LEARNING MEDICINE IN DUNDEE:
CURRICULUM HANDBOOK

UNIVERSITY OF DUNDEE
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INTRODUCTION

The Dundee curriculum has been designed to meet the challenges of educating competent doctors for the twenty-first century, which include:

- Changes in delivery of healthcare. Services are being moved away from in-patient hospital care towards day-care, out-patient clinics and community settings. Improved diagnostic techniques and treatment methods, enhanced community services and government policy have all contributed to this trend
- An increasing emphasis on research-based practice
- Changes to the public’s expectations of a doctor
- Exciting developments in the methods of teaching and learning and in approaches to assessment - the Dundee curriculum is at the forefront of many of these developments
- The expectations set out in the General Medical Council document ‘Tomorrow’s Doctors’ (GMC, 2009), which builds on their previous recommendations for all UK medical schools

Key features of the Dundee curriculum are:

- An explicit statement of the outcomes expected of students at each stage
- A core curriculum with student-selected components
- The spiral nature of the curriculum, with its interlocking phases, allowing topics to be revisited in more depth
- A body-system-based approach, providing a focus for students’ learning
- A framework of nearly 100 core clinical problems to develop reflective practice
- A range of educational strategies, including elements of task-based and problem-oriented learning, community-based learning, and approaches to teaching and learning that encourage the students to take increasingly more responsibility for their own learning
- An ‘assessment to a standard’ approach which emphasizes the overall outcomes of the curriculum and which uses a range of methods including online examinations, OSCEs (Objective Structured Clinical Examination) and portfolio assessment.
- Students are encouraged to develop a partnership approach to their learning for professional practice. Students and staff, as active stakeholders, have an important role to play in the continuing development of the curriculum.

About this handbook

This document has been designed to provide a comprehensive overview of learning and teaching in Dundee Medical School. It is not intended to be read from cover to cover but to be dipped into on an as-and-when-required basis. Section 1 outlines the educational approach adopted in general terms while Section 2 goes into more specific detail about the teaching and assessment at different stages of the course. Section 3 contains additional detailed information which may be required by individuals.

Whilst the information in the handbook was correct at the time of printing, the curriculum is constantly being reviewed, refined and updated. The most recent versions of any documents can be obtained through the School website and we encourage you to check regularly for updates (http://www.dundee.ac.uk/medschool/undergraduate/mbchb).
SECTION ONE: EDUCATIONAL APPROACH

The Spiral Curriculum

The Dundee curriculum draws on constructivist learning theory, where students gain new knowledge and ideas by expanding and developing what they already know. The ‘spiral curriculum’ means that students are given opportunities to revisit aspects of learning, making links between concepts and deepening understanding. As the student progresses to each new phase in the spiral, new information and skills are introduced that build on the information and skills from the previous phase.

Curriculum Overview

Systems in Practice (SiP)

Systems in Practice (SiP) runs from the beginning of Year 1 until the end of Year 3. It is based on the various organ systems of the body and is an integrated course that focuses on normal and abnormal structure, function and behaviour, basic and clinical sciences, and hospital and community perspectives. Problem-oriented learning (where learning is structured around examples of clinical problems) is employed wherever appropriate.

Each year is made up of a period of system-based teaching (Principles and three systems are covered in Year 1, seven systems in Year 2, and five in Year 3), Integrating Science and Specialties (ISS) blocks, examinations and Student Selected Components (SSCs).
Preparation in Practice (PiP)

Years 4 and 5 form Preparation in Practice (PiP) which moves towards a task-based learning approach. A series of around 100 ‘core clinical problems’ provide students with a framework for an integrated view of medicine. PiP begins with a transition block, followed by a series of core clinical placements and a final Preparation for Practice block.

The Transition Block is designed to ‘pull together’ the cross-systems teaching, to prepare students for the task-based clinical approach to teaching adopted in PiP, and to equip them with generic skills they will require throughout the core clinical placements. During the core clinical placements, students are expected to organise their learning around the core clinical problems, observing these problems in different contexts and settings. The Preparation for Practice (PfP) block allows for further development of experience preparing the student for their role as a junior doctor. Students undertake foundation apprenticeship blocks in general practice, medicine and surgery. PiP also includes Student Selected Components with an elective and clinical SSC’s.

![Diagram of Year 1 and Year 5 with Basic Science and Practice of Medicine: CSC / ACTC / GPPC / Primary Care / Ward Teaching / Communication]
The Learning Outcomes

Outcome-based education

Learning outcomes are increasingly used as a focus for curriculum planning. Identifying, defining and communicating the knowledge, skills, attitudes and professional behaviours doctors should have is fundamentally important for the curriculum.

Doctors have a unique blend of different kinds of abilities that are applied to the practice of medicine. What is needed or valued at any time depends on the context - at times it may be a practical intervention, at other times, diagnostic abilities and at other times a caring attitude and understanding.

In Dundee we have developed an interactive, user friendly and transparent approach to communicating learning outcomes. The three-circle model used (see figure 2) is based on the three dimensions of the work of the doctor and uses the outcomes described by the GMC in “Tomorrows’ Doctors” 2009.

![Three-circle model](image)

The inner circle represents what the doctor as a practitioner or doctor is able to do, e.g. the physical examination of a patient. This can be thought of as “doing the right thing”

The middle circle represents the way the doctor as a scholar and scientist approaches the tasks in the inner circle e.g. with scientific understanding, ethically, and with appropriate decision-making and analytical strategies. This can be thought of as “doing the thing right” and includes the academic, emotional, analytical and creative intelligences.

The outer circle represents the development of the doctor as a professional and thus the personal attributes of the individual - “the right person doing it”.

“Tomorrow’s Doctors” Outcomes

“Tomorrow’s Doctors” 2009 contains expected “outcomes for graduates” which set out what the GMC expect medical schools to deliver and what employers of new graduates can expect to receive.
These outcomes form the basis of the Dundee Curriculum and, as students progress through the curriculum, the contribution of each course and curricular phase towards achievement of the outcomes is identified. (http://www.gmc-uk.org/education/undergraduate/tomorrows_doctors_2009.asp)

The following outcomes correspond to the inner circle and describe the competent doctor in terms of what he or she will be able to do as a practitioner.

**Consult with patients**

The doctor is competent to take a comprehensive, relevant medical and social history and perform a physical examination. He or she will be able to assess capacity and involve patients in decision making while providing explanation, advice, reassurance and support.

**Diagnose and manage clinical presentations**

The doctor is competent to interpret findings from a patient’s history and examination to form a differential diagnosis and plan of investigation. Using investigation results they can define the likely diagnosis, or diagnoses, and formulate a plan for treatment, management and discharge.

**Communicate effectively with patients and colleagues in a medical context**

The doctor is proficient in a range of communication skills including written and oral, both face-to-face, electronically and by telephone. He or she communicates effectively with patients, relatives of patients, the public and colleagues.

**Provide immediate care in emergencies**

The doctor will recognise the need for immediate emergency care and manage these acute situations providing resuscitation if required.

**Prescribe drugs safely, effectively and economically**

The doctor can establish a drug history and prescribe safely an appropriate drug therapy. The doctor will be alert for adverse drug reactions and provide patients with appropriate information regarding their medicines as well as understanding patients may use complementary or alternative therapies.

**Carry out practical procedures safely and effectively**

The doctor will be able to perform a range of diagnostic and therapeutic procedures and demonstrate correct practice in the general aspects of these procedures.

**Use information effectively in a medical context**

The doctor will keep accurate and complete clinical records making effective use of computing information systems. The doctor will keep to the requirements of confidentiality in dealing with information and apply the principles of health informatics to medical practice

The following outcomes correspond to the middle circle and describe how the doctor, as a scholar and a scientist, approaches their work.

**With an understanding of biomedical sciences and underlying principles**
The doctor understands the basic, clinical and social sciences that underpin the practice of medicine. He/she will be able to explain normal body structure and the scientific bases for common diseases and the mode of action of their selected treatments.

*With the application of psychological principles, method and knowledge to medical practice*

The doctor can explain and discuss the psychological concepts of health, illness and disease and the psychological factors that impact on illness, course of disease and treatment success. The doctor will be aware of the aspects of behavioural change on treatment compliance and normal vs. abnormal patient adaptation to major life changes such as bereavement.

*With the application of social science principles, method and knowledge to medical practice*

The doctor can explain and discuss sociological concepts of health, illness and disease applying theoretical frameworks of sociology to explain the varied responses to disease. The doctor will be aware of those sociological factors that contribute to illness including issues related to health inequality.

*With the application of principles, method and knowledge of population health to medical practice and to the improvement of health and healthcare*

The doctor can discuss basic principles of health improvement including wider determinants of health such as inequalities and disease surveillance. He/she is aware of the principles underlying development of health service policy and clinical guidelines. Applying epidemiological data in their practice they will be aware of the global, community and individual factors that influence health.

*With the application of scientific method and approach to medical research*

The doctor can critically appraise results of various trials and studies as reported in medical literature and apply findings to their everyday work. He/she will be able to formulate their own research questions and design appropriate studies to address these whilst following ethical and governance guidelines.

Outcomes in to the outer circle and are concerned with the personal development of the doctor as a professional

*Behave according to ethical and legal principles*

The doctor is aware of and will maintain the ethical standards set by the GMC. The patient will be the first concern of the doctor who will work with the patient to understand their health care needs. The doctor will respect all individuals whom they interact with, be they patients or colleagues, and conduct themselves in a polite, considerate and honest manner. In caring for people, including those who may be vulnerable, the doctor accepts the legal, moral and ethical responsibility of such a role.

*Reflect, learn and teach others*

The doctor will establish the foundations for lifelong learning to keep up with changes and continuing professional development. He/she will reflect continuously recognising their own limits and seeking help appropriately and in turn giving help/ feedback/ teaching to others when possible.
**Learn and work effectively within a multi-professional team**

The doctor will understand and respect the roles and expertise of other health care professionals. Working to best serve the patient using effective team working the doctor can take on various roles including leadership and the ability to accept leadership from others.

**Protect patients and improve care**

The doctor will keep patients’ needs and safety at the centre of the care process dealing effectively with uncertainty and change. Keeping health and safety a priority (including issues such as infection control) the doctor will apply the principles of quality assurance, clinical governance and risk assessment to their practice always looking for potential system improvement.

This approach encourages the holistic view of medical practice with the outcomes in the middle and outer circles acting through the outcomes in the inner circle. The outcome model offers a framework for teaching and learning. It is a powerful tool for teachers designing and implementing the curriculum, for examiners assessing the students’ performance and not least for students who ultimately have responsibility for their learning.

**Learning and Teaching Strategies**

**Educational Philosophy**

The curriculum has been designed to give students increasing responsibility for their own learning. The General Medical Council recommended that learning through curiosity, the exploration of knowledge, and the critical evaluation of evidence should be promoted and should ensure a capacity for self-education. This approach to learning is reflected in the Dundee curriculum through the core and student selected component (SSC) courses.

To assist students in the curriculum’s move from teacher-centred to student-centred, extensive use has been made of online study guides. The study guides for each course, which are part of the virtual learning environment (VLE), play a crucial role in informing students of the available educational opportunities and helping them to identify those appropriate for their individual approach to their studies.

A feature of the Dundee student-centred curriculum is an attempt, wherever possible, to match the learning experiences to the needs of the students. A focus of the curriculum is SSCs giving students more opportunity to choose the area they wish to study in more depth. It is recognised also that not all students may master the core at the same rate. Students who take longer to master the core to the standards set will undertake directed SSCs. All students, however, must pass the required number of SSCs to graduate.

People learn best in different ways. Some students may prefer small group discussions; some prefer individual study using books in the library whilst others prefer online learning (e-learning) methods. To accommodate various learning preferences a wide range of teaching and learning methods has been provided throughout the course. These methods include: small group discussions, clinical teaching, lectures, e-learning, clinical skills sessions, peer learning, simulation, integrating science and specialties (ISS) sessions, laboratory and practical work.
Approaches to Teaching and Learning

Systems-based teaching

During the Systems in Practice phase of the curriculum a body-systems approach is used to integrate students’ learning around a number of patient problems. The learning outcomes provide a systematic framework for approaching each problem.

Task-based Learning

In the Preparation in Practice section of the curriculum, students progress to a task-based learning approach where they utilise their experience from clinical practice. Task based learning has been adopted as the key educational strategy in this phase of the Dundee curriculum and is used as the basis for integration and problem-oriented learning in the clinical context. Specified ‘tasks’ undertaken by doctors (known as core clinical problems) provide the focus for the learning. Students are expected to take responsibility for integrating their learning as they move through the clinical attachments in the individual disciplines. For example, acute abdominal pain in surgery, medicine, gynaecology, child health and primary care may have different presentations and learning outcomes for the doctor. Students are expected to learn not only about the task or core clinical problem, but also acquire the necessary understanding of the basic and clinical medical sciences, in addition to generic competencies such as prioritising and problem solving. The study guide relating to each of the core clinical problems supports students’ opportunistic experience of practice by providing a systematic breadth of problems they should be aware of. This is available within the virtual learning environment (VLE).

Integrated Teaching

From 1993, The General Medical Council has emphasised a move towards integrated teaching, with extensive recommendations for basic medical education included in the first edition of Tomorrow’s Doctors.

Their most recent guidance states:

“The structure and content of courses and clinical attachments should integrate learning about basic medical sciences and clinical sciences. Students should, wherever possible, learn in a context relevant to medical practice, and revisit topics at different stages and levels to reinforce understanding and develop skills and behaviours.”

(GMC, 2009)

Integrated learning is provided in the Principles Block and Systems in Practice around a framework of core clinical problems. The advantage of this type of approach is that it enables students to develop and build a flexible professional knowledge base for practice.

Integrated teaching is used in Systems in Practice to:

- Enhance the development of critical thinking and clinical reasoning skills
- Provide opportunities to apply existing knowledge to clinical scenarios
- Use basic sciences in problem solving
- Highlight the relationship between the different body systems
- Promote horizontal (i.e. across body systems) as well as vertical (across years of the curriculum) teaching
- Provide students with an opportunity to progress towards deeper understanding (i.e. comprehensive learning beyond memorization) via active (self-directed) learning
- Highlight the relationship between basic sciences (and basic principles) and patients’ presentations
- Consolidate and supplement information delivered in other teaching sessions

During Systems in Practice, integrated teaching occurs through a longitudinal problem-based program and during discrete ‘ISS’ weeks within the years.

Many of the integrated teaching activities are centred on clinical problem-solving. Resources used will include clinical photographs, models, pathological specimens, graphs, videos and e-learning activities. In each system the integrated teaching course structures the activities differently.

**Community Based Teaching**

Undergraduate Community Medical Education (UCME) contributes to teaching throughout all phases of the curriculum. Initially, ‘General Practice and Primary Care’ (GPPC) forms a core component of the curriculum in parallel systems teaching. This includes a range of general practice and community experiences. In Preparation in Practice all students have a primary care attachment in both years 4 and 5 with opportunities for urban and rural placements.

GPPC teaching takes place in the Tayside Centre for General Practice, local General Practice settings, community venues and patients’ homes. There is the opportunity to:

- Learn and practice listening and consulting skills with real and simulated patients
- Shadow professionals who are involved with patients in the community
- Learn about the management of patients with clinical conditions in primary care
- Learn about the wider community and social issues which affect patients

In keeping with the General Medical Council’s recommendations in Tomorrow’s Doctors, GPPC teaching is integrated as far as possible with the systems teaching through simulated patient scenarios, problem-based learning topics, GP input to each systems component and tutorials on core clinical problems. GPPC teaching utilizes individual, small group and team based learning teaching methods. The course is delivered by a wide range of staff, with core support from GPPC tutors who are a mix of GP and practice nursing staff.

There is also significant input from members of UCME and other academic and clinical staff from across the Medical School. The learning experience is coordinated over the first three years to promote the transfer of thinking skills from one visit to the next.

A significant proportion of GPPC teaching is delivered within primary care premises in Tayside, corresponding to about 10-20% of the core curriculum. Interwoven with these sessions are a variety of online modules, covering areas such as Allied Health Professionals, Disability and Diversity and specific clinical topics.

Further information about GPPC is available on request or at https://mbchb.dundee.ac.uk/gppc/
Elearning and use of online Study Guides

Online study guides play an important role in facilitating the students’ learning. These, together with the curriculum documents, provide for staff and students a full description of the course including the learning outcomes, the course content, the learning opportunities available, the timetable and the assessment procedures.

The guides are designed to encourage independent learning. Some are problem-based. The guides vary in their style and format for different parts of the course, and are available electronically on the Dundee VLE either as PDFs or as discreet ‘study guide’ sections embedded within individual systems block and clinical attachment sections.

The guides in general:

- Provide some key content information
- Help students to manage their learning by indicating what they should be learning and the opportunities available
- Direct the student to meaningful activities through which they can understand and apply what they have learned

Throughout the study guide are key issues which are related to the learning outcomes. A glossary of terms is listed to cover any new terminology which is to be mastered. A self-assessment section exists to allow students to assess progress towards meeting the curriculum outcomes.

Learning Repository

The School has a learning repository which hosts learning resources used in the curriculum including lectures and etutorials as well as videos, medical illustrations and animations. All of the resources are mapped to curriculum systems, themes, core clinical problems and tagged with key words to support both searchability and discoverability. The repository will be fully searchable and staff and students will have access to this via the Unifi login authentication system.

Core Clinical Problems

Core Clinical Problems (CCPs) are used to give students a focus for their learning. The list of CCPs is regularly updated, and criteria for inclusion of a problem in the list includes the following:

- The problem can serve as an appropriate focus for learning clinical medicine, for reviewing the basic medical sciences, and for the development of the generic competencies expected of a doctor.
- The problem is one which either doctors would be expected to face commonly in a range of settings or which may be rarer but have serious implications.
- The problem is likely to be encountered by students during their clinical attachments and usually in more than one attachment.
Dundee Core Clinical Problems

- Abdominal distension / weight gain
- Abdominal / loin / pelvic pain
- Abnormal blood test result
- Abnormal / irregular vaginal bleeding
- Abnormal / unsteady gait
- Altered mood
- Anxiety
- Arrested intellectual development
- Back and neck pain
- Behavioural problems
- Blocked nose
- Breast lump
- Bruising
- Chest pain
- Child abuse
- Cold extremities
- Collapse
- Confusion
- Constipation
- Contraception
- Cough
- Deafness
- Deliberate self-harm
- Diarrhoea
- Difficulty in swallowing
- Dizziness
- Dying patients and bereavement
- Ear ache
- Falls and immobility
- Foetal malformation
- Fever
- Focal neurological deficit
- Generalised weakness
- Genetic concerns
- Growth and development, including intellectual development
- Haematemesis
- Haematuria
- Haemoptysis
- Hair problems
- Headache
- Hoarseness
- Immunisation
- Incontinence of faeces
- Infection control
- Infertility
- Itching
- Jaundice
- Joint pain / swelling
- Labour
- Leg / foot ulcer
- Leg pain / ankle swelling
- Loss of vision
- Lump in groin
- Lump in neck
- Muscle pain
- Noisy breathing (wheeze / stridor)
- Normal pregnancy care
- Numbness and tingling
- Obesity
- Pain
- Pain / bleeding in pregnancy
- Painful or uncomfortable mouth
- Palpitations
- Paraplegia
- Peri-operative care
- Pelvic organ prolapse
- Post-operative problems
- Pregnancy-small or large for dates
- Psychosis
- Raised Blood pressure
- Rectal bleeding
- Recurrent infections
- Red / painful eye
- Sexually transmitted infection / genital discharge
- Shortness of breath / respiratory distress
- Sick child
- Skin lumps
- Skin rash
- Sleep problems
- Sore throat
- Squint
- Substance misuse (including alcohol)
- Sudden death
- Swelling in scrotum
- Thirst
- Tinnitus
- Tiredness
- Trauma
- Travel advice
- Tremor
- Unconscious patient
- Unhealthy lifestyle
- Urinary symptoms
- Vomiting
- Weight loss / loss of appetite
Teaching Methods

Lectures

Lectures are a commonly used approach to teaching in Systems in Practice. The core content of each lecture is detailed on the VLE and lecture slides are posted on the VLE as revision aids. All lectures have aims and objectives, core content and further reading. Lectures may occasionally be on a theme unrelated to the system being studied although where possible there will still be links between these subjects and the system.

Small Group Work

Small group discussion and tutorial sessions are very important learning opportunities. Where practicable students will be in the same small group (approximately 10-12 students) throughout Systems in Practice. In Preparation in Practice the majority of formal teaching sessions will be delivered in small groups as part of the clinical attachment.

Small group sessions will often adopt a problem-oriented learning approach. This allows the students and teachers to share feedback and deal with any areas which are difficult or unclear.

Team-Based Learning

Team-based learning (TBL) is comparatively new to medical education, but has been successfully used elsewhere for many years. TBL requires preparation before the session, then a series of Readiness Assurance Test (RAT) questions taken in class by individual students (iRAT) then repeated by student teams (tRAT). The final stage is a set of team Application Test questions that require applied thinking and team working.

There are other team-based formats for teaching and learning within the medical curriculum which students may encounter, including “flipped classroom”. These do not necessarily follow the same structure as TBL.

Problem-Oriented Learning

In problem-oriented learning students are presented with a problem or problems and, usually by working in small groups facilitated by a tutor, they address the problem and identify any future learning needs.

As students progress through the curriculum they are given opportunities which focus on integrating clinical experience with their new-found knowledge, and are expected to take increasing responsibility for their own learning in relation to the “Tomorrows’ Doctors” outcomes.

Use of simulation

Students are exposed to a range of simulation-based learning experiences to allow them to practice skills and techniques in a safe setting. Most of these opportunities are provided within the Clinical
Skills Centre (CSC) and Dow Simulation Suite, however an increasing number of clinical areas now have their own equipment for simulation-based teaching and learning.

Within the CSC, the cardiology simulator (HARVEY ) produces a level of simulation of incomparable value to both undergraduate and postgraduate medical students / practitioners by providing a range of cardiology symptoms from the most basic blood pressure monitoring techniques to the most complex cardiology scenarios with truly life-like replication. Another high-fidelity simulator, SimMan, can be programmed to mimic different emergencies on a real time basis and is invaluable in supporting learning from patient scenarios.

The CSC also makes extensive use of ‘simulated patients’ - volunteers from the Tayside community who undergo specific training. The use of simulated patients offers many advantages, including:

- Providing control over the complexity of the learning situation
- Giving an opportunity to repeat consultations and clinical examinations
- Allowing mistakes to be made within a safe environment
- Encouraging direct feedback
- Being independent of ‘real’ patient availability, enabling the student to focus on knowledge and skill development at the same time in the curriculum
- Directly involving members of the local community in the healthcare learning process

In the final year of the curriculum, all students take part in a ‘Ward-simulation exercise’ (WSE) where they take on the role of a Foundation doctor managing a ward and receive feedback on their performance.

**Workshops and practical sessions**

Throughout the course, students have opportunities to participate in practical, lab-based workshops, to facilitate their understanding and application of basic sciences. Examples include use of microscopy to look at normal and abnormal cells or an exploration of nerve conduction speeds in humans.

**Dissection**

Dundee is one of only a few medical schools to retain the practice of teaching anatomy through dissection, and the only UK school to embalm bodies using the Thiel soft-fix method, which preserves them with life-like flexibility and tissue quality. The emphasis of dissection for medical students is on clinical relevance and includes interpretation of x-rays, the anatomy-pathology interface and surgical skills.

**E-learning**

The Medical School has a dedicated Technology and Innovation in Learning Team (TILT) supporting academics and NHS teachers in their use of technology to enhance teaching and learning. TILT helps teachers and students to create online teaching resources using a variety of tools and software packages. Advice and support on using technology in face to face teaching, tools for collaborative group work and interactive teaching sessions are also available.
The Medical School’s VLE is known as ‘Dundee MBChB’ or ‘Dundee Medblogs’. Each curriculum system, theme and attachment has a dedicated section, delivering customised learning resources. Students are also signposted to other useful resources on the web and TILT can help staff tailor their site to support their teaching needs. Students can post questions on the VLE and tutors can post discussion cases which students can comment on.

Unifi is the Medical School’s curriculum information management system and manages room bookings and timetables. Students can access their personal timetable from Unifi and subscribe to their calendars in Outlook and on mobile devices. Staff can do likewise with their teaching calendars and Unifi also records their teaching activity to support reporting requirements for the Measurement of Teaching (MoT).

Access to Dundee MBChB, Unifi and “My Dundee” is secure and is only accessible by registered students and staff. Once registered, staff or students can log in online and access information from anywhere in the world (https://mbchb.dundee.ac.uk/). NHS staff teaching mainly in clinical areas will need to request that their account is activated by emailing tilt@dundee.ac.uk.

**Independent Study**

During Systems in Practice, a significant proportion of the timetable is allocated to private independent study. This encourages students to develop their time management skills and prioritise their life/work deadlines.

This is time for students, either alone or in small groups, to consider the course material, prepare for a tutorial or simply to do some background reading and reflect on the course. This time is for learning and should be used constructively - it is not time off. It is envisaged that by having study time in the working day students will have more time in the evenings and at weekends to enjoy university life in its widest aspects.

Facilities to help students make the most of private study include the Library & Learning Centre, the Small Group Teaching Rooms on level 7 (when not used for teaching) and the Interactive Teaching Suite (also only available outside designated teaching sessions). The Clinical Skills Centre allows students to book self-revision areas and keep up-to-date with their skills. There are also a number of informal learning spaces throughout the Medical School.

**Teaching Facilities**

**Clinical Skills Centre**

The Clinical Skills Centre (CSC) and Dow Simulation Suite is an exciting facility which offers a number of learning opportunities and encourages students to develop:

- Communication and history taking skills using a patient-centred approach
- Professional attitudes and awareness of the ethical basis of healthcare
- Physical examination, procedural and clinical laboratory skills
- Diagnostic and therapeutic skills
- Resuscitation skills and a safe approach to the care of the acutely ill patient
- Critical thinking, reasoning, and problem solving skills
- Team-working, organisation and management skills
- Information technology skills

Each room is fully equipped with closed-circuit video recording, teleconferencing and examination facilities for groups of up to twelve students. These rooms are peripheral to well-equipped seminar rooms which are flexible in their use. There are self-revision areas for students to drop into from time-to-time to revise or hone techniques.

In addition, equipment is available to permit students to practise common techniques such as fundoscopy, auscultation and pelvic examination. This provides students with secure, unpressurised surroundings in which to gain the capability and confidence in many basic and common clinical skills before going to the real situation in the wards or primary care environment.

The new Dow extension provides a realistic virtual ward where students can be taught and assessed, often in multi-professional groups. The facility offers access to offline NHS information management systems which further adds to the realism of the situation and provides training in their use for clinical practice.

A multidisciplinary team develops and co-ordinates delivery of the learning programmes in collaboration with the System Convenors. The teaching complements hospital and community-based clinical teaching.

Resources available in the Centre include:
- Anatomical models and manikins
- Diagnostic and therapeutic equipment
- Resuscitation equipment
- HARVEY, the cardiac simulator
- Videos of key examinations
- Tele-medicine links within and beyond the campus
- Simulated and real patients
- Self revision rooms which can be booked

**Hospital-based teaching**

Hospital-based teaching takes place in a range of settings throughout the undergraduate curriculum. The increased emphasis on community care has seen more patients treated in day-care and out-patient clinic settings; clinical teaching in the curriculum reflects this shift.

Ward teaching is an important part of hospital-based teaching, and students are introduced to it early in the course. Ward based teaching for years 1 and 2 focuses on three themes: core clinical problems; structured history taking and physical examination. Students are encouraged to evaluate each other using mini-CEX forms to give them early experience of this form of workplace-based assessment.

Ward-based teaching takes place either at the bedside in small groups with a tutor or as a small-group discussion of a clinical problem in a side room. Opportunities are available for students to
have independent access to ward patients when history taking skills and examination techniques can be practised using a parent ward system.

During Preparation in Practice, in addition to ward-based teaching, students are exposed to a range of other clinical environments e.g. outpatient clinics; theatres; specialist diagnostic services. This provides the opportunity to see patients with similar types of disease presenting at different stages of the illness process.

**The Ambulatory Care Teaching Centre**

In recognition of the changes in healthcare practices with the increasing use of the outpatient or ambulatory clinic to both diagnose and deliver care and treatment, an Ambulatory Care Teaching Centre (ACTC) has been developed. This is closely allied to the Clinical Skills Centre, and provides a key opportunity for students to rehearse, putting together their knowledge and skills with a real patient who attends the ACTC. Systems in Practice students, with the help of their tutor, consult with the patient and have the opportunity to learn about keeping accurate records of the consultation.

**Interactive Teaching Suite**

A new Interactive Teaching Suite opened in autumn 2013. A dedicated space for integrated sciences and specialties teaching allows students to work in groups of five or as a larger group of up to 40, with state-of-the-art IT/AV facilities to support teaching, whilst a large flexible teaching space with high spec AV facilities enhances the range of teaching that can be delivered. Wireless internet access is available throughout.

**Small group teaching rooms**

Nine modern teaching rooms holding between 10 and 30 students are available for small group teaching. The rooms are also available when not in use for timetabled teaching for groups of students to study collaboratively.

**Lecture theatres**

A full refit of the medical school’s lecture theatres began in 2013, equipping them with modernized AV facilities. The Gannochy Trust lecture theatre provides seating for 250 and is designed to allow students to work in small groups during lectures, encouraging use of more participative teaching techniques.

**Teaching labs**

Students have access to a suite of newly refurbished teaching labs for small- and large-group practical teaching in the laboratory-based specialities.

**IT/AV Facilities in the Medical School Teaching Accommodation, Ninewells**

The Library provides 80 fixed PCs, spread over two levels – 40 in a formal IT suite which also has high spec AV facilities and 40 in “open study” areas around the library. These PCs run the latest University
managed desktop providing students with access to email, core University systems, the internet and a wide range of software packages. There are also facilities for printing (black & white and colour) and scanning. Wireless access is also available throughout the library and there are many open study spaces providing desks with pop-up power for charging laptop/mobile devices.

Netbooks and mobile broadband “dongles” are available for loan and a number of laptop lockers are located in the library. Support is available by contacting Computing & Media Services on 01382 383021 or cams@cmdn.dundee.ac.uk.

Library and Learning Centre

In addition to the main library facilities on the City Campus, the Library & Learning Centre (LLC) provides study facilities at Ninewells Hospital for staff and students of the Medical School, and for NHS employees. The LLC provides an extensive range of approximately 20,000 medical and nursing textbooks including multiple copies of core and recommended texts and a growing collection of eBooks. The Library also provides over 2000 periodicals in paper and electronic format. All electronic resources can be accessed online from anywhere in the world using University login details.

The LLC provides study facilities and support for students in the use of information in pursuit of their studies. A suite of teaching rooms is available adjacent to the Library which can be used by students for independent study when not in use for teaching. The Library is fully wireless-networked, but also provides a number of fixed PCs. It also houses the Medical Computing suite detailed above. A height-adjustable desk is available, and a range of supporting technologies for students with disabilities.

The library offers support for both students and staff in accessing the facilities, and provides a range of tutorials covering study skills, information handling skills and accessing subject-specific resources. More details are available by visiting the LLC website www.dundee.ac.uk/library/ or contacting by contacting the College of Medicine, Dentistry & Nursing liaison team at LLC-Liaison-CMDN@dundee.ac.uk

Assessment

Key Principles of Assessment

Student assessment is based on the “Tomorrow’s Doctors” learning outcomes and the core clinical problems. The core curriculum, Student Selected Components (SSCs) and electives are all assessed in relation to the outcomes. As far as possible, assessment is integrated like the teaching and learning, and oriented towards clinical relevance rather than theoretical aspects.

Assessment informs staff and students, with the aim that students will be fit to practise as Foundation doctors. A range of appropriate assessment instruments are used to enable assessment of the outcomes at the level required at each stage of the curriculum. These are selected to allow assessment of knowledge, its application, competence, performance and professionalism.
It is recognised that assessment inevitably drives learning, and it is both formative, enabling students to identify their strengths and weaknesses in terms of the learning outcomes, and summative, allowing individual students to demonstrate achievement of the outcomes at a level appropriate for each year of the course, before being allowed to progress to the next stage.

**Assessment to a Standard**

An overall approach to assessment has been adopted throughout the curriculum, in recognition that the core standard is one which all students must achieve - a basic minimum expectation for safe clinical practice. Flexibility in curriculum design has been introduced through the relationship between core and student selected components to ensure that students who need longer to demonstrate mastery of the core have time allocated within the undergraduate programme for this. This approach is called assessment to a standard and it is applied in different ways in each part of the curriculum. It ensures that all students achieve a satisfactory standard in the core course and that all students complete the required number of student selected components.

An examination blueprint is produced for each examination to reflect teaching and curriculum outcomes. Students must reach an appropriate standard in both the online and practical elements of course core material. Certain elements are given special consideration - for example, resuscitation skills and communication skills. If a student’s performance of resuscitation or communication skills in the exams does not meet the standards expected, they will have to attend extra teaching on these skills, irrespective of whether they have or have not achieved the standard overall.

Formative assessments may take place during modules, blocks of teaching or clinical attachments, and are the responsibility of the organizer of each module / block of teaching. Summative assessment takes place towards the end of each academic year to enable the students to demonstrate that they have achieved the appropriate standard for progression / graduation, and is carried out by both internal and external examiners. All assessments provide students with feedback on their performance to allow improvement in areas of weakness.

The assessment process is subject to quality assurance procedures by the Medical School, the university and external bodies.

A range of prizes and awards are given for performance in various aspects of the course, a list of which is available from the Medical School Office and at www.mbcchb.dundee.ac.uk/prizes. Students are identified by those tutors responsible for the aspects of the course to which the prize relates.

Assessment of core material is rigorous and students who fail to reach the appropriate assessment standard at the first diet will be required to participate in further remedial study and re-assessment. A student failing to reach the appropriate standard on the second occasion will be deemed to have failed the year and will be referred to the Academic Review Committee.

**Range of Assessments used in Dundee**

This section provides an outline of the various types of assessment which are used at different stages in the course. It does not include in-depth discussion of either the process or content of the summative course assessment.
Formative Assessment

Students gain experience of their summative examinations by undertaking formative assessments. During systems in practice, for example, these include the online exam and the anatomy practical exam. Questions included in these formative assessments are representative of the style of question found in the summative examination and are done under examination conditions. Students receive feedback on their performance in these exams.

Anatomy Practical examination

The Anatomy Practical in first year is conducted in a similar manner to the OSCE (Objective Structured Clinical Examination - see below) but the stations involve answering applied core anatomy questions on anatomical specimens and radiographs.

Written Assignments

Students are required to submit a number of case histories each year, demonstrating their understanding of both the tasks of history taking and examination, and of writing up the findings of a clerking in a clear and comprehensive way. Students are also asked to complete a number of reflective essays, case reports and other pieces of written work as part of both formative and summative assessment. This assessment method is particularly likely to be used in SSCs or clinical attachments and forms a component of the student’s portfolio.

Verbal reports and presentations

Students may be assessed on a verbal report or presentation, for example of a patient case or research findings. As with written assignments this method frequently forms part of assessment of SSCs or clinical attachments.

Online examinations

Online examinations include Multiple Choice Questions, Extended Matching Item (EMI) questions, Numerical Questions and Drag and Drop Graphical Questions.

EMI questions generally consist of a lead-in question setting the topic (e.g. management of stroke patients), followed by series of clinical scenarios (each with a single best answer) and a range of answers to select from (in this case a selection of management options). This type of assesses not only knowledge but its application.

Cumulative Assessment Programme (CAP)

The Cumulative Assessment Programme (CAP) is an online formative test for medical students which is performed annually, a few months prior to summative examinations. The test is compulsory and uses multiple choice and extended matching questions.

Students receive results with feedback on answers, marks relative to peers, systems of teaching and curriculum outcomes. If they have performed poorly a meeting with a pastoral tutor can be arranged to discuss and identify potential learning difficulties and support requirements.

The results are also used to allow the medical school to plan appropriate revision teaching depending on individual cohorts of students’ needs. In addition they allow phase conveners to assess quality of
teaching in their teaching block and so initiate improvement in teaching in any future redesign of course curriculum.

**OSCE**

The Objective Structured Clinical Examination (OSCE) is used each year to measure competence in skills such as communication, clinical examination, practical procedures/prescribing, clinical reasoning and interpretation of results. Students rotate through a series of stations at which they are required to undertake a variety of tasks. The OSCE in the early years consists of shorter task-based stations, and in the later years of longer, integrated stations.

**Portfolio**

A portfolio is a collection of work that can be used to demonstrate progress and learning. Whilst the written and practical exams can measure what the student knows, these tools do not easily assess professional behaviours. The Dundee portfolio enables assessment of higher order skills such as self-reflection, critical thinking and clinical reasoning. By accumulating evidence of experiences and accomplishments a final assessment of students’ strengths and weaknesses, across all competences, can be made.

The portfolio relates to curriculum outcomes and its summative focus is to the assessment of professionalism. It provides a personal competence matrix/evidence of progress, achievement and reflection for each student while being supported by regular reviews with portfolio supervisors, each of whom has between 5-10 students (usually 2 from each year group). Supervisors are responsible for monitoring student progress and have the following responsibilities:

- Clerking Reviews
- Virtual Portfolio Review
- Transition Review Meeting
- Final Formative Review Meeting
- The Year 5 summative ‘sign-off’

**Clinical In-course Assessment**

An outcome assessment form is completed by supervisors at the end of each core placement in PiP in Years 4 and 5. This is designed to give students feedback on performance with respect to the “Tomorrows Doctors” outcomes. Students with consistent problems in one or more outcomes are interviewed to identify ways of helping their progress. In addition, the outcome assessment forms are used to identify any concerns of supervisors which may indicate the need for a further attachment as a Directed Study Module.

**Workplace-based Assessment Tools**

With the growing use of the portfolio as a summative assessment, there is a need for more objective ways to measure student performance in clinical placements. A range of tools have been developed for use in postgraduate medical education and these are now being incorporated into undergraduate assessment. They include Direct Observation of Procedural Skills (DOPS; a measure of competence in practical procedures), mini-Clinical Evaluation Exercise (mini-CEX; can be used for observations of
patient interactions) and case-based discussions (CBD; used to assess clinical reasoning and judgment). Many of these tools are used in year 4 and 5 clinical attachments.

**Ward Simulation Exercise**

The Ward Simulation Exercise is an innovative assessment undertaken in the Dow Simulation Suite. Students complete this during Preparation for Practice (PfP) block. Students adopt the role of a Foundation doctor in a ward with simulated patients and nursing staff in order to experience coping in this situation, and are given feedback on their performance. The exercise is recorded and students are able to view this in order to reflect on their performance.
SECTION TWO

Course Structure

The Core Curriculum

A key feature of the curriculum is the concept of a ‘core’ and ‘student selected components’ as originally advocated by the General Medical Council.

The need for identification of a ‘core’ curriculum arose from perennial concerns about information overload in the undergraduate medical curriculum. The GMC undertook a major review of undergraduate education in 1993, recommending that students should graduate with the essential knowledge and skills they would require to practise immediately following graduation. As well as this new doctors should have the lifelong-learning skills necessary to acquire the more specialist knowledge they would need as their careers progressed. While ‘Tomorrow’s Doctors’ has evolved, this concept continues to underpin the delivery of undergraduate education:

“The overall curriculum must allow students to meet the outcomes specified in the first part of Tomorrow’s Doctors. This is to ensure that graduates have the necessary knowledge, skills and behaviours to practise as a provisionally registered doctor.”

(GMC, 2009)

The original recommendations stated that “Completion of the core syllabus and demonstration of proficiency in its outcomes will be mandatory for all; the core, as its name suggests, will represent a distillate of essential knowledge and skills from all fields of medicine.” This continues to apply, and students are not permitted to graduate unless they can demonstrate competence in all outcomes.

We have designed the core curriculum to: ensure breadth of coverage; allow integration of basic and clinical sciences; align theory with practice; and to ensure students have adequate opportunities to achieve the learning outcomes. An overview of the core curriculum in each stage of learning is provided below.

Systems in Practice

Introduction

Systems in Practice (SiP) runs from the beginning of Year 1 until the end of Year 3. It is based on the various organ systems of the body and is an integrated course that focuses on normal and abnormal structure, function and behaviour, basic science and clinical science, and hospital and community perspectives. Problem-oriented learning (where learning is structured around examples of clinical problems) is employed wherever appropriate.
Each year is made up of a period of system-based teaching (Principles and three systems are covered in Year 1, seven systems in Year 2, and five in Year 3), Integrating Science and Specialties (ISS), examinations and Student Selected Components (SSCs).

**Aims**

SiP aims to:

- Introduce the biomedical-scientific principles underlying the practice of medicine
- Develop an understanding of normal and abnormal structure, function and behaviour of the various body systems
- Provide an introduction to clinical practice in both hospital and community settings
- Demonstrate how basic and clinical science integrates with clinical practice
- Instil the values of professionalism and enable development of students’ professional identities

**Structure of SiP**

The Principles Block

The first 8 weeks of first year are the Principles Block, which gives an introduction to the basic principles underlying the practice of medicine. These are:

- Structural Principles
- Functional Principles
- Molecular Principles
- Psychosocial Principles
- Disease Mechanisms
- Defence Mechanisms
- Principles of Drug Therapy
- Safe Medical Practice

The curriculum outcomes from the GMC’s Tomorrow’s Doctors 2009, Basic Emergency Care (BEC), interprofessional learning, the problem-oriented approach to learning and the principles of Medical Ethics are also introduced in this phase. Clinical relevance is emphasised throughout and early patient contact is achieved utilising primary care teaching. Students consider the safe practice of medicine in regular clinical skills sessions. Self-directed learning is well represented in the timetable.
and established as a significant component of this part of the curriculum. The first year Student Selected Component (SSC) is timetabled and runs parallel to the core from early in semester 1.

**The Systems Blocks**

Following on from the Principles Block there are 15 blocks covering the various body systems:

- Respiratory
- Nervous
- Child and family
- Reproduction
- Musculoskeletal
- Special Senses: ENT,
- Cardiovascular
- Ageing
- Ophthalmology and
- Renal
- Endocrine
- Dermatology
- Gastrointestinal
- Nervous
- Musculoskeletal
- Ageing
- Endocrine
- Haematological

Teaching in each system is structured around core clinical problems, and is supported by an online study guide. There is a topic for every week of the systems-based courses. For example, in the Cardiovascular system, the topics are:

- Week 1&2: Cardiovascular principles
- Week 3: Cardiovascular risk factors
- Week 4: Vascular and Ischaemic heart disease
- Week 5: Acute MI
- Week 6: Structural cardiac abnormalities

All teaching for a particular week is structured around a clinical example of the week’s topic. Each of these scenarios has a set of learning outcomes which should enable students to identify:

- Which aspects should be revised from Principles Block
- What learning opportunities there are to achieve these learning outcomes
- How this relates to other aspects of the curriculum

**Preparation in Practice**

**Introduction**

Preparation in Practice (PiP) consists of years 4 and 5 of the undergraduate medical course. The systematic approach to learning about normal and abnormal structure, function and behaviour, and to developing clinical skills in SiP provides a springboard to take advantage of a wide range of clinical learning opportunities in PiP.

**Aims**

PiP aims to provide the medical student at graduation with:

- The knowledge and skills necessary to fulfil the responsibilities of a Foundation Doctor
- Sound professional attitudes towards patients and colleagues
- An understanding of the obligations of the medical profession
- The ability to take responsibility for self-directed continuing medical education and lifelong learning
Transition Block

The Transition Block takes place in the first eight weeks of year 4 and is designed to enable students to recognise the need to integrate the knowledge, skills and attitudes that they have learned in the systems-based learning in the previous three years to the setting of managing a patient presenting with a core clinical problem. This should prepare them for learning in the clinical environment by enabling them to elaborate, reorganise and refine their learning.

The block aims to:

- Help students learn the principles of applying medical knowledge in a clinical environment
- Consolidate students’ existing knowledge and skills in history taking, physical examination, communication and professionalism
- Introduce students to normal working practice in the clinical environment
- Enable students to maximise their knowledge gain using normal day to day activities within the clinical environment
- Consolidate the concept of patient safety
- Guide students in developing cooperation, initiative, and appropriate leadership skills

Core Clinical Attachments

Following on from the Transition block there are five clinical attachments, each of eight weeks duration. Development towards the Curriculum Outcomes takes place within the framework of roughly 100 core clinical problems. Students are expected to organise their learning around these common problems / concerns with which patients present, each problem being supported by an online study guide.

Students are encouraged to develop a wealth of clinical experience of patients and their problems, to master the competencies relating to the core clinical problems outlined in the study guides, and to learn to look at the patient as a whole rather than from the perspective of a disease entity. This strategy is aimed at enabling students to pursue a career in medicine where patients’ concerns and problems are central to their practice.
### Structure of Core Clinical Attachments

<table>
<thead>
<tr>
<th>Medicine – General</th>
<th>Medicine – Specialties</th>
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<tbody>
<tr>
<td>4 weeks General Medicine</td>
<td>1 week Infectious Diseases</td>
</tr>
<tr>
<td>Ninewells or outblock</td>
<td>2 week Neurology/Neurosurgery</td>
</tr>
<tr>
<td>1 week Oncology</td>
<td>Ninewells</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Surgery – General</th>
<th>Surgery – Specialties</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 weeks General Surgery</td>
<td>1½ weeks Ophthalmology</td>
</tr>
<tr>
<td>Ninewells or outblock</td>
<td>1½ weeks Otolaryngology</td>
</tr>
<tr>
<td>1 week Urology</td>
<td>Ninewells and Fife</td>
</tr>
</tbody>
</table>

#### Integrated Specialties

<table>
<thead>
<tr>
<th>1 week Anaesthetics</th>
<th>2 week Ageing &amp; Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 week Emergency Department</td>
<td>2 week Dermatology</td>
</tr>
<tr>
<td>1 week Orthopaedics</td>
<td>Ninewells, Royal Victoria and Roxburghe House</td>
</tr>
<tr>
<td>1 week Rheumatology</td>
<td></td>
</tr>
<tr>
<td>Ninewells</td>
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<table>
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<tr>
<th>General Practice (GP)</th>
<th>Psychiatry</th>
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<tr>
<td>4 weeks</td>
<td>4 weeks</td>
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<tr>
<td>Dundee or outblock</td>
<td>Dundee or outblock</td>
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<tr>
<th>Child Health</th>
<th>Obstetrics &amp; Gynaecology</th>
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<td>4 weeks</td>
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<td>Ninewells or outblock</td>
<td>Ninewells or outblock</td>
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</table>

In addition to the study guides, student learning is supported by problem-oriented tutorials in therapeutics (which run throughout the year). There is also the opportunity to undertake workshops in the Clinical Skills Centre in relation to patients with acute care problems.

In PiP, core clinical placements include GP teaching practice in an urban environment under the supervision of an approved tutor. Usually this is in Dundee, but some students may go to Perth or other towns in the central belt. While in the practices they are expected to consult with patients under supervision, and also study a number of core clinical problems. They are also expected to spend time with all members of the interprofessional practice team and gain a broad understanding of primary care.
**Preparation for Practice**

There is a change of emphasis towards the end of Year 5 to the development of experience provided by a particular specialty, and final preparation for practice as a Foundation doctor. Students maintain and further develop their achievements in relationship to the curriculum outcomes. These developments now take place within a framework of Student Selected Components and Pre-registration (Foundation) Apprenticeship blocks: the former provide an opportunity for in-depth study in selected areas and the latter for integrating theory and practice in preparation for the Foundation appointments the following year.

**Acute Care Block**

The acute care block includes elements of acute medicine, emergency medicine and anaesthetics. During the block students are exposed to a wide variety of acute care scenarios, including spending time with the primary care out-of-hours team and the Scottish Ambulance service rapid response team.

**Foundation Apprenticeship blocks**

Students undertake three foundation apprenticeship blocks (4-weeks General Practice, 4-weeks medicine, 4-weeks surgery). Where possible in these blocks they ‘shadow’ year 1 Foundation doctors or General practitioners.

The ethos of these apprenticeships is to link theory and practice in relation to the students’ future role in service delivery. Students are supported by the combination of the PiP study guides for the core clinical problems and an individual learning plan developed with their supervisor. They are expected to participate in the delivery of patient care as part of the healthcare team.

**Student Selected Components**

Students undertake sixteen weeks of SSC time – a longitudinal project, an eight-week elective and a four-week clinical SSC.

**4th Year project**

Students undertake a longitudinal SSC known as the 4th Year project. This equates to four weeks’ work, but is spread over the year as a half-day each week, and is equivalent to 10% of teaching time for year.

**Elective**

The elective provides an opportunity for students to follow studies entirely of their choosing, either at home or abroad, the only requirement being that it is relevant to the practice of medicine and at least 50% ‘clinical’ as opposed to research. There is no requirement to travel overseas but in order to seek contrasting experiences we strongly encourage students to arrange their elective away from Tayside.

These five areas have been identified as broad learning objectives for all Dundee electives.
- Gain experience of a broader range of disease patterns by practicing clinical medicine in a contrasting environment.
- Consider how health care systems can be structured and function differently.
- Consider how non-clinical determinants of health (e.g. the politics or gender disparities) influence health at local and global level.
- Consider how climate change may affect global health in the 21st century.
- Demonstrate the ability to locate, organise and complete a suitable elective in a professional manner.
- Students are required to set their own objectives for their elective, tailored to their chosen destination and based on the areas outlined above – this is the basis of Module 1. Your elective proposal must be approved by Dr Jon Dowell the Elective Convener.

Students are required to make their own arrangements and organise themselves entirely for their elective. This includes demonstrating their professionalism through interacting effectively with hosts and all other agencies required and meeting Medical School expectations of timely and satisfactory completion of related e-learning modules and assessments.

Clinical SSC

Clinical SSCs are either selected from a menu or are self-proposed at the end of Year 4. They provide students with an opportunity to experience specific areas of medical practice in more detail. All clinical SSCs will contribute to the development of the curriculum outcomes.

Curriculum Themes

Dundee medical school aims to integrate the learning of basic and clinical sciences with art of clinical practice from the beginning of the curriculum. The ‘spiral’ curriculum at Dundee introduces students to generic principles underpinning the learning and practice of medicine. As learning advances over the next three years of the course, the basic themes learnt during the ‘Principles’ block in Year 1 will be visited repeatedly and applied to individual organ systems. More complex learning later on, will be facilitated through progression throughout the 5 year programme from principles to knowledge, acquisition and application. Of the subjects taught throughout medical school, some are mapped to the curriculum as integrated themes which are assessed accordingly.

The Curriculum themes are:

- Physiology
- Biochemistry
- Genetics
- Immunology
- Pathology
- Infection
- Anatomy
- Nutrition
- Palliative Care
- Public Health
- Safety
- Prescribing
- Evidence Based Medicine
- Information and Informatics
- Ethics
- Global Health
- Behavioural Science
- Communication skills
- Clinical Skills
- Radiology and imaging
Further information about the themes is available via Medblogs (https://mbchb.dundee.ac.uk/)

Student Selected Components (SSCs)

Student-selected components have been part of the undergraduate medical curriculum in the UK for nearly twenty years. One of the key innovations of Tomorrow’s Doctors (1993) was the provision of student choice on a scale that had never been seen before. It was seen as essential if students were to engage with the process of reform.

In the original Tomorrow’s Doctors (1993) document it was identified that:

“...the greatest educational opportunities will be afforded by that part of the course which goes beyond the limits of the core, this allows students to study in depth in areas of particular interest to them, that provides them with insights into scientific method and discipline of research, and that engenders an approach to medicine that is constantly questioning and self-critical. This part of the course we refer to in terms of ‘special study modules.’”

Not all student-chosen elements are modular. In recognition of this, the term ‘special study module’ was replaced some years ago by the more generic ‘student-selected component’ or SSC.

SSCs provide the opportunity to study areas of the student’s choice in depth; indeed this remains the explicit purpose. They also allow students to develop generic skills that are essential to their professional development. In addition, students can, through SSCs, achieve core learning outcomes not related to specific fields of knowledge, but concerned with transferable skills, like information handling, computer literacy, critical thinking and independent learning. SSCs aren’t an ‘optional extra’ – they’re a very important part of the curriculum.

The relation between core and SSC varies in different parts of the Dundee curriculum. In Year 1 the SSC is a longitudinal exercise running throughout the year. In Years 2 and 3 (Systems in Practice), SSCs are delivered as modules interspersed with other elements of the curriculum. In Years 4 and 5 (Preparation in Practice), SSCs are delivered in both ways: longitudinal (fourth year project) and modular (clinical SSC).

Currently the GMC stipulates that SSCs must occupy at least 10% of curriculum time, compared with one-third originally. This represents an attempt to shift the emphasis from quantity to quality, i.e. to ensure that genuine student choice achieves its fullest expression. In Dundee, the proportion of curriculum time devoted to SSCs varies from one year to the next, but is on average about 25%.

“The purpose of SSCs is the intellectual development of students through exploring in depth a subject of their choice.”

SSCs confer many benefits:

For the school:

- They provide flexibility in the curriculum, allowing particular groups of students to be catered for
- They allow piloting of innovative educational approaches to curriculum development
- SSC programmes are constantly ‘refreshed’, with old modules replaced by new ones

For the student:
- They present an opportunity to study an area in greater depth
- They allow students to study topics not found in the standard curriculum
- They allow students to demonstrate an early interest in a potential career
- They help to bridge the gap between basic science and clinical subjects
- They provide broader educational opportunities

For the teacher:
- They offer an opportunity for more personalized teaching
- They can be rewarding and invigorating
- They present an opportunity to prioritize novel projects

Topics covered by SSCs:

SSCs fall into different categories.

Related to core
- In-depth study of core subjects, e.g. more detailed anatomy, biochemistry, pathology beyond the core
- Related topic e.g. sports medicine, musculoskeletal system and orthopaedics, clinical application of core and basic sciences
- Exploring the ‘cutting edge’ of a discipline both clinically and in basic sciences: variety of basic medical science topics, some offering laboratory experience; novel drugs and treatments

Medical topics not related to core, e.g.
- Neurobiology of stress
- Stem cell treatment
- Photobiology in dermatology
- Physics in medicine

Not directly related to medicine, e.g.
- Foreign language e.g. Medical French
- Medicine and humanities
- Music and art therapies

Topics may be integrated, covering several departments or disciplines, or specialty-based. In the development of SSCs the following are avoided:
- Re-introduction of material left out when the core was planned
- ‘Cramming’ – topics should emphasise generic competencies of in-depth study and critical thinking
Gaining a place in an SSC

There is a tension between, on the one hand, gaining experience across a portfolio of modules e.g. hospital-based, community-based, basic science, research-based topics, and, on the other, satisfying the reasonable aspirations of individual students to demonstrate and explore a clear and fixed interest in a particular specialty. This tension can usually be accommodated with judicious planning of educational objectives that demonstrate the acquisition of new skills where a clinical area is revisited.

Not all students gain allocated to their first-choice SSC. The medical school tries to ensure that student expectations are realistic and that a fair distribution of topics is made to students in order to provide the maximum opportunity of achieving individual choice.

Self-Proposed SSCs (SPSSCs)

Since Dundee medical school cannot absolutely guarantee allocation to preferred modules, students are allowed to design their own SSC (‘self-propose’). Students are responsible for contacting the supervisor, and ensuring the proposal is submitted to the school for approval. Proposals are approved if it can be demonstrated that the student will make progress towards the curriculum outcomes. This option is a good choice for students with specific career plans. More generally, it ensures that students who want to be certain of doing a preferred module have the opportunity to take matters into their own hands – it is the fullest expression of student choice in the curriculum.

Time Allocated to SSCs in Dundee Curriculum

Year 1:
The Year 1 SSC is longitudinal and comprises a project (literature review) through the course of the year.

Years 2 & 3:
SSCs in Years 2 and 3 are offered in separate four-week blocks: May in year 2 and January and May in year 3.

The Systems in Practice SSC Student Guide is available at https://mbchb.dundee.ac.uk/dundeessc/. It contains all the information students need to know about Student Selected Components (SSC), Self-Proposed Student Selected Components (SPSSC) and the selection process.

Years 4-5:
In Year 4, students undertake a longitudinal SSC known as the 4th year project. This equates to four weeks’ work, but is spread over the year as a half-day each week, and is equivalent to 10% of teaching time for year. The aims of the assignment are to:

- the expectation that all students will study the content of the SSC
- develop personal interest and ownership of learning, encourage self-management skills; and facilitate deep learning
- enhance research and reasoning skills

Students develop the project proposal in Year 3 and identify a supervisor to enable any ethics / Caldicott approvals to be in place for Year 4. More information about the 4th Year project, including deadlines and the forms required is at https://mbchb.dundee.ac.uk/4thyearprojects/

Year 5 students complete an elective period of 8 weeks. The purpose of electives is to enable students in the final year of the medical course to follow studies entirely of their own choosing, either at home or abroad. The only over-arching requirement is that the proposed studies are relevant to the practice of medicine. Students are expected to make their own arrangements, but to keep the medical school informed of plans as they develop. All programmes of electives must have the formal approval of one of the advisers of studies for electives before they can be considered as an approved part of the final year course. Written reports on the elective are assessed in relation to the curriculum outcomes and are an integral part of the student’s portfolio of work.

In Year 5, as well as the 8 week elective, students select a 4 week long SSC. The SSC can be in any area of medicine but is usually based within Scotland. It gives a chance for a student to experience, in more depth, an area of medicine that they are particularly interested in. The SSC can be self-proposed and organised by the student, or it can be selected from a menu of pre-organised SSCs that are run each year.

**Intercalated year**

Students who have performed well in both the core and the student selected components are offered the opportunity to take an intercalated year during which they study for a Bachelor of Medical Science (BMSc) Honours degree. There is a choice of courses, each of two semesters in duration. The intercalated year is normally taken between Years 3 and 4.

At present courses are available leading to an Honours BMSc Degree in Anatomy; Applied Orthopaedic Technology; Biochemistry; Clinical Research; Forensic Medicine; Human Genetics and Experimental Medicine; Human Reproduction, Assisted Conception and Embryonic Stem Cells; International Health; Medical Psychology; Neuroscience; Pharmacology; Physiology; Sports Biomedicine; or Teaching in Medicine. Some of these courses can also be taken by selected dental students at the end of their second year.

http://medicine.dundee.ac.uk/intercalated-degree-bmsc

Students taking the BMSc course in a department where there is a BSc honours course usually join those students for most of their teaching. Special BMSc courses are run by other departments. In both cases, the courses involve formal teaching provided by lectures, tutorials, problem solving sessions etc. and a substantive research project of 1-2 semesters giving the students an opportunity for in-depth study of an important research topic under the direct supervision of an academic member of staff in the relevant discipline of interest. At the end of the course, the research is presented as a bound dissertation. The knowledge gained by the student from both the formal
teaching and the research project is assessed in written and oral examinations where an external examiner is present.
SECTION THREE: ADDITIONAL INFORMATION

Academic Standards

The Medical School has in place a robust mechanism for collecting information from students and staff to quality assure the teaching provision.

A single data set is collected and is used for internal monitoring by the School / University; to inform the GMC Quality Assurance of Basic Medical Education (QABME) process; and by NHS Tayside / NHS Education for Scotland (NES), all with a view to improving the quality of teaching and learning and enhancing the student experience.

The Medical School QA Process

Student questionnaires are screened and any urgent issues dealt with immediately. The feedback is then circulated to the system convenor, the phase convenor, and staff delivering teaching during the block. Staff contributing to teaching are asked to review the feedback received and respond to the system convenor, who will collate responses. A combination of student and staff feedback is then used by system conveners / block organisers to plan future teaching.

NES QA process and ACT Accountability

The Director of Medical Education (DME) for NHS Tayside is accountable for the delivery of clinical teaching provided by NHS staff, and the spending of Additional Costs for Teaching (ACT) funding to support this, reporting to the Board, the local ACT group and NHS Education for Scotland (NES).

The School and NHS Tayside jointly comply with NES requirements to report on NHS Board teaching performance. Information from the student feedback forms is used to produce reports by specialty for NES which are collated and circulated via the DME to ensure that issues of performance are discussed by specialty teaching leads and relevant clinical staff. Areas of best practice are highlighted and support provided for areas that are not performing to their full potential.

Student facilities and Support

The Student Support Scheme

The student support scheme consists of the tutor scheme and various support services which can be accessed as required.

Medical School Office and Academic Leads

The Medical School Office helps students with issues relating to the curriculum and can direct them to additional sources of support in both academic and pastoral areas. The phase, block and system
leads for each part of the course provide support for students who have particular issues relating to their parts of the curriculum.

**Core Support Group**

The core support group is a group of trained individuals, made up of interested and approachable tutors, teachers and admin staff within the facility who are willing to help students with problems and barriers to their education.

The team has been assembled by and is led by the Academic Mentor. Members of the Core Group see individual students with academic or personal issues. They also organise small group sessions for students who are yet to master certain elements of the curriculum for whatever reason. Weekly drop-in sessions give students an opportunity to speak to an individual privately and face to face should something arise.

Online guides with information about the scheme are available for both students and tutors.

**Academic Mentor**

The role of the Academic Mentor is to provide extra help to medical students who are finding difficulty in achieving their full academic potential. Barriers to learning can be due to a wide range of factors including academic, professional, social and emotional issues.

Mentoring involves providing feedback, coaching, advice, guidance and support. This may be provided on a one-to-one basis or in small groups if the need arises. The role of academic mentor is entirely supportive, mentoring is confidential and the post-holder is not involved in any assessment of students.

The role involves taking time to listen, to provide feedback and to work with students to resolve their academic issues and to complement existing support services. Some students may be referred for extra help by tutors and some may self-refer for advice.

**Peer Support**

Dundee Medical School has run a highly successful peer-tutoring scheme since 1999. Senior students run body-system-based revision sessions for their more junior peers. The sessions are highly valued by both tutors and tutees and the scheme has seen a consistent, year-on-year increase in the number of student tutors involved.

In 2013 a new web and phone based peer support and advice service was launched. MSAS, the Medical Students Advisory Service, provides practical support or signposting towards other support services. It is run by senior students who have gathered a network of junior and senior clinicians to help with queries, advice or hands-on help.

**Portfolio Supervisors**

Each student is allocated a portfolio supervisor, usually an active clinician or academic within the Medical School. The supervisor’s primary role is to help guide the student through the portfolio process which includes written patient presentations and case discussions.
TIPP (Tayside Insightful Practice Portfolio)

Students who are experiencing some form of difficulty in the academic arena or who have collected a number of Lapse in Professionalism points can be referred to the TIPP process. TIPP enables a student to reflect on their learning and provides a formal system of coaching for them.

University Student Services

The university provides a comprehensive system of support through Student Services. Here students can access counselling, careers advice, financial help, study skills advice as well as disability and health services.

Informal Support

Often students prefer to approach clinical, academic or administrative staff they know well for advice and support. A great deal of informal support is ongoing within the medical school.

Raising Concerns

The General Medical Council requires that qualified doctors raise concerns about unprofessional behaviours and encourages students to behave in a similarly professional manner. The Medical School fully supports this requirement and encourages students to report serious concerns when they have witnessed poor professional practice regarding standards of clinical care, teaching practice or ‘fitness to practise’ through the ‘Raising Concerns’ policy and service (https://mbchb.dundee.ac.uk/raising-concerns/raising-concerns-policy). This commitment also reflects the School’s support for high standards of openness, probity and accountability, and the NHS Quality Improvement Strategy.

The School recognises that medical students may encounter episodes which distress and concern them but may lack the confidence to raise these, be unsure about normal standards of practice, who the relevant body might be, or have concerns their progress may be jeopardised. The Raising Concerns policy and service are designed to encourage students to raise concerns in a supportive, confidential and informal environment.

The service is facilitated by an independent member of staff. Initial concerns may be raised and discussed with the facilitator or the Academic Mentor who will advise on the next steps, normally in close consultation with at least one other senior Medical School or NHS staff member. Alternatively, students may submit concerns via an online reporting form: https://mbchb.dundee.ac.uk/raising-concerns/

Options are:

- Discuss and resolve with student concerned
- Investigate further internally (for instance contacting other students for their accounts)
- Refer on to other more relevant channels (e.g. if clearly relates to a substantive failure in clinical care)
At each stage students will be kept informed of what is to happen next, who is responsible and the likely timeframe.

Following any investigation a report will be made identifying the issues and actions taken. This will be retained by the facilitator and copied to the student, as well as the subject of the complaint, if relevant and appropriate.

Responsibility for discussions with any member of University or Health Service staff will rest with their immediate manager, Medical School Teaching Dean or the NHS Director for Medical Education.

This policy compliments the existing university and NHS formal policies for reporting complaints about the teaching and facilities, public interest disclosure, unprofessional behaviour and compromised standards of care.

**Careers information, Advice & Guidance**

The Medical Careers Adviser is available to respond to the initial career needs of undergraduate medical students and Foundation trainees and to act as a signposting forum for more complex career related requirements; this role ensures the provision of a full, impartial career advice service for medical students and Foundation trainees throughout their training. Access to the Medical Careers Adviser can be through 1:1 appointments, drop-in sessions, or by email or telephone as appropriate.

The Medical Careers Pod information kiosk, situated in the library of the Medical School, is an innovative one-stop information resource for medical careers information.

For more information regarding careers in a specific discipline, the Eastern Regional Postgraduate Medical Education Advisory Committee has appointed, in each of the areas of medicine, a specialty adviser, part of whose responsibility is the counselling of medical students regarding career advice. This is also a responsibility of the Postgraduate Dean. A full list of specialty advisers can be found in the Useful Contacts section.

**Students with disabilities**

Students with any form of disability that may impact on their ability to study medicine can contact the Disability Services unit in the Old Technical Institute (OTI) building on the Main Campus. They will meet with the student to discuss their needs and make recommendations to the School of Medicine as to appropriate support for the student in their studies and examinations.

More details are available at http://www.dundee.ac.uk/disabilityservices/
Medical Student Professionalism and Fitness to Practise

The Medical School takes issues related to Professionalism and Fitness to Practise very seriously and has a number of methods in place to deal with professional misconduct on the part of students. The Student Support and Progress Committee deal with all concerns of this nature.

In 2012 a recording and monitoring system, known as the Lapses in Professionalism Policy (LiP) and Procedure https://mbchb.dundee.ac.uk/professionalism/lapses-in-professionalism/, was introduced.

This acts as an early warning system to identify students who demonstrate a ‘lack of professionalism’ and/or incidents which might serve as indicators for deeper concerns.

The intention of the Lapses in Professionalism policy is to enable a staff member e.g. Clinician, Allied Health Professional or other to flag any concerns identified in a student’s professional behaviour during the undergraduate programme. Student professionalism is evaluated at every clinical encounter and out with the educational settings.

The policy:

- Provides an early warning system to identify students with difficulties
- Provides an opportunity for staff to feedback on students in relation to individual clinical activities
- Provides an additional support system for students in their clinical attachments

It does not replace other forms of assessment or feedback already in place

It is expected that staff would normally raise their concern with the student, agree on action if required, and then submit the online form https://medicine.dundee.ac.uk/lip

It is important that the form is completed following the discussion as this may not be the first time concerns have been raised and the Medical School may need to take further action.

Serious allegations will always be fully investigated through the School’s formal ‘Fitness to Practise’ procedure. Medical students have a responsibility to develop professional values and conduct, while the Medical School must provide the opportunities to learn and practise to the standards expected and ensure that graduating students are fit to practise. These interlinked responsibilities are set out in the Dundee Medical School Student Charter1 that is signed by all students on admission to the School and at the start of the Preparation for Practice Programme (Year 4). More information on the School’s “Fitness to Practise” procedure can be found at:

Medical School Charter

Introduction

This document represents a significant development in trying to capture the expectations and responsibilities of students and the University. All students are required to sign up to the charter upon embarking on the course.

The Dundee document has been developed from the principles set out in the Medical School Charter developed by the Council of Heads of Medical Schools and BMA Medical Students and should be read in conjunction with the GMC’s document Good Medical Practice:

http://www.gmc-uk.org/guidance/good_medical_practice.asp

Part 1: The Responsibilities of the Medical Student

Medical students undertake a degree in medicine with the aim of becoming medical practitioners. Whilst students do not yet have the full duties and responsibilities that go with being a registered medical practitioner, they are already in a privileged position with regards to patients and those close to them. In recognition of this, students must maintain a good standard of behaviour and show respect for others. By awarding a medical degree, a university is confirming that the graduate is fit to practise to the high standards that the GMC has set in its guidance to the medical profession, Good Medical Practice. The GMC outlines the standards expected of a qualified doctor in Good Medical Practice and other guidance. Many of those standards apply to the medical student.

Part 2: The Responsibilities of the Medical School

In accepting a place at medical school or university, the student is expected to comply with certain responsibilities which are outlined in Part 1 of the Medical School Charter. These responsibilities accord with GMC standards and take into consideration the requirement that medical schools are expected to graduate students who are fit to practise medicine.

The responsibilities of the Medical School relate to:

- Education
- Privacy and equal opportunity
- Administration and support
- Student representation

In identifying these goals the Medical School seeks to obtain the highest possible standard and work with students to ensure that this is consistently achieved.
Links to University Services

Academic Affairs: http://www.dundee.ac.uk/academic/

Links to important academic regulations and policies, including those related to examinations, discipline, complaints and appeals and termination of studies

Academic Standards: http://www.dundee.ac.uk/qaf/

Information and policies related to the University’s Quality Assurance Framework. Includes links to current Learning and Teaching Strategies, assessment policies and student representation on University committees.

Information & Communication Services: http://www.dundee.ac.uk/ics/

Support for students and staff with computing or technological issues. Also hosts the policy on use of University IT equipment and facilities.

Library and Learning Centre: http://www.dundee.ac.uk/library/

Access to the library catalogue and a wealth of electronic books, journals and other online resources.

‘Medblogs’: https://unifi.dundee.ac.uk/unifi/

Access to the University’s secure virtual learning environment

Student Services: http://www.dundee.ac.uk/studentservices/

Aimed at both students and staff, provides information on a range of topics including childcare, finance, accommodation, disability and health and well being

Careers Service: http://www.dundee.ac.uk/careers/

Support for both students and staff with career and personal development planning.

Health & Safety Services: http://www.dundee.ac.uk/safety/

The University’s Health & Safety Policy and information relating to occupational health, fire safety and accident reporting

University Campus: http://www.dundee.ac.uk/general/campusguide/ourcampuses/

Useful information about the various campus sites including maps and travel information.

Chaplaincy: http://www.dundee.ac.uk/chaplaincy/

Institute of Sport & Exercise: http://www.dundee.ac.uk/ise/

Information on the gym and sports facilities available to staff and students

Clubs and Societies: http://www.dundee.ac.uk/general/societies.htm
Full listing of clubs and societies which are open to both staff and students.

**For Students:**

Registry: http://www.dundee.ac.uk/registry/

Information about matriculation, examinations, graduation and tuition fees

Academic skills Centre:

http://www.dundee.ac.uk/aatu/ug.htm

Support to develop vital academic and study skills.

**For Staff:**

Centre for Medical Education: http://www.dundee.ac.uk/meded/

The Centre for Medical Education offers a range of short courses and distance learning or face-to-face teaching qualifications tailored to clinical teachers.

Organisational & Professional Development http://www.dundee.ac.uk/ppd/

Links to a variety of training opportunities available to University staff, including support for managers and with developing IT skills.

LLC Educational Development

http://www.dundee.ac.uk/library/teaching/

LLC Educational Development supports excellence in teaching across the University through their ‘InspirED’ programme of workshops, conferences, seminars and good practice events

Human Resources: http://www.dundee.ac.uk/hr/

Policies and information related to equality and diversity, bullying and harassment, sickness and absence and staff appraisal procedures. Within these pages you will also find up-to-date contact details for the Medical School’s HR officers
Medical School Committees

This section contains details of the main committees operating within the Medical School. For a full list of committees and up-to-date membership, please consult the document ‘Committee Remits and Membership’ available through the Medical School Undergraduate Office.

Undergraduate Medical Education Committee (UMEC)

UMEC is the strategic group in respect of curriculum management who meet on a monthly basis. Its remit is as follows:

- To advise the School Board on matters concerning undergraduate medical education.
- To set the strategic direction for the delivery and assessment of the undergraduate medical course and develop the Teaching and Learning Plan.
- To plan, co-ordinate and oversee the administration of teaching, learning and assessment arrangements for undergraduates in medicine according to the Teaching and Learning Plan.
- To manage the teaching budget.
- To quality assure the undergraduate medical programme (including the BMSc) to meet the requirements of University QA, GMC QABME and NES.
- To address and implement any required changes arising from the School or GMC curriculum reviews and Quality Assessment of Teaching.

Systems in Practice (SiP) and Preparation in Practice (PiP) Sub-Committees

In respect of the relevant section of the Undergraduate Medical Curriculum and under direction from UMEC the committee has responsibility:

- To manage curriculum implementation.
- To design, implement and evaluate teaching and learning strategies for the delivery of the curriculum.
- To design, implement and evaluate assessment strategies; this includes production of assessment questions and standard setting of examinations.
- To act as the Board of Examiners.
- For quality assurance.
- To identify, develop and monitor placement areas.
- To establish resource needs for the Phase.
- To consider student welfare issues.
- To report to the Undergraduate Medical Education Committee.

Support and Progress Committee

The primary aim of the committee is the welfare (academic and health) of students to maximise the opportunities for students in difficulty to complete the medical course.

Specifically the committee will:
- Advise the relevant SiP or PiP convenor, when necessary, on remedial programmes of work for those students who are failing to meet the standard in any aspect of the undergraduate medical course
- Advise the Teaching Dean and / or Dean in respect of potential fitness to practice (FtP) cases.
- Specifically the need to refer to an FtP investigation panel or recommend appropriate non-disclosable disciplinary action or student support
- Provide advice on support for students with persistent or difficult problems which the tutor is having difficulty resolving or that is not being resolved by the tutor
- Track students with persistent problems including those repeatedly flagged up by the LiP system
- Review evidence for return after withdrawal for health reasons
- Review progress of repeating/returning students
- Advise the admissions convenor on acceptability of students requesting inter-university transfer into the Medical School

**Curriculum Management Team (CMT)**

CMT is the operational group for the ‘day to day’ management of the curriculum. It functions under the strategic direction of UMEC but provides a forum for executive decisions relating to operational and management issues (teaching delivery, planning and assessment) and student welfare.

**Academic Review Committee (ARC)**

The Medical School’s Academic Review (Termination of Studies) Committee, acting under powers delegated to it by the Faculty Board considers the future studies of any students who fail to satisfy the requirements to proceed.

The Academic Review Committee may decide:

(i) To require a student to withdraw from the Course
(ii) To allow a student to continue medical studies by repeating a year of the Course or
(iii) In exceptional circumstances to allow a student to proceed to the next phase of study “carrying” a component

The Committee may attach whatever conditions it thinks fit to any permission to continue studies: failure to observe any such conditions will render a student liable to be required to withdraw from the Course.

**Medical Students Council (MSC)**

The Dundee Medical Students Council (MSC) is a student body which acts as the main interface between students and the Medical School.

Remit:

- To lead the student body in participation with the necessary course developments and design, initiatives and discussion;
- To act as the frontline for feedback mechanisms between students and staff - positive and negative;
- To hold regular meetings with the Teaching Dean to discuss issues;
- To arrange student events (careers night, electives evening, symposium);
- To arrange and nominate student representatives for all other committees and events;
- To act as ambassadors and guides at admission events in provision of the perspective of the Dundee School of Medicine student

**Further Reading**

**About the Curriculum and the Medical School**

All of these publications are available in both print and electronic format. Email mn-staffdevelopment@dundee.ac.uk to request a copy.

Curriculum Information: https://mbchb.dundee.ac.uk/

Policies and Procedures: https://mbchb.dundee.ac.uk/policies-and-regulations/

**Useful Medblogs**

- Staff development: https://mbchb.dundee.ac.uk/staffdevelopment/
- FAME awards: https://mbchb.dundee.ac.uk/fameawards/
- Student support scheme: https://mbchb.dundee.ac.uk/studentsupport/
- Student professionalism: https://mbchb.dundee.ac.uk/professionalism/
- Patient safety and quality improvement: https://mbchb.dundee.ac.uk/patientsafety/

Contact mn-staffdevelopment@dundee.ac.uk for further information

**GMC Publications**

The following documents relate specifically to undergraduate teaching:

- Tomorrow’s Doctors (2009)
- Good Medical Practice (2013)
- Medical Students: professional behaviour and fitness to practise (2009)
- QABME report for Dundee University Medical School (2009)

Available online: http://www.gmc-uk.org/

**Support for Learning and Teaching**


Contact mn-staffdevelopment@dundee.ac.uk to request a copy
General enquiries:
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Dundee, DD1 9SY Scotland, UK

t +44 (0)1382 633696
f +44 (0)1382 632127
www.dundee.ac.uk/medschool

Admissions enquiries:
Admissions and Student Recruitment
University of Dundee, Nethergate, Dundee DD1 4HN, UK

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e contactus@dundee.ac.uk

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