Our Medical Physiology BSc degree provides an advanced course of study on how cells, tissues and organ systems function, and how together they carry out the activities needed for life. The course, delivered in central London, focuses on understanding normal human physiology; how and why it might be impaired, and the pathogenic mechanisms that lead to disease, all of which are essential for developing diagnostics and treatments. The course also features options to study abroad or to transfer to other Biomedical Science courses.

Key benefits
- Europe’s largest centre for medical and professional healthcare education.
- 90 per cent Student Satisfaction (National Student Survey 2015 & 2016).
- Teaching by internationally renowned scientists and researchers.
- One of the UK’s best graduate employment rates.
- Career opportunities through international exchanges.
- Contemporary approach based on our history of pioneering discoveries – including our part in finding the structure of DNA.
- Flexible options to tailor your degree.

Course details
The Medical Physiology BSc course will give you a sound introduction to the mechanisms that underlie the function of the body in health and disease, at the cellular, tissue, organ and whole human levels.

This course forms part of the suite of ‘Common Year 1’ courses within the School of Bioscience Education. These comprise Anatomy, Developmental & Human Biology; Biochemistry; Biomedical Science; Medical Physiology; Molecular Genetics; Neuroscience; Pharmacology; Pharmacology & Molecular Genetics. Once you have successfully completed Year 1, you can choose to switch to any other course within this suite.

Your second year allows greater flexibility, but retains a core of Physiology modules that cover endocrinology and physiological control systems, and with at least one module chosen from options in neuroscience, cell biology and a physiology library project.

Your final year modules reflect the research interests of the academic staff. In particular you will benefit from the wide range of expertise at King’s in neuroscience, developmental biology, physiology of extreme environments, cardiovascular and muscle physiology, endocrinology and reproduction.

Alternatively, after the ‘Common Year 1’ course, you can apply to transfer to one of our four-year MSci courses: Biochemistry MSci; Molecular Genetics MSci; Neuroscience MSci. In Year 3 you can apply to transfer to the four-year Integrated Pharmacology & Physiology for Research MSci.
Teaching
Teaching on this course takes place in lectures, seminars and tutorials and through practical laboratory work. The rest of your time will be spent on self-study, including reading, research and writing assignments.

<table>
<thead>
<tr>
<th>Course stage</th>
<th>Percentage of time in scheduled learning and teaching activities</th>
<th>Percentage of time in guided independent study</th>
<th>Percentage of time on placements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>25%</td>
<td>75%</td>
<td>-</td>
</tr>
<tr>
<td>Year 2</td>
<td>22%</td>
<td>79%</td>
<td>-</td>
</tr>
<tr>
<td>Year 3</td>
<td>30%</td>
<td>70%</td>
<td>-</td>
</tr>
</tbody>
</table>

Typically, one credit equates to 10 hours of work.

Assessment
You will be assessed through a combination of coursework, examinations and practical observation.

<table>
<thead>
<tr>
<th>Course stage</th>
<th>Percentage of assessment by written exams</th>
<th>Percentage of assessment by practical exams</th>
<th>Percentage of assessment by coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>78%</td>
<td>5%</td>
<td>17%</td>
</tr>
<tr>
<td>Year 2</td>
<td>66%</td>
<td>6%</td>
<td>28%</td>
</tr>
<tr>
<td>Year 3</td>
<td>58%</td>
<td>13%</td>
<td>34%</td>
</tr>
</tbody>
</table>

Optional modules
Take sufficient credits to bring your total for the year to 120 from a range of optional modules which may typically include:

- The modules listed above
- Animal Models of Disease & Injury (15 credits)
- Bioinformatics (15 credits)
- Comparative Physiology (15 credits)
- Drug Discovery & Development (15 credits)
- Emergence of Vertebrate Form & Function (15 credits)
- Essentials of Embryology (15 credits)
- Gene Cloning & Expression (15 credits)
- Human & Molecular Genetics (15 credits)
- Immune System in Medical Microbiology (15 credits)
- Introduction to Stem Cells (15 credits)
- Protein Structure & Function (15 credits)
- Psychology (15 credits)
- Social Impact of the Biosciences (15 credits)
- Tissue Pathology (15 credits)
- A modern language (15 credits)

You also have the opportunity to study abroad for your full second year. Partner universities currently include:

- The Karolinska Institute in Stockholm, Sweden
- The University of Melbourne, Australia
- National University of Singapore
- The University of California
- The University of North Carolina - Chapel Hill

Regulating body
King’s College London is regulated by the Higher Education Funding Council for England.
Year 3

Required modules
You are required to take at least 75 credits of physiology related modules, including one of the following project modules:

• Physiology Laboratory Project: based in a research laboratory – please note that allocation to a laboratory project will depend on academic performance in Year 2. (45 credits)
• Physiology Library Project: a supervised study in a physiological topic of your choice. (15 credits)
• Project Design in Physiology: designing a research project, writing a research grant application. (30 credits)
• Social Impact of the Biosciences – please note that this module is only available to students who take Social Impact of the Biosciences in Year 2 (15 credits)

Optional modules
Take sufficient credits to bring your total for the year to 120, from a range of optional modules which may typically include:

• Cardiovascular & Respiratory Control (30 credits)
• Cell Physiology (15 credits)
• Endocrinology of Diabetes (15 credits)
• Experimental Physiology (15 credits)
• Extreme Physiology (30 credits)
• Muscle (15 credits)
• Neuroendocrinology (15 credits)
• Biology of Lung Disease (15 credits)
• Reproductive Physiology (15 credits)
• Topics in Regenerative Medicine (15 credits)
• Vascular Physiology (30 credits)
• Advanced Biophysical Techniques (15 credits)
• Molecular Genetics of Model Organisms (15 credits)
• Biomedical Diagnostics (15 credits)
• Cellular & Systems Neuroscience (30 credits)
• Molecular Basis of Human Disease (15 credits)
• Molecular Immunology (15 credits)
• Forensic Genetics & Toxicology (15 credits)
• Cardiovascular Pharmacology (15 credits)
• Cell & Molecular Pharmacology (30 credits)
• Pharmacology of Inflammation (15 credits)
• Cellular Basis of Drug Dependence (30 credits)
• Pharmacology of Neurological & Psychiatric Disorders (15 credits)
• Biology of Cancer (30 credits)
• Developmental Neurobiology (30 credits)
• Cellular Basis of Disease (15 credits)
• Mechanisms of Development (30 credits)
• Behavioural Science (15 credits)

Please note that some modules with a high practical component are capped, which means that we cannot guarantee a place to all students who select that particular module.

During Year 3 you can apply to transfer to the four-year MSci Integrated Pharmacology & Physiology for Research, on which you will be required to take a 90-credit research project, usually at an external industrial provider within the UK, during your fourth year. A contribution by the university is given to cover additional living costs during the project up to a maximum of £2,000.

King’s College London reviews the modules offered on a regular basis to provide up-to-date, innovative and relevant programmes of study. Therefore, modules offered may change. We suggest you keep an eye on the course finder on our website for updates.

Location
This course is primarily taught at the King’s College London Guy’s and Waterloo Campuses, both on the South Bank of the Thames, putting you at the heart of everything London has to offer in terms of academic resources and also close to its social and entertainment attractions.

Career prospects
Graduates from the School of Bioscience Education are equipped with a variety of transferable skills including data gathering, analysis and interpretation, presentation skills and teamwork. Our graduates are well-qualified to undertake a wide range of careers or training for a higher degree such as an MSc or PhD.

Recent graduates have found employment as:

• research project co-ordinators
• food scientists
• company managers
• business analysts
• scientific copy editors.

Others have continued to study in medicine, dentistry and other related fields including pharmaceutical sciences, cardiovascular pharmacology and biomedical research.
**Fees and funding**

**Full-time tuition fees – UK**
The UK tuition fees for the 2018–19 academic year are available on the course web page.
Please note that the tuition fees for subsequent years of study may be subject to increases in line with King’s terms and conditions.

**Full-time tuition fees – EU**
Current regulations allow some students to pay UK tuition fees on the basis of their EU citizenship or residency. Until these eligibility criteria are changed, the EU tuition fee will remain the same as the UK tuition fee.

The UK tuition fees for the 2018–19 academic year are available on the course web page.
Please note that the tuition fees for subsequent years of study may be subject to increases in line with King’s terms and conditions.

**Full-time tuition fees – International**
The International tuition fees for the 2018–19 academic year are available on the course web page.
Please note that the tuition fees for subsequent years of study may be subject to increases in line with King’s terms and conditions.

All International applicants to undergraduate courses are required to pay a deposit of £2,000 against their first year’s tuition fee. This deposit is payable when you firmly accept an unconditional offer to study with us, and will be offset against your tuition fees when you join King’s.

For further information, please visit the fees and funding section of our website:
www.kcl.ac.uk/study/undergraduate/fees-and-funding/index.aspx

**Additional costs**
If you choose the study abroad option with one of King’s partner universities, you will not be charged tuition fees by the host university (although some partners do charge a small administration fee for applying). Please see the Study Abroad webpages for details of the relevant partner universities.

King’s will continue to invoice for a proportion of King’s tuition fees. At present these are as follows:

- Home students studying or working for a full academic year abroad will receive an invoice for £1,350 for King’s tuition fees for the year.
- Overseas students studying or working for a full academic year abroad will receive an invoice for one third of the King’s tuition fees for the year.

You should also budget to pay for the associated subsistence costs, such as travel, visas, accommodation and food as well as any vaccination/immunisations required by the country to which you are travelling.

In addition to the costs above, you can also expect to pay for:

- college approved calculator for exams
- books if you choose to buy your own copies
- clothing for optional course related events and competitions
- library fees and fines
- personal photocopies
- printing course handouts
- society membership fees
- stationery
- graduation costs
- travel costs for travel around London and between campuses.

**Disclaimer**
This PDF was produced in August 2017. Although it was up-to-date at the time it was produced, please make sure you check our website www.kcl.ac.uk/study or contact us directly for the very latest information before you commit yourself to any of our courses.

**Contact us**
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