

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

Introduction to the Course

W. 12–1 (7 Oct.) DR D. MACDONALD, DR J. SILVERMAN, DR D. WOOD, (Medical Students) *Anatomy Lecture Theatre*
W. 2–3 (7 Oct.) DR D. BAINBRIDGE, PROF. M. HERRTAGE, DR G. PEARCE (Veterinary Students) *Biffen Lecture Theatre*

MICHAELMAS 2009

LENT 2010

EASTER 2010

FUNCTIONAL ARCHITECTURE OF THE BODY

(Medical Students)

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

Further information may be obtained from the Faculty Website 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, 9 Oct.)
MR C. CONSTANT
Introduction to the Limbs (One lecture, 14 Oct.)
DR P. SCHOFIELD
Development of the Body Plan (One lecture, 16 Oct.)
DR S. JONES
Principles of the Nervous System (One lecture, 21 Oct.)
MS M. SPEAR
Principles of the Vascular System (One lecture, 23 Oct.)
DR S. JONES
Degeneration and Repair in the Peripheral Nervous System (One lecture, 28 Oct.)
PROF. A. DIXON
Introduction to Imaging (One lecture, 30 Oct.)
PROF. D. RICHES
Posture and Locomotion (One lecture, 4 Nov.)

No lectures on 6 and 11 Nov.

DR P. SCHOFIELD
Embryonic Folding, Somatogenesis and Segmentation (One lecture, 13 Nov.)
MR C. CONSTANT
The Vertebral Column (One lecture, 18 Nov.)
DR C. BAKER
Craniofacial Development (One lecture, 20 Nov.)
PROF. R. J. KEYNES
Overview of the Cranial Nerves (One lecture, 25 Nov.)
MR C. CONSTANT AND DR C. BRASSETT
Review and Preview (One lecture, 27 Nov.)

Clinical Demonstration (4 Dec. 10–12)

William Harvey Lecture Theatre, Addenbrooke's Hospital

Practical Work

Dissection Room.* Times according to Sets.
Introduction and Essential Information: 7 Oct. at 9 or 10 according to Sets.
Dissection Sessions. M. 10–12 and F. 2–4
or
Tu. 10–12 and Th. 10–12.
Applied Anatomy: W. 10–12 or 2–4 fortnightly

Lectures W. F. 9

Anatomy Lecture Theatre

PROF. R. J. KEYNES
Clinical Applications of the Cranial Nerves (One lecture, 15 Jan.)
DR C. BRASSETT
The Larynx (One lecture, 20 Jan.)
MS M. SPEAR
The Lymphatic System (One lecture, 22 Jan.)
DR S. JONES
The Autonomic Nervous System (One lecture, 27 Jan.)
PROF. D. RICHES
The Neck (One lecture, 29 Jan.)
PROF. S. BRAY
Development of Body Cavities, Diaphragm, Lungs (One lecture, 3 Feb.)
PROF. S. BRAY
Development of the Cardiovascular System (One lecture, 5 Feb.)
PROF. D. RICHES
Applied Anatomy of the Thorax (One lecture, 10 Feb.)
PROF. S. BRAY
Development of the Gut Tube and Derivatives (One lecture, 12 Feb.)
DR C. BRASSETT
Applied Anatomy of the Abdominal Wall (One lecture, 17 Feb.)
PROF. D. RICHES
Applied Anatomy of the Abdominal Cavity (One lecture, 19 Feb.)
DR P. BEARCROFT
Medical Imaging of the Thorax and Abdomen (One lecture, 24 Feb.)
MR C. CONSTANT AND DR C. BRASSETT
Preparing for the Tripos (One lecture, 26 Feb.)

Clinical Demonstration (4 Mar. 2–4)

William Harvey Lecture Theatre, Addenbrooke's Hospital

Practical Work

Dissection Sessions.*

Applied Anatomy: The same continued.

Lectures W. F. 9

Anatomy Lecture Theatre

PROF. G. BURTON
Applied Anatomy of the Pelvis (One lecture, 23 Apr.)
DR R. H. WHITAKER
Continence Mechanisms (One lecture, 28 Apr.)
DR P. SCHOFIELD
Development of the Urogenital System: Hormonal and Genetic Co-ordination of Development (One lecture, 30 Apr.)
DR P. SCHOFIELD
Development of the Urogenital System: Sex Determination and the Genital System (One lecture, 5 May)
MR C. CONSTANT AND DR C. BRASSETT
Final Overview (One lecture, 7 May)

Practical Work

Dissection Sessions.*

Applied Anatomy: The same continued.

* 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 Sets.

MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)

MICHAELMAS 2009

LENT 2010

EASTER 2010

HISTOLOGY

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

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

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 (9 Oct.); or M. 10–12 or 2–4 (12 Oct.); or W. 2–4 (14 Oct.); or F. 2–4 (16 Oct.); or W. 2–4 (21 Oct.)
2. Connective Tissue, Nerve and Neuromuscular Junction. F. 2–4 (23 Oct.); or M. 10–12 or 2–4 (26 Oct.); or W. 2–4 (28 Oct.); or F. 2–4 (30 Oct.); or W. 2–4 (4 Nov.)
3. Striated, Cardiac and Smooth Muscle. F. 2–4 (6 Nov.); or M. 10–12 or 2–4 (9 Nov.); or W. 2–4 (11 Nov.); or F. 2–4 (13 Nov.); or W. 2–4 (18 Nov.)
4. Vascular System and Blood. F. 2–4 (20 Nov.); or M. 10–12 or 2–4 (23 Nov.); or W. 2–4 (25 Nov.); or F. 2–4 (27 Nov.); or W. 2–4 (2 Dec.)

Practical Work: *Histology Classroom, Physiology Building*

5. Epithelia and Skin. F. 2–4 (15 Jan.); or M. 10–12 or 2–4 (18 Jan.); or W. 2–4 (20 Jan.); or F. 2–4 (22 Jan.); or W. 2–4 (27 Jan)
6. Respiratory System. F. 2–4 (29 Jan.); or M. 10–12 or 2–4 (1 Feb.); or W. 2–4 (3 Feb.); or F. 2–4 (5 Feb.); or W. 2–4 (10 Feb.)
7. Urinary System and Adrenal Gland. F. 2–4 (12 Feb.); or M. 10–12 or 2–4 (15 Feb.); or W. 2–4 (17 Feb.); or F. 2–4 (19 Feb.); or W. 2–4 (24 Feb.)
8. Alimentary System. F. 2–4 (26 Feb.); or M. 10–12 or 2–4 (1 Mar.); or W. 2–4 (3 Mar.); or F. 2–4 (5 Mar.); or W. 2–4 (10 Mar.)

Practical Work: *Histology Classroom, Physiology Building*

9. Liver, Pancreas and Salivary Glands. F. 2–4 (23 Apr.); or M. 10–12 or 2–4 (26 Apr.); or W. 2–4 (28 Apr.); or F. 2–4 (30 Apr.); or W. 2–4 (5 May)
10. Thyroid, Parathyroid, Pituitary Gland and Revision. Exercises F. 2–4 (7 May); or M. 10–12 or 2–4 (10 May); or W. 2–4 (12 May); or F. 2–4 (14 May); or W. 2–4 (19 May)

HOMEOSTASIS

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

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

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

DR C. J. SCHWIENING AND PROF. R. C. THOMAS
Introduction; Cellular Electrophysiology and Nerve.
(Nine lectures, 13 Oct. – 30 Oct.)

PROF. C. L-H. HUANG
Muscle. (Five lectures, 3 Nov. – 12 Nov.)

DR R. J. BARNES
Heart and Circulation. (Nine lectures, 13 Nov. – 3 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, 14 Jan. – 2 Feb.)
DR J. FRASER AND DR D. GIUSSANI
Fluids and Electrolytes. (Ten lectures, 4 Feb. – 25 Feb.)

DR MATTHEW J. MASON
Digestion, Absorption and Storage. (Six lectures 26 Feb. – 11 Mar.)

Practical Work

The same continued.

PROF. R. C. THOMAS
Control of Metabolism. (Six lectures, 22 Apr. – 4 May)

Practical Work

The same continued.

MOLECULES IN MEDICAL SCIENCE

Course Organiser: Dr F. J. Livesey (mail: fjl1000@cam.ac.uk)

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

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

Introduction

DR F. J. LIVESEY
Introduction to the Course. (One lecture, Th. 8 Oct. at 12.00)

Metabolism in health and disease

PROF. K. SIDDLE
Prologue. Diabetes Mellitus as a Metabolic Disease.
(Two lectures, 12–13 Oct.)

DR M. K. HIGGINS
Introduction to Macromolecules. Protein Structure and Enzyme Catalysis. (Six lectures, 15–27 Oct.)

DR J. L. GRIFFIN
Bioenergetics and Metabolism. (Eight lectures, 29 Oct.–16 Nov.)

DR D. PEREIRA
Nutrition. (Two lectures, 17–19 Nov.)

PROF. R. F. IRVINE
Membrane Dynamics and Function; Signalling by Hormones. (Five lectures, 23 Nov.–1 Dec.)

PROF. K. SIDDLE
Epilogue. (One lecture, 3 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, 14–18 Jan.)

DR F. J. LIVESEY
Organisation, Replication and Repair of Genomes. (Five lectures, 19–28 Jan.)

DR E. MISKA
Transcription, Translation and Control. (Five lectures, 1–9 Feb.)

PROF. A. H. WYLLIE
Control of Proliferation and Death in Cancer Cells. (Three lectures, 11–16 Feb.)

DR M. K. HIGGINS
Proteins and Molecular Recognition. (Two lectures, 18–22 Feb.)

DR D. W. MACDONALD
Genetics in Human and Animal Medicine.
(Five lectures, 23 Feb.–3 Mar. note W. 12 (3 Mar.))

PROF. A. H. WYLLIE
Mesologue: Cancer Therapy (One lecture, 8 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
Genetics in Human and Animal Medicine
(continued). (Four lectures, 22–29 Apr.)

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 2009

LENT 2010

EASTER 2010

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 Website 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 unless otherwise stated.

DR D. R. J. BAINBRIDGE, DR D. J. CHIVERS AND DR S. BRAY
Introduction (Three Lectures, 9, 12, 14 Oct.)
DR D. R. J. BAINBRIDGE, DR J. BRACKENBURY, DR S. BRAY DR
D. J. CHIVERS AND DR J. M. HOLMES
The Locomotor System (Thirteen Lectures, 16, 19, 21, 26,
28 Oct., M. 9 (2 Nov.); M. 10 (2 Nov.), 4 Nov. 11, 16,
18, 23, 25 Nov.)
DR J. M. HOLMES
The Nervous System (Two Lectures 30 Nov., 2 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,
13, 15 Jan.)
DR D. R. J. BAINBRIDGE, DR S. J. BRAY AND DR J. M.
HOLMES
The Cardiovascular System. (Five lectures, 18,
20, 25, 27 Jan. 1 Feb.)
DR J. H. BRACKENBURY
The Respiratory System. (Two lectures, 3, 8
Feb.)
DR D. J. CHIVERS, DR D. R. J. BAINBRIDGE AND DR J.
GIBSON
The Digestive System. (Nine lectures, 10, 15, 17,
22, 24 Feb. 1, 3, 8, 10 March.)

Practical Work

The same continued.

DR C. ROBERTS AND MRS J. PEARSON
The Digestive System (continued). (Two
lectures, 23, 26 Apr.)
DR D. R. J. BAINBRIDGE, DR S. J. BRAY
The Urinary System. (Three lectures, 28 Apr.
3, 5 May)
DR J. M. HOLMES
Integumentary System. (One lecture, 7 May)
DR D. R. J. BAINBRIDGE
Review (One lecture, 10 May)

Practical Work

The same continued.

INTRODUCTION TO THE SCIENTIFIC BASIS OF MEDICINE

(All students: SECOND M.B. & 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 Website 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, 21, 28 Oct., 4, 11 Nov.)
DR M. HOLMES
Epidemiology (One lecture, 18 Nov.)
DR C. PALMER
Biostatistics; Estimating Population Measures. (Two
lectures 25 Nov., 3=2 Dec.)

DR C. PALMER
Biostatistics (continued); Testing Hypotheses,
Comparing Groups, Interpreting
Research. (Three lectures, 20, 27 Jan.,
3 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 Website at <http://www.bio.cam.ac.uk/sbs/facbiol/mvst.html>All lectures will be held in the *Babbage Lecture Theatre* at W. 12

DR S. COHN
Social Context of Health and Illness (Six lectures 14, 21,
28 Oct; 11, 18, 25 Nov.) (Revision lecture 24 Feb.)
(Two supplementary lectures 4 Nov., 2 Dec.)

Seminars (Supervisions)

Group 1: Thu. 4–5 pm, 15, 22, 29 Oct.; 5 Nov.
Group 2: Thu. 3–4 pm, 15, 22, 29 Oct.; 5 Nov.
Group 3: Thu. 4–5 pm, 12, 19, 26 Nov.; 3 Dec.
Group 4: Thu. 3–4 pm, 12, 19, 26 Nov.; 3 Dec.

Students will be notified which seminars to attend.

MEDICAL AND VETERINARY SCIENCES TRIPOS, PART IA (continued)

MICHAELMAS 2009

LENT 2010

EASTER 2010

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 Website 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. (20, 27 Oct., 3, or 10 Nov.) 2–4pm *Anatomy Lecture Theatre***General Practitioner visits.** (27 Oct., 5 or 10 or 17 or 19 or 24 or 26 Nov. or 1 Dec.) 2–5**General Practitioner visits.** (14 or 21 or 26 Jan. or 2 or 9 or 11 or 16 or 18 Feb.) 2–5

DR J. SILVERMAN

Review Sessions. (26 Jan. or 8 or 9 or 15 or 16 or 22 or 23 Feb. or 1 Mar.) 2–4 *Mill Lane Lecture Room 6*

Students will be notified which sessions to attend.

FARM ANIMAL HUSBANDRY and PREPARING FOR THE VETERINARY PROFESSION (First Year Strand)**To be called “Principles of Animal Management”****(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 Website 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, at Tu. 2, 3 or 4***Lectures:** Tu. 2, 3, 4 *Biffen Lecture Theatre*

TO BE CONFIRMED

(Seventeen lectures, 2–4 13 Oct., 2–5 20 Oct., 2–4 27 Oct., 3, 10, 17, 24 Nov. and 1 Dec.)

Practical Work or Small Animal HandlingTh. 2–5 *Department of Veterinary Medicine or Milton Campus WAU* (Six sessions, Th. 2–5 22, 29 Oct., 5, 12, 19, 26 Nov.)

Detailed scheme in course handbook

Students will be advised which sessions to attend

Lectures: Tu. 2, 4 *Biffen Lecture Theatre*

TO BE CONFIRMED

(Two lectures, 4–5 19, 26 Jan.)

No lectures on 2 Feb.

TO BE CONFIRMED

(Ten lectures, 2–3 and 4–5 9, 16, 23, Feb., 2, 9 Mar.)

Practical Work, Small Animal Handling or CAL PackageTh. 2–5 or Tu. 2–5 *Department of Veterinary Medicine* (Five sessions, Th. 2–5 21, 28 Jan., 11, 18, 25 Feb., 4 Mar.)*Department of Veterinary Medicine* (One session, Tu. 2–5 2 Feb.)*Milton Campus WAU* (Seven sessions, Th. 2–5 21, 28 Jan., 11, 18, 25 Feb., 4, 11 Mar.)

The same continued.