



University
of Glasgow

School of Medicine,
Dentistry & Nursing

UNIVERSITY OF GLASGOW

CERTIFICATE OF HIGHER EDUCATION (PRE-MED)

ACADEMIC YEAR 2023/2024

REGULATIONS AND COURSE OUTLINE

UNIVERSITY OF GLASGOW
PRE-MEDICAL PROGRAMME
LEADING TO THE AWARD OF
UNDERGRADUATE CERTIFICATE OF HIGHER EDUCATION (CoHE): PRE-MEDICAL STUDIES

REGULATIONS

1. ADMISSION: PRE-ENTRY REQUIREMENTS

- i. General Secondary Education Certificate (GSEC) – normally a minimum of 90% overall, with no less than 90% in Chemistry and Biology and one from Physics or Maths.
- ii. A-Level minimum BBB will normally be considered, with at least one science.
- iii. IB minimum score of 34 will normally be considered, with 3 HL subjects at 6, 6, 5 (must include Chemistry and Biology) and Maths or Physics at minimum score of 6 at SL.
- iv. SAT overall score 1800 with no subtest less than 600 plus two AP subjects (including Chemistry or Biology) at grade 4 or above OR three AP subjects (including Chemistry or Biology) at grade 4 or above.
- v. Applicants may be invited to interview if they do not meet minimum entry requirements, with the combination of required subjects.
- vi. IELTS is required, with normally no less than 6.0 (with no subtest lower than 6.0) considered.

2. APPLICATIONS

- i. Applications may be submitted via UCAS - course code 4T6H – up to the UCAS deadline of 25 January 2023 by 6 pm (UK time) for 2023 entry, but must include evidence of application for government sponsorship.
- ii. Direct applications submitted following Embassy approval may be made up to 30 June 2023. Applications received after this date will only be considered if it can be guaranteed that the applicant will be in attendance by the start of semester, should their application be successful.
- iii. Applicants will normally only be interviewed if they do not meet minimum entry requirements, with the combination of required subjects.
- iv. We would be involved in the selection of students together with officials of the relevant Ministry of Higher Education. The final decision on acceptance will be made by University of Glasgow.
- v. Academic performance is only one of a number of criteria considered by the University for admission to the pre-medical programme. The level of spoken English will be considered as well as motivation, commitment and suitability for training as a clinical practitioner.
- vi. Fees for 2023 entry are £27,930.
- vii. Applicants must normally successfully apply for Government sponsorship. On confirmation of their scholarship, applicants must forward evidence to the Admissions Administrator in

time to administer their commencement of studies. It is strongly recommended that applicants contact their Embassy to discuss eligibility before they apply.

3. GENERAL REGULATIONS

- i. A candidate who does not meet the attendance requirements of a course, or who does not perform the prescribed work of the class, may be refused permission by the Head of the relevant Department to enter for the end of course assessment in that course.
- ii. For the purposes of the award of the Undergraduate Certificate of Higher Education, in each academic year candidates are permitted only one further diet of assessment in a course in which they have failed.
- iii. The University reserves the right to exclude a student from further study, on being satisfied that there is sufficient reason for doing so.
- iv. Applicants to the MBChB programme will in addition to successful completion of the Certificate, complete a formal application to study on UCAS as well as having an interview.

4. SCHEDULE OF COURSES

(CHEM1001) Chemistry 1

Credits: 40

Runs: Throughout Semester 1 & 2

Description: A course covering the fundamentals of chemical theory and practical laboratory skills.

Timetable: 22 weeks of four or five lectures per week; weekly laboratory (3 hours); workshops and tutorials as arranged at normal lecture times.

Assessment: December examination (30%), April examination (50%), practical mark (10%), assessments (10%)

Course Aims: To broaden students' knowledge of the facts, theories, concepts, applications, development and importance of chemistry; to enhance skills in - handling numbers, units, equations, diagrams and abstract ideas; analysing data; prioritising information; making deductions; taking decisions; making and justifying proposals; and in communicating and reporting clearly; to provide a sound basis for those students who may decide to proceed to Honours in Chemistry or a related science; to encourage interest in the subject and its interaction with other sciences; to give experience in the safe and accurate handling of chemical substances and apparatus; to encourage development of learning strategies.

ILOs: By the end of this course students will be able to:

- demonstrate a knowledge and understanding of the basic facts and experimental basis of modern chemistry;
- solve elementary problems of a numeric or logical nature in the chemistry context
- demonstrate practical skills in chemical techniques.

Requirements for award of Credits: Students must submit at least 75% by weight of the components (including examinations) of the course's summative assessment and attend at least 75% of the laboratories.

(BIOL1001) Biology 1A

Credits: 20

Runs: Semester 1

Description: Biology 1A introduces students to cellular systems, both at the unicellular and multicellular level. A comparative investigation of these biological systems highlights the specialisation and variation across organisms.

Timetable: Normally, five lectures per week plus one 3-hour lab per week.

Assessment: An examination at the end of the course, which counts as 50% plus in-course assessment, which counts as 50%. In-course assessment includes: 2x written assignments, 1x group project, 2x online quizzes, 1x student-generated content assessment (PeerWise)

Course Aims:

- to provide a broad-based understanding of modern biology at the organismal level;
- to provide the knowledge appropriate for continuing studies in Life Sciences;
- to develop general scientific skills and graduate attributes;
- to develop an awareness of current scientific research in Life Science;
- to introduce core digital literacy skills.

ILOs: By the end of this course, students will be able to:

- describe the differences between prokaryotes and eukaryotes;
- describe members of the microbial world and appreciate the important contribution they make to man's survival;
- recognise how animal form and function reflect biology's overarching theme of evolution;
- describe the components of nutrition and the consequences of inappropriate nutrition;
- assess the need for a circulatory and gas exchange system in all but the smallest organisms, and describe its form and function in vertebrates;
- define what is meant by homeostasis, and discuss the role specific organs and hormones play in homeostasis;
- describe the spectrum of signalling processes (the nervous system, transmitters, neuromodulators, hormones etc.) within the bodies of animals;
- describe the components of the mammalian immune response and relate this detail to pathogenic infections;
- state the basic concepts of ecology and conservation and distinguish between population, community, ecosystem and biome levels of organisation;
- outline factors that influence distribution of plants and animals, the principal interactions between populations in a community, and biodiversity.

(BIOL1002) Biology 1B

Credits: 20

Runs: Semester 2

Description: Biology 1B introduces the students to Biology at the molecular level. Students will carry out detailed investigations of the molecular make-up of biological systems and organisms and relate these to real-life examples of disease, treatments and current research.

Timetable: Normally, five lectures per week plus one 3-hour lab per week.

Assessment: An examination at the end of the course, which counts as 50% plus in-course assessment, which counts as 50%. In-course assessment includes: 1x written assignment, 1x problem solving exercise, 1x group project, 2x online quizzes, 1x practical skills assessment.

Course Aims:

- to provide a broad-based understanding of modern biology at the molecular and cellular level;
- to provide the knowledge appropriate for continuing studies in Life Sciences;
- to develop general scientific skills and graduate attributes;
- to develop an awareness of current scientific research in Life Science;
- to introduce core digital literacy skills.

ILOs: By the end of this course, students will be able to:

- describe cellular respiration in relation to the structure and function of organelles within eukaryotic cells; describe the structure of proteins in relation to their function;
- explain the processes involved in DNA replication, transcription and translation, and the problems that can occur in these processes;
- describe how plants use solar energy to fix atmospheric CO₂ into carbohydrates;
- explain the events that occur in the eukaryotic cell division;
- explain how genetic disease can be due to abnormalities in karyotypes and mutations in genes;
- describe how inheritance works, and the role of DNA in these processes;
- describe the genetic and cellular principles of reproduction and development and their evolutionary implications;
- explain the theories of evolution, natural selection and speciation;
- describe the importance of the mechanisms of plant growth and the potential impact bioengineering can have;
- describe the principles of the cellular and molecular basis of plant development and responses to the environment;
- appraise the quickly changing field of stem cell research.

(LANGCTR1011) EAP 1-Academic English and Skills for International Undergraduates

Credits: 20

Runs: First semester

Short Description: This course reviews essential English language and academic skills to support undergraduate study. Listening, reading and speaking are all practised with a strong focus on researching and writing academic assignments typically required for successful study.

Timetable: 5 hours each week during the semester (2 x 2 hour classes and a 1 x 1 hour tutorial).

Assessment: A written essay (1000 words) - 15%, a further essay (1500 words) - 25%, a reading skills test - 20%, listening and note-taking skills class test - 20%, a seminar presentation (10 minutes) - 10% and a seminar discussion - 10%.

Course aims: This course will provide the opportunity to:

- receive support for the kind of academic study common to intended subject areas;
- strengthen English language skills to participate more confidently and fully in the Scottish University experience.

ILOs: By the end of this course, students will be able to:

- cope with a typical undergraduate course reading load;
- take efficient notes and exploit their understanding of lectures and seminars;
- research and write a successful assignment;
- contribute to a seminar discussion, plan and deliver a short presentation on an academic subject.

(LANGCTR1056) EAP 2 for students within MVLS

Credits: 20

Runs: Second semester

Short Description: This course develops essential English language and academic skills to support your undergraduate study. Listening, reading and speaking are all practised with a strong focus on interactional skills and researching and writing academic assignments typically found in the MVLS subject areas.

Timetable: Two x 2 hour seminars and one x 1 hour seminar per week. 5 x half hour one-on-one sessions by arrangement with tutor.

Assessment: Report (1000 words) - 40%, Seminar presentation (10 minutes) - 20%, Reflective writing task (500 words) - 20%, Poster Presentation (10 minutes) - 20%

Course Aims: This course will provide the opportunity to:

- develop English language and study skills of International students on a foundation program in MVLS;
- take an integrative approach to language and skills development, enabling students to participate fully on their undergraduate courses;
- develop students' understanding of UK academic culture and their awareness and knowledge of the written and spoken discourses expected in MVLS.

ILOs: By the end of this course students will be able to:

- apply improved interpersonal and interactional skills, for example, in 1:1 situations, group based work, seminars, professional practice etc. in subject specific topics;
- record and summarise scientific ideas derived from a variety of listening and reading contexts;
- simplify and structure scientific ideas in writing and speaking in a way that is clear to a variety of audiences;
- reflect on the relevance, scope and effectiveness of currently available subject material.

Any student who does not require to take either/both EAP 1 & EAP 2 will choose from the wide range of other first year subjects in order to achieve an additional 40 credits. This would be one course in each semester. The choice would come from the university's course catalogue and advice on suitable subjects will be given after discussing individual interests with the student.

Professional, vocational and study skills

Being a medical student brings with it responsibility. The expectation on you as a future medical student is that you appreciate the standard of behaviour expected of you. The GMC, our professional regulatory body, specifically states that 'your behaviour at all times, both in the clinical environment and outside of your studies, must justify the trust that patients and the public place in you as a future member of the medical profession'.

The CoHE will help to prepare you for your journey towards becoming a medical student and future doctor by offering an introduction to the professional qualities and vocational skills which will be required for a future career in Medicine. This will include the opportunity for clinical visits both within the hospital environment as well as community medicine and primary care.

In addition to the above credit bearing courses, students will be required to undertake a series of sessions to enhance study and presentation skills, problem solving and team-working to aid the transition towards becoming an independent learner, all essential for future success on the MBChB programme.

5. ACADEMIC PROGRESS: -

- i. Students who accumulate 120 credits at Level 1, at a minimum grade of D3, are eligible for the Award of the University's Undergraduate Certificate of Higher Education.
- ii. Candidates may apply for entry into the first year of the MBChB programme. Such candidates must normally:
 - Apply via UCAS (www.ucas.com) by 15 October for consideration for entry in September the following year.
 - Completion of CoHE with grades BBB in all courses (including Chemistry and Biology).
 - Satisfy the English Language Proficiency requirements - IELTS: overall score of 7.0, no subtest less than 7.0 (or alternatives as stated on the University website).
 - Confirmation of scholarship for funding for the 5 year MBChB Course must be received by the relevant Ministry of Education by August of the year of entry.
 - Applicants who are being considered further will be interviewed. However please note that an interview or entry is not guaranteed.

- Offers made normally include the conditions for academic and English language requirements. An offer is not guaranteed.
 - Satisfactory health and police checks are required prior to commencing the MBChB course.
- iii. Candidates who fail to meet the specific academic requirements for the MBChB programme, may be eligible to enter 2nd year of one of the BSc programmes, including a range of Honours programmes. Such candidates must normally require 120 credits at D3 minimum with 40 credits in both Biology and Chemistry at D3 minimum to be considered further.