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. OCTAVIAN 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 fortuitously
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 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)

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)

MR. C. CONSTANT
Preparing for the Tripos (One lecture, 11 May)

Clinical Demonstration (10 Mar. 10–12)
William Harvey Lecture Theatre
Addenbrooke’s Hospital

Practical Work
Dissection Room.* Times according to groups.

Clinical Demonstration (10 Mar. 10–12)
William Harvey Lecture Theatre
Addenbrooke’s Hospital

Practical Work
Dissection Sessions.

* 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.
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.)
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 (6 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. J. SCHWIENING**
Muscle. (Five lectures, 2 Nov.-11 Nov.)

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

**Experimental 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.)

**DR. J. L. GRAF**
Proteins and Molecular Recognition. (Two lectures, 20-24 Jan.)

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

**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.)

**DR. D. CROWTHORNE**
Control of Proliferation and Death in Cancer Cells. (Three lectures, 17-22 Feb.)

**DR. D. CROWTHORNE/DR. C. SARGENT**
Genetics in Human and Animal Medicine. (Four lectures, 28 Apr.-5 May)

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. LIVSEY
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, 1-12 Oct.)

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

**DR. 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. (Fve 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. CROWTHORNE**
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. CROWTHORNE**
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
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.)

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
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. 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.
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

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.)

**Practical Work or Small Animal Handling**  
Th. 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.)

Detailed scheme in course handbook  
Students will be advised which sessions to attend

**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, 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.)

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.