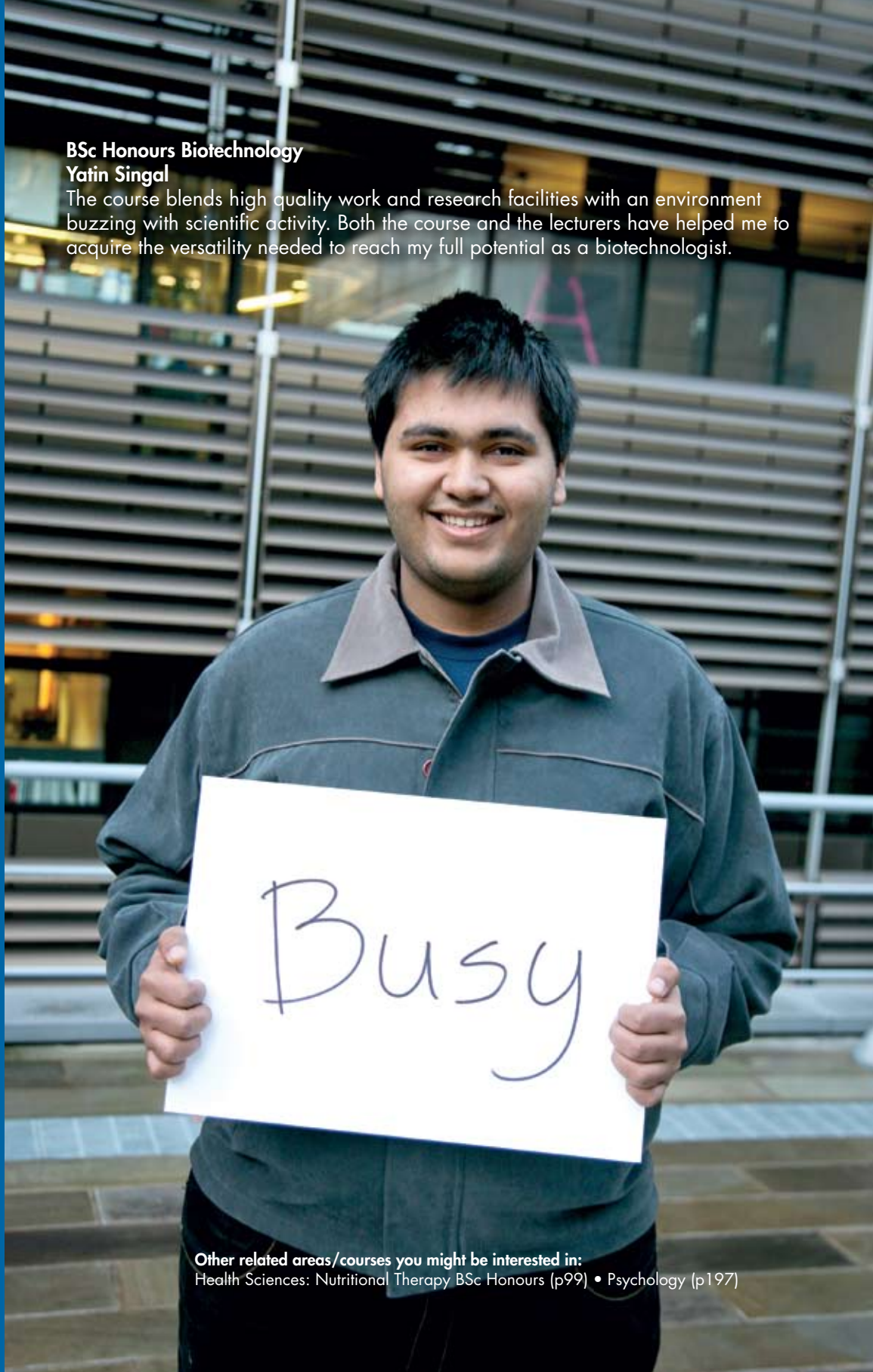

BSc Honours Biotechnology
Yatin Singal
The course blends high quality work and research facilities with an environment buzzing with scientific activity. Both the course and the lecturers have helped me to acquire the versatility needed to reach my full potential as a biotechnologist.

Other related areas/courses you might be interested in:
Health Sciences: Nutritional Therapy BSc Honours (p99) • Psychology (p197)

Applied Biomedical Science BSc Honours

This course has been designed to augment the academic qualifications of scientists who work in diagnostic and research medical science laboratories in hospitals and other medical institutions.

Only applicants employed in a suitable accredited laboratory able to support work-based learning (WBL) can be considered for the course. A written statement of support is required from your employer.

Course content
Initially you will study the important fundamental sciences along with an integrated programme of WBL. As you progress, you will develop an understanding of disease processes and the biology of associated sub-cellular changes, combined with the principles of laboratory procedures used to aid diagnosis. In addition to this, immunology, molecular biology and genetics are studied within the context of disease processes, along with training in research methods and techniques.

In Year 3 (Credit Level 6) you will focus on the study of the complex nature of disease as it affects particular physiological systems. The investigation of the disease process centres on the laboratory procedures that are used in haematology, clinical chemistry, cellular pathology and medical microbiology to diagnose and monitor disease. A major research project, carried out in your home laboratory, will enable you to develop the skills required for genuine scientific inquiry.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Work-Based Learning 1

Year 2 (Credit Level 5)
Subjects of study include: Biology of Disease • Infection and Immunity • Medical Genetics • Principles of Laboratory Diagnosis • Research Methods • Work-Based Learning 2

Year 3 (Credit Level 6)
Subjects of study include: Cellular Pathology • Clinical Chemistry • Haematology and Transfusion Science • Medical Immunology • Medical Microbiology • Project • Work-Based Learning 3

Formal credit is given via the WBL process to meet the requirements of an Honours degree in a minimum time of four years part-time study, and in recognition of the learning associated with employment in medical laboratories. Approval by the HPC enables you to become 'registrant' practitioners on successful completion of the course.

Biomedical Sciences Foundation Degree (see p75)
If you are a healthcare professional in full-time employment in a national health service or private laboratory, but do not have the necessary qualifications for entry into the BSc Honours Applied Biomedical Science, you may choose to study the Biomedical Sciences Foundation Degree.

Length of course
Four-year, part-time day release, one day per week

Location
Central London (Cavendish)

Professional recognition
The degree is approved by the Health Professions Council (HPC) and accredited by the Institute of Biomedical Science (IBMS) thereby enabling you to fulfil all requirements for HPC registration and membership of the Institute.

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Although already employed in diagnostic and research laboratories, your career prospects are enhanced by this degree. You might also wish to study one of the many MSc courses available in the School or elsewhere; a range of postgraduate biomedical degree courses accredited by the IBMS exists.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

For further information about Bioscience courses visit **www.westminster.ac.uk/science**

Biochemistry BSc Honours

Biochemistry is one of the pivotal degree disciplines in modern times, and a fundamental component of all biological science degree disciplines at the University. Biochemistry is the study of living systems at the molecular level, and biochemists study the ways in which cells and organisms are formed and interact. This involves examining the structure and function of macromolecules such as proteins, nucleic acids and carbohydrates, as well as carrying out experiments that seek to ascertain the properties of biological systems varying in complexity from cell extracts to whole organisms.

This course hinges upon our buoyant biochemical research in subjects as diverse as plant cell wall architecture, membrane transport, use of enzymes in glycobiology, fungal molecular genetics and fungal metabolite biosynthesis.

Course content
You will be provided with sound foundations in chemistry, structural biochemistry and relevant analytical biochemical techniques. There is a broad range of biochemistry-related modules which are taught at Year 3 (Credit Level 6) that reflect the research interests of our department. A core component is the research project, for which you are expected to undertake original research under staff guidance.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Biological and Organic Chemistry • Laboratory Research Methods • Molecular Biochemistry • Molecular Genetics • plus one option module • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Bioinformatics • Current Topics in Biochemistry and Molecular Biology • Enzymes: Mechanisms and Control • Project • Protein Biochemistry • plus one option module • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
C700; with Foundation C708

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
You will be equipped with a wide range of subject-specific skills and knowledge that will enhance your employment prospects. You will be able to apply for a range of biochemical and related jobs, while further opportunities are also available in areas such as biotechnology, genetics, immunology and molecular biology. Companies that employ biochemistry graduates include those in the pharmaceutical, diagnostic and water industries. The skills you acquire and develop will also be useful in areas such as teaching, management, and more than 25 per cent of our graduates go on to undertake research or further study leading to an MSc, MPhil or PhD.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Biological Sciences BSc Honours

This flexible course enables you to tailor your study according to your interests, by building up your own combination of modules from those on offer. You can study combinations of subjects not on offer in a single discipline, for example physiology and biochemistry, or pharmacology and biotechnology. Your course leader and personal tutor can help you to choose appropriate modules at Year 2 and Year 3 (Credit Levels 5 and 6) to ensure you build up a sound programme of study for your degree. This will also allow you to establish a foundation for a wide variety of careers in the biological sciences.

Course content
Your tutors will work with you to plan an academically viable programme of modules as you progress through the course. The pathway you design for yourself is dictated by your preferences or career needs. Only the core modules are listed; other biosciences modules are chosen by you to complete the programme. Look at those on offer in our other degree programmes to get an idea of possible subjects.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Laboratory Research Methods • plus five option modules • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Project • plus five option modules • plus one free choice module

Length of course
Three-year full-time; four-year, full-time with Foundation

UCAS codes
C900; with Foundation C901

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, together with a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
The strong multi-disciplinary background of graduates from the course makes you attractive to a wide range of employers.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Biomedical Sciences BSc Honours

This degree has been designed to prepare scientists for careers in both the medical diagnostic and research environments. It provides a thorough education in the disciplines required to understand and investigate disease, and enables access to a variety of pathways of professional development in the biomedical sciences.

Course content
Initially you will study the important fundamental sciences, along with an introduction to biomedicine. As you progress, you will develop an understanding of disease processes and the biology of the associated sub-cellular changes, combined with the principles of laboratory procedures used to aid diagnosis. In addition, immunology, molecular biology and genetics are studied within the context of disease processes, along with training in research methods and techniques.

In Year 3 (Credit Level 6) you will focus on the study of the complex nature of disease as it affects particular physiological systems. The investigation of the disease process centres on the laboratory procedures that are used in haematology, clinical chemistry, cellular pathology and medical microbiology to diagnose and monitor disease. A major research project will enable you to develop the skills required for genuine scientific inquiry.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biology of Disease • Infection and Immunity • Laboratory Research Methods • Medical Genetics • Principles of Laboratory Diagnosis • plus one free choice module

Sandwich placement year
In association with NHS trusts, we offer selected students the opportunity to spend a year working in hospital laboratories. Between Year 2 and Year 3 (Credit Levels 5 and 6) you will gain valuable work experience, practical and career development skills, and the opportunity to learn more about biomedical sciences in the hospital context. You will receive a student bursary during your sandwich year.

Year 3 (Credit Level 6)
Subjects of study include: Cellular Pathology • Clinical Chemistry • Haematology and Transfusion Science • Medical Immunology • Medical Microbiology • Project • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time sandwich; four-year, full-time with Foundation

UCAS codes
B940; with sandwich B900; with Foundation B903

Location
Central London (Cavendish)

Professional recognition
The degree is accredited by the Institute of Biomedical Science (IBMS).

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, together with a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Employment prospects for graduates are excellent, with openings in a variety of diagnostic and research laboratories in hospitals, universities/research institutes and pharmaceutical companies. Honours graduates can expect to become registered with the Health Professions Council (HPC) as Biomedical Scientists, provided they fulfil the additional HPC requirements of competencies through suitable employment.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Biotechnology BSc Honours

Biotechnology draws upon biochemistry, microbiology, genetics and biochemical engineering to create products and services from biological organisms. People's lives have been influenced by biotechnology for centuries, through the use of micro-organisms to produce food and drink. The large-scale production of antibiotics has revolutionised healthcare, and biotechnology has now entered a new and exciting phase with the advent of molecular biology and molecular genetics.

Recent possibilities for medical applications, such as gene therapy and gene diagnosis, deserve wider consideration than the purely scientific, and the course aims to promote interest in ethical and societal issues. Scientists with a broad educational background will deliver developments in biotechnology, whether in the areas of new environmental treatment processes or the production of previously unavailable human hormones.

Course content
The course will provide you with a grounding in areas fundamental to many bioscience disciplines as well as an understanding of biochemistry, biotechnology, microbiology and molecular genetics. The option modules allow you to follow your particular interests in the various aspects of biotechnology.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Laboratory Research Methods • Microbial Form and Function • Microbial Physiology and Culture • Recombinant DNA Applications • plus one option module • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Bioinformatics • Bioscience and Business • Environmental Biotechnology • Industrial Microbiology • Project • plus one option module • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
J700; with Foundation J708

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
There is a need for graduate biotechnologists in the UK and overseas. The combination of skills and knowledge obtained also provides a sound background for a wide range of opportunities for employment or further study to MSc or PhD level.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Forensic Biology BSc Honours

The biological aspects of forensics are the fastest-growing area of forensic applications in both criminal and civil cases. As such, there is a high demand for graduates skilled in biological molecular sciences and the analysis of biological forensic data. This course is designed to meet this demand as well as reflect how the use of science can provide evidence in legal investigations.

Course content
The course includes the theory and practice of a wide range of disciplines including bioinformatics, biological analysis, DNA profiling, forensic medicine (pathological and toxicological analysis), molecular and cellular biosciences, molecular genetics and protein analysis, as well as key elements of the legal system and the presentation of evidence.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Forensics and the Law • Laboratory Research Methods • Recombinant DNA Applications • Techniques in Forensic Biology • plus one option module • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Forensic Evidence and the Law • Medical Forensic Biology • Molecular Applications in Forensic Biology • Processes in Pathology • Project • plus one option module • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
F410; with Foundation F411

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Successfully completing the degree will open up the possibility of a career in government agencies, for example as a scene of crime officer, or in laboratories as an analytical bioscientist. Your wide range of skills may also lead to jobs in teaching, management and related areas, or you could go on to embark on further research leading to an MSc, MPhil or PhD.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Human and Medical Science BSc Honours

Recent rapid growth in knowledge and technology has led to a greatly enhanced understanding of human function in health and disease. This new degree integrates biological and medical sciences in order to understand human structure, function, development and behaviour.

You will study the core medical sciences (physiology, anatomy, cell biology, biochemistry, molecular biology and genetics) and choose from a range of options in pharmacology, neuroscience, nutrition or pathology in order to tailor your degree to your interests and career aspirations. Our ethos of 'teaching informed and enriched by research' will give you the good research and critical analytical skills needed to progress to postgraduate studies.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Human Physiology and Anatomy • Working in Bioscience Options, choose one from: Concepts in Bioscience • Introduction to Health and Nutrition • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Cellular Communication • Laboratory Research Methods • Physiology for Health Sciences • plus two option modules • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Diagnostic and Clinical Physiology • Endocrinology and Reproduction • Project • plus three option modules • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
B901; with Foundation B902

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Employment opportunities include working in hospitals, research institutions, industry and the scientific or medical civil services. Alternatively the skills developed will enable you to move into such fields as teaching, journalism and management. This degree also provides ideal preparation for the graduate-entry programmes into medicine which are becoming increasingly available in UK medical schools.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Human Nutrition BSc Honours

Public and media interest in what we eat has never been greater. Emerging as one of the most popular sciences, human nutrition integrates knowledge from diverse areas of science to present a unified view of this dynamic discipline and its applications. You will examine how nutrients and eating patterns impact on health and well-being, and the role of diet in both health and disease.

We have well-equipped laboratories in all bioscience disciplines including a suite of biochemical test facilities for nutritional analysis, whole body metabolism and determination of body composition. A lively research culture in the area is reflected in current studies into metabolic features underlying obesity, diet and exercise treatments for overweight, and nutritional strategies to improve performance.

Course content
The course presents you with the relevant aspects of human nutrition, physiology, public health, biochemistry and psychology.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Human Physiology and Anatomy • Introduction to Nutrition and Health • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Health Behaviour • Human Nutrition • Laboratory Research Methods • Nutrition in Society • Physiology for Health Sciences • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Advanced Nutrition • Clinical Nutrition • Nutrition and Performance • Project • Public Health • plus one option module • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
B401; with Foundation B408

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Graduates in this exciting field gain employment as nutrition advisors and consultants, in regulatory and organisational roles and in teaching, research and clinical capacities. You will be eligible for associate registration of the Nutrition Society (UK) in the areas of nutrition, public health and sports nutrition. A number of graduates take postgraduate opportunities that allow them to gain professional accreditation as dieticians and registered public health or sports nutritionists.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Microbiology BSc Honours

Microbiology complements biochemistry, genetics and biochemical engineering but offers specialisation in applied microbiology. This course is designed to provide the necessary academic, practical and vocational knowledge and skills to enable you to work effectively in a wide range of microbiological settings. You will study the diversity of microbial types, how micro-organisms can be used and manipulated to aid mankind, and the detrimental effects of micro-organisms (for example on health).

Course content
The course will provide you with a grounding in areas fundamental to many bioscience disciplines, while focusing on microbiology. The option modules allow you to follow your interests in various aspects of microbiology.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Infection and Immunity • Laboratory Research Methods • Microbial Form and Function • Microbial Physiology and Culture • plus one option module • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Bioinformatics • Environmental Biotechnology • Industrial Microbiology • Medical Microbiology • Project • plus one option module • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
C500; with Foundation C501

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
You will be able to apply for a range of microbiological and related jobs, along with opportunities in areas such as genetics, molecular biology, immunology and biotechnology. Companies that employ microbiology graduates include those in the pharmaceutical, diagnostic and water industries, and hospital laboratories. The skills you develop during the course could also lead to employment is areas such as teaching and management, and more than 25 per cent of our graduates go on to undertake research or further study leading to an MSc, MPhil or PhD.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Molecular Biology and Genetics BSc Honours

This course covers the rapidly expanding areas of molecular biology and genetics which have ever-increasing impacts on modern life. For example, the findings of the Human Genome Project, which have been obtained using modern techniques of molecular biology, have changed our views on how human life is controlled. There is the potential to generate great benefits in improved healthcare provision, and applications beyond this include improvements in agriculture and the environment.

Course content
You will begin the course with a broad-based introduction to the areas supporting molecular biology and genetics, such as cell biology, biochemistry and microbiology. These areas are developed further and are extended to consider issues supported by molecular biology, including classical, medical and molecular genetics. You will then specialise in expanding areas, such as bioinformatics and recent applications of molecular biology and genetics.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Human Physiology and Anatomy • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Laboratory Research Methods • Medical Genetics • Molecular Genetics • Recombinant DNA Applications • plus one option module • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Bioinformatics • Current Topics in Biochemistry and Molecular Biology • Molecular Biology and Disease Diagnosis • Molecular Therapeutics • Project • plus one option module • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
C400; with Foundation CC74

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Graduates are well qualified to pursue a career in a variety of areas requiring specialist molecular knowledge. These include the fields of medicine, agriculture, biotechnology, forensic science, pharmaceuticals and environmental sciences. In addition, your skills' portfolio will equip you for a career in teaching, management or sales. Further study and research may lead to an MSc, MPhil or PhD.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Nutrition and Exercise Science BSc Honours

This degree focuses on the role that food, nutrition and physical activity play in all aspects of human health. Taking a unique holistic approach, the course draws on the disciplines of nutrition, physiology, psychology and exercise science. You will gain a solid scientific grounding on which to develop strategies to improve the general population's health and well-being and enhance performance.

We have well-equipped laboratories in all bioscience disciplines including a suite of biochemical test facilities for nutritional analysis, whole body metabolism and determination of body composition. A lively research culture in the area is reflected in current studies into metabolic features underlying obesity, diet and exercise treatments for the overweight, and nutritional strategies to improve performance.

Course content
You will begin with the underpinning science for the study of nutrition and health. As the course progresses, modules in exercise physiology and human nutrition are central to your studies. You will have the opportunity to develop expertise in such areas as instructing and supervising exercise programmes and conducting health screening.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Human Physiology and Anatomy • Introduction to Health and Nutrition • Working in Bioscience • plus one free choice module

Year 2 (Credit Level 5)
Subjects of study include: Exercise Physiology • Health Behaviour • Human Nutrition • Laboratory Research Methods • Physiology for Health Sciences • plus one option module • plus one free choice module

Year 3 (Credit Level 6)
Subjects of study include: Advanced Nutrition • Applied Professional Practice • Environmental and Stress Physiology • Nutrition and Performance • Project • Public Health • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
BC46; with Foundation BCK6

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
You will be ideally qualified to pursue a career in independent consultancy roles, nutrition or sports nutrition, research, education, media, the fitness industry, and health promotion. You will gain eligibility for associate registration of the Nutrition Society (UK).

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Physiology and Pharmacology BSc Honours

Physiology and pharmacology are closely related disciplines. Physiology is concerned with how the body and its systems are controlled, and the changes that lead to disease states. Pharmacology is the scientific study of drug action, and this element of the course builds on physiology to demonstrate how medicines may modify disease states. The aim of the course is to produce scientists with a sound understanding of the biological action of drugs and chemicals at the tissue, cellular and molecular levels, in addition to their use in medicines for the treatment of disease. These studies provide an ideal grounding for a career in the pharmaceutical industry or other areas of biomedical research. Collaborations with research laboratories provide the possibility of an external placement to further enhance your practical skills.

Course content
In Year 1 (Credit Level 4) you will acquire a vital set of core skills necessary for more advanced studies undertaken later in the course. These fundamental topics include cell biology, human physiology, biochemistry and scientific skills, and this base is greatly expanded at Year 2 (Credit Level 5), developing your knowledge of physiology, drug action, and the central nervous and immune systems. As you progress, modules reflect a more applied content, focusing upon central nervous system and peripheral pharmacology, clinical physiology and disease processes. In addition, your Year 3 (Credit Level 6) project will be undertaken in a department with an active and enthusiastic attitude towards fundamental and clinically-related research.

Year 1 (Credit Level 4)
Subjects of study include: Cell Science • Concepts in Bioscience • Drugs and Therapeutics • Human Physiology and Anatomy • Working in Bioscience

Year 2 (Credit Level 5)
Subjects of study include: Biochemistry • Cell Communication • Cellular Neuroscience • Laboratory Research Methods • Nervous System • Organ Systems Pharmacology • Physiology for Health Sciences

Year 3 (Credit Level 6)
Subjects of study include: Bioinformatics • Central Nervous System Pharmacology • Diagnostic and Clinical Physiology • Drug Development and Toxicology • Immunopharmacology • Project • plus one free choice module

Length of course
Three-year, full-time; four-year, full-time with Foundation

UCAS codes
BB12; with Foundation BBC2

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment.

Associated careers
Graduates are ideally equipped for life in a fast-evolving and exciting workplace. The degree offers good prospects for research careers in academia, industry, the scientific civil service and hospitals. Physiology and pharmacology graduates become valuable members of the scientific community. Alternatively, it may lead on to non-research or non-pharmacological careers in marketing, publishing or teaching.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CCD to include CC in Science subjects
International Baccalaureate	26 points to include a minimum of 5 in two Higher Level Science subjects
BTEC National Diploma/ Certificate	MMP/DM in Science

See also entry requirements on p48.

Biological Sciences Foundation

If you do not have the formal entry qualifications for the three-year degrees in biosciences, this course is the first year of a four-year degree. It is a well-established route of access to higher education for mature students (those aged over 21) without formal qualifications. It is also suitable if you have completed Advanced GCEs in non-science subjects. If you have studied science subjects to this level you are not eligible to apply. This Foundation course enables many students to study for a degree at the University on a wide range of courses. Local education authorities recognise the Biosciences Foundation Level 3 (BS3) as qualifying for a mandatory grant award.

Course content
You will study the fundamentals of biology, chemistry, maths and physics, and no previous knowledge in these subjects is assumed. You will also study a skills-based module designed to ease your transition into full-time study and a subsequent career. All modules introduce and integrate transferable skills into your learning, enabling you to exercise various practical, reading, writing and presentational skills which will be of use later in your studies and career.

The modules studied in the course would normally be taken in one year. However, there is considerable flexibility in the time it takes to accumulate the modules and credits leading up to your final degree. This flexibility, along with the wide choice of subject area within the biological sciences after the Foundation year, makes the course particularly attractive to mature students.

Length of course
One-year, full-time, as first year (Credit Level 3) of a four-year, full-time Honours degree course

UCAS codes
See individual BSc degree entries

Location
Central London (Cavendish)

Teaching and assessment
The course combines lecture, tutorial and practical laboratory elements, and you will be able to use a variety of learning resources, including podcasts and Blackboard, our online learning environment. Formal exams are supported by course work assessment that operates in a variety of formats across the year, and is designed to promote learning and provide a sound basis for entering any of our courses at Year 1 (Credit Level 4).

Associated careers
Completion of this course will allow you to progress on to one of the named degrees in the University.

Typical offer for September 2009

Qualification type	*Grade/points*
A Levels	CC to include no Science subjects
International Baccalaureate	26 points to include no Higher Level Science
BTEC National Diploma/ Certificate	MPP/MM to include no Science subjects

We welcome applications from candidates without formal qualifications.

See also entry requirements on p48.

Biomedical Sciences Foundation Degree

This is a new vocational qualification designed with the help of employers within the National Health Service. The Foundation Degree will be offered for the first time in October 2009, subject to approval.

The course is for healthcare professionals in full-time employment in national health service and private laboratories, who do not have the necessary qualifications for entry into our BSc in Applied Biomedical Science.

The Biomedical Sciences Foundation Degree course provides a flexible approach to your learning by offering a blended teaching programme consisting of extensive online learning using the University's virtual learning environment, supplemented by limited block attendance at the University for laboratory work. You would be expected to complete the course in a minimum of three years, after which you would be eligible to apply for entry into the third year of the BSc Honours Applied Biomedical Science (see p63).

The typical entry requirements will be one GCE A Level in a science-related plus a minimum of three GCSEs at Grade C or above, although equivalent qualifications will be considered.

Length of course
Three-year (minimum), part-time

Location
Central London (Cavendish)