumi pendedahan kepada amalan rutin ladang haiwan ruminan dan babi/ haiwan akuatik. Selain mempelajari aktiviti pengurusan ladang, nilai etika dan profesionalisme pengamal veterinar juga ditekankan. Latihan ini melibatkan penempatan pelajar di ladang ruminan dan ladang babi/akuatik

This practical training encompasses the exposure to regular farming routines of ruminant and pigs/aquatic animals. Apart from learning farm management practices, the ethical values and professionalism of veterinary practitioners will also be emphasized. The training involved farm attachments at ruminant and pigs/aquatic animal farms.

VPD3934 Pengurusan Haiwan Ternakan II/ *Management of Livestocks II* 3 (0+3)

Prasyarat : Tiada

Latihan amali ini merangkumi pendedahan kepada amalan rutin ladang poltri, pusat hidupan liar dan operasi makmal diagnosis. Selain mempelajari aktiviti pengurusan ladang dan rutin makmal diagnosis, nilai etika dan profesionalisme pengamal veterinar juga ditekankan. Latihan ini melibatkan penempatan pelajar di ladang ayam-itik, pusat hidupan liar dan Unit Perkhidmatan Makmal Veterinar (VLSU).

This practical training encompasses the exposure to regular routines of poultry farms, wildlife centers and the operation of diagnostic laboratories. Apart from learning farm and laboratory management practices, the ethical values and professionalism of veterinary practitioners will also be emphasized. The training involved attachments at poultry farms, wildlife centers and the Veterinary Laboratory Services Unit (VLSU)

VPD3935 Orientasi Klinikal/ *Clinical Orientation* 1 (0+1)

Prasyarat : Tiada

Latihan amali ini merangkumi pendedahan kepada organisasi, operasi serta kaedah pengurusan kes di hospital dan klinik veterinar. Ia melibatkan putaran klinikal di Hospital Veterinar Universiti (UVH) untuk pendedahan dan pembelajaran kemahiran klinikal.

This practical training encompasses the exposure to the organization, operation and case management practices in veterinary hospitals and clinics. These involve clinical rotations at the University Veterinary Hospital (UVH) for clinical skills exposure and training

VPD4941	Amalan Luar Makmal Diagnosis/ <i>Extramural Diagnostic Laboratory Practice</i>	1 (0+1)
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Prasyarat : Tiada

Latihan amali ini merangkumi pendedahan kepada organisasi, operasi serta kaedah pengurusan kes di hospital dan klinik veterinar. Ia melibatkan putaran klinikal di Hospital Veterinar Universiti (UVH) untuk pendedahan dan pembelajaran kemahiran klinikal.

This practical training encompasses the exposure to the organization, operation and case management practices in veterinary hospitals and clinics. These involve clinical rotations at the University Veterinary Hospital (UVH) for clinical skills exposure and training

VPD4945	Amalan Luar Klinik/ <i>Extramural Clinical Practice</i>	2 (0+2)
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Prasyarat : Tiada

Kursus ini memberi pendedahan dalam amalan klinikal veterinar melalui penempatan di pusat amalan veterinar. Selain mengikuti kes klinikal di pusat amalan, pelajar juga perlu mengetahui prosedur pengurusan kes dan pendekatan diagnosis yang relevan kepada kes

This course provides exposure in veterinary clinical practice through clinical attachment at veterinary practices. Apart from following clinical cases at veterinary practices, students are required to know procedures of case management and relevant diagnostic approaches for the case.

VPD4970	Siasatan Masalah Veterinar/ <i>Veterinary Problem Investigation</i>	1 (0+1)
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Prasyarat : VPP3213, VPM3300/ Tiada

Kursus ini menumpu kepada mekanisme penyakit dalam sistem badan dan penyiasaan penyakit melalui penggunaan pendekatan berasaskan masalah untuk menyepadu pengetahuan yang telah dan akan diperoleh melalui pembelajaran suar-aruh berkaitan tajuk.

The course focuses on mechanisms of disease in body systems and disease investigation through a problem-based approach to integrate previous knowledge with new knowledge gained through self-directed learning in the topics.

VPD4971	Penyelesaian Masalah Penyakit/ <i>Problem Solving in Disease</i>	1 (0+1)
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Prasyarat : VPK3932, VPK4620/ Tiada

Kursus ini menggunakan pendekatan pembelajaran berpusatkan pelajar untuk mengenalpasti, menyasiasat, membentuk hipotesis dan menyediakan penyelesaian masalah penyakit.

This course uses a student-centered approach to identify, investigate, create a hypothesis and provide solutions to disease problems.

VPD4990 Sains Veterinar Gunaan/ *Applied Veterinary Science* 3 (0+3)

Prasyarat : Lulus semua kursus teras sebelum semester akhir program DPV

Kursus ini meliputi penggunaan pengetahuan dan kemahiran yang diperolehi dalam sains peternakan, sains pra-klinikal, sains para-klinikal dan pengajian klinikal. Kursus ini melibatkan peruntukan masa belajar bagi pelajar secara sendirian dalam semester akhir program Doktor Perubatan Veterinar.

This course involves application of the knowledge and skills acquired in animal sciences, pre-clinical sciences, para-clinical and clinical sciences. This course comprises self-study in the final semester of the Doctor of Veterinary Medicine programme.

VPD4999 Projek Ilmiah Tahun Akhir/ *Final Year Academic Project* 3 (0+3)

Prasyarat : Tiada

Kursus ini merangkumi projek penyelidikan yang mengenalpasti isu dalam industri haiwan, perancangannya, pelaksanaan, analisis dan penterjemahan data, menyedia dan membentangkan laporan saintifik.

This course encompasses research projects which identifies issues in the animal industry, its planning, implementation, data analysis and interpretation, preparation and presentation of a scientific report.

KURSUS TAWARAN FAKULTI LAIN

(Sila rujuk sinopsis pada fakulti berkenaan)

1. FAKULTI EKOLOGI MANUSIA

1.1	SKP2101	Kenegaraan Malaysia/ <i>Malaysian Nationhood</i>	3 (3+0)
1.2	SKP2203	Tamadun Islam dan Tamadun Asia/ <i>Asian and Islamic Civilization</i>	2 (2+0)
1.3	SKP2204	Hubungan Etnik / <i>Ethnic Relation</i>	2 (2+0)
1.4	*SKP2101	Kenegaraan Malaysia/Malaysian Nationhood	2 (2+0)
1.5	ANT2001	Masyarakat dan Perubahan/ <i>Society and Change</i>	2 (2+0)

2. FAKULTI PERTANIAN

2.1	PRT2008	Pertanian dan Manusia/ <i>Agriculture and Man</i>	2 (2+0)
2.2	SHW3002	Pertanian Ternakan/ <i>Animal Agriculture</i>	3 (2+1)
2.3	SHW3101	Produksi Ruminan/ <i>Ruminant Production</i>	3 (2+1)
2.4	SHW3202	Produksi Bukan Ruminan/ <i>Non-ruminant Production</i>	4 (3+1)

3. FAKULTI BAHASA MODEN DAN KOMUNIKASI

3.1	BBI2420	Oral Interaction Skills	3 (2+1)
3.2	BBI2421	General Writing Skills	3 (2+1)
3.3	BBI2412	Writing for Academic Purpose	3 (2+1)
3.4	BBI2414	Interactive Speaking	3 (2+1)
3.5	BBI2417	Public Speaking	3 (2+1)
3.3	BBM1401*	Bahasa Malaysia Asas/Basic Malay	3 (2+1)

Note: * Untuk pelajar antarabangsa/ *For international students*

ELEx SCHEME FOR 4 YEARS PROGRAMMES FROM SEPTEMBER 2013

MUET Band	Graduation Requirements for 4-year programmes
1 & 2	3 BBI + 3 CEL + 24 LAX points
3 & 4	2 BBI + 2 CEL + 36 LAX points
5 & 6	3 CEL + 36 LAX points

Sem	4 - Years Programme					
	MUET 1 & 2		MUET3 & 4		MUET 5 & 6	
Sem 1	BBI2422	CEL101	CEL102	LAX	LAX	
Sem 2	LAX	CEL102	BBI2423		CEL103	
Sem 3	BBI2423		BBI2424		LAX	
Sem 4	BBI2424		LAX		Choose ONE : CEL104/105	
Sem 5	LAX		LAX		LAX	
Sem 6	Choose ONE : CEL105/106/107		Choose ONE : CEL105/106/107		LAX	
Sem 7	LAX		LAX		Choose ONE : CEL105/106/107	
Sem 8	LAX <u>or</u>	OPTIONS : CEL104/105/106/107	LAX <u>or</u>	OPTIONS : CEL104/105/106/107	LAX <u>or</u>	OPTIONS : CEL104/105/106/107

Note :

Students who are away on Industrial Training in any semester need not enroll in any course or LAX for that particular semester, but they must enroll in a course LAX in subsequent semesters.

BBI courses

- BBI2422 (Reading for Academic Purpose)
- BBI2423 (Academic Interaction and Presentation)
- BBI2424 (Academic Writing)

CEL courses

- CEL101 (Vocabulary and Grammar for Communication)
- CEL102 (Effective Listening and Speaking)
- CEL103 (Writing Academic Texts)
- CEL104 (Oral Presentation)
- CEL105 (Spoken Communication for the Workplace)
- CEL106 (Communication for Professional Development)
- CEL107 (Written Business Communication)

LAX

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

Pre-requisites for courses

- CEL102 : Level 2 in CEL101 or MUET Band 5-6
- CEL103 : Passed BBI2424 or MUET Band 5 - 6

- BBI2423 : Level 2 in CEL102
- BBI2424 : Passed BBI2423
- CE2104,105,106,107 :Passed BBI2424 or MUET Band 5 – 6