

Lectures Proposed by the Boards of the Faculties of Earth Sciences and Geography, Physics and Chemistry, Biology, and Mathematics, and the Board of History and Philosophy of Science

For particulars of the University Composition Fee and of the fees payable for attendance at separate courses of lectures see p. 2.

MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA

MICHAELMAS 2010

LENT 2011

EASTER 2011

FUNCTIONAL ARCHITECTURE OF THE BODY

(Medical Students)

Course Organisers: Mr C. Constant (email: crc25@cam.ac.uk) & Dr C. Brassett (email: cb457@cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>

At the *Anatomy School*, unless otherwise stated

Lectures W. F. 9

Anatomy Lecture Theatre

MR C. CONSTANT AND DR C. BRASSETT

Course Aims and General Principles (One lecture, 8 Oct.)

MR C. CONSTANT

Introduction to the Limbs (One lecture, 13 Oct.)

DR S. JONES

Principles of the Nervous System (One lecture, 15 Oct.)

DR S. JONES

Degeneration and Repair in the Peripheral Nervous System (One lecture, 20 Oct.)

PROF. M. ZERNICKE-GOETZ

Development of the Body Plan (One lecture, 22 Oct.)

DR OCTOVIAN VOICULESCU

Embryonic Folding, Somatogenesis and Segmentation (One lecture, 27 Oct.)

MS M. SPEAR

Bone Dynamics (One lecture, 29 Oct.)

PROF. D. RICHES

Posture and Locomotion (One lecture, 3 Nov.)

No lectures on 5 and 10 Nov.

MR C. CONSTANT

The Vertebral Column (One lecture, 12 Nov.)

No lecture on 17 Nov.

PROF. R. J. KEYNES

Overview of the Cranial Nerves (One lecture, 19 Nov.)

DR C. BAKER

Craniofacial Development (One lecture, 24 Nov.)

MR C. CONSTANT AND DR C. BRASSETT

Review and Preview (One lecture, 26 Nov.)

Clinical Demonstration (3 Dec. 10–12)

William Harvey Lecture Theatre

Addenbrooke's Hospital

Practical Work

Dissection Room.* Times according to groups.

Introduction and Essential Information: 6 Oct. at 9 or 10 according to groups.

Dissection Sessions. M. 10–12 and F. 2–4 or

Tu. 10–12 and Th. 10–12.

Optional self-directed DR Sessions on 15 and 16 Nov.

Applied Anatomy: W. 10–12 or 2–4 fortnightly

No AA Sessions on 13 Oct. and 17 Nov.

Lectures W. F. 9

Anatomy Lecture Theatre

No lecture on 21 Jan.

PROF. R. J. KEYNES

Clinical Applications of the Cranial Nerves (One lecture, 26 Jan.)

DR C. BRASSETT

The Larynx (One lecture, 28 Jan.)

PROF. D. RICHES

The Neck (One lecture, 2 Feb.)

DR S. JONES

The Autonomic Nervous System (One lecture, 4 Feb.)

DR C. BAKER

Development of Body Cavities, Diaphragm, Lungs (One lecture, 9 Feb.)

DR C. BAKER

Development of the Cardiovascular System (One lecture, 11 Feb.)

PROF. D. RICHES

Applied Anatomy of the Thorax (One lecture, 16 Feb.)

DR C. BRASSETT

Applied Anatomy of the Abdominal Wall (One lecture, 18 Feb.)

DR C. BRASSETT

Applied Anatomy of the Abdominal Cavity (One lecture, 23 Feb.)

PROF. G. BURTON

Development of the Gut Tube and Derivatives (One lecture, 25 Feb.)

No lecture on 2 Mar.

DR J. CROSS

Clinical Applications of Medical Imaging (One lecture, 4 Mar.)

MS M. SPEAR

Vascular and Lymphatic Systems (One lecture, 9 Mar.)

MR C. CONSTANT AND DR C. BRASSETT

Preparing for the Tripos (One lecture, 11 Mar.)

Clinical Demonstration (10 Mar. 2–4)

William Harvey Lecture Theatre

Addenbrooke's Hospital

Practical Work

Dissection Sessions.

Optional self-directed DR Sessions on 28 Feb. and 1 Mar.**

Applied Anatomy: The same continued.

No AA Sessions on 26 Jan. and 2 Mar.

Lectures W. F. 9

Anatomy Lecture Theatre

PROF. G. BURTON

Applied Anatomy of the Pelvis (One lecture, 29 Apr.)

MR C. CONSTANT

Continence Mechanisms (One lecture, 4 May)

PROF. G. BURTON

Development of the Urogenital System: Hormonal and Genetic Co-ordination of Development (One lecture, 6 May)

PROF. G. BURTON

Development of the Urogenital System: Sex Determination and the Genital System (One lecture, 11 May)

MR C. CONSTANT AND DR C. BRASSETT

Final Overview (One lecture, 13 May)

Practical Work

Dissection Sessions.*

Applied Anatomy: 10–12 4 May, 2–4 5 May and 10–12 & 2–4 11 May

* The Dissection Room is open to students from 10–12 M. Tu. Th.; and 2–4 F. and students should attend in accordance with their groups.

MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)

MICHAELMAS 2010

LENT 2011

EASTER 2011

HISTOLOGY

Course organiser: Dr J. T. Tiffert (email: jtt1000@cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>

Students will be notified of the time at which they should attend each of the classes.

Practical Work: *Histology Classroom, Physiology Building*

1. Introduction to Microscopy and Cell Structure. F. 2–4 (8 Oct.); or M. 10–12 or 2–4 (11 Oct.); or W. 2–4 (13 Oct.); or F. 2–4 (15 Oct.); or W. 2–4 (20 Oct.)
2. Connective Tissue, Nerve and Neuromuscular Junction. F. 2–4 (22 Oct.); or M. 10–12 or 2–4 (25 Oct.); or W. 2–4 (27 Oct.); or F. 2–4 (29 Oct.); or W. 2–4 (3 Nov.)
3. Striated, Cardiac and Smooth Muscle. F. 2–4 (5 Nov.); or M. 10–12 or 2–4 (8 Nov.); or W. 2–4 (10 Nov.); or F. 2–4 (12 Nov.); or W. 2–4 (17 Nov.)
4. Vascular System and Blood. F. 2–4 (19 Nov.); or M. 10–12 or 2–4 (22 Nov.); or W. 2–4 (24 Nov.); or F. 2–4 (26 Nov.); or W. 2–4 (1 Dec.)

Practical Work: *Histology Classroom, Physiology Building*

5. Epithelia and Skin. F. 2–4 (21 Jan.); or M. 10–12 or 2–4 (24 Jan.); or W. 2–4 (26 Jan.); or F. 2–4 (28 Jan.); or W. 2–4 (2 Feb.)
6. Respiratory System. F. 2–4 (4 Feb.); or M. 10–12 or 2–4 (7 Feb.); or W. 2–4 (9 Feb.); or F. 2–4 (11 Feb.); or W. 2–4 (16 Feb.)
7. Urinary System and Adrenal Gland. F. 2–4 (18 Feb.); or M. 10–12 or 2–4 (21 Feb.); or W. 2–4 (23 Feb.); or F. 2–4 (25 Feb.); or W. 2–4 (2 Mar.)
8. Alimentary System. F. 2–4 (4 Mar.); or M. 10–12 or 2–4 (7 Mar.); or W. 2–4 (9 Mar.); or F. 2–4 (11 Mar.); or W. 2–4 (16 Mar.)

Practical Work: *Histology Classroom, Physiology Building*

9. Liver, Pancreas and Salivary Glands. F. 2–4 (29 Apr.); or M. 10–12 or 2–4 (2 May); or W. 2–4 (4 May); or F. 2–4 (11 May); or W. 2–4 (11 May)
10. Thyroid, Parathyroid, Pituitary Gland and Revision. Exercises F. 2–4 (13 May); or M. 10–12 or 2–4 (16 May); or W. 2–4 (18 May); or F. 2–4 (20 May); or W. 2–4 (25 May)

HOMEOSTASIS

Course Organiser: Dr C. J. Schwiening (email: cjs30@cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>

All lectures take place in the *Babbage Lecture Theatre* Tu. Th. F. 12, unless otherwise stated.

DR C. J. SCHWIENING AND PROF. R. C. THOMAS
Introduction; Cellular Electrophysiology and Nerve.
(Nine lectures, 12 Oct.–29 Oct.)

PROF. C. L.-H. HUANG
Muscle. (Five lectures, 2 Nov.–11 Nov.)

DR R. J. BARNES
Heart and Circulation. (Nine lectures, 12 Nov.–2 Dec.)

Practical Work

Experimental Physiology. M. 10–12 or 2–4 or W. 10–12 or F. 10–12 (unless otherwise stated in the Course Handbook)

DR MICHAEL J. MASON
Respiration. (Nine lectures, 20 Jan.–8 Feb.)
DR J. FRASER AND DR D. GIUSSANI
Fluids and Electrolytes. (Ten lectures, 10 Feb.–3 Mar.)

DR MATTHEW J. MASON
Digestion, Absorption and Storage. (Six lectures 4 Mar.–17 Mar.)

Practical Work

The same continued.

PROF. R. C. THOMAS
Control of Metabolism. (Six lectures, 28 Apr.–10 May)

Practical Work

The same continued.

MOLECULES IN MEDICAL SCIENCE

Course Organiser: Michaelmas Term Dr F. J. Livesey (email: fjl1000@cam.ac.uk)

Lent and Easter Term Dr J. L. Griffin (email: jlg40@cam.ac.uk)

Further information may be obtained from the Faculty web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst/courses.html>

Unless stated otherwise, all lectures take place in the *Babbage Lecture Theatre, New Museums Site*, on M. 12, Tu. Th. 9.

Introduction

DR F. J. LIVESEY
Introduction to the Course. (One lecture, Th. 7 Oct. at 12.00)

Metabolism in health and disease

DR G. S. YEO
Prologue. Diabetes Mellitus as a Metabolic Disease.
(Two lectures, 11–12 Oct.)

DR J. MCCAFFERTY
Introduction to Macromolecules. Protein Structure and Enzyme Catalysis. (Six lectures, 14–26 Oct.)

DR J. L. GRIFFIN
Bioenergetics and Metabolism. (Eight lectures, 28 Oct.–15 Nov.)

DR D. PEREIRA
Nutrition. (Two lectures, 16–18 Nov.)

PROF. R. F. IRVINE
Membrane Dynamics and Function; Signalling by Hormones. (Five lectures, 22–30 Nov.)

DR G. S. YEO
Epilogue. (One lecture, 2 Dec.)

Experimental work and discussion; problem-based learning exercise

Department of Biochemistry, Downing Site
Detailed scheme in course handbook

Macromolecules in health and disease

DR T. R. HESKETH
Prologue. Cancer as a Molecular Disease.
(Two lectures, 20–24 Jan.)

DR L. PELLEGRINI
Organisation, Replication and Repair of Genomes. (Five lectures, 25 Jan.–3 Feb.)

DR E. MISKA
Transcription, Translation and Control. (Five lectures, 7–15 Feb.)

PROF. A. H. WYLLIE
Control of Proliferation and Death in Cancer Cells. (Three lectures, 17–22 Feb.)

DR J. MCCAFFERTY
Proteins and Molecular Recognition. (Two lectures, 24–28 Feb.)

DR D. CROWTHER/DR C. SARGENT
Genetics in Human and Animal Medicine.
(Five lectures, 1–9 Mar. note W. 12, 9 Mar.)

PROF. A. H. WYLLIE
Mesologue: Cancer Therapy (One lecture, 14 Mar.)

Experimental work and discussion; problem-based learning exercise

Department of Biochemistry, Downing Site
The same continued.

Macromolecules in Health and Disease (continued)

DR C. SARGENT/DR D. CROWTHER
Genetics in Human and Animal Medicine
(continued). (Four lectures, 28 Apr.–5 May)

Experimental work and discussion; bioinformatics exercise

Department of Biochemistry, Downing Site
The same continued.
Bioinformatics in Genetics

MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)

MICHAELMAS 2010

LENT 2011

EASTER 2011

VETERINARY ANATOMY AND PHYSIOLOGY

(Veterinary Students)

Course Organiser: Dr D.R. J. Bainbridge (email: db125@cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>All lectures take place in the *Biffen Lecture Theatre, Department of Genetics* on M. W. F. 9 and occasionally M. W. 10–12.

DR D. R. J. BAINBRIDGE, DR D. J. CHIVERS AND DR A. N. OTHER
 Introduction (Three Lectures, 8, 11, 13 Oct.)

DR D. R. J. BAINBRIDGE, DR J. BRACKENBURY, DR A. N. OTHER, DR D. J. CHIVERS AND DR J. M. HOLMES
 The Locomotor System (Thirteen Lectures, 15, 18, 20, 25, 27 Oct., M. 9 (1 Nov.); M. 10 (1 Nov.), 3 Nov. 10, 15, 17, 22, 24 Nov.)

DR J. M. HOLMES
 The Nervous System (Two Lectures 29 Nov., 1 Dec.)

Practical Work

Dissection of the domestic animals, examination of live animals, fresh viscera, radiographs, laboratory work and other activities. (Tu. and Th. 10–12 and F. 10–12 *or* 2–4 and occasionally Tu. *or* Th. 2–4.)

DR J. M. HOLMES
 The Nervous System (continued). (Two lectures, 19, 21 Jan.)

DR D. R. J. BAINBRIDGE, DR A. N. OTHER, AND DR J. M. HOLMES
 The Cardiovascular System. (Five lectures, 24, 26, 31 Jan. 2, 7 Feb.)

DR J. H. BRACKENBURY
 The Respiratory System. (Two lectures, 9, 14 Feb.)

DR D. J. CHIVERS, DR D. R. J. BAINBRIDGE AND DR J. GIBSON
 The Digestive System. (Nine lectures, 16, 21, 23, 28 Feb. 2, 7, 9, 14, 16 Mar.)

Practical Work

The same continued.

DR C. ROBERTS AND MRS J. PEARSON
 The Digestive System (continued). (Two lectures, 29 Apr. 2 May)

DR D. R. J. BAINBRIDGE AND DR A. N. OTHER
 The Urinary System. (Three lectures, 4, 9, 11 May)

DR J. M. HOLMES
 Integumentary System. (One lecture, 13 May)

DR D. R. J. BAINBRIDGE
 Review (One lecture, 16 May)

Practical Work

The same continued.

INTRODUCTION TO THE SCIENTIFIC BASIS OF MEDICINE 2010–11
(All students: SECOND M.B. AND SECOND VET M.B. EXAMINATION)

Course Organiser: Prof. K. T. Khaw (email: kk101@medschl.cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>All lectures will be held in the *Babbage Lecture Theatre* on W. 4

PROF. K. T. KHAW, DR M. HOLMES
 Epidemiology, Risk, Methods, Screening, Inference and Causation. (Four lectures, 20, 27 Oct., 3, 10 Nov.)

DR M. HOLMES
 Epidemiology (One lecture, 17 Nov.)

DR C. PALMER
 Biostatistics; Estimating Population Measures. (Two lectures 24 Nov., 1 Dec.)

DR C. PALMER
 Biostatistics (continued); Testing Hypotheses, Comparing Groups, Interpreting Research. (Three lectures, 26 Jan., 2, 9 Feb.)

SOCIAL CONTEXT OF HEALTH AND ILLNESS
(Medical students: SECOND M.B. EXAMINATION)

Course Co-ordinator: Dr S. Cohn (email: simon.cohn@medschl.cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>All lectures will be held in the *Babbage Lecture Theatre* on W. 12

DR S. COHN
 Social Context of Health and Illness (Six lectures 13, 20, 27 Oct.; 10, 17, 24 Nov.) (Revision lecture 2 Mar.)
 (Two supplementary lectures 3 Nov., 1 Dec.)

Seminars (Supervisions)

Group 1: Thu. 4–5 pm, 14, 21, 28 Oct.; 4 Nov.
 Group 2: Thu. 3–4 pm, 14, 21, 28 Oct.; 4 Nov.
 Group 3: Thu. 4–5 pm, 11, 18, 25 Nov.; 2 Dec.
 Group 4: Thu. 3–4 pm, 11, 18, 25 Nov.; 2 Dec.

Students will be notified which seminars to attend.

MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)

MICHAELMAS 2010

LENT 2011

EASTER 2011

**PREPARING FOR PATIENTS A (First Year Strand)
(Medical Students: SECOND M.B. EXAMINATION)**

Course Organiser: Dr J. Silverman (email: pfp@medschl.cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>

There are four strands to this course, which run over the three pre-clinical years of study

DR J. SILVERMAN

Briefings. (19, 26 Oct., 2, or 9 Nov.) 2–4pm Anatomy*Lecture Theatre***General Practitioner visits.** (26 Oct., 4 or 9 or 16 or 18 or 23 or 25 or 30 Nov.) 2–5**General Practitioner visits.** (20 or 27 Jan. or 1 or 8 or 15 or 17 or 22 or 24 Feb.) 2–5

DR J. SILVERMAN

Review Sessions. (1 or 14 or 15 or 21 or 22 or 28 Feb. or 1 or 7 Mar.) 2–4 *Mill Lane Lecture Room 6*

Students will be notified which sessions to attend.

**PRINCIPLES OF ANIMAL MANAGEMENT
(Incorporating FARM ANIMAL HUSBANDRY and the first year strand of PREPARING FOR THE VETERINARY PROFESSION)
(Veterinary students: SECOND VET M.B. EXAMINATION)**

Course Organiser: Dr G. Pearce (email: gpp28@cam.ac.uk)

Further information may be obtained from the Faculty Web site at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>All lectures will take place in the *Biffen Lecture Theatre, Department of Genetics, New Museums Site (unless otherwise advised in your handbook)*, at Tu, 2, 3 or 4**Lectures:** Tu, 2, 3, 4 *Lecture Theatre to be confirmed*

DR G. P. PEARCE AND OTHERS

(Seventeen lectures, 2–4 12 Oct., 2–5 19 Oct., 2–4 26 Oct., 2, 9, 16, 23 and 30 Nov.)

Lectures: Tu, 2, 3 *Lecture Theatre to be confirmed*

DR G. P. PEARCE AND OTHERS

(Two lectures, 3–4 25 Jan. and 1 Feb.)

No lectures on 8 Feb.

DR G. P. PEARCE AND OTHERS

(Ten lectures, 2–3 and 3–4 15, 22, Feb., 1, 8 Mar.)

Practical Work or Small Animal HandlingTh. 2–5 *Department of Veterinary Medicine or College of West Anglia Cambridge Campus* (Six sessions, Th. 2–5 21, 28 Oct., 4, 11, 18, 25 Nov.)**Practical Work, Small Animal Handling or CAL Package**Th. 2–5 or Tu, 2–5 *Department of Veterinary Medicine* (Five sessions, Th. 2–5 27 Jan., 3, 17, 24 Feb., 3, 10 Mar.)

Detailed scheme in course handbook

Students will be advised which sessions to attend

Department of Veterinary Medicine (One session, Tu. 2–5 8 Feb.)*College of West Anglia Cambridge Campus*

(Seven sessions, Th. 2–5 27 Jan., 3, 17, 24 Feb., 3, 10 Mar.)

The same continued.