



**MEDICAL AND  
HEALTH SCIENCES**

# **MBChB**

## **Phase 1 (Year 2)**

### **Guidebook**

# **2017**

**Available on MBChB Portal**

[www.mbchb.auckland.ac.nz](http://www.mbchb.auckland.ac.nz)

**(version 1.2, Released June 2017)**

**Contact**

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Dear Students

## **Re: Compulsory Declaration – Year 2**

You are required to confirm that you have read your Guidebook and Policy Guide by completing your Phase 1 (Year 2) Compulsory Declaration by Friday 10 March 2017. This is to be completed online, and an individual link will be sent to your university email address. The wording of the declaration is provided below for your information.

Please note that it is your sole responsibility to complete the declaration by the deadline. Any delay risks disciplinary action.

Johanna Beattie      Group Services Manager, Medical Programme Directorate

### **Medical Programme Directorate**

#### **Compulsory Declaration – Year 2**

This Guidebook is to be read in conjunction with the Medical Programme Policy Guides.

I have downloaded a copy of the Phase 1 (Year 2) Guidebook, and have read and understood the information therein with particular reference to:

- Policies Relevant to Phase 1 (Year 2) (Section E)
- Research or Teaching involving Human Subjects (Sections H.6)

I am aware of the penalties that might be applied if I breach these policies.

I agree to abide by the Faculty and University policies and regulations.

I am not affected by any physical condition or impairment with the capacity to affect my ability to perform the functions required for the practice of medicine. These include neurological, psychiatric or addictive (drug or alcohol) conditions, including physical deterioration due to injury, disease, or degeneration.\*

I have not been convicted in any court in New Zealand or elsewhere with any offence punishable by imprisonment of three months or longer.\*

I consent to assessment and evaluation data being used in research.

\* If you have something to declare in relation to these items and cannot complete this declaration, please contact the Directors of Medical Student Affairs email: [director.medstudentaffairs@auckland.ac.nz](mailto:director.medstudentaffairs@auckland.ac.nz)

## **An important message from the AUMSA Vice President (Education)**

Dear MBChB Year 2 students,

Congratulations on getting into medical school! All the work you've put in has finally paid off.

The first week will probably be a mix of many emotions. There is joy, excitement, anticipation and even a bit of anxiety. Information and advice will seem to come from everyone and everywhere, the prospects of a new, exciting career in medicine stretch before you but can also be overwhelming.

Along with all the administrative information you receive, there are heaps of opportunities to get involved with student interest groups. Please dive in and immerse yourself in the many events AUMSA, grassroots and other student groups have to offer. The events offer unique opportunities to meet new people, make lifelong friendships and broaden your skills and achievements outside of demanding academic commitments.

As always though, it's important to keep your studies in mind. Recently, the medical school curriculum was reinvigorated, which means that Phase 1 consists of modules instead of separate courses; which means modules are taught one after the other, instead of 4 courses simultaneously over the semester. The end-of-module test is therefore held as each module finishes, and NOT at the end of the semester. For you, this means that when a module starts, you have to stay on top of the work and start studying from day one as you won't have much time before you will be tested, and the modules move at a fast pace.

Some students in Phase 1 still feel that the information can be crammed in the 1 or 2 weeks preceding the module test. There are many reasons that I would advise against this:

1. For a given individual, it is not possible to cram all of the information that you'll need to get the grade you want. Unlike pre-medicine, module tests are designed to test overall understanding of concepts and not rote-learned answers. Only consistent study will provide the in-depth knowledge of concepts necessary to answer the questions.
2. Cramming doesn't allow you to retain the information, which you will need for progress tests and clinical years, and most importantly, for being doctors.
3. Cramming is not worth the stress that it causes before the module test.

From my own experiences, a lot of students don't realise just how much there is to get through and ran out time to learn everything trying to cram. This meant they were much more in danger of failing.

Now in year 6, I look back and remember the years I spent in medical school as some of the best of my life. I think of the friends I made, the incredible social events, the long nights studying and the patients I met. Medical school will go by quickly (honestly, yesterday I was in year 2 I swear!) and it is very important to get involved as much as possible, enjoy yourself, have fun and most importantly strike a balance between work and play. The best doctors are the most balanced!

Good luck Class of 2021! I can't wait to meet you all and hear the hopes and dreams of the NZ's future doctors!

Liam Walsh.

# Contents

<b>A. Essential Information</b>	<b>7</b>
A.1. Key Contacts	7
A.1.1. Medical Programme website	7
A.1.2. Medical Programme Overall	7
A.1.3. Module Coordinators	8
A.1.4. Who to contact for advice	9
A.2. Teaching and Learning Venues	10
A.2.1. Workshops and Tutorial Venues	10
A.2.2. Medical Sciences Learning Centre & Human Anatomy Laboratory	10
A.2.3. The Clinical Skills Centre (CSC)	10
A.3. Health and Safety and Equipment in Year 2	11
A.3.1. Optional extra equipment	12
<b>B. The Medical Curriculum</b>	<b>14</b>
B.1. MBChB Graduate Learning Outcomes	14
B.2. Purposes of Outcomes, Domains and Phases	15
B.2.1. Graduate Learning Outcomes	15
B.2.2. The Domains	16
B.2.3. The Phases	18
B.3. Programme Structure	19
B.4. Options and Planning your Programme of Study to Graduation	21
B.4.1. Phase 1 (Year 2) optional components for research	21
B.4.2. Phase 1 (Year 3) optional curriculum components	21
B.4.3. Allocation policy for clinical years (Years 4 – 6)	22
B.4.4. Phase 2 (Year 4) optional sites	22
B.4.5. Phase 2 (Year 5) optional components	22
B.4.6. Phase 3 (Year 6) optional component	23
B.4.7. Research degree pathways	24
B.5. Exit Pathways from the MBChB	25
B.6. Deferral of Study	25
B.7. Academic honesty	26
<b>C. Year 2</b>	<b>27</b>
C.1. Clinical scenarios and learning	27
C.2. MBCHB 221	29
C.3. Integrated Learning Activities	30
C.3.1. Human Early Life Development (HELD)	31
C.3.2. A Patient with Chest Pain	31
C.3.3. First Patient Project	31
C.4. Special Features	31
C.5. Recommended Texts	32
C.6. Learning Outcomes for Year 2 Modules	33
<b>D. Assessment</b>	<b>48</b>
D.1. Assessment Schedule for MBCHB 221	48

D.2. General Assessment Policies.....	48
D.3. Progress Testing.....	48
D.3.1. Overview.....	48
D.3.2. Grading and Progress Tests.....	49
D.3.3. Progress Test dates for 2017 .....	50
D.3.4. Policies and Progress Tests.....	50
D.3.5. Guidelines to approaching a Progress Test.....	51
D.4. Year 2 Assessments and Weightings.....	53
D.5. Pass, Fail and Remediation Decisions .....	54
D.6. Grades reported to students.....	54
D.7. Impaired performance in Examinations, Tests and Coursework .....	56
D.7.1. Impairment in tests and coursework .....	56
D.7.2. Impairment before tests.....	56
<b>E. Policies Relevant to Phase 1, Year 2.....</b>	<b>57</b>
E.1. Assessment Policy .....	57
E.1.1. General.....	57
E.1.2. Deferred result.....	57
E.1.3. Repeating a year .....	57
E.1.4. Grading system.....	57
E.1.5. How to calculate your Grade Percent Average (GPA) ....	58
E.2. Registration Requirements .....	58
E.3. Immunisation and Infectious Diseases .....	59
<b>F. Student Advice and Support.....</b>	<b>61</b>
F.1. Student Centre.....	61
F.2. Personal Wellbeing .....	61
F.3. Professionalism, Online Social Media and the Curriculum .....	61
F.4. Professional Relationships.....	62
F.5. Harassment.....	62
F.6. International Student Advice.....	63
F.7. Scholarships and Financial Support .....	63
<b>G. Learning Resources.....</b>	<b>64</b>
G.1. Medical Programme Portal .....	64
G.2. The Philson Library – Te Herenga Hauora.....	64
G.2.1. Library access for students based in Auckland .....	64
G.2.2. All Students.....	64
G.3. Library Skills Programme – Philson Library .....	65
G.3.1. Expected Library skills .....	65
<b>H. Administrative Details.....</b>	<b>66</b>
H.1. Medical Indemnity.....	66
H.2. Year 2 Notices and Communication.....	66
H.2.1. Year 2 notices.....	66
H.2.2. Email communication.....	66
H.3. University Travel Policy for students.....	67
H.4. University Policy on Audiotape Recordings of Lectures .....	67

H.5. Medical Programme Research.....	68
H.6. Research or Teaching Involving Human Subjects .....	68
H.7. Copyright .....	68
H.8. Withdrawal from MBChB 2 .....	69
<b>I. Evaluation and Year 2 .....</b>	<b>70</b>
I.1. Student evaluations for Year 2.....	70
I.2. Changes made from previous feedback.....	70

# A. Essential Information

## A.1. Key Contacts

### A.1.1. Medical Programme website

Links to all relevant aspects of the medical curriculum can be found on the MBChB Portal at:

<http://mbchb.auckland.ac.nz>

### A.1.2. Medical Programme Overall

#### Key contacts

Medical Programme Directorate (MPD) general enquiries: phone 923 1606 or email [MPD@auckland.ac.nz](mailto:MPD@auckland.ac.nz)

Website: [www.fmhs.auckland.ac.nz/mpd](http://www.fmhs.auckland.ac.nz/mpd)

MPD is located in room 010 on the ground floor of building 501 at the Grafton Campus.

#### Key Staff

Role	Person	Phone & email
Phase 1 Director & Year 3 Coordinator	Assoc Prof Roger Booth	923 6475 <a href="mailto:rj.booth@auckland.ac.nz">rj.booth@auckland.ac.nz</a>
Year 2 Coordinator	Assoc Prof Trecia Wouldes	923 6221 <a href="mailto:t.wouldes@auckland.ac.nz">t.wouldes@auckland.ac.nz</a>
Student Support Advisor Domestic and International students	Carley Fletcher	923 7071 027 801 3726 (office hours only) <a href="mailto:fmhssupport@auckland.ac.nz">fmhssupport@auckland.ac.nz</a>
Student Support Advisor MAPAS students	William Nepia	923 4912 <a href="mailto:w.nepia@auckland.ac.nz">w.nepia@auckland.ac.nz</a>
Group Services Manager (Medical Programme)	Johanna Beattie	923 2773 <a href="mailto:j.beattie@auckland.ac.nz">j.beattie@auckland.ac.nz</a>
Phase 1 Team Leader	Kathryn Siow	923 6370 <a href="mailto:k.siow@auckland.ac.nz">k.siow@auckland.ac.nz</a>
Academic Systems Coordinator	Nicholas FitzHerbert	923 2553 <a href="mailto:n.fitzherbert@auckland.ac.nz">n.fitzherbert@auckland.ac.nz</a>
Practicum Placement Coordinator	Teresa Timo	923 6745 <a href="mailto:t.timo@auckland.ac.nz">t.timo@auckland.ac.nz</a>
Group Services Coordinator	Yvonne Chan	923 6747 <a href="mailto:y.chan@auckland.ac.nz">y.chan@auckland.ac.nz</a>

Information Systems Coordinator	Kimberley Weston	923 1734 <a href="mailto:k.weston@auckland.ac.nz">k.weston@auckland.ac.nz</a>
Directors of Medical Student Affairs	Dr Fiona Moir Dr Tony Fernando	<a href="mailto:director.medstudentaffairs@auckland.ac.nz">director.medstudentaffairs@auckland.ac.nz</a>
Head of the Medical Programme	Prof Warwick Bagg	923 9794 or 923 6747 <a href="mailto:w.bagg@auckland.ac.nz">w.bagg@auckland.ac.nz</a>

### A.1.3. Module Coordinators

The Musculoskeletal System	Dr Keryn Reilly (Anatomy & Medical Imaging)	923 6058 <a href="mailto:k.reilly@auckland.ac.nz">k.reilly@auckland.ac.nz</a>
The Digestive System	Assoc Prof Clare Wall (Nutrition)	923 9875 <a href="mailto:c.wall@auckland.ac.nz">c.wall@auckland.ac.nz</a>
The Genitourinary System	Assoc Prof Alan Davidson (Molecular Medicine & Pathology) Assoc Prof Helen Pilmore (Medicine)	923 6764 <a href="mailto:a.davidson@auckland.ac.nz">a.davidson@auckland.ac.nz</a> <a href="mailto:hpilmore@adhb.govt.nz">hpilmore@adhb.govt.nz</a>
Principles of Medicine	Prof Cristin Print (Molecular Medicine & Pathology)	923 5062 <a href="mailto:c.print@auckland.ac.nz">c.print@auckland.ac.nz</a>
The Cardiovascular System The Respiratory System	Dr Carolyn Barrett (Physiology) Dr Sue McGlashan (Anatomy & Medical Imaging)	923 6909 <a href="mailto:c.barrett@auckland.ac.nz">c.barrett@auckland.ac.nz</a> 923 6067 <a href="mailto:s.mcglashan@auckland.ac.nz">s.mcglashan@auckland.ac.nz</a>
Professional and Clinical Skills 1	Dr Geraldine Tennant (Psychological Medicine)	<a href="mailto:g.tennant@auckland.ac.nz">g.tennant@auckland.ac.nz</a>
Clinical Pharmacology	Prof Nick Holford (Pharmacology)	923 6730 <a href="mailto:n.holford@auckland.ac.nz">n.holford@auckland.ac.nz</a>
Hauora Māori	Dr Rhys Jones (Te Kupenga Hauora Māori)	923 6278 <a href="mailto:rg.jones@auckland.ac.nz">rg.jones@auckland.ac.nz</a>
Clinical Skills Centre	Assoc Prof Andy Wearn Admin enquiries	923 8953 <a href="mailto:a.wearn@auckland.ac.nz">a.wearn@auckland.ac.nz</a> <a href="mailto:csc@auckland.ac.nz">csc@auckland.ac.nz</a>
GP Visits	Jannine Wood (General Practice & Primary Health Care)	923 6575 <a href="mailto:jannine.wood@auckland.ac.nz">jannine.wood@auckland.ac.nz</a>
Year 3 Medical Humanities  (Research Option)	Dr Phillipa Malpas (Psychological Medicine) Dr Fabiana Kubke (Anatomy & Medical Imaging)	923 3775 <a href="mailto:p.malpas@auckland.ac.nz">p.malpas@auckland.ac.nz</a> 923 6002 <a href="mailto:f.kubke@auckland.ac.nz">f.kubke@auckland.ac.nz</a>



BMedSc(Hons)	Dr Ali Mirjalili (Anatomy & Medical Imaging)	923 7487 <a href="mailto:a.mirjalili@auckland.ac.nz">a.mirjalili@auckland.ac.nz</a>
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#### A.1.4. Who to contact for advice

The following table gives a summary outline of who to go to if help or advice is needed.

Person	Advice/ Issue/ Question
Individual Lecturer	Questions about material in individual lectures (contact details for lecturers are given in the relevant module Canvas pages).
Module Coordinator	Most routine and organisational matters relating to modules.
Assoc Prof Trecia Wouldes	Any matter in relation to MBCHB II.
Assoc Prof Roger Booth	Any academic or professional matter in relation to Phase 1. Any request for variation to current policy and extended absence.
Dr Ali Mirjalili	BMedSc(Hons) pathway queries.
Assoc Prof Warwick Bagg	Issues requiring the approval of the Dean.
Student Support Advisor	General support and advice on financial and welfare matters. Personal issues impacting on academic progress. Personal counselling.
Johanna Beattie MPD	Administrative issues about Phase 1. Clarification of existing policies. Programme regulatory matters.
Kathryn Siow	General enquiries regarding Year 2 and Year 3. Course information, timetabling and change in allocation.
Teresa Timo, MPD	Enquiries about Year 4 and 5 clinical allocations.
Nicholas FitzHerbert, MPD	Māori Health Intensive enquiries.
Yvonne Chan, Teresa Timo, MPD	General Enquiries, Logins, Standard Letters.

## A.2. Teaching and Learning Venues

All students are required to have their University ID cards with them in all laboratory-based, clinical skills and small group teaching sessions as they may be scanned for identification purposes at any time during such teaching sessions.

### A.2.1. Workshops and Tutorial Venues

Workshop	Venue
Microscopic Anatomy /Pathology	Ground and first floor student laboratories, (MDL) Building 502
Human Anatomy-Laboratory and Medical Sciences Learning Centre (MSLC)	First floor, Building 502
Physiology (Musculoskeletal, Respiratory and Cardiovascular modules)	Second floor laboratories, Building 502
PCS1 Small Group Activities (SGAs)	Venues for small group activities will be shown on Canvas and in PCS1 course book
PCS1 Clinical Skills	Clinical Skills Centre Ground Floor Building 502, opposite MDL

### A.2.2. Medical Sciences Learning Centre & Human Anatomy Laboratory

Location: Building 502, First Floor.

These areas are not accessible to first year students or other unauthorised visitors. At no time should you invite a first year student or visitor to accompany you into this area. This rule also applies to the ADHB Mortuary and Autopsy rooms.

### A.2.3. The Clinical Skills Centre (CSC)

Location: Building 502, Ground Floor (opposite the MDL)

*All sessions will start in the CSC Seminar room (502-034), accessed through the CSC main entrance.*

#### **Purpose**

This facility has been set up specifically for teaching and learning clinical skills in the early years of health professional training. The centre is designed to have features of a clinical environment as well as being a teaching space; there is a large learning space, a simulated ward and seminar/tutorial spaces. Sessions in the CSC will enable students to learn and practice clinical examination skills and some procedural skills in a supervised and 'safe' environment prior to the clinical attachments in real clinical settings. In the clinical skills sessions, links will be

made with other relevant basic science teaching (anatomy, radiology, pathology, physiology and pharmacology) and the skills will be taught in a clinical context. Sessions will be tutored and a range of resources will be used to facilitate learning. These include: clinical equipment, anatomical models, training models, patients, actors, pathology specimens, electronic media and patient imaging. Students act as examination 'models' for each other for practising most examination skills, therefore students will be asked to consider and sign a consent form. Neither participation nor abstention from being examined will influence a tutor's attitude towards, or assessment of, an individual student.

### **Standards expected**

- Because this is the beginning of professional clinical practice, students are expected to behave in this room as they would in a clinical environment (e.g. hospital and general practices). Dress code advice is given in the Clinical Skills Guide – available on Canvas.
- Respect for peers, patients, actors, staff, and equipment.
- Preservation of confidentiality of any clinical information obtained during the course of study in CSC.
- Access by those involved in Faculty programmes only.
- No eating or drinking (except water).
- Use of CSC or equipment outside of scheduled teaching sessions only by arrangement with teaching staff.
- Reporting of any information obtained to be done accurately and honestly.
- No recording of images without the consent of CSC staff.

## **A.3. Health and Safety and Equipment in Year 2**

The Health and Safety in Employment Act, HSNO Code of Practice and the University Injury and Illness Prevention Programme all require that appropriate personal protective equipment is worn in laboratories and that you should not take food or drinks into laboratories. For further information see:

<https://cdn.auckland.ac.nz/assets/science/for/current-students/HR/health-safety-wellness/documents/Personal-protective-equipment.pdf>

You must wear white coats in the dissection room and all laboratories or you will not be allowed entry. You must provide and launder your own coats. Lab coats must not be obtained from any of the hospitals. Adequate footwear must be worn in the laboratories, i.e. closed-toe shoes and definitely no sandals or jandals. You will also need a pair of protective glasses, which you can purchase from any hardware shop.

Appropriate equipment for tissue dissection will be provided. Students do not need to bring their own dissection kits and must not remove equipment from the laboratories.

The following equipment is not needed for MBCHB 2, but is required for future years of your medical training. Students may wish to purchase some of it this year.

### **Stethoscope**

Choose a stethoscope with a head that has a separate bell and diaphragm or a single tuneable head (that can reproduce the effect of bell and diaphragm) and a tube length that allows you to comfortably examine. It is important that earpieces fit comfortably; most manufacturers offer soft and hard earpieces.

The most popular model purchased has been the 3M Littmann Classic II SE (~\$160). In 2016, the Littmann Classic III was launched (~\$180). They are both available online from a range of local online suppliers (two sources are given below). AUMSA may arrange a bulk purchase once each year. Cheaper models tend to be less robust and may have poorer acoustic qualities. More expensive models are a luxury at this stage. Welch Allyn also make good quality stethoscopes and Ultrascopes have made inroads into the NZ market (non-tuneable acrylic single head with hand-painted embedded images).

### **Pocket Flashlight/Pen torch**

Look for a torch with a bright, tightly-focused beam. Avoid those with ragged beams. Medical Books have them for \$26 - 28. Also consider the LED pen torches available at electrical & DIY outlets.

The *FMHS shop* now sells two styles of pen torch (\$11 or \$40).

<http://store.fmhs.auckland.ac.nz/>

### **Sources of equipment:**

Stethoscope/torch  
Medical Books  
9 Canaveral Drive  
Albany  
Auckland  
P: 09 4797105  
[www.medicalbooks.co.nz](http://www.medicalbooks.co.nz)

Stethoscope/torch  
Capes Direct/Capes Medical  
Unit 2, 14 Portside Drive  
Mount Maunganui  
P: 07 575 9777  
[www.capesmedical.co.nz](http://www.capesmedical.co.nz)

## **A.3.1. Optional extra equipment**

### **Reflex Hammer**

The Queen's Square type with a round head (metal with a rubber rim) and long nylon handle is the best. Prices range from \$15.00 to \$25. Don't buy one with a metal handle.

The *FMHS Shop* now sells a good quality tendon hammer for \$20.

<http://store.fmhs.auckland.ac.nz>

Product Code 1119  
\$25\*

Lighter weight product.  
\$15

USL Medical  
527A Rosebank Road  
Avondale  
P: 09 829 0960  
[www.uslmedical.co.nz](http://www.uslmedical.co.nz)

Medical Books  
9 Canaveral Drive  
Albany  
Auckland  
P: 09 4797105  
[www.medicalbooks.co.nz](http://www.medicalbooks.co.nz)

\* *Handling fee of \$20 for  $\leq 3$ , so organise a group buy*

## B. The Medical Curriculum

### B.1. MBChB Graduate Learning Outcomes

#### **Domain: Applied Science for Medicine**

Graduates will, with a broad scientific body of knowledge encompassing biological, behavioural and social sciences:

- Discuss the normal structure, function and development of the human body and mind at all stages of life, the factors that may disturb these, and the interactions between body and mind;
- Apply the scientific body of knowledge appropriately to common and important clinical problems and to the management of patients;
- Apply scientific principles, research methodologies and evidence to improve practice and the health of individuals and communities.

#### **Domain: Clinical and Communication Skills**

Graduates will, with a culturally competent, empathetic patient-centred approach and with skills appropriate for the stage and setting of practice:

- Competently
  - elicit clear, comprehensive and relevant case histories;
  - perform routine clinical examinations;
  - select and interpret appropriate diagnostic investigations;
  - perform a range of procedures for diagnostic and therapeutic purposes;
  - synthesise and integrate information to formulate differential diagnoses;
  - develop and implement a clinical management plan;
  - inform and educate patients and their families.
- Communicate sensitively and effectively with patients, their families and colleagues using a process of shared decision-making where appropriate;
- Access, evaluate and use new knowledge and information sources to support clinical decision-making.

#### **Domain: Personal and Professional Skills**

Graduates will:

- Practise ethically and with regard to medicolegal obligations;
- Practise self-reflection in personal and professional settings;
- Explain the influence of own culture and that of the health system on patient and population health outcomes;
- Apply a range of approaches to maintain psychological, physical and overall wellbeing to themselves and others;
- Demonstrate the capacity for independent critical thought, rational inquiry and self-directed learning;

- Use appropriate teaching and learning strategies to educate themselves, peers, other health care professionals and the community;
- Work as a constructive and collaborative health care team member and as a leader for elements of health care, with respect for complementary skills and competencies;
- Make appropriate decisions in situations of incomplete knowledge, complexity/ambiguity, or resource constraint.

#### **Domain: Hauora Māori**

Graduates will, with a critical understanding of the social, cultural, political, economic and environmental determinants impacting on Māori health:

- Engage in a culturally safe manner with Māori individuals, whānau and communities;
- Identify approaches to reducing and eliminating health inequities including actively challenging racism;
- Engage in a process of reflection on own practice, as it relates to obligations under the Treaty of Waitangi.

#### **Domain: Population Health**

To guide practice and to improve health care in New Zealand, graduates will:

- Identify feasible strategies to improve health that incorporate the broader determinants of health at community and population level;
- Identify major threats to health and critique trends in health care delivery in New Zealand and internationally;
- Apply the principles of health promotion, population screening and disease management involving individuals and populations to a range of health care settings.

## **B.2. Purposes of Outcomes, Domains and Phases**

### **B.2.1. Graduate Learning Outcomes**

The graduate learning outcomes indicate the competencies you should have to enter the workforce and practice effectively as a first year House Officer (PGY1), and thence postgraduate training. They also convey to staff and employers the competencies the Faculty of Medical and Health Sciences expects its graduates to have at the end of the six-year programme.

The set of outcomes is important for two purposes:

- it guides the teacher’s teaching and assessment; and

- it gives greater clarity of focus to students for their self-directed learning, thereby encouraging them to take more responsibility.

### **B.2.2. The Domains**

The graduate learning outcomes are organised into five broad domains, all of which are essential components of the programme. They are:

- Applied Science for Medicine
- Clinical and Communication Skills
- Personal and Professional Skills
- Hauora Māori
- Population Health

The five domains help to define the breadth of practice required for effective clinical practice in New Zealand. Domains are part of each clinical/community experience, although emphases will vary in each. The domains also highlight those personal attributes and qualities an individual doctor needs to acquire to be effective. Hauora Māori and Population Health are included to highlight a student's ability to deal with societal and population issues, especially those that are unique to New Zealand.

#### **Purpose of Applied Science for Medicine Domain**

This is a standalone domain for three purposes:

- To continue to emphasise the strong science basis of our medical programme.
- To ensure our students act as clinician-scientists who both use and generate evidence to inform clinical and broader health practices.
- To strengthen the research and evidence base, thereby reflecting the expertise required of graduates of The University of Auckland.

#### **Purpose of Clinical and Communication Skills Domain**

This domain is fundamental to the role of the doctor and has relevance in:

- Phase 1 as students develop and hone their communication and clinical skills throughout various modules.
- Phases 2 and 3 in all clinical attachments.

#### **Purpose of Personal and Professional Skills Domain**

This domain has been developed as a standalone domain to give greater emphasis to professionalism and the health and wellbeing aspects of the role of a doctor across all years of the programme. There are specific assessments associated with this domain and hence it must be passed to progress to the following year. While the Board of Studies (Medical Programme) has approved six themes for this domain, in 2017 the following five themes will be incorporated into the curriculum.



1. Professionalism and Reflective Practice
2. Ethics and the Law
3. Health and Wellbeing
4. Cultural Competence
5. Learning and Teaching

The teaching and learning methods will include an emphasis on small group activities, skill development, and critically reflective individual and group processes.

### **Purpose of Hauora Māori Domain**

Ethnic inequalities in health care have been extensively documented in the international literature, including inequalities in both access to care and the quality of care received. In New Zealand it is clear that Māori experience poorer health care outcomes than non-Māori. There are a number of factors responsible for these disparities, including the performance of the health care system.

The FMHS has adopted a generic graduate profile in Hauora Māori (Te Ara) for students of all its undergraduate programmes to achieve as a baseline achievement, including medicine. The Te Ara learning outcomes are:

- Engage appropriately in interactions with Māori individuals, whānau and communities.
- Explain the historic, demographic, socioeconomic, and policy influences on health status.
- Explain how ethnic inequalities in health are created and maintained and how they may be reduced and eliminated.
- Identify approaches to reducing and eliminating inequalities including actively challenging racism.
- Explain the influence of one's own culture and that of the health system on patient and population health outcomes.
- Engage in a continuous process of reflection on one's practice and actively participate in self-audit in respect of the Treaty of Waitangi.
- Identify and address professional development needs as a basis for life-long learning about Māori health.

In the medical programme we encourage the use of a 'self-audit' approach, which allows students to reflect on the care patients receive and compare it to best practice.

### **Purpose of Population Health Domain**

This domain is important to emphasise students' exposure to aspects relevant to population-, public- and community-based health issues of national and international importance, as these are essential contextual considerations for the practice of medicine and understanding the business of healthcare delivery.

### B.2.3. The Phases

The phases are intended to help you see the context of science within clinical medicine in the initial years, and to continue to use the basic sciences in your more clinically-focused years. Throughout the phases you will continue to revisit various topics at an increasing level of difficulty and in more complex contexts.

Increased scope		Increased utility	Increased proficiency
Increased breadth	Increased difficulty	Application (to medical practice)	Increased accomplishment
Extension to more or new topics Extension to different practice contexts Accommodation of existing knowledge or skills to new knowledge or skills	More in-depth or advanced consideration Application to a more complex situation <ul style="list-style-type: none"> <li>– move from a unidimensional straightforward situation to one involving multiple problems or systems</li> <li>– move to multifactorial problems involving different factors (e.g. social, economical, medical)</li> <li>– complications (e.g. associated with treatment)</li> </ul> Less obvious or more subtle situations <ul style="list-style-type: none"> <li>– fewer cues</li> <li>– less obvious cues</li> <li>– atypical cues</li> </ul>	Move from general context to specific medical context Move from theory to practice of medicine Move to integration into the role of a doctor <ul style="list-style-type: none"> <li>– an integrated repertoire involving a holistic approach to practice and bringing together the different abilities expected of a doctor</li> <li>– dealing with and reconciling competing demands, such as time spent on curative and preventative medicine</li> </ul>	More efficient performance <ul style="list-style-type: none"> <li>– better organised</li> <li>– more confident</li> <li>– takes less time</li> <li>– more accessible</li> <li>– less unnecessary or redundant action</li> <li>– higher standards</li> <li>– fewer errors</li> </ul> Less need for supervision Takes initiative and anticipates events Better able to defend and justify actions Adopts routinely as part of practice

University of Dundee, Centre for Medical Education, September 1999

There are four distinct phases in the medical curriculum.

<b>Phase</b>	<b>Year</b>	<b>Curriculum</b>
Phase 3	Year 6	Preparation for Workforce
Phase 2	Years 4 and 5	Clinical Practice in Context
Phase 1	Years 2 and 3	Fundamentals of Clinical Practice
Phase A	Year 1	Health Science Foundation

Each phase of the curriculum builds on the one before it, and your competencies will build continuously much as outlined in the schema above.

Students will continue to use the basic sciences in the more clinically-focused years. They are also expected to continue to revisit various topics at an increasing level of difficulty and in more complex contexts.

### **B.3. Programme Structure**

The diagram on the following page represents the entire structure of the current medical programme.

**Note: Bachelor of Medical Science (Honours)**

The Bachelor of Medical Science (Honours) (BMedSc(Hons)) is a one-year, full-time degree with a significant research component. Eligible students may elect to study for this degree after successfully completing Year 3, Year 4, Year 5 or Year 6. Success will depend on the intended research topic that a student chooses, and personal circumstances and aspirations. On completion, the student will return to complete the remaining MBChB studies and graduate with two qualifications. See Section B.4.7 for more information.

## University of Auckland Medical Programme – Courses and Clinical Attachments 2017

<b>Phase 3 (6) 42 wks</b> Whangarei, Waitemata, Auckland, South Auckland, Waikato, Rotorua, Tauranga & Taranaki	General Medicine	General Surgery	Obstetrics & Gynaecology	Psychiatry	Paediatrics	General Practice	Clinical Imaging	Emergency Medicine	Elective	Option
	Research Project									
<b>Phase 2(5) 35 wks</b> Waitemata / Auckland South Auckland Waikato/Lakes	Paediatrics		Obstetrics & Gynaecology	General Practice		Selective		Psychiatry		Specialty Surgery
<b>Phase 2(5) 35 wks</b> Bay of Plenty Regional-Rural	Paediatrics		Obstetrics & Gynaecology	Psychiatry		Rural Medicine Selective		General Practice		Specialty Surgery
<b>Phase 2(5) 36 wks</b> Pūkawakawa	Integrated Care & General Practice		Specialty Surgery	Selective		Psychiatry		Women & Children's Health		
<b>Phase 2(4) 41 wks</b> Auckland South Auckland Waitemata, Waikato Rotorua & Tauranga	General Medicine	Specialty Medicine		Geriatrics		Musculoskeletal	Anaesthesia	General Surgery	GPOP	Emergency Medicine & Acute Care/ Procedural Skills
Intercalated	BMedSc(Hons) which may lead to PhD									
<b>Phase 1 (3)</b> 26 weeks	Professional and Clinical Skills 2			Professional and Clinical Skills 2						
	Nervous System	Reproduction & Development	Sensory Systems	Blood, Immunity & Infection				Regulation of Body Function		
	Medical Humanities									
<b>Phase 1 (2)</b> 26 weeks	Principles of Medicine			Māori Health Intensive	Clinical Pharmacology					
	Professional and Clinical Skills 1				Professional and Clinical Skills 1					
	Musculoskeletal System	Digestive System	Respiratory System		Respiratory System	Cardiovascular System		Genitourinary System		
	Human Anatomy, Pathology, Physiology laboratories, ILAs				Human Anatomy, Pathology, Physiology laboratories, ILAs					
<b>Year 1</b> 24 weeks	<b>BIOSCI: Cellular Processes and Development (15)</b> <b>POPLHLTH: Population Health (15)</b> <b>CHEM: Chemistry of the Living World (15)</b> <i>Central Concepts of Biology / Health and Society (15)</i>				<b>MEDSCI: Organ Systems (15)</b> <i>Physics for the Life Sciences / Behaviour, Health &amp; Development (15)</i> <i>Foundations of Biochemistry / Health Systems 1 (15)</i> General Education Option (15)					

Courses in Yr 1 **Bold**: Courses common to BHS& BSc (Biomed)

*Italics*: BSc only, Normal: Courses in BHS& only

ILA: Integrated Learning Activity

■ Formal Learning Weeks

Numbers refer to points (120 points per year)

15 points per course over 1 semester

Intercalated BMedSc(Hons) may be completed anytime after Year 3.

## **B.4. Options and Planning your Programme of Study to Graduation**

While the diagram of the entire programme indicates that much of the curriculum is compulsory, there are some important optional elements that students need to consider. Having this information early means they are able to map out preferred choices and do some forward planning to make their preferences more achievable.

There are several research opportunities that students may wish to pursue, including the route that involves the BMedSc(Hons).

### **B.4.1. Phase 1 (Year 2) optional components for research**

There are no optional curriculum components in Year 2. However in Year 2 of the Principles of Medicine module, students will undertake a visit to a research group of their choice to learn about the process of medical research, how it promotes understanding of human biology, and how it drives future medical practice. If students are interested in pursuing research opportunities a number of summer studentship projects will be available, for which students may apply around July. These normally involve about ten weeks of research conducted over the summer vacation. A list of the projects will be posted on the Faculty website. Some will be clinical projects and others will be biomedical or basic science. These studentships are very popular with all students from the Faculty, so prompt action is needed; a number of students will apply for each. A student who is successful in being selected by the Project Leader will then need to write a research proposal that is considered by a Research Group within the Faculty, to determine which ones will be funded. If successful, students will receive a grant of about \$5,000 to complete the project over the summer.

A summer studentship is a good way to get a taste of what a research career pathway is like. Students who enjoy research should consider deferring a year of MBChB study to do the BMedSc(Hons) degree described in section B.4.7 and then returning to qualify and graduate with two qualifications. Many of the most influential medical graduates undertake research as part of their career; experience of research in a summer studentship or BMedSc(Hons) degree lays a solid foundation for this later research work.

### **B.4.2. Phase 1 (Year 3) optional curriculum components**

In Year 3 students complete a General Education course by choosing one of several Medical Humanities options.

It is during Year 3 that students should first consider whether to take up the BMedSc(Hons) at the end of the year (refer to B.4.7 for this pathway). This can be a beneficial option for students who wish to pursue an academic leadership career in medicine in the future.

### **B.4.3. Allocation policy for clinical years (Years 4 – 6)**

It is essential that you are familiar with the student allocation policy, see section 3 of the [Academic & Programme-Related Policies](#).

#### **Hospital locations**

Clinical learning can be undertaken in varying inpatient and outpatient settings. Learning outcomes for all sites are the same but the pathway to achieve these learning outcomes may vary from site to site. Teaching hospitals available are:

- Four hospitals in Auckland (Auckland City, Middlemore, North Shore and Waitakere)
- New Plymouth Hospital
- Rotorua Hospital
- Tauranga Hospital
- Waikato Hospital
- Whakatane Hospital
- Whangarei Hospital, and the hospitals at Dargaville, Kawakawa, Rawene and Kaitaia for the Year 5 Northland Regional-Rural Programme which combines secondary and rural primary care (available for 24 Year 5 students) and Year 6.
- Other North Island teaching hospitals that are used for some attachments.

#### **Timelines for indicative preferences**

Year 3 students will be given the opportunity in June to indicate their preference of cohort site in Year 4.

### **B.4.4. Phase 2 (Year 4) optional sites**

Year 4 is an exciting and challenging year in which the focus moves from basic medical science to one of seeing many patients in a variety of clinical situations. Because of the demands and diversity of this year, all aspects are compulsory to assist students to become a junior medical colleague.

It is important to realise that all students will need to move out of Auckland for some of their clinical experience, and each student is required to complete at least one year of study outside of the area encompassed by Auckland DHBs. See section 3 of the [Academic & Programme-Related Policies](#).

### **B.4.5. Phase 2 (Year 5) optional components**

#### **Selective**

- The selective is a six-week period (five weeks in Pūkawakawa) in which students seek a workplace opportunity to achieve one of the following:
- increased confidence and competence in a medical discipline in which they desire more exposure;

- greater knowledge of a medical discipline and apply it to more complex clinical situations;
- appropriate research skills and methods by constructively participating in an ongoing research project;
- knowledge and skills in areas not covered in depth in the curriculum e.g. complementary and alternative medicine.

The selective counts as a clinical attachment and students are required to have an approved supervisor. Once a student has a supervisor, s/he needs to negotiate the goals and learning objectives for this experience and how they will be met, as part of a Learning Agreement, before being given approval by the Selective Coordinator for their choice. These goals and objectives will form a component of the assessment.

Please note that selective attachments will not be approved for the following:

- Pacific Islands, owing to a lack of appropriate supervision;
- New Zealand General Practices, due to existing pressures for other clinical experiences (undergraduate and postgraduate).

Some students will be required to overcome remedial deficiencies in performance in a clinical discipline, as directed by the Year 3 Board of Examiners (a Directed Selective). Students are not informed of this decision until after the Board of Examiners has met. If you are required to complete a Directed Selective you will not be able to do the Selective you have arranged.

### **Regional-Rural pathways**

During Year 4 students will have the opportunity to apply for a Regional-Rural pathway of study for all of Year 5. This is offered as the Pūkawakawa programme, based in Northland and the Bay of Plenty Regional-Rural Programme.

These programmes are an equivalent, but different programme from the Auckland-based programme, and require a commitment to study in only that programme for the year. Admission is voluntary, but once confirmed, students will not be able to opt-out or exchange places with other students.

It is not compulsory for Regional Rural Admission Scheme (RRAS) students to apply for these programmes; nor will they be selectively balloted if there are insufficient applicants. To date, students from all four categories have been accepted onto the programme.

## **B.4.6. Phase 3 (Year 6) optional component**

### **The Elective**

The eight-week elective is a unique experience that allows students the chance to experience medical practice in another country or to extend their knowledge and skills in a specific area of interest or to formulate ideas about their future vocation. Students have a free choice of activity, whether it be medical, paramedical or medicosocial, or research (outside New Zealand, for NZ-based research see the Research Project description below) and there is an approval process for the elective proposal. During

this period students will be encouraged to show initiative and to have a sense of responsibility with minimal direction.

To gain the most out of this, students need to start planning early, at least in Year 4, especially if they intend to do this overseas. Note that any work students undertake is in a non-salaried capacity.

An elective overseas is more likely to be approved where it involves experience that is not readily available in New Zealand. Electives in the South Pacific and the developing world are especially encouraged.

Previous elective reports are held on a database linked to the MBCHB portal – reading these, as well as talking to Year 6 students and junior doctors, should help give students inspiration about feasible options.

### **Research Project**

Students have the opportunity to complete an 11-week Research Project in New Zealand during Year 6. For this project, students need to have a University of Auckland supervisor, who should be at the location where this research project will be completed. It is possible for this project to be scientifically-based, clinically-based or population-based. Successful completion of this Project with an appropriate GPA is a pathway to a PhD.

### **B.4.7. Research degree pathways**

It is possible to consider doing an Honours degree or a PhD while you are still doing medicine.

#### **Bachelor of Medical Science (Honours)**

An important research opportunity you may wish to pursue during the medical programme is the BMedSc(Hons), which is a pathway towards a PhD. This is an intercalated research-focused degree that may be completed at the end of Year 3 or subsequent years. Students may consider whether to take up this option during Year 3 and plan their future years accordingly. It has proved to be a valuable qualification for those seeking international postgraduate scholarships at a later date in their careers.

This degree allows highly motivated and able students to gain some research training before continuing with their clinical medical education. Research opportunities are offered in both all medical disciplines. Applicants are required to have passed the MBChB Part III courses, or its equivalent, with an average of B or higher.

The degree involves one year of full-time study, during which a student completes courses to the total value of at least 120 points, and must not exceed 160 points. Students have the option of completing:

- a 90 point thesis and 30 points from an approved schedule of courses; or
- a 120 point thesis.

Following completion the student returns to complete the remaining years of MBCHB to qualify and graduate with two qualifications.



If students wish to discuss this career pathway further, it is suggested they contact a senior member of the Faculty in their area of interest and/or the BMedSc(Hons) Coordinator, Dr Ali Mirjalili.

### **PhD**

For exceptional students it is possible, with careful planning of the programme, to put MBChB study on hold to commence a PhD. This pathway will usually involve extending the student's MBChB programme and pursuing doctoral research during the clinical years. Before being eligible to be admitted to doctoral study students need to have completed a relevant entry programme such as the BMedSc(Hons). Additionally the eleven-week Research Project that may be undertaken in Year 6 as an alternative to the Elective is another pathway to the PhD. Please note that unless this Research Project is undertaken the MBChB alone is not a direct pathway to a PhD.

Those interested in this route are advised to talk to the Doctoral Coordinator in the Faculty Student Centre.

## **B.5. Exit Pathways from the MBChB**

On rare occasions, students find that they do not wish to complete their medical degree. The most frequent time for this to occur is early in the fourth year of study when students experience the challenges of the clinical environment.

For those who wish to pursue a career in science or health science, the Faculty has two other degrees to which students can credit their study. These are:

- Bachelor of Science (Biomedical Sciences)
- Bachelor of Health Science

While cross credits are considered on a case-by-case basis, students should expect to complete at least an extra 18 months of study, after completion of Phase 1, to be awarded either degree.

Students who wish to exit the MBChB after completing Year 3 may also be able to enrol in the BMedSc(Hons) if they meet the admission criteria (see above).

## **B.6. Deferral of Study**

The MBChB regulations require that students follow the programme for this degree continuously. However provision is made for interrupted study. This is only an option if completing the BMedSc(Hons), commencing a PhD or if there is another pressing reason to interrupt study. Interruption of study is usually only permitted for one year, and re-entry to the medical programme may be subject to specific conditions being met. The person who approves the interrupted study is the Head of the Medical Programme after advice from the Directors of Medical Student Affairs and the relevant Phase Director. Students who wish to interrupt study should make an appointment with their Student Support Advisor in the first instance.

Students who need to interrupt their studies within the academic year to recommence in the future may be subject to fees in each of those years.

## **B.7. Academic honesty**

Academic honesty is a key feature of professional behaviour and the Faculty takes any breaches of it very seriously. If a student is suspected of cheating during a test the *Guidelines: Conduct of Coursework* will be applied.

If a student is found to have cheated a penalty will be applied, and the offence entered in the academic misconduct register (as required in the *Guidelines: Conduct of Coursework*). The Board of Studies (Medical Programme) Fitness to Practise (FTP) process may be invoked as a part of the penalty.

For further information, please refer to section 1 of the [Academic & Programme-Related Polices](#).

## C. Year 2

### C.1. Clinical scenarios and learning

About 190 clinical scenarios effectively define the core curriculum. Each scenario provides relevant learning points across each of the five curriculum domains.

The primary purposes of the clinical scenarios for students are to:

- provide guidance for the experiences and range of patients you could be expected to see in clinical attachments;
- keep you focused on your future role as a doctor;
- guide your independent learning;
- provide an integrating mechanism to your learning both within a year and across years;
- encourage you regularly to re-visit content and medical cases, including applied medical knowledge relevant to the Phases 2 and 3;
- provide a core curriculum so you can be assured of equivalence, irrespective of your place of learning.

Please be assured that we do not expect you to engage with the learning in all scenarios in any one year, as this would overwhelm you. We believe you will find them useful to relate to the patient conditions you encounter during this year.

Any discipline can use any clinical scenario for learning. Each may be used in several years of the programme, emphasising different aspects at each level in the spiral of learning.

#### **Guidelines for using clinical scenarios**

Please note that there is open access to the clinical scenarios through the medical programme portal, so you can access them anywhere you are studying.

The following guidelines are intended to help you maximise your use of the clinical scenarios.

When lecturers refer to specific scenarios in their teaching, we expect you to review these scenarios and any links provided within them. When doing this, please consider how what you have learned in the teaching session applies to the clinical scenario. While you may not yet have learned about all the clinical aspects of a scenario, nevertheless you can still use the scenario to understand better and remember what you are learning in teaching sessions. Some written assessments will use these scenarios to provide a clinical context for questions. Therefore, we also expect you to use these scenarios during your revision. For example, using relevant scenarios as a starting point, you could write yourself and your colleagues' questions about what you have learned. That will help you to apply your knowledge to clinical situations. Some specific points you may find helpful are below:

1. Title of scenarios: the titles are broad and mainly indicate the presenting problem.

2. Clinical discipline(s)/ organ system(s) (and their weightings) and progress test topic(s) associated with each scenario are provided as a guide to areas of content.
3. Most scenarios start with a brief clinical description of a patient as they may present to a medical practitioner or equivalent. A small number of scenarios start with an outline of an issue relevant to medicine.
4. There are learning points under each of the five domains of the curriculum, to encourage you to think about all aspects of the clinical problem and closely related medical issues. On the Scenario website you can search these learning points within each of the graduate learning outcome domains, in order to find scenarios relevant to a particular lecture or a particular topic you are revising.
5. For each scenario, learning points that are particularly important have been selected. To keep the scenarios reasonably succinct, they do not include every learning point that may be relevant. However, across the entire set of scenarios, the intention is that all key learning points in the curriculum will be represented somewhere. The learning points in each scenario that are most relevant to Phase 1 (MBChB Years 2 and 3) can be highlighted by clicking a check box at the top of the scenario.
6. Conditions to be considered relating to the scenario are listed after the domain entries. They are grouped as 'Common', 'Less Common but "Important Not to Miss"' and 'Uncommon', and within groups the order is roughly equivalent to the degree of relevance.
7. Links to relevant resources (mainly on the Portal but some external) and to 'related scenarios' are provided. The scenarios are valuable for finding information related to learning points, with over 700 links now established, in addition to those for most of the medicines.
8. It is possible to search the scenario database using text or through a listing of diagnoses, so that you are able quickly to gain an idea of clinical scenarios with relevant content. The scenarios may also be searched according to clinical discipline/ organ system and by progress test topic.
9. Following a progress test, your feedback regarding each question will include links to relevant scenarios and learning points.
10. A list of medicines with indications, mechanisms and the scenarios to which they relate is an additional feature of the clinical scenario database. This is linked to the New Zealand Formulary (which includes the New Zealand Formulary for Children).
11. A glossary is provided to explain how terms have been used in the learning points.
12. Work is continuing to have progress test-type questions associated with each scenario, so that you can use these to enhance your learning. Currently there are over 150 such question associated with almost 80 of the scenarios.

## **Feedback**

It is intended that there will be continual improvement of the scenarios and feedback is welcomed. There is a link on the scenarios website for providing feedback. If you believe that something in a scenario requires changing, please do tell us. We would also like to hear of any important learning points that you feel are missing from the entire set of scenarios.

## **C.2. MBCHB 221**

Year 2 students enrol in a single, 120-point course. Through clinical scenarios, lectures and laboratories in this course, students are introduced to human health and the description and pathogenesis of disease processes as a basis for the systematic study of human illness. This is integrated with the study of human organ systems through components focusing on musculoskeletal, digestive, genitourinary, cardiovascular and respiratory systems, linked with practical work in anatomy, physiology, pathology, medical imaging, and professional, clinical and communication skills.

The course comprises a set of organ-system and theme-based modules developed and overseen by Phase 1 Curriculum Group and the Board of Studies (Medical Programme). Material is covered in a multidisciplinary way, using relevant clinical scenarios as a contextual framework. Practical work in the modules involves clinically-oriented sessions in laboratories, problem-solving tutorials, and small group sessions.

The following modules make up the MBCHB 221 course.

### **Principles of Medicine**

Introduction to general disease processes as a basis for the systematic study of human disease. The application of pathology, genetic and genomic technology, microbiology and immunology in medicine, with cancer used to exemplify common disease processes. Clinical examples and examples of leading research will be used to explore each area.

### **Professional and Clinical Skills 1**

Multidisciplinary approach to personal and professional development and the clinical, communication and professional skills needed to be an effective medical practitioner. Topics include: ethics, clinical and communication skills, personal development, practitioner health and well-being, learning and teaching, health promotion and consideration of cultural issues, with emphasis on clinical interactions and the development of professional skills.

### **The Musculoskeletal System**

Integrated study of the human musculoskeletal system with emphasis on the structural and functional aspects that underpin common clinical problems such as: fractures; soft tissue, nerve and joint injuries; osteoarthritis and rheumatoid arthritis; and osteoporosis. Practical work links anatomy, radiology, physiology and pathology and includes appropriate clinical skills.

### **The Digestive System**

The structure and function of the gastrointestinal system in health and disease, with

relevant clinical examples. Multidisciplinary study of digestion and absorption of food components, their metabolic roles and actions, and the nutritional significance of dietary components. Includes fundamental anatomical, biochemical and pathological principles of gastrointestinal structure, digestion and nutrition.

### **The Respiratory System**

Multidisciplinary approach to the scientific basis of normal and abnormal structure and function of the human airways and respiratory system and the physiology of respiration. Learning is structured around clinically-important respiratory conditions and includes relevant clinical examination skills linked to practical exploration of relevant anatomy, radiology, physiology and pathology.

### **The Cardiovascular System**

Multidisciplinary approach to the scientific basis of normal and abnormal structure and function of the human heart and vascular system. Clinically-important cardiovascular conditions provide a focus exploring relevant anatomy, radiology, physiology and pathology. The module involves relevant clinical examination skills and also includes population, behavioural and therapeutic aspects of cardiovascular illness and disease.

### **The Genitourinary System**

A multidisciplinary approach, through clinically important examples, to the normal and abnormal structure and function of the renal and genital systems. As well as the development of practical and clinical skills, the module includes an overview of important diseases, their therapy, and population and behavioural perspectives.

### **Clinical Pharmacology**

General principles and mechanisms of drug action and therapeutic intervention in the management of human illness.

### **Hauora Māori**

Three activities throughout the year, including Māori Health Intensive (Section C.4) begin the process of developing a critical understanding of the social, cultural, political, economic and environmental determinants impacting on Māori health.

### **Laboratories and Integrated Learning Activities**

Throughout the year, students engage in practical, laboratory-based projects as well as other integrated learning activities designed to complement learning in the organ system-based and theme-based modules.

## **C.3. Integrated Learning Activities**

Integrated Learning Activities (ILAs) are used throughout Phase 1 as core, overarching activities that encourage student learning in the context of patient/physician experiences and emphasise links across different aspects of the Phase. ILAs are not components of individual modules but integrate knowledge across several disciplines. Any queries about the ILAs should be directed to the Phase 1 Director, Assoc Prof Roger Booth.

### **C.3.1. Human Early Life Development (HELD)**

This study takes place throughout Years 2 and 3 and allows students to develop an understanding of child development from birth through to adolescence and the various factors that influence it. Completion of this study is required before students can proceed to Year 4.

### **C.3.2. A Patient with Chest Pain**

The overarching purpose of this ILA is to allow Year 2 students to integrate isolated items of knowledge pertaining to the cardiovascular system in health and disease into a holistic understanding.

### **C.3.3. First Patient Project**

During Year 2, all students perform cadaveric dissection as part of a group. At the start of the year, each group is provided with a list containing some of their “patient’s” diagnoses. During the course of the year each group will also find pathologies in their cadaver, from which they can take histology to help deduce the likely cause of death, along with postulating how each condition may have presented clinically. These pathologies will be reviewed in a web-based clinico-pathological correlation exercise. At the end of the year, each group is assessed through a formal group presentation of their findings and conclusions.

## **C.4. Special Features**

### **Māori Health Intensive**

All students in Year 2 in Medicine, Nursing and Pharmacy and Year 3 Optometry will be involved in Māori Health Intensive from 17<sup>th</sup> – 20<sup>th</sup> July 2017, which is organised by Te Kupenga Hauora Māori and the Centre for Medical and Health Sciences (CMHSE), along with the leaders of the respective programmes.

All students are required to attend this compulsory four-day component of the year, and will participate in both large and small group sessions and in a visit to a local marae. Further details will be provided in Semester 1.

**Completion of this study is a compulsory requirement for passing the MBCHB 2 year.**

### **Clinical Skills**

The clinical skills teaching is part of the PCS 1 module and is run in small groups; each group is timetabled for ten sessions over the year. These sessions introduce students to basic clinical examination, focusing on examining the organ systems taught in other modules (i.e. principles of medicine, musculoskeletal and digestive systems).

The skills learnt in Year 2 should be viewed as ‘building blocks’ for Year 3 and beyond. Clinical skills are assessed in both years of Phase 1.

### **Early Clinical General Practice Experience**

Students will spend one afternoon in a general practice. This GP visit will be one of the students' first experiences as a medical professional, therefore students are expected to dress and conduct themselves seriously and professionally, including maintaining strict confidentiality about patient details and about their host doctor and practice. There will also be a small assignment to be completed.

This is a compulsory component of the MBChB Year 2 programme and is organised within the Principles of Medicine module. These general practice visits are difficult to set up and changes can only be made in exceptional circumstances, please fix your visit date and time in your diary as soon as you learn of it

### **C.5. Recommended Texts**

Textbooks recommended for Year 2 can be found on Canvas in the 'Reading Lists' section. It is not necessary to purchase all the books listed under each subject. Choose the one that you find easiest to learn from. If necessary, Module Coordinators will be able to advise you on your choice. Copies of many of these books are available in the Philson Library. Some of the books will also be relevant for later years, so it is useful to have your own copy.



## C.6. Learning Outcomes for Year 2 Modules

### Principles of Medicine

<b>Domain: Applied Science for Medicine</b>	
1	<p>Outline the processes leading to disease.</p> <ul style="list-style-type: none"> <li>• Describe the roles played by cell injury, cell death, inflammation, repair and neoplasia.</li> <li>• Describe the basic mechanisms of cancer and infectious disease (viral and bacterial).</li> <li>• Identify basic disease processes during cadaver dissection and describe clinical-pathological correlations related to these processes, with reference to material available in the Medical Sciences Learning Centre.</li> <li>• Explain the role evolution has played in shaping human disease.</li> <li>• Describe the process of research and how it shapes future medical care.</li> </ul>
2	<p>Outline basic concepts of infection, microbiology and immune responses.</p> <ul style="list-style-type: none"> <li>• Describe the activities of pathogens and how they cause disease.</li> <li>• Describe detailed examples of different pathogen types.</li> <li>• Explain the features of immune recognition, specificity, and responsiveness.</li> </ul>
3	<p>Apply knowledge of genetics to explain normal human development, how abnormalities in gene structure and function contribute to disease, as well as the status of potential gene-based therapies.</p> <ul style="list-style-type: none"> <li>• Describe normal genome organisation, gene structure, DNA replication, transcriptional regulation, generation of proteins, the role of non-coding RNA, the nature of mutations, and DNA repair mechanisms.</li> <li>• Describe how gene-environment interactions operate in disease pathogenesis.</li> <li>• Describe how chromosomal abnormalities contribute to disease.</li> <li>• Describe the characteristics of different patterns of inheritance and provide molecular explanations for unexpected phenotypes.</li> <li>• Explain the major genetic alterations in cancer.</li> <li>• Describe the consequences of the Human Genome Project.</li> <li>• Describe modern technologies including gene sequencing and bioinformatics used to unravel the genetic basis of disease.</li> <li>• Identify opportunities for genetics to contribute to personalised medicine.</li> <li>• Use oncology clinical scenarios as examples of the application of core biomedical knowledge to clinical situations.</li> </ul>
4	<p>Outline basic principles of cancer biology and how these are relevant to oncology.</p> <ul style="list-style-type: none"> <li>• Explain the pathological meaning of neoplasia and how tumours develop.</li> <li>• Describe the genomic basis of cancer and how genomic information is used to stratify cancer treatment.</li> <li>• Describe the relationship between nutrition and cancer.</li> <li>• Describe the cellular, genetic and environmental determinants of cancer.</li> <li>• Describe cancer classification, grading and staging.</li> <li>• Discuss how knowledge of cancer biology underpins the basic</li> </ul>

	<p>principles of cancer therapy.</p> <ul style="list-style-type: none"> <li>• Use oncology clinical scenarios as examples of the application of core biomedical knowledge to clinical situations.</li> </ul>
<b>Domain: Clinical and Communication Skills</b>	
5	<p>Demonstrate understanding of the clinical relevance of basic biomedical principles.</p> <ul style="list-style-type: none"> <li>• Explain how pathological science is placed into the context of patient care, assessment and treatment.</li> <li>• Describe clinically-relevant genetic laboratory techniques.</li> <li>• Discuss how cultural issues along with counselling and ethical principles guide patient care, using examples from clinical genetics.</li> </ul>
<b>Domain: Personal and Professional Skills</b>	
6	<p>Demonstrate the ability to write reflectively on personal and learning experiences.</p> <p>Demonstrate academic integrity.</p> <p>Demonstrate an ability to work in a team.</p> <p>Be aware of ways in which to support a patient with cancer.</p>
<b>Domain: Hauora Māori</b>	
7	<p>Describe the Māori concept of whakapapa and outline how this might impact on genetic research, diagnosis of genetic disorders and novel gene-based therapies.</p> <p>Discuss considerations for Māori in modern genetic research and clinical practice.</p>
<b>Domain: Population Health</b>	
8	<p>Identify genetic, environmental and lifestyle factors that contribute to disease in the New Zealand population.</p>
9	<p>Explain how basic principles of medicine contribute to general practice.</p> <p>In a General Practice setting, identify elements of the consultations observed that have relevance to other Learning Outcomes for this course.</p>

## Professional and Clinical Skills 1

	<b>Domain: Applied Science for Medicine</b>
1	<p>Clinical Reasoning and Decision Making</p> <ul style="list-style-type: none"> <li>• Demonstrate an awareness of objective versus subjective findings</li> </ul>
	<b>Domain: Clinical and Communication Skills</b>
2	<p>The Clinical Relationship</p> <ul style="list-style-type: none"> <li>• Describe and discuss the principles and benefits of effective communication</li> <li>• Describe the components of patient-centred interactions</li> </ul> <p>Principles of Doctor-Patient Communication</p> <ul style="list-style-type: none"> <li>• Use appropriate techniques to structure the interview</li> <li>• Outline strategies used to motivate patients in regard to specific lifestyle issues</li> <li>• Use effective communication skills in controlled settings with patients (real or simulated)</li> </ul>
3	<p>Clinical Assessment: The History and the Physical Examination</p> <ul style="list-style-type: none"> <li>• Explain the rationale for the planned assessment and seek their consent</li> <li>• Use a supportive and empathic communication style throughout the assessment and establish rapport</li> <li>• Demonstrate a systematic approach to obtaining a clinical history</li> <li>• Actively explore the patient's illness experience (i.e. the impact of the illness, their ideas, concerns and expectations)</li> <li>• Demonstrate an awareness of non-verbal communication</li> <li>• Describe and justify a systematic approach to clinical examination</li> <li>• Perform elements of a basic physical examination</li> <li>• Develop strategies to close consultations with patients</li> </ul>
	<b>Domain: Personal and Professional Skills</b>
4	<p>Professionalism and Reflective Practice</p> <ul style="list-style-type: none"> <li>• Demonstrate an empathetic and professional approach to patients in a simulated setting</li> <li>• Demonstrate the ability to write reflectively on personal and learning experiences</li> </ul>
5	<p>Ethics and the Law</p> <ul style="list-style-type: none"> <li>• Discuss ethical principles and issues relating to medicine and to learning in the medical programme</li> <li>• Discuss the principle of informed consent</li> <li>• Discuss the legal requirements that inform and legislate with respect to medical practice</li> </ul>
6	<p>Health and Well-being</p> <ul style="list-style-type: none"> <li>• Explore the components of stress and strategies for preventing and managing your own stress-related problems</li> <li>• Practise accessing your relaxation response, using mindfulness or other techniques</li> <li>• Describe the impact of medical students' help-seeking behaviours on themselves and on patients</li> </ul>
7	<p>Cultural Competence</p> <ul style="list-style-type: none"> <li>• Examine the effect of culture, ethnicity and spirituality on health, illness and dying</li> </ul>
8	<p>Learning and Teaching</p> <ul style="list-style-type: none"> <li>• Relate learning styles to the value of different approaches to learning</li> <li>• Demonstrate the processes of peer and self appraisal and</li> </ul>

	<p>constructive feedback</p> <ul style="list-style-type: none"> <li>• Demonstrate how elements of presentation contribute to clear communication</li> </ul>
<b>Domain: Hauora Māori</b>	
9	<ul style="list-style-type: none"> <li>• Recognise and understand power and vulnerability</li> <li>• Define “culture” and describe a number of “mini-cultures” evident in New Zealand society</li> <li>• Define the terms: cultural awareness, cultural sensitivity, cultural competence and cultural safety</li> <li>• Identify important aspects of one’s own culture</li> <li>• Identify one’s own values, implicit biases, assumptions and stereotypes</li> <li>• Understand in-group favouritism</li> <li>• Identify factors that can contribute to communication problems in cross-cultural interactions</li> <li>• Appropriately acknowledge cultural and religious norms during interactions with patients, families and team members</li> <li>• Describe the impact of health systems, structures, policies and protocols on health care quality and inequity</li> <li>• Explain how attitudes and actions of health professionals contribute to differential quality of care</li> </ul>
<b>Domain: Population Health</b>	
11	<p>Teaching/Health Education</p> <ul style="list-style-type: none"> <li>• Outline behaviours that adversely impact on health and describe interventions to alter behaviours at both the level of the population and the individual</li> <li>• Describe the factors that influence the effectiveness of patient education</li> <li>• Describe the patterns of alcohol, drug use and gambling in New Zealand</li> <li>• Evaluate the impact of historical, political and social processes with respect to people’s health</li> <li>• Outline the role of various community-based health agencies with interests in the health needs of different communities</li> </ul>

## The Musculoskeletal System

<b>Domain: Applied Science for Medicine</b>	
1	<p>Develop through the study of relevant regional anatomy* a systematic and personalised framework of the musculoskeletal system for use in future clinical practice.</p> <ul style="list-style-type: none"> <li>• Define the anatomical and functional compartments of the different limb regions.</li> <li>• Describe the muscles of the limbs and their major functions.</li> <li>• Explain the key features of the joints of the limbs.</li> <li>• Describe the innervation of the upper and lower limbs, and courses of the major nerves, by relating them to the structures they innervate or pass by.</li> <li>• Describe the course and relations of the major arteries through the limbs, and the muscle groups and regions they supply.</li> <li>• Describe the major superficial and deep veins of the limbs.</li> </ul>
2	<p>Integrate the knowledge of the relevant regional anatomy with physiology and pathology.</p> <ul style="list-style-type: none"> <li>• Describe the pathological processes involved in a variety of common conditions affecting the musculoskeletal system, and relate this to change in function.</li> <li>• Interrelate structure and function of lower motor units, in selected common and important conditions.</li> <li>• Identify basic motor control mechanisms at spinal and supraspinal levels.</li> <li>• Relate findings on electromyography and nerve conduction studies to the physiology of neuromuscular control.</li> <li>• Predict clinical effects resulting from abnormalities of the structures of the spinal column.</li> </ul>
3	<p>Apply knowledge of the microanatomical structure of connective tissues and muscle, along with pathology and physiology to:</p> <ul style="list-style-type: none"> <li>• Relate selected clinical presentations to underlying abnormalities of connective tissue and muscle.</li> <li>• Predict the effects of changed mechanical forces on connective tissue.</li> <li>• Describe how bone develops and how it is remodelled during growth and fracture healing.</li> <li>• Describe the structure and function of the skin.</li> <li>• Describe how lines of skin tension relate to hypertrophic scar formation.</li> <li>• Describe the impact of ageing on bone.</li> </ul>
4	Describe the major forms of imaging of the human body, and differentiate their major clinical uses.
<b>Domain: Clinical and Communication Skills</b>	
5	Identify key surface anatomical features of the living human.
6	Identify on the living human, and using diagrams, the dermatomes of the body.
7	Interpret radiological images of the normal musculoskeletal system and common abnormalities.
8	Describe important anatomical considerations relating to common clinical procedures.
9	Perform selected procedures.
<b>Domain: Personal and Professional Skills</b>	
10	Demonstrate the ability to reflect on one's attitudes towards dissection, and appropriate attitudes towards using human bodies.

<b>Domain: Population Health</b>	
11	Describe the prevalence of selected musculoskeletal problems in the community at large and propose strategies to reduce this burden, especially in the elderly, the infirm and those in care.

\* Regions include the upper and lower limbs, skin, the back, the vertebral column and the contents of the vertebral canal.

**Symptoms & Presentations**

Pain

Weakness

Joint swelling  
Deformity

**Conditions/Diseases**

Osteoarthritis  
Inflammatory arthritis  
Gout  
Fractures  
Joint injuries  
Muscle/tendon injuries  
Peripheral nerve lesions  
Compartment syndromes

**Clinical Skills**

Elements of musculoskeletal examination

Elements of neurological examination

Elements of peripheral vascular examination

**Procedural Skills**

Joint aspiration, knee, ankle  
shoulder (cadaver)

## The Digestive System

<b>Domain: Applied Science for Medicine</b>	
1	<p>Apply knowledge of basic anatomy, physiology, biochemistry, pharmacology and pathology of the digestive system to:</p> <ul style="list-style-type: none"> <li>• Describe the structure of the gastrointestinal system at macro, organ, tissue, cellular, histological and molecular levels in healthy and diseased states.</li> <li>• Relate the development and structure of the gastrointestinal tract and its associated organs to their function.</li> <li>• Describe the pathological processes involved in a variety of common conditions.</li> <li>• Discuss the relationship between pathological processes and the changing function.</li> <li>• Describe the principles associated with the interpretation of physiological data from tests related to gastrointestinal function.</li> <li>• Link the abnormalities of structure and function to their clinical and radiological presentations.</li> <li>• Identify the factors that change at different stages of life.</li> </ul>
2	<p>Discuss the digestion, absorption, transport, function, mechanism of action, metabolism and elimination of a selection of nutrients.</p> <ul style="list-style-type: none"> <li>• Describe the macro and micronutrients required by the human body and how these can be obtained from common foods.</li> <li>• Describe the digestive and metabolic pathways involved in carbohydrate, lipid and protein metabolism.</li> <li>• Relate the digestive and metabolic pathways to common associated disorders.</li> <li>• Link the disorders from various nutrient deficiencies to their clinical presentations.</li> </ul>
3	Describe the integration of the gastro-intestinal function during the normal response to a meal.
4	<p>Outline the relationship between under- and over-nutrition of specific macro and micronutrients and nutritional disorders.</p> <ul style="list-style-type: none"> <li>• Explain the role of recommended daily intake (RDI) for macro and micro nutrients in health and compare with those for acute and chronic disease states.</li> </ul>
<b>Domain: Clinical and Communication Skills</b>	
5	<p>Use experiential physical examinations in CSC to:</p> <ul style="list-style-type: none"> <li>• Describe and interpret findings of normal clinical examinations.</li> <li>• Describe and justify a systematic approach to clinical examinations.</li> <li>• Correctly use equipment and perform selected procedures.</li> <li>• Take a history of a presenting complaint with some medical and social context.</li> <li>• Identify cultural factors and beliefs that influence physical examinations.</li> </ul>
6	Describe the principles relating to taking a dietary history and record an individual's dietary intake.
7	Develop hypotheses of the underlying pathophysiology of selected gastrointestinal diseases from appropriate laboratory data.
<b>Domain: Hauora Māori</b>	
8	<p>Discuss the differences in gastrointestinal disease burden between Māori and other New Zealanders.</p> <ul style="list-style-type: none"> <li>• Discuss the cultural and social significance of nutrition among Māori.</li> <li>• Compare the different epidemiology of common gastrointestinal diseases among Māori with other New Zealand sub-populations.</li> </ul>

<b>Domain: Population Health</b>	
9	Describe the prevalence of selected gastrointestinal diseases in the community at large. Outline key strategies to reduce this burden.

### **Symptoms & Presentations**

Abdominal pain  
 Gastrointestinal Bleeding  
 Jaundice  
 Obesity  
 Malnutrition  
 Anaemia  
 Diarrhoea and vomiting

### **Clinical Skills**

Elements of abdominal examination  
 Rectal examination, using models  
 BMI calculation  
 Dietary history

### **Conditions/Diseases**

Reflux disease  
 Stomach and bowel cancer  
 Pancreatic cancer  
 Oesophageal cancer  
 Coeliac disease  
 Crohn's disease  
 Peptic ulcer disease  
 Alcoholic liver disease  
 Acute pancreatitis  
 Diabetes mellitus  
 Malignancies (gastric, hepatocellular)  
 Hepatitis B and C  
 Gallbladder disease

### **Procedural Skills**

Naso-gastric tube (principles)  
 Capillary blood glucose



## The Respiratory System

<b>Domain: Applied Science for Medicine</b>	
1	<p>Apply knowledge of basic anatomy, physiology, pathology, and pharmacology of the respiratory system to:</p> <ul style="list-style-type: none"> <li>• Describe the structure of the system and relate these structures to their function at body, organ, tissue, cellular and molecular levels.</li> <li>• Outline the interrelationships of the structures within the chest.</li> <li>• Describe the roles and actions of muscles in ventilation.</li> <li>• Describe the physiology of normal ventilation, oxygen delivery and gas exchange including: how gas exchange occurs in the lung and the rest of the body, the role of haemoglobin in gas transport and the impact of stress and altitude on gas exchange.</li> <li>• Compare and contrast the anatomy and physiology of the pulmonary and systemic vasculature.</li> <li>• Explain the relationship between pressures, flow and volume during normal breathing and during maximal inspiration and expiration.</li> <li>• Identify the factors that change at different stages of life.</li> </ul>
2	<p>Apply knowledge of basic anatomy, physiology, pathology, and pharmacology of the respiratory system to:</p> <ul style="list-style-type: none"> <li>• Explain static and dynamic lung volumes and flows, and the common physiological tests of pulmonary function.</li> <li>• Describe the changes in microvascular function during common respiratory pathologies.</li> </ul>
3	<p>Apply knowledge of basic anatomy, physiology, pathology, and pharmacology of the respiratory system to:</p> <ul style="list-style-type: none"> <li>• Describe the multiple factors that influence the lungs and respiratory function under normal and pathologic conditions.</li> <li>• Describe the pathological processes involved in a variety of common conditions involving the respiratory system.</li> <li>• Discuss the relationship between pathological processes and the changing function of the system.</li> <li>• Trace how the pathology of the major diseases links to clinical presentation.</li> <li>• Describe the impact of common respiratory disorders on lung function tests.</li> </ul>
4	Discuss the mechanism of action and physiological effects of a small number of drugs used in common respiratory conditions.
5	Link normal and abnormal embryological development of the heart and lungs to common and significant clinical problems and presentations.
<b>Domain: Clinical and Communication Skills</b>	
6	<p>Use experiential physical examinations in CSC to:</p> <ul style="list-style-type: none"> <li>• Describe and interpret findings of normal clinical examinations.</li> <li>• Describe and justify a systematic approach to clinical examinations.</li> <li>• Correctly use equipment and perform selected procedures.</li> <li>• Take a history of a presenting complaint with some medical &amp; social context.</li> <li>• Identify cultural factors and beliefs that influence physical examinations.</li> </ul>
7	Summarise the symptoms, main physical findings and imaging results to describe common and important abnormalities of the respiratory system.
8	Perform clinical and procedural skills in laboratory settings.
9	Describe selected primary techniques used in respiratory research, and outcomes of the work.
<b>Domain: Population Health</b>	
10	Describe the prevalence, distribution and trends in incidence of selected

	respiratory diseases in community subgroups and the population in New Zealand.
11	List the main risk factors that contribute to the common respiratory diseases.
12	List the main environmental risk factors that contribute to differing rates of respiratory diseases in different communities.
<b>Domain: Hauora Māori</b>	
13	Identify the prevalent respiratory conditions in the Māori population, and feasible strategies for their prevention.

### **Symptoms & Presentations**

Chest pain  
Shortness of breath  
Oedema  
Claudication  
Respiratory failure

### **Clinical Skills**

Elements of respiratory examination  
Surface anatomy  
Percussion  
Auscultation

### **Conditions/Diseases**

Pneumonia  
Asthma  
COPD  
Lung cancer  
Bronchiectasis  
Tuberculosis  
Cystic fibrosis  
Respiratory distress syndrome  
Pneumothorax  
Interstitial lung disease  
Pulmonary embolism  
Pleural effusion  
Altitude and exercise

### **Procedural Skills**

Pleural aspiration (cadaver)  
Chest tube placement (cadaver)  
Spirometry & PEFR

## The Cardiovascular System

<b>Domain: Applied Science for Medicine</b>	
1	<p>Apply knowledge of basic anatomy, physiology, pathology, and pharmacology of the cardiovascular system to:</p> <ul style="list-style-type: none"> <li>• Describe the structure of the system and relate these structures to their function at body, organ, tissue, cellular and molecular levels.</li> <li>• Outline the interrelationships of the structures within the chest.</li> <li>• Compare and contrast the anatomy and physiology of the pulmonary and systemic vasculature.</li> <li>• Discuss normal microvascular function.</li> <li>• Describe the determinants of vascular function and systemic blood pressure.</li> <li>• Identify the factors that change at different stages of life.</li> </ul>
2	<p>Apply knowledge of basic anatomy, physiology, pathology, and pharmacology of the cardiovascular system to:</p> <ul style="list-style-type: none"> <li>• Explain the relationship electrical function in the heart and the standard clinical electrocardiogram in the normal person and in common cardiovascular pathologies.</li> <li>• Use appropriate physiological models of cardiac and vascular function to analyse and describe the status of a person's cardiovascular system.</li> <li>• Use the relationships between cardiac and vascular function to describe changes in the cardiovascular system under differing physiological and pathological conditions.</li> <li>• Describe the changes in microvascular function during common cardiovascular pathologies.</li> </ul>
3	<p>Apply knowledge of basic anatomy, physiology, pathology, and pharmacology of the cardiovascular system to:</p> <ul style="list-style-type: none"> <li>• Describe the multiple factors that influence the heart and cardiovascular function under normal and pathologic conditions.</li> <li>• Describe the pathological processes involved in a variety of common conditions involving the cardiovascular system.</li> <li>• Discuss the relationship between pathological processes and the changing function of the system.</li> <li>• Trace how the pathology of the major diseases links to clinical presentation.</li> <li>• Describe the impact of common cardiovascular disorders on cardiovascular function tests.</li> </ul>
4	Discuss the mechanism of action and physiological effects of a small number of drugs used in common cardiovascular conditions.
5	Link normal and abnormal embryological development of the heart to common and significant clinical problems and presentations.
6	Discuss the role of psychological factors in the development of and recovery from cardiovascular disorders, particularly myocardial infarction.
<b>Domain: Clinical and Communication Skills</b>	
7	<p>Use experiential physical examinations in CSC to:</p> <ul style="list-style-type: none"> <li>• Describe and interpret findings of normal clinical examinations.</li> <li>• Describe and justify a systematic approach to clinical examinations.</li> <li>• Correctly use equipment and perform selected procedures.</li> <li>• Take a history of a presenting complaint with some medical and social context.</li> <li>• Identify cultural factors and beliefs that influence physical examinations.</li> </ul>
8	Summarise the symptoms, main physical findings and imaging results to describe common and important abnormalities of the cardiovascular system.
9	Perform clinical and procedural skills in laboratory settings.

10	Interpret physiological data including from ECGs, echocardiograms in the clinical context.
11	Describe selected primary techniques used in cardiovascular research, and outcomes of the work.
<b>Domain: Population Health</b>	
12	Describe the prevalence, distribution and trends in incidence of selected cardiovascular diseases in community subgroups and the population in New Zealand.
13	List the main risk factors that contribute to the common cardiovascular diseases.
14	List the main environmental risk factors that contribute to differing rates of cardiovascular diseases in different communities.
<b>Domain: Hauora Māori</b>	
15	Identify the prevalent cardiovascular conditions in the Māori population, and feasible strategies for their prevention.

### Symptoms & Presentations

Chest pain

Shortness of breath

Oedema

Claudication

### Conditions/Diseases

Ischaemic heart disease

Acute coronary syndromes

Congestive cardiac failure

Shock

Hypertension

Peripheral vascular diseases

Valvular heart disease

Aortic aneurysm

Congenital heart defects

### Clinical Skills

Elements of cardiovascular examination

Blood pressure and pulse assessment

Auscultation of the heart

JVP assessment

### Procedural Skills

Perform and interpret ECG

## The Genitourinary System

<b>Domain: Applied Science for Medicine</b>	
1	<p>Apply knowledge of basic anatomy, physiology, biochemistry and pharmacology of the systems of the genitourinary tract to:</p> <ul style="list-style-type: none"> <li>• Explain the anatomical interrelationships of the components of the genitourinary system and related glands and hormones, in male and female.</li> <li>• Relate the structure of the urinary system to its function at organ, tissue, cellular and biochemical levels in healthy and diseased states.</li> <li>• Discuss the role of the kidney in homeostasis of the volume, electrolytes and osmolarity of the body fluid.</li> <li>• Describe the normal biochemical assays of the genitourinary system.</li> <li>• Outline the clinical pharmacology of drugs acting on the genitourinary system.</li> <li>• Outline the mechanisms of renal failure, haematuria, proteinuria and the pharmacological basis of selected therapeutic interventions.</li> <li>• Correlate anatomical knowledge in situ and in sectional planes with common images from a range of modalities (Range: Plain radiological films; MRI median sagittal and axial planes; CT scan; Ultrasonography).</li> <li>• Identify the factors that change at different stages of life.</li> </ul>
2	<p>Summarise the effects of pathological lesions and injuries affecting the various organs and structures of the genitourinary system in male and female.</p> <ul style="list-style-type: none"> <li>• Explain the pathological basis of the common diseases of the genitourinary system in male and female.</li> <li>• Describe the epidemiology, microbial causes and the preventive measures of the common genitourinary tract infections.</li> <li>• Describe the mechanism and the stages of labour in normal birth and identify malpresentation and malposition.</li> </ul>
<b>Domain: Clinical and Communication Skills</b>	
3	<p>Use experiential physical examinations in CSC to:</p> <ul style="list-style-type: none"> <li>• Describe and interpret findings of normal clinical examinations.</li> <li>• Describe and justify a systematic approach to clinical examinations.</li> <li>• Correctly use equipment and perform selected procedures.</li> <li>• Take a history of a presenting complaint with some medical and social context.</li> <li>• Identify cultural factors and beliefs that influence physical examinations.</li> </ul>
4	Diagnose common clinical presentations by interpreting radiological images.
5	Interpret kidney function using laboratory data, especially the glomerular filtration rate and excretion rate.
6	Perform selected clinical and procedural skills.
<b>Domain: Personal and Professional Skills</b>	
7	Be aware of own views on having children, possible self-identification with patient, and professional boundaries.
<b>Domain: Hauora Māori</b>	
8	Identify the factors that affect the incidence of the genitourinary diseases in Māori and compare with those of other populations.
<b>Domain: Population Health</b>	

9	<ul style="list-style-type: none"> <li>• Identify the factors that affect the incidence of sexually transmitted diseases in the population and community groups in New Zealand.</li> <li>• Describe the components of the biopsychosocial perspective of sexuality.</li> </ul>
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**Symptoms & Presentations**

Haematuria  
Proteinuria  
Oedema

**Clinical Skills**

Elements of abdominal examination  
Rectal examination and prostate assessment (model)

**Conditions/Diseases**

Renal failure (acute and chronic)  
Renal cancer  
Urinary tract infections  
Electrolyte disturbances  
Hypertension  
Sexually transmitted diseases  
Cervical cancer  
Prostate cancer

**Procedural Skills**

Ultrasound examination

## Clinical Pharmacology

<b>Domain: Applied Science for Medicine</b>	
1	<ul style="list-style-type: none"> <li>• Develop, through study of pharmacological principles a framework of knowledge that forms the basis for the safe and effective use of medicines in clinical practice.</li> <li>• Define a receptor and describe the principles of affinity, efficacy and potency and the differences between competitive and non-competitive antagonism and inverse agonism.</li> <li>• Describe the role of receptors, enzymes, ion channels and transporters in drug action.</li> <li>• Describe the different signalling pathways for G-protein coupled receptors, tyrosine kinase inhibitors, ligand gated ion channels and nuclear receptors.</li> </ul>
2	<ul style="list-style-type: none"> <li>• Define volume of distribution, clearance and half-life.</li> <li>• Describe factors that affect absorption and describe the major pathways of drug elimination and how factors influence them, including enzyme induction and inhibition, lead to drug interactions.</li> <li>• Describe the Emax model of drug action.</li> <li>• Explain the difference between predictable and unpredictable adverse drug reactions, and how these may be minimised.</li> <li>• Describe the mechanisms of common examples of poisoning and approaches to treatment and prevention.</li> </ul>
<b>Domain: Clinical and Communication Skills</b>	
3	<ul style="list-style-type: none"> <li>• Demonstrate foundation skills for safe and effective prescribing.</li> <li>• Explain the information patients and medical practitioners need before prescribing a medicine.</li> <li>• Show how to access sources of information about medicines.</li> <li>• Show how to individualise dose requirements (including calculation of loading and maintenance doses) and how to monitor response to treatment.</li> <li>• Write a prescription correctly.</li> </ul>
<b>Domain: Population Health</b>	
4	<ul style="list-style-type: none"> <li>• Discuss the contribution of medicines, and their costs, to health care in New Zealand.</li> <li>• Describe the impact of adverse drug reactions and medication error.</li> </ul>

## D. Assessment

### D.1. Assessment Schedule for MBCHB 221

Dates or deadlines for all written or oral assessments in MBCHB 221 are available on the following Phase 1 Results and Feedback website under the 'Assesment Dates' menu:

<http://medprog.fmhs.auckland.ac.nz/mbchbphase1/>

Please make sure you have these dates and deadlines in your diaries. See sections D.4 to D.7 for details of weightings etc.

### D.2. General Assessment Policies

The following general policies apply to Year 2.

Students must pass the year as a whole and are required to gain a pass in each module within the MBCHB 221 course.

Students must pass the assessment relating to each domain within each year in order to progress to the next year of the programme. The domains relevant to Year 2 in 2017 are:

- Applied Science for Medicine
- Clinical and Communication Skills
- Personal and Professional Skills
- Hauora Māori

The grade for each module is a provisional grade only, until approved by the Board of Examiners at the end of each year.

### D.3. Progress Testing

#### D.3.1. Overview

Progress testing is a method of assessing applied medical knowledge across all five domains of the programme. Hence each test may cover all aspects of the curriculum. Progress testing is also the primary method of assessing the domain of the Applied Science for Medicine in Phases 2 and 3.

The progress test is a longitudinal test of growth of your medical knowledge across the whole programme. Due to this, your entire record will be available to the Board of Examiners and may be used for making decisions on your progression. The level of performance achieved in each individual test is determined by norm-referencing within each separate year cohort.

As a student progresses through the programme, the percentile graded as unsatisfactory or borderline on an individual test will change, as indicated in the table below. Note that Year 6 is standards-based.



	<b>Unsatisfactory</b>	<b>Borderline</b>
Year 2	5%	10%
Year 3	4%	8%
Year 4	3%	6%
Year 5	2%	4%

Progress Tests will occur three times each year. Each is three hours long and has 125 single-best-answer questions. All students, at all levels of the programme, sit the same test at the same time.

In Year 2, the first progress test is formative only and the subsequent two progress tests will form 5% and 10% respectively of the grade for the Applied Science for Medicine Domain. In Year 2 you cannot fail the year as a whole solely on the basis of having failed the progress test component.

### **D.3.2. Grading and Progress Tests**

Grades on **individual** tests are recorded as Excellent (E), Satisfactory (S), Borderline (B) and Unsatisfactory (U). About the top 5% of students will be awarded an Excellent grade on any individual test.

Because the progress test is a longitudinal cumulative assessment, grades on individual tests are less important than the overall pattern of performance. Hence, grades on individual tests are aggregated into a current **cumulative grade**, which can be Satisfactory (S), Doubtful (D) or Unsatisfactory (U).

For the second and third progress tests in Year 2, grade aggregation is calculated as detailed in the table below. Because of the progressive nature of the testing, you will carry the summative aggregate grade from the end of the year to the start of your Year 3 so that aggregation of grades is continuous over Years 2-5 of the programme.

<b>Grades from Progress Tests 2 and 3</b>	<b>Summative Aggregate Grade</b>
UU	U
UB	D
US	D
UE	D
BU	U
BB	D
BS	S
BE	S

<b>Grades from Progress Tests 2 and 3</b>	<b>Summative Aggregate Grade</b>
SU	D
SB	D
SS	S
SE	S
EU	D
EB	D
ES	S
EE	S

Progress Test results and feedback are available from through the following Progress Test website link (or through the MBChB Portal):

<https://medprog.fmhs.auckland.ac.nz/progress/>

### D.3.3. Progress Test dates for 2017

Progress Tests are scheduled for:

Friday 28 April 2017	commencing at 2.15 pm
Friday 21 July 2017	commencing at 2.15 pm
Saturday 14 October 2017	commencing at 2.15 pm

**IMPORTANT NOTE:** All progress test dates are regarded as part of the Phase 1 calendar and are not vacation times therefore students are expected to be available to sit the tests on those days.

### D.3.4. Policies and Progress Tests

#### Aegrotat and compassionate considerations

All applications for aegrotats and compassionate consideration will be dealt with using standard University processes applying to all written tests (refer to this [University website](#) and also Section D.7).

The following table summarises the possible situations that may apply to you if you miss a Progress Test.

Student situation	Grade recorded
Student didn't sit/no authorisation or application	Student awarded an Unsatisfactory grade for missed test.
Student didn't sit/application for consideration declined	Student awarded an Unsatisfactory grade for the missed test.
Student didn't sit/application for consideration approved	Student receives no grade for the current test, but will carry forward the most recent aggregate grade. A student who misses the first summative test for any reason will be awarded an aggregate Doubtful grade.
Student sat test/application for consideration not approved	Grade achieved in test is awarded.
Student sat test/application for consideration approved	Student will carry forward the most recent aggregate grade or the grade achieved on test, whichever is to the student's advantage.
Student misses two or more consecutive tests (with or without approved consideration).	Student awarded a Doubtful aggregate grade.

### **Special circumstances – Out-of-time/ Out-of-centre**

Applications for sitting Progress Tests Out-of-Time or Out-of-Centre will be considered on an individual basis at the discretion of the MPD, applying University guidelines.

### **Cheating**

If a student is suspected of cheating during a Progress Test the Student Academic Conduct Statute will be applied.

If a student is found to have cheated a penalty will be applied, and the offence entered in the academic misconduct register. The Board of Studies (Medical Programme) FtP process may also be invoked.

### **Operation and supervision of progress tests**

Progress Tests will be run according to the University of Auckland Examinations policies, processes and guidelines, except that there will be no reading time for the tests. At the start of each test, 10 minutes will be set aside for administration and a standard briefing.

## **D.3.5. Guidelines to approaching a Progress Test**

### **The format**

- Refer to Instructions on the front cover of the test.
- Each test paper is individually identified. This is to ensure all test papers will be returned and accounted for, including the colour copy sheets with photos, diagrams and similar.
- Each question starts with a clinical scenario or patient case, and there are six choices on the Scantron sheet for your answer:
  - 5 choices relate to applied knowledge potential answers
  - The 6th choice is to answer as “Don’t know” (the question mark on the Scantron sheet).

### **The standard**

The test is set at the level of knowledge required of a new graduate at beginning of the PGY1 year. Please interpret your results with this in mind. Compare your result with others at your stage of medical educational development and training.

All questions focus on applied medical knowledge and require integration of knowledge and clinical reasoning.

### **Condition for sitting Progress Tests**

The test is sat under standard University of Auckland rules:

- You may not enter your Progress Test later than halfway through.
- You may not leave the room until 15 minutes after the midway point of the examination writing time, and then only with the supervisor’s permission and upon handing in your Scantron sheet and Progress Test paper.
- You may not leave the Progress Test room in the last 15 minutes.

### **Marking and the progress test**

- Choose ONE option only. If you choose two answers your answer will be marked as wrong.
- You gain 1 mark for each question answered correctly.
- You gain 0 marks for a 'don't know' choice, and you are encouraged to acknowledge what you don't know.
- Not answering a question is equivalent to 'don't know' and you will gain 0 marks.
- Negative marking is used and 0.25 of a mark is deducted for a wrong answer.
- **Make sure you use a soft pencil (4B is good) and fill the circle completely for your chosen option.**

### **Strategy for tests with negative marking**

- Remember that if your answer is correct, you gain a mark, if you choose don't know you get no mark, if your answer is wrong, you lose 0.25 of a mark.
- It is useful to apply the 'cover-up' test first i.e. hide all answers, read the scenario, identify the likely answer and then read to see if it is there (you then don't waste time reading all five choices).
- If you have no idea of the right answer your best strategy is to answer 'don't know'.
- If you feel reasonably sure that you know the answer, your best option is to answer the question.

### **Results and feedback**

Following the Progress Test, you will access via the Progress Test website:

- a mark for the test, and a grade of excellent, satisfactory, borderline or unsatisfactory, which is based on the results for your cohort of students;
- a table that shows what questions you got right (green), wrong (red) or don't know (amber);
- key learning point for all questions.

### **Probity message to all those sitting the test**

We wish to advise you of the following points:

1. No question will be used again for at least a period of three years.
  2. Each clinical scenario may have a number of different questions associated with it, and each with a different learning point.
  3. Neither you nor any of your immediate and future colleagues will benefit from trying to remember questions and 'save/ circulate' them after the test is completed.
1. Severe consequences through the University of Auckland Academic Misconduct policy and/ or the FtP policy will be implemented for anyone who either removes a progress test from the examination room or who tries to remember, share and pass a question onto others.

## D.4. Year 2 Assessments and Weightings

Module	Assessment	Contribution	221 Weighting
Musculoskeletal System	2hr SAQ test	100%	8.07%
Digestive System	2hr SAQ test	100%	8.07%
Respiratory System	2hr SAQ test	100%	8.07%
Cardiovascular System	2hr SAQ test	100%	8.07%
Genitourinary System	2hr SAQ test	100%	8.07%
Clinical Pharmacology	2hr SAQ test *	80%	8.07%
	Therapeutics assignment *	20%	
Principles of Medicine	2hr SAQ test *	80%	8.58%
	Research visit *	10%	
	GP visit *	10%	
Professional and Clinical Skills 1	Ethics essay	15%	15%
	SAFE-DRS journal	10%	
	SGA participation	18%	
	SGA attendance *	Must attend	
	Clinical Skills attendance *	Must attend	
	Comm. skills experience	20%	
	Core skills	15%	
	Peer feedback on Core Skills	2%	
	Portfolio Dev Tasks	20%	
	Cultural Competence Task	*	
	Alcohol and Drugs Task	*	
Progress tests	3hr MCQ test 1	0%	15%
	3hr MCQ test 2	33.7%	
	3hr MCQ test 3	66.6%	
Laboratories and Integrated Learning Activities (ILAs)	MSS PST	12%	10%
	DS PST	6%	
	RS and CVS PST	12%	
	GUS PST	6%	
	Physiology laboratories	25%	
	Nutrition laboratory	8%	
	Chest pain ILA	8%	
	HELD ILA	8%	
	FPP ILA	15%	
Hauora Māori *	Significant Learning Event relating to Whakanoa	20%	3%
	Māori Health Intensive *	65%	
	Group generation of progress test-type question	15%	

\* indicates that students must perform to our satisfaction in this assessment in order to pass the module as a whole

*PPS domain:*

Ethics essay 15%, SAFE-DRS journal 10%, SGA participation 15%, Peer feedback 5%, Portfolio 20% (total: 65%)

*CCS domain:*

Communication skills experience 20%, Core skills 15% (total: 35%)

*Hauora Māori:*

Students are required to keep a copy of all their submitted work in this module to be used in Hauora Māori Domain portfolio summaries in the following years.

## **D.5. Pass, Fail and Remediation Decisions**

The Examination Regulations for Deferred Results for Parts II, III, IV and V are as follows (University Calendar 2017, Page 62, clause 21b):

*“Where a student has not achieved a pass in a particular component or components of a Part the Examiners may withhold the result pending the completion of specified additional work and/or examination to the satisfaction of the Examiners. If in the opinion of the Examiners for MBChB a particular weakness in a component or components is such that it cannot be addressed by the setting of additional work and/or examination, the student will fail that Part.”*

The Board of Examiners will make the following decisions for each student:

- A student who passes every module of the course except the Progress Test component of Applied Science for Medicine will be considered to have passed Year 2.
- A student who fails modules that have an aggregate weighting of more than 20% from the table listed above fails the year as a whole.
- At the discretion of the Board of Examiners, a student who fails modules with an aggregate of less than 20% and has an overall grade-percent average for the year of at least 2.5, may be offered further directed study and a further exam/assessment in the failed module(s).
- Note that, because Progress Tests are not a ‘must-pass’ component of Year 2, no remediation will be available for students failing Progress Tests.

## **D.6. Grades reported to students**

Throughout the year, students can access grades for each component of the course that has been completed using the following website:

<http://medprog.fmhs.auckland.ac.nz/mbchbphase1/>

This site also calculates an estimate of the final grade for the year based on completed components to date. Feedback on topics assessed in each module test is also provided with indications of a student’s performance in each topic relative to the rest of the class. This feedback is designed to assist students in focussing their revision as they proceed through the medical programme.

Module	MBCHB 221 Weighting	Indicative Grade	Numeric
Musculoskeletal System	8.07%	A+ - D-	9 - 0
Digestive System	8.07%	A+ - D-	9 - 0
Respiratory System	8.07%	A+ - D-	9 - 0
Cardiovascular System	8.07%	A+ - D-	9 - 0
Genitourinary System	8.07%	A+ - D-	9 - 0
Clinical Pharmacology	8.07%	A+ - D-	9 - 0
Principles of Medicine	8.58%	A+ - D-	9 - 0
Professional & Clinical Skills 1	5.25% (CCS) 9.75% (PPS)	D, P, BP, F	9, 6, 3, 0
Progress tests	15%	E, S, B, U	9 - 0
Laboratories and ILAs	10%	D, P, BP, F	9, 6, 3, 0
Hauora Māori	3%	D, P, F	9, 6, 0

Once all the assessments have been completed for a module, students will receive an indicative grade for that module as shown in the table above.

At the end of the year, each of these module grades will be converted to a numeric (see table above), multiplied by the MBCHB 221 weighting for that module, and then summed and used to generate a single final grade for MBCHB 221. Following the end-of-year Board of Examiners meeting, that single grade for the MBCHB 221 course will be reported to students through the normal process of the Examinations Office. In addition, through the website above, students will have access to an internal transcript containing each of their Domain grades as listed in the following table:

Domain	Grade
Applied Science for Medicine Musculoskeletal, Digestive, Respiratory, Cardiovascular, Genitourinary, Principles of Medicine, Clinical Pharmacology Progress Tests Aggregate ILAs and Laboratories	Each graded A+ to D-  Satisfactory, Doubtful, Unsatisfactory * Distinction, Pass, Fail
Clinical and Communication Skills	Distinction, Pass, Fail
Personal and Professional Skills	Distinction, Pass, Fail
Hauora Māori	Distinction, Pass, Fail

\* Note that Satisfactory, Doubtful, Unsatisfactory refer to the cumulative Progress Test categories derived by combining the Excellent, Satisfactory, Borderline and Unsatisfactory grades from Progress Tests 2 and 3 according to the Board of Studies-approved rubric described in section D.3.2.

## **D.7. Impaired performance in Examinations, Tests and Coursework**

The examinations office has clear and detailed guidelines available at the following website to support you through the whole examinations process:

[www.auckland.ac.nz/en/for/current-students/cs-academic-information/cs-examination-information.html](http://www.auckland.ac.nz/en/for/current-students/cs-academic-information/cs-examination-information.html)

### **D.7.1. Impairment in tests and coursework**

When illness or difficulties prevent you from sitting a test, affects your preparation or impairs your performance during the test you may apply for aegrotat consideration (in the case of illness) or for compassionate consideration (other exceptional or unforeseen difficulties). It is important that you follow the directions in the University Calendar (also available on the University website). A Medical Certificate or other evidence will be required, and it must relate to the actual day(s) of the test(s) affected. Applications should be made through University Health Services. For further information about aegrotat or compassionate applications visit:

[www.auckland.ac.nz/en/for/current-students/cs-academic-information/cs-examination-information/cs-aegrotat-and-compassionate-consideration.html](http://www.auckland.ac.nz/en/for/current-students/cs-academic-information/cs-examination-information/cs-aegrotat-and-compassionate-consideration.html)

### **D.7.2. Impairment before tests**

In all situations involving illness, accidents or family circumstances where your work may be affected, you should check with staff responsible for a particular course. You are also encouraged to talk with your Student Support Advisor.



## **E. Policies Relevant to Phase 1, Year 2**

### **E.1. Assessment Policy**

#### **E.1.1. General**

In order to progress from Year 2 to Year 3, a student must pass the year as a whole by achieving a pass in each module and component.

Where a student fails to obtain a pass grade in one or more modules, the Board of Examiners may apply the Deferred Result mechanism. However, this does not apply where the result constitutes a serious failure to meet the requirements of the module or modules concerned.

#### **E.1.2. Deferred result**

Where a student has clearly failed a module or modules (totalling not more than 20% weighting in MBCHB 221), so that the student is not able to pass the year as a whole, the result for MBCHB 221 will remain internal to the school, with the result to the student deferred.

In order to pass the year as a whole, the student will be required to complete additional work (normally over the summer) and obtain a pass grade for each module reassessed. The grade awarded for each module passed in this way may not be higher than a C+.

Failure to satisfy the examiners in these modules means that the student does not pass the year, and s/he cannot progress to the next year of the programme.

#### **E.1.3. Repeating a year**

Each Part of the MBChB programme is to be completed to the satisfaction of Senate or its representative before a student is permitted to enrol for the next Part (2017 University Calendar Regulation 5b, p293). In the event that a student does not pass all modules, s/he does not pass the year as a whole. The Board of Examiners may allow a student one further attempt at the year as a whole. However, at the discretion of Senate or its representative, a student who fails any of Parts II-VI may be declined permission to re-enrol in the programme as a whole (2017 University Calendar Regulation 5c, p293).

A student who fails twice to pass the same Part will not be permitted to continue with this degree (2017 University Calendar Regulation 5d, p293).

#### **E.1.4. Grading system**

For Phase 1 (Year 2) end of year results, the medical programme uses the standard A+ to D- grading system of The University of Auckland. The internal grade for each module is described in section D.6.

### E.1.5. How to calculate your Grade Percent Average (GPA)

Each module has a percentage contribution to your final MBCHB 221 grade.

Each module grade can be converted to a number as follows:

A+ = 9, A = 8, A- = 7, B+ = 6, B = 5, B- = 4, C+ = 3, C = 2, C- = 1, D+ = 0, D = 0, D- = 0

Distinction = 9, Pass = 6, Borderline Performance = 3, Fail = 0

Excellent = 9, Satisfactory = 6, Borderline = 3, Unsatisfactory = 0

Distinction = 9, Pass = 6, Fail = 0

For Year 2, the GPA is a weighted average of the grade percent values across all of your modules. The weighting is based on the percentage each module is worth.

Domain	Module	Example Grade	Numb.	MBCHB 221 Weighting	Grade x Percent
Applied Science for Medicine	Musculoskeletal	A	8	8.07%	64.6
	Digestive	B+	6	8.07%	48.4
	Respiratory	A-	7	8.07%	56.5
	Cardiovascular	B-	4	8.07%	32.3
	Genitourinary	C+	3	8.07%	24.2
	Clinical Pharmacol.	A-	7	8.07%	60.1
	Princ. of Medicine	A-	7	8.58%	60.0
	Progress tests	S	6	15%	90.0
	Labs and ILAs	P	6	10%	60.0
Clinical and Communications Skills		D	9	5.25%	47.3
Personal and Professional Skills		P	6	9.75%	58.3
Hauora Māori		P	6	3%	18
<b>Total</b>				<b>100</b>	<b>616.4</b>
<b>Grade Percent Average</b>					<b>6.16</b>

*Note:* So that you can monitor your progress, this calculation is done for you automatically throughout the year as your results accumulate on the website:

<http://medprog.fmhs.auckland.ac.nz/mbchbphase1/>

### E.2. Registration Requirements

Under the Health Practitioners Competence Assurance Act 2003, the Medical Council has no jurisdiction over medical students. Nevertheless, the conduct and health of students **prior to graduation** may have significant bearing on future eligibility for registration as a medical practitioner. Please refer to section 2 of the [Fitness to Practice](#) policy for more detail.

### E.3. Immunisation and Infectious Diseases

This section needs to be read in conjunction with the [Immunisation and Prevention of Infectious Diseases](#) Policy.

You are expected to be able to provide evidence of your hepatitis serology and immunisation status if your clinical experience host requests it. It is highly likely that this information will be sought in the clinical training years 4,5 & 6. In part, the test results and vaccinations you received in Year 2 will provide useful evidence. You are responsible for maintaining your records and having a copy readily accessible. You should ensure the following:

- you have evidence of up to date immunisation for Varicella and Pertussis;
- you know your Quantiferon TB Gold status;
- you know your immune status for Measles, Mumps, Varicella and Rubella;
- you complete an annual *S.aureus* transmission risk survey to gain a clearance certificate.

**Students are strongly advised to have the seasonal influenza vaccine, which is provided annually by the Faculty and is free to students.**

In addition, students are advised to review with their doctor their immunisation status with regard to infections that you may be at increased risk of acquiring as the result of changes in your living situation (e.g. hostel or student flat accommodation, new relationships, etc). Such immunisations include Meningococcal C vaccine and HPV vaccine.

You also are advised to ensure that you have acquired Hepatitis B surface antibodies and are up to date with other vaccinations, for example diphtheria, tetanus, and polio.

#### **Staphylococcus aureus transmission risk certification**

Refer to section 4 in the [Immunisation and Prevention of Infectious Diseases](#) Policy for background on the compulsory annual surveys and certification.

All students participating in clinical environments are required to have a current transmission risk clearance certificate and be prepared to present it if evidence is requested. Organisations which host students have the right to insist on further testing or swabs prior to allowing a student to start patient contact. Few organisations require swabbing but it does depend on circumstances which are changeable. Clearance from swabs requires up to 5 working days (significantly more time is needed if MRSA positive) which is a lot of patient contact time to lose so it is important to clarify with the host administrator if swabs are required or not at least 2 weeks in advance of moving to a new institution. This will ensure you have time to get the issue resolved prior to arrival.

If a student has a clearance certificate but is moving to an institution which requires swabs, or subsequently develops symptoms which need further investigation, they have a duty to self refer for a nurse appointment at University Health Services

(student health), Grafton. FMHS will meet the costs of this appointment and testing (but not treatment) service.

## F. Student Advice and Support

### F.1. Student Centre

The Student Centre at the Grafton Campus provides a range of support services for all students of the Faculty of Medical and Health Sciences. The Student Centre located on the ground floor of building 503 (entrance from the atrium near the main stairs, and can be accessed through the main entrance.

For medical students the services we provide include:

- general enrolment issues;
- fees and Studylink issues;
- scholarships – application forms;
- graduation matters, academic advisement and the Medical Qualifying Ceremony;
- standard letters - verification of enrolment and academic record/transcript, jury service exemptions, bona fide letters, ISIC card applications
- general advice on postgraduate study;
- general support and advice on health and welfare matters;
- general support and advice on examination matters, including support for special circumstances, aegrotat and compassionate consideration applications.

Other general information can be found on the Student Centre web pages:

[www.fmhs.auckland.ac.nz/en/faculty/about/student-support-services.html](http://www.fmhs.auckland.ac.nz/en/faculty/about/student-support-services.html)

### F.2. Personal Wellbeing

Please check the Phase 1 **Where to get HELP!** section in the MBChB Portal for the most up to date information on where to get assistance with personal wellbeing issues, including health and counselling.

<http://mbchb.auckland.ac.nz>

### F.3. Professionalism, Online Social Media and the Curriculum

Many students have a presence on online social media sites, providing varying levels of detail (personal and professional) and with varying levels of security. Online social media pose significant personal and professional risks for medical students and doctors.

The New Zealand Medical Students' Association has prepared guidelines in association with other Australasian partners, and this guide is available on its website (see below). While discussion on the use of online social media comprises part of the curriculum, you are also strongly encouraged to look critically at the information on your personal site(s) and consider the material from the professional perspective of

being a student doctor engaging with the public and many other stakeholders in health and community settings.

The NZMSA guidelines can be accessed via:

[www.nzmsa.org.nz/wp-content/uploads/2008/08/Social-Media-Guide.pdf](http://www.nzmsa.org.nz/wp-content/uploads/2008/08/Social-Media-Guide.pdf)

#### **F.4. Professional Relationships**

From time to time, situations may arise where staff behaviour may adversely affect you. This could be due to sexist or other discriminatory comments.

The teacher/student relationship is a special one that places important responsibility on the teacher to always behave in a fair and considerate manner to all students. It is appreciated that you may not wish to challenge inappropriate behaviour directly, at the time it occurs, because of perceived effects on your grade and/or employment opportunities.

While the FMHS makes every effort to ensure this will not be the case, it has responded to the student request to have a procedure established which enables you to discuss any concerns about such incidents in confidence. In the first instance, students should contact your Student Support Advisor. It is very helpful to document your concern in writing, including the day and time of the event, a description of what happened and/or notes about the conversation. This helps achieve a more timely resolution to the satisfaction of all parties.

You also have the responsibility to respect the rights and values of your fellow students, and to demonstrate a courteous and considerate manner towards all staff. You also have the responsibility to act in a professional manner yourself from the commencement of your medical studies. This includes fully respecting the rights and values of your fellow students, whether they are similar or different from yours, as well as demonstrating a courteous, professional and considerate manner towards all administrative and teaching staff in your behaviour, verbal and written communication. The levels of maturity and professionalism expected of you extend to ensuring that you do not distract other students' from learning in lectures and workshops, that you participate actively and appropriately in group exercises, and that you respond to communications with timely and professional replies.

#### **F.5. Harassment**

In the large and complex society of the University, you may encounter problems with the behaviour of staff or fellow students. If this behaviour is unwarranted, unacceptable, or offensive, it may be harassment. University policy is that harassment on any grounds, whether it be sexual, racial, religious, academic, intellectual, is totally unacceptable. For informal and confidential assistance in dealing with harassment problems, students may approach any member of Mediation Services.

Website address for Mediation Services is:

[www.auckland.ac.nz/en/for/current-students/cs-student-support-and-services/cs-personal-support/dispute-resolution.html](http://www.auckland.ac.nz/en/for/current-students/cs-student-support-and-services/cs-personal-support/dispute-resolution.html)

Contact the service by phone 923 8905 or by email [mediation@auckland.ac.nz](mailto:mediation@auckland.ac.nz).

## F.6. International Student Advice

The FMHS Student Support Advisor is available for all international students. Local support is focussed on the special needs of international health professional students.

Contact: Student Support Advisor

Location: The Student Centre, Grafton Campus, Room 503-023

Phone: (09) 923 7071 or [fmhssupport@auckland.ac.nz](mailto:fmhssupport@auckland.ac.nz)

## F.7. Scholarships and Financial Support

Staff in the main University Scholarships Office are available to assist with:

- advice and administration of the large range of scholarships, prizes and awards for first year students through to doctoral level students;
- advice and financial assistance to students in financial hardship (where appropriate);
- presentations on funding opportunities.

### Contacts:

Location: Student Information Centre, Clock Tower Building

Hours: 8.30am to 5.00pm Monday to Friday  
9.00 am to 12 pm Saturdays

Phone: 0800 60 62 63

Website: [www.auckland.ac.nz/scholarships](http://www.auckland.ac.nz/scholarships)

Email: [scholarships@auckland.ac.nz](mailto:scholarships@auckland.ac.nz)

Advice and support in financial matters can also be discussed in confidence with the Student Academic Services and Engagement Manager (Kate Snow), in the Faculty Student Centre at Grafton. Emergency funds are available to support medical students (Wallath Trust) and students wishing to make an application should make an appointment with the Student Services Manager.

For students applying for scholarships, the MPD is able to provide letters explaining the grading system used in the programme, on request.

## G. Learning Resources

### G.1. Medical Programme Portal

Links to all relevant aspects on the medical curriculum can be found at the MBChB Portal at: <http://mbchb.auckland.ac.nz>

### G.2. The Philson Library – Te Herenga Hauora

#### G.2.1. Library access for students based in Auckland

Continue to use Philson Library and the Library website as usual. Ask Philson Subject staff (details below) for help to ensure you know about the range of useful databases (eg, PubMed, plus evidence-based databases such as Cochrane, Dynamed, and Best Practice), and to refresh your search skills.

#### G.2.2. All Students

##### Interlibrary Loans

If the library does not hold the journal or book you want, place an Interlibrary Loan request - either from within Library Search, or by using the link on the library home page.

##### Help with finding information

If you are having problems finding information, contact Philson Subject staff (details below).

##### Referencing styles

The Faculty recommends students use either the Vancouver or APA 6th style of referencing. Information about these styles can be found in the Referencing section at [www.library.auckland.ac.nz/guides/medical-health](http://www.library.auckland.ac.nz/guides/medical-health)

Philson Subject staff can assist with specific referencing queries.

##### Philson Library contacts

Role/ Person	DDL	Email
<b>Library Manager</b> Megan Clark	923 6130	<a href="mailto:mp.clark@auckland.ac.nz">mp.clark@auckland.ac.nz</a>
<b>Document Delivery</b> Patrick Graham	923 6125	<a href="mailto:philson.iclds@auckland.ac.nz">philson.iclds@auckland.ac.nz</a>
<b>Subject Staff</b> Sue Foggin	923 6123	<a href="mailto:sm.foggin@auckland.ac.nz">sm.foggin@auckland.ac.nz</a>
<b>General Enquiries and Lending</b>	923 6122	<a href="mailto:askalibrarian@auckland.ac.nz">askalibrarian@auckland.ac.nz</a>
<b>Grafton Information Commons Help Desk</b>	923 2300	<a href="mailto:ichelpdesk@auckland.ac.nz">ichelpdesk@auckland.ac.nz</a>



## Library

Physical address:	Philson Library, Level 1, Building 503, 85 Park Rd, Grafton, Auckland.
Postal address:	Private Bag 92019, Auckland.
Telephone:	(09) 373 7599 extn 85532
Fax:	(09) 373 7491
Email:	<a href="mailto:philson@auckland.ac.nz">philson@auckland.ac.nz</a>
Web:	<a href="http://www.library.auckland.ac.nz/">www.library.auckland.ac.nz/</a>

### G.3. Library Skills Programme – Philson Library

Students should be skilled in acquiring, organising and presenting information using the Philson Library's electronic and print resources. For assistance with any of the skills listed below, or with using any of the resources, please see one of Philson's Subject Services team, or contact us by phone/email.

#### G.3.1. Expected Library skills

By the time you complete Phase 1, students should be:

- able to formulate a question /information needed
- able to decide what sort of information is needed to answer that question (background information? statistics? recent research? evidence-based information?)
- aware of the tools on the Library website to find resources to answer different information needs (e.g. LibrarySearch; basic databases such as Medline, PsycInfo; a range of evidence-based databases; drug databases; etc)
- able to make efficient use of those tools (search techniques used on LibrarySearch differ from those needed to search Medline, which differ from those needed to search other databases)
- able to locate and access the resources found (is it a book or a journal article? is it available electronically or in print? can I get it at Philson, or is it in another library? If it is in another library, how do I get hold of it?)
- aware of help offered by Philson Library Subject Services staff (advice on appropriate tools and resources; tuition in how to use them; how to set out a reference list; etc)

To start developing your library skills, see Philson's online tutorial – "Information Skills Online". Follow this up by attending library courses (See "Book a Library Course" on the library website). Philson has a huge range of printed and electronic books, reports, theses and journals which can be accessed online, borrowed or photocopied, so if you need additional help to find something appropriate ask Philson Subject Services staff. They offer all sorts of help from comprehensive hands-on tutorials on a range of resources, through to brief on-the-spot assistance.

# H. Administrative Details

## H.1. Medical Indemnity

Once you accept some independent responsibility for patient care, even under careful supervision, you also accept a liability for negligent or accidental practice. This is usually shared by the Supervising Preceptor in General Practice, or by the DHB and the School of Medicine.

There could be circumstances where you would be held personally liable for a negligent act. As a protection against such liability, **you must** take out individually suitable professional negligence cover before commencing your first clinical assignment. The cover should relate to clinical activities carried out by you both within and outside of the hospitals.

There are a number of providers of Professional Indemnity Insurance who provide (no fee) student memberships. These include the Medical Protection Society (MPS) and Medicus. Most of you will have joined in the earlier years of the programme. If you are not currently a member please contact the Student Centre for an application form, as evidence of membership is required for the commencement of Phase 3.

## H.2. Year 2 Notices and Communication

### H.2.1. Year 2 notices

Class notices, messages and announcements will be posted on the MBCHB 221 Canvas site. Results for tests, coursework etc will be posted on the results website:

<http://medprog.fmhs.auckland.ac.nz/mbchbphase1/>

Where it is necessary to post information, your mailing address on Student Services Online will be used. Any queries regarding passwords should be referred to the Student Services Online Help Desk.

### H.2.2. Email communication

To avoid a breakdown in communication it is vital to keep your address, and phone numbers up to date. Please update any changes as soon as they occur, via Student Services Online.

Please ensure that you are aware of the University Policy on student email as found [here](#). The policy specifically states:

- 1) Email is an official and the primary means of communication with students
- 2) All official email to a student will be sent to a student's current University email address (username@aucklanduni.ac.nz) and the student is responsible for ensuring that any desired forwarding to other addresses is in place and operating correctly
- 3) Official emails will be deemed to have been received by a student at the time they are delivered to the student's current University email address.

- 4) Failure to read an official email does not exempt a student from their responsibility to comply with the message

### **H.3. University Travel Policy for students**

The University of Auckland has a “Travel Policy for Students Undertaking University Activities Abroad” for all students travelling overseas for university related activities. The policy applies to all overseas travel whether funded by grants, research contracts, the University, or funded by students themselves and is for activities such as electives, internships, visiting scholars or travel to conferences or events related to their study.

All students must familiarise themselves with this policy available [here](#). The aim of the policy is to help ensure the safety of students completing studies or study related business (e.g. conferences) overseas. You need to be aware of your obligations under Section 6.2 that detail your travel planning and responsibilities which include adequate travel insurance.

The University strongly recommends the University of Auckland Corporate Travel insurance (details on MBChB [Portal](#)) which is now available to students and economically covers situations such as incidents on medical selective/elective. An advantage of this insurance is that the university will be able to liaise with the insurer on your behalf if the need arises.

As part of this process you are also required by the University to register your travel plans with the Ministry of Foreign Affairs and Trade (MFAT) available [here](#). This is not an arduous process and details can be updated as your plans change.

The policy requires you to book your overseas travel through the University’s preferred travel provider APX ([www.apx.co.nz](http://www.apx.co.nz)) who undertake to keep your travel and contact details. Alternative travel suppliers can be used by you to arrange your travel, however in this case you must register your travel plans on the Survey Gizmo from this [link](#) which is for ad hoc travel (e.g. conferences).

Registration is compulsory under the policy, which includes penalties for travel outside of this process except through the preferred supplier.

If you have any questions about the policy please email [mpd@auckland.ac.nz](mailto:mpd@auckland.ac.nz) for clarification.

### **H.4. University Policy on Audiotape Recordings of Lectures**

A lecture is regarded as the intellectual property of the lecturer. Lectures may only be taped with the express permission of the individual lecturer concerned. Also, recorded lectures made available to you through Canvas are not public property and may only be used by you for personal study purposes.

## H.5. Medical Programme Research

In order to study aspects of the effectiveness of the medical programme, a small group of senior researchers in the FMHS has access to anonymised student data from assessments and course evaluations. This enables staff to answer specific research questions such as: "Is there any difference across clinical sites in how well students perform in end-of-year examinations?" The results are used to improve the quality of the medical programme, as well as to better understand medical student learning.

The ethics approval for this project is UAHPEC 2011/7437. If you have any concerns, please contact the Principal Investigator, Prof Phillipa Poole [p.poole@auckland.ac.nz](mailto:p.poole@auckland.ac.nz).

## H.6. Research or Teaching Involving Human Subjects

The University of Auckland recognises the need for studies in which human subjects may serve as research or teaching subjects. The University is also aware of its responsibility for ensuring that the privacy, safety, health, social sensitivities and welfare of such subjects are adequately protected. Thus the University has established a committee to review and approve the adequacy of protection for human subjects.

**It is the policy of the University that all staff or student projects and teaching sessions that involve human subjects (with certain exceptions) must receive the approval of the Human Participants Ethics Committee of the University of Auckland (UAHPEC) prior to commencement.**

Detailed provisions relating to research and teaching ethics may be found in UAHPEC Guidelines (2003) which may be obtained electronically from:

[www.auckland.ac.nz/en/about/research/re-ethics.html](http://www.auckland.ac.nz/en/about/research/re-ethics.html)

Attention is also drawn to the Research Policy Manual (2003) section F.4 *Guidelines for the Conduct of Research*.

## H.7. Copyright

Students should be aware that the course materials, and content and delivery of lectures in each course, are protected by copyright. Course materials have been copied either under the Education provisions of the Copyright Act 1994 or one of the Copyright licences the University has entered into. Recording of lectures is at the discretion of the lecturer. Lecturers own copyright in the lectures, materials they have created which supplement the course, and their power point presentations.

Unless specifically allowed by the copyright owner, you must not copy, alter, distribute (for example on a social media site such as Facebook) or sell to any other person any part of these course materials or lectures. Failure to comply with the terms of this warning may expose you to legal action for copyright infringement by the copyright owner, and disciplinary action by the University.

For further information see the Academic Integrity Course

[www.auckland.ac.nz/en/about/learning-and-teaching/policies-guidelines-and-procedures.html](http://www.auckland.ac.nz/en/about/learning-and-teaching/policies-guidelines-and-procedures.html)

Module 4: Using Copyrighted Material Correctly, and "Copyright for students" downloadable from that site.

## **H.8. Withdrawal from MBChB 2**

The last day for withdrawal from MBChB 2 without penalty is 17 March 2017.

# I. Evaluation and Year 2

## I.1. Student evaluations for Year 2

Students have an important role in contributing to the improvement of the programme. Hence student feedback is regularly sought for various areas of the programme. An important forum for raising issues as they arise is through the Staff-Student Committee meetings, which are held four times a year. Please keep your class representative informed of aspects you wish to be raised.

Towards the end of the year you will be asked to complete a survey evaluating the MBCHB221 course as a whole. This is important feedback that assists the Module Coordinators and the Phase 1 Curriculum Group to improve the course for future years. The Faculty encourages student feedback.

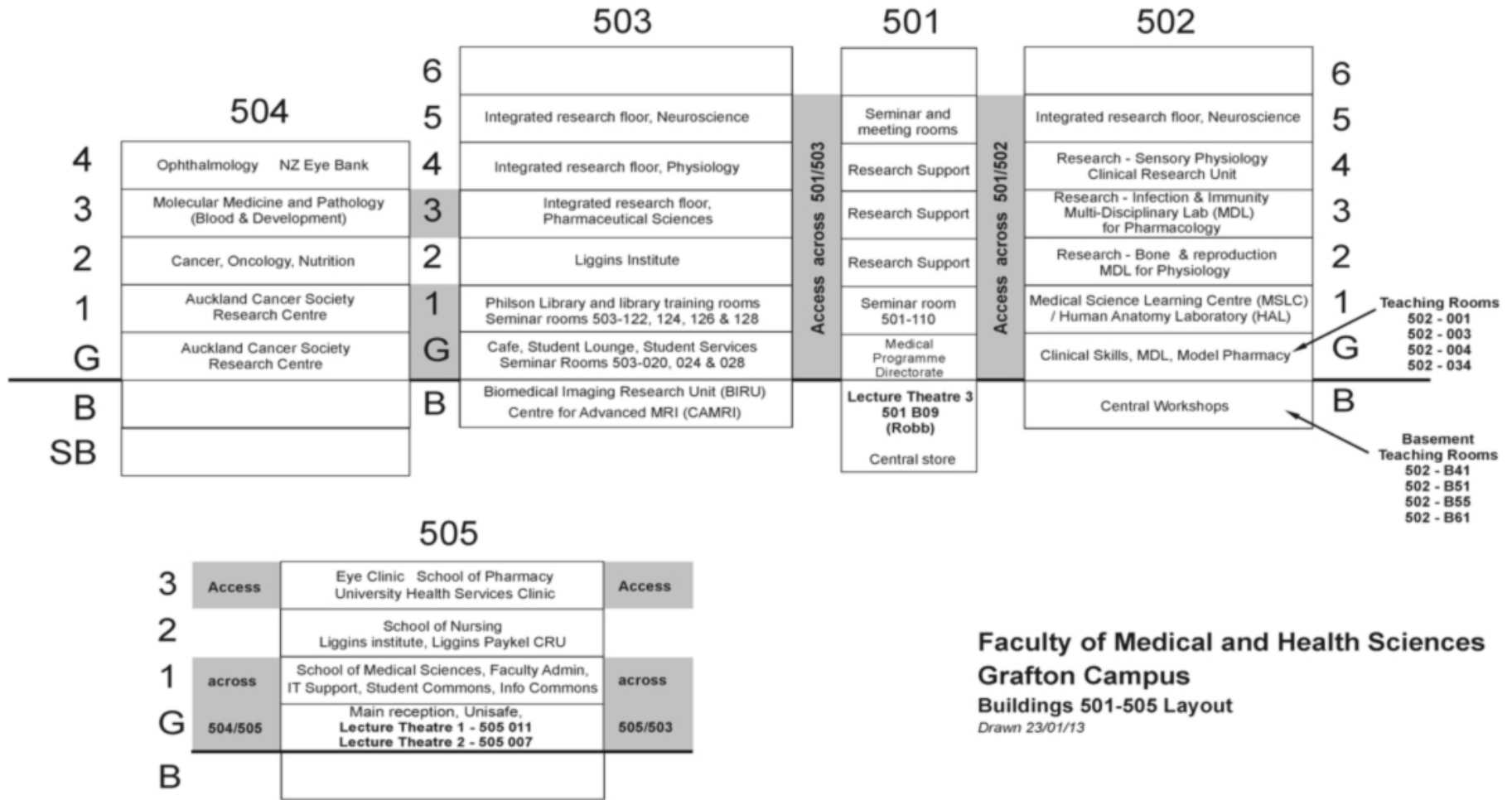
## I.2. Changes made from previous feedback

Over the past few years since the re-invigorated curriculum for MBChB Year 2 commenced, Year 2 students have provided substantial feedback and valuable suggestions. Here are some of the changes that have been made as a result of that student feedback:

- Recording lectures where possible
- Reducing the number of formal teaching sessions immediately before end-of-module tests
- Providing access to provisional results throughout the year with an estimate of final grade
- Delaying assignment deadlines until after end-of-module tests where possible
- Providing practice short-answer questions for all modules with anonymous access to answers from other students
- Providing feedback on end-of-module test performance
- Linking Progress Test feedback to relevant Clinical Scenarios
- Providing more guidance on the use of Clinical Scenarios
- Increased time in clinical skills learning
- Including an overview of the medical programme and career options
- Spacing assessments throughout the year as much as possible and providing an assessment timetable and information about assessments as early as possible
- Providing test dates and assignment deadlines online at the beginning of the year (<http://medprog.fmhs.auckland.ac.nz/mbchbphase1>)
- Providing summary whole-class feedback about each end-of-module test
- Setting up a mechanism to highlight Phase 1-relevant learning points in the Clinical Scenario database
- Providing workshops with guidelines on how best to approach progress tests

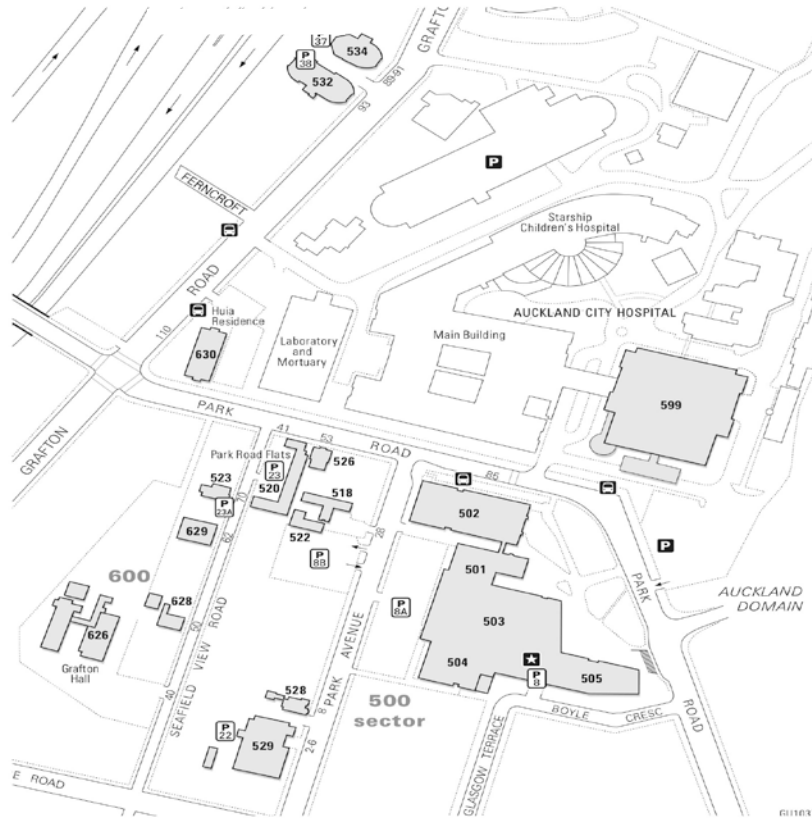
- Providing practice progress test-type questions through the MBChB Portal and associated with clinical scenarios

Grafton campus location map as at February 2017





## Grafton campus location map as at February 2017




**THE UNIVERSITY OF AUCKLAND**  
**GRAFTON**  
 Te Whare Wananga o Tamaki Makaurau

### Directory

Administration 505  
 AMRF Medical Sciences Learning Centre 534  
 Anaesthesiology 599  
 Anatomy with Radiology 505  
 Auckland Cancer Society Research Centre 504  
 Auckland Clinical School 599  
 Biomedical Engineering Services 502  
 Biomedical Imaging Research Unit 503  
 Brain Research, Centre for 501-503  
 Café 503  
 Cancer Trials New Zealand 505  
 Childcare Centre 518, 522  
 Counselling Service 505  
 Eye Clinic 505  
 Faculty Reception 505  
 Faculty Services 505  
 Grafton Hall of Residence 626, 628-629  
 Gravida: National Centre for Growth & Development 505  
 Huia Residence 630  
 Infant & Toddler Centre 522  
 Information Commons 505  
 Information Technology Services, ITS 505  
 IT Support 505  
 Learning Technology Unit 534  
 LENS 505  
 Liggins Institute 503, 505  
 MAPAS Student Centre 532  
 Medical & Health Sciences Education, Centre for 534  
 Medical Programme Directorate (MPD) 501  
 Medical Sciences 505  
 Medicine 599  
 Molecular Medicine & Pathology 503-505  
 Neuroscience Laboratories 502-503  
 Nursing 505  
 Nutrition 504

NZ National Eye Bank 504  
 Obstetrics & Gynaecology 599  
 Oncology 505  
 Ophthalmology 504  
 Ophthalmology Clinic 505  
 Optometry & Vision Science 505  
 Paediatrics: Child & Youth Health 599  
 Park Road Student Flats 520, 523  
 Pharmacology & Clinical Pharmacology 505  
 Pharmacy 505  
 Physiology 505  
 Psychological Medicine 599  
 Student Centre 503  
 Student Commons (Study Area) 505  
 Student Lounge 503  
 Student Organisations 501  
 Surgery 599  
 The Royal Apartments 526  
 Unisafe / Security 505  
 University Health Services 505  
 Well Child Clinic - Psychological Medicine 534