Yong Loo Lin School of Medicine

- 1 Faculty's Commitment
- 2 Kev Contact Information
- 3 Undergraduate Education
 - 3.1 <u>Degrees Offered</u>
 - 3.2 <u>Degree Requirements</u>
 - 3.2.1 Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.)
 - 3.2.2 <u>Bachelor of Science (Nursing) / Bachelor of Science (Nursing) (Hons.)</u>
 - 3.3 Special Programmes
 - 3.4 Financial Assistance and Awards
- 4 Graduate Education
 - 4.1 Research Programmes
 - 4.1.1 Degrees Offered
 - 4.1.2 <u>Degree Requirements</u>
 - 4.1.3 Financial Assistance and Awards
 - 4.2 <u>Cancer Science Institute of Singapore (CSI) Ph.D Programme</u>
 - 4.2.1 <u>Degrees Offered</u>
 - 4.2.2 Admission Requirements
 - 4.2.3 Financial Assistance and Awards
 - 4.3 Graduate Coursework Programme in Clinical Research
 - 4.4 Research Programme in Nursing
 - 4.4.1 Degrees Offered
 - 4.4.2 <u>Degree Requirements</u>
 - 4.4.3 Financial Assistance and Awards
 - 4.5 <u>Coursework and Clinical Training Programmes: Division of Graduate Medical Studies (DGMS)</u>
 - 4.6 Graduate Coursework Programme in Nursing

Faculty's Commitment

The Yong Loo Lin School of Medicine was first established as the Straits and Federated Malay States Government Medical School in 1905. In 1912, it was renamed King Edward VII Medical School, in recognition of a gift of \$120,000 from the King Edward VII Memorial Fund. Substantial academic expansion took place and the name was further changed to King Edward VII College of Medicine in 1921 to reflect its status as an academic institution of university status. In 1949, the college amalgamated with Raffles College to form the University of Malaya. This later became the University of Singapore and in 1981 became the National University of Singapore.

In 2005, when NUS celebrated its centennial anniversary, the Yong Loo Lin Trust made a transformational gift of \$100 million dollars to the Medical School, which was similarly matched by the Government. The gift will provide funding to recruit and retain top faculty as well as to develop new infrastructure and state-of-the-art facilities to position the Yong Loo Lin School of Medicine as the key driver in Singapore's Biomedical Science initiative.

To reinforce its position as a Health Science academic campus, Singapore's first Bachelor of Science (Nursing) Programme was launched by the School in August 2006 through the establishment of the Alice Lee Centre for Nursing Studies. The founding of the Alice Lee Centre for Nursing Studies was made possible through a \$10 million donation from the Lee Foundation. The School established two additional centres to complement its active research programmes, the Centre for Health Services Research in collaboration with RAND-Health; and the Centre for Biomedical Ethics through a donation of \$2.5 million dollars from the Chen Su Lan Trust. These two centres further cement the School's status as a Research Centre of Excellence.

These initiatives will help ensure that the School's mission will continue to succeed for generations to come: to provide excellence in medical education for successive generations of healthcare practitioners, generate world-class research aimed at changing the way medicine is practiced, and to provide healthcare of the highest quality to serve the people of Singapore and the region.

(For up-to-date information, please visit the Faculty's website at http://medicine.nus.edu.sg.)

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Mr TEO Kheng Lin Stewart	Vice-Dean (Finance)	3811	medtkls

Departments/Divisions

The following departments are involved in teaching the undergraduate courses. In addition, clinical staff practise and teach in NUH and other restructured hospitals and national centres in Singapore. Medical undergraduates are also rotated to all the hospitals and selected clinics as part of their clinical teaching.

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Prof Emily ANG Neo Kim	Head, Alice Lee Centre for Nursing Studies	6516 5088	nurhead
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Prof Wong Hee Kit	Head, Department of Orthopaedic Surgery	6772 4342	doshead
Assoc Prof LOH Kwok Seng Thomas	Head, Department of Otolaryngology	6772 5372	enthead
Assoc Prof GOH Yam Thiam Daniel	Head, Department of Paediatrics	6772 4414	paehead
Prof Teh Ming	Head, Department of Pathology	6601 1249	pathead
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Centre for Medical Education (CenMED)

The Centre for Medical Education (CenMED) is a core unit in the National University Health System, with the mission to promote Professionalism and Excellence in Medical Education.

The CenMED aims to provide two core functions namely:

Academic Function

- Initiate, organise, design and conduct faculty development programmes in medical pedagogy.
- Undertake and enhance scholarship and research in medical education.
- Establish the Yong Loo Lin School of Medicine and National University Health System as a centre of excellence for medical education in the region and beyond with enhanced capability in providing quality training courses in various aspects of medical education.

Service Function

- Provide educational leadership and expertise in the development of educational policies and procedures based on best evidence in medical education.
- Provide expertise in and support for student assessment and curriculum evaluation.
- Contribute to the development of instructional materials to support teaching and learning.

Director: Dr Dujeepa D Samarasekera Senior Associate Director: Ms Lee Su Mei

Tel: 6516 3732 Fax: 6872 1454 Email: medlsm@nus.edu.sg

Centre for Healthcare Simulation (CHS)

The mission of the Centre is to develop a world-class immersive, simulation-based learning environment where medical education is enhanced through simulation technology, innovation and research. Since the establishment of CHS, simulation teaching is embedded into all 5 years of medical school.

CHS comprises a simulated Operating Theatre (OT), an Intensive Care Unit (ICU), an Emergency Room (ER), a Paediatrics Acute Ward, a Labour Ward, eight clinical wards, two procedural rooms and 60 consultation rooms. With a suite of high fidelity simulators, part task trainers and a pool of trained Standardised Patients, faculty members are able to plan and design innovative programs where medical and nursing students are given opportunities to learn various clinical skills, team training and communication skills in a safe environment.

Director: Assoc Prof Suresh Pillai Assistant Manager: Ms Ang Shu Shing

Tel: 6601 1520

E-mail: medangss@nus.edu.sg

Division of Graduate Medical Studies

Graduate training and education is a continuation of medical education from the undergraduate years. The Division of Graduate Medical Studies (DGMS) has been responsible for postgraduate medical training and education in Singapore since 1969. It offers Singapore's Master of Medicine degree examinations leading to specialist qualifications. There are 12 specialties or disciplines of Master of Medicine (M.Med) examinations of which 5 are offered jointly with Royal Colleges in the United Kingdom. Besides M.Med examinations and its examination preparatory courses, it currently also offers 6 Graduate Diploma programmes and is responsible for 2 Allied Health professional degrees, namely Master of Science (Speech and Language Pathology) and Master of Science (Audiology).

Head: Assoc Prof Chen Fun Gee Assistant Director: Ms Goh Mei Ling

Tel: 6516 1939

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Phase Directors

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Ms Canny Chow	Assistant Manager (Curriculum and Assessment, Phase IV)	3714	6778 5743	medchlh
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	(Curriculum and Assessment, Phase V)			
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	(Undergraduate Student Feedback System)			
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C. Graduate Studies

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Mr Michael LIM Seow Ping	Senior Executive (Master of Clinical Investigation Programme)	6772 7545	6778 5743	medlspm
Ms Goh Mei Ling	Assistant Director (Division of Graduate Medical Studies)	6516 1939		gsmgohml

Title & Name	Designation/Res ponsibility	Telephone	Fax	Email (XXXX@nus.edu .sg)
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Mr CHOO Boon Beng Edmund	Assistant Manager (Master of Science [Audiology])	6601 3613		entcbbe
A/Prof CHOW Yeow Leng	Programme Coordinator (Master of Nursing Programme)	6516 7449	6776 7135	nurcyl
Ms MARIATI Bte Mohd Noor	Senior Assistant Manager Graduate Research Programmes in Nursing	6516 3115	6776 7135	nurmmn

D. General Enquiries

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Title & Name	Designation/Res ponsibility	Telephone	Fax	Email (XXXX@nus.edu .sg)
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Home > NUS Bulletin AY2015/16 > Yong Loo Lin School of Medicine > Undergraduate Education

- 3 <u>Undergraduate Education</u>
 - 3.1 <u>Degrees Offered</u>
 - 3.2 <u>Degree Requirements</u>
 - 3.2.1 Bachelor of Medicine and Bachelor of Surgery (M.B.,B.S.)
 - 3.2.2 Bachelor of Science (Nursing) / Bachelor of Science (Nursing)
 (Honours)
 - 3.3 Special Programmes
 - 3.4 Financial Assistance and Awards

3 Undergraduate Education

3.1 Degrees Offered

The Yong Loo Lin School of Medicine offers two full-time undergraduate programmes, leading to:

- Bachelor of Medicine and Bachelor of Surgery (M.B.,B.S.)
- Bachelor of Science (Nursing) / Bachelor of Science (Nursing)(Honours)

Overview of Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.)

The undergraduate medical programme is a five-year course leading to the degrees of Bachelor of Medicine and Bachelor of Surgery (M.B.,B.S.). The curriculum map is as follows:

Phase I (Year 1)	Normal Structure and Function	Longitudinal Tracks:
Phase II (Year 2)	Abnormal Structure and Function	 Health Ethics, Law & Professionalism Medicine & Society Information Literacy Patient-based
Phase III (Year 3)	Core Clinical Practice	Programme • Clinical Skills Foundation Programme
Phase IV (Year 4)	Acute and Specialty Clinical Practice	
Phase V (Year 5)	Student Internship Programme	

Note: The curriculum map set out in the above table is only applicable to students admitted in AY2008/09 and subsequent academic years, or students graduating 2013 and onwards. This revised curriculum map is not applicable to students admitted before AY2008/09 or students graduated in 2012 and before. Students should note that there is a distinction in the degree requirements for students graduated in 2012 and before and the degree requirements for students graduating in 2013 and onwards. Where applicable, the distinctions in the requirements are set out in this Bulletin and

students should take note of the requirements that are applicable to them. The Yong Loo Lin School of Medicine will endeavour to give students notice of any requirements which have yet to be finalised as soon as reasonably practicable after these have been finalised, and such requirements shall apply to students as if they had been incorporated in this Bulletin.

Some of the key highlights of the undergraduate medical curriculum are:

- Early meaningful clinical exposure;
- Developing caring and ethical medical professionals;
- Devoting significant curriculum time to case-based learning and small group teaching;
- Interprofessional education;
- Aligning teaching and assessment to outcomes.

Overview of Bachelor of Science (Nursing)

The B.Sc. (Nursing) curriculum reflects current healthcare trends and the role of registered nurses in facing the challenges of nursing practice in the 21st century. Students will learn basic skills in a simulated clinical laboratory on campus and be exposed to practise in a range of clinical settings as they progress. The programme is modular in nature and includes the following subjects:

- Nursing Sciences
- Anatomy and Physiology
- Pathophysiology
- Pharmacology
- Immunology
- Microbiology
- Psychology
- Sociology
- Critical Thinking and Analysis
- Healthcare Law and Ethics
- Healthcare Management and Education
- Research and Statistics
- Evidence-based Practice
- Clinical Skills
- Clinical attachments at local hospitals/institutions, etc.

Fourth-year Honours students will be expected to complete a research project and modules such as Applied Research Methods and Evidence-based Health Care Practice.

3.2 Degree Requirements

3.2.1 Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.)

Admission to the undergraduate medical programme

Apart from the minimum requirements specified by the NUS Office of Admissions, to be eligible for Medicine, candidates presenting the Singapore-Cambridge GCE 'A' Levels / International Baccalaureate / NUS High School Diploma / Local Polytechnic Diploma must meet the applicable prerequisites set out below:

GCE 'A' Levels

A good H2 pass in Chemistry and H2 pass in either Biology or Physics

International Baccalaureate

A good Pass in HL Chemistry and either HL Biology or HL Physics

NUS High School Diploma

Major CAP of at least 2.0 in Chemistry and either Biology or Physics and CAP of at least 1.0 in one other major and in English Programme and Research Project

Local Polytechnic Diploma

Good GPA from accredited polytechnic diplomas

Applicants will be shortlisted for the Focus Skills Assessment (FSA) and Situational Judgement Test (SJT) based on University Admission Score. All shortlisted candidates are required to submit a portfolio, attend the FSA and SJT. Candidates who do not meet shortlisting criteria but have exceptional talents or achievements may apply to be shortlisted by means of discretionary admissions process, known as the Exceptional Individual Scheme (EIS). Admission to NUS Medicine will be based on your performance in the FSA and SJT.

Health Requirements - Virus Screening and Immunisation

Besides the conditions indicated in the offer letter, admission to Medicine & Nursing is also subject to the following health requirements.

Health Requirement	Details
Mumps, Measles and Rubella(MMR)	All prospective medical/nursing students should be immune (from documented infection) or fully vaccinated. Candidates should produce official records of previous vaccinations or serological screening results or physician documented diagnoses of previous infection as proof of immunity. Self-declaration is not sufficient. Students may begin classes without documentary evidence of immunization for MMR if he/she has a letter from a physician stating that there is a reason why he/she cannot receive the vaccine.
Varicella (Chickenpox)	All prospective medical/nursing students must undergo screening for immunity to the Varicella Zoster Virus (VZV). Candidates with negative or equivocal titres as defined by the reference range of an accredited testing laboratory will require immunisation. Certification of past infection/previous immunisation of chickenpox is not acceptable as there are issues with clinical diagnosis and the risk of transmission from students to vulnerable patients is significant. Students may begin classes without documentary evidence of immunization for Chickenpox if: i. He/she has a letter from a physician stating that there is a reason why he/she cannot receive the vaccine; ii. He/she concerned has documented evidence of two administrations of the varicella vaccine (non-responders).
Pertussis	All prospective medical/nursing students should produce documented proof of vaccination with Tdap. Those who have not previously received tetanus toxoid, reduced diphtheria toxoid and

Health Requirement	Details
	acellular pertussis (Tdap) should be vaccinated with a single dose of Tdap, regardless of the interval since the last dose of tetanus or diphtheria-containing vaccine. Proof of vaccination with Td alone is insufficient. Selfdeclaration is not accepted as proof of immunity.
Blood Bourne Diseases (BBD)	Hepatitis B
	All prospective medical/nursing students should be screened for hepatitis B carriage and show documented serological evidence of immunity against hepatitis B (i.e. anti-HBs ≥10 mlU/mL). Hepatitis B negative students who do not have documented serological evidence of immunity against hepatitis B (i.e. anti-HBs ≥10 mlU/mL) should be vaccinated with the primary course series (i.e. 3 doses of hepatitis B vaccine). A post-vaccination serology test should be conducted to determine the concentration of protective antibodies i.e. anti-HBs of at least 10mlU/mL
	Hepatitis C
	All prospective medical/nursing students should be screened for hepatitis C.
	HIV
	All prospective medical/nursing students should be screened for HIV.
	Screening should be carried out before final admission into the course, as results may affect students' career choices. Students tested positive for Hep B, Hep C and/or HIV will be counselled to understand that their areas of practice may be restricted in future to non exposure-prone procedure areas.

All candidates may have their screenings and immunisations done at the University Health Centre (UHC) Level 1, 20 Lower Kent Ridge Road, Singapore 119080. The costs for screening and immunisation, as well as the deadlines by which the screening and immunisation must be completed, are set out in the table below.

Virus	Screening		Immunisation	1	Post Vaccination Screening
	Cost	Deadline	Cost	Deadline	Deadline
Varicella Zoster (Chickenpo	\$47.00	1 July 2015	• \$75.0 0 per inject	To complete by 30 September	Not Applicable

Virus	Screening		Immunisation	1	Post Vaccination Screening
	Cost	Deadline	Cost	Deadline	Deadline
x)			ion • 2 inje ction s over 6 to 10 week s	2015	
Mumps Measles Rubella (MMR)	\$75.00 \$90.00 \$28.00		 \$35.0 0 per inject ion 2 inje ction s over 4 to 6 we eks o r boo ster single ction only 		
Pertussis	Not Applicable		• \$40.0 0 per inject ion • 1 inje ction only	10 July 2015	Not Applicable
Hepatitis B	\$26.00		 \$30.0 0 per inject ion 3 inje ction s over 6 mont hs or boost er singl e inje 	To complete by 31 January 2016	• 1 mont h after immu nizati on • Post- vacci natio n anti body blood test at

Virus	Screening		Immunisation		Post Vaccination Screening
	Cost	Deadline	Cost	Deadline	Deadline
			ction only		\$16.0 0
Hepatitis C	\$40.00		Not Applicable		
Hepatitis C	\$25.00		Not Applicable		

^{*}Fees are subject to change. Please refer to http://www.nus.edu.sg/uhc/ for updates.

The above Health Requirements and costs are subject to change. All updates will be available on our Corporate Website at http://www.med.nus.edu.sg/corporate/. If you need clarification on any of these issues, please contact our staff at UHC at Tel: 6776 1631.

Bonds for Medical Students

Candidates admitted to the Medical course at the NUS and who are not in receipt of Public Service Commission (PSC)/Ministry of Defence (MINDEF) scholarships/ bursaries, are required to serve the Government of Singapore upon successful completion of the course for a number of years as stated in the following table:

	Singaporeans	Singapore PR and International students
No. of Years of Bond	5 (excluding housemanship / first year residency training)	6 (excluding housemanship / first year residency training)

Those awarded PSC/MINDEF scholarships/bursaries will be bonded according

to the terms of their respective awards.

Students are required to sign agreements with the Government to serve the bond periods as specified. Your acceptance of the offer of admission to the Medical course is conditional upon you signing the agreements with the relevant authority in the year of entry to the University.

Students who fail to fulfil the bond obligations will be required to pay liquidated damages (LD), amounting to the actual amount of tuition grants given, pro-rated by the number of completed months of service. Failure to obtain the M.B.,B.S. or to complete the M.B.,B.S. course within the time stipulated by NUS will also be considered a breach of the provisions of the Agreement.

<u>Please note that candidates are required to sign the agreement only in the year that they are matriculating in NUS.</u>

For signing of the bond, two persons are required to stand as your sureties. Your sureties should:

- 1. Be above 21 years of age and preferably under 65 years of age;
- 2. Not be in bankruptcy;
- 3. Either be:
 - a. Able to provide proof of financial means to pay the scholarship liabilities should it become due, viz. banker's guarantee or proof of ownership of assets*;
 or is
 - b. Gainfully employed and drawing an income of at least \$\$1,000 per month;
 - c. Not party to an existing bond, scholarship or bursary; and
 - d. Not bonded for an existing scholarship, bursary or study loan agreement.

*Note:

The asset(s) must be owned by the surety (not mortgaged) and the purchase value of the asset(s) must not be less than the quantum of liquidated damages.

For Singaporeans/Singapore Permanent Resident students, the first surety should be a Singapore Citizen. The second surety can be a Singapore Citizen or Singapore Permanent Resident. For international students, sureties can be non-citizens if they are parents of the non-citizen students. Otherwise, each surety must either be a Singapore Citizen or Singapore Permanent Resident.

If you need further information, please visit the Ministry of Health website at http://www.moh.gov.sg/content

/moh_web/healthprofessionalsportal/allhealthcareprofessionals/career_practic e/medical_dental_undergraduate

<u>agreement.html</u> or contact Mrs Chew Meow Kheng of the Ministry of Health at Tel: 6325 9104.

Educational Aims

The aim of the medical curriculum is to produce graduates who are excellent Residents or House Officers and servant leaders, with the foundation to undergo further training to become excellent clinicians and specialists, clinician researchers, clinician scholars, or health administrators.

The curriculum aims to support Singapore's goal of becoming a regional centre of excellence in healthcare, by meeting the needs of the aging population, and by fostering translational research as an engine of growth for the economy.

Education Outcomes

Our graduates will:

- be equipped with sound medical knowledge;
- be able to provide quality patient care;
- demonstrate excellent interpersonal and communication skills;
- · uphold high standards of professionalism;
- engage in continual practice-based learning & improvement; and
- engage in systems-based practice.

Medical Knowledge

- Demonstrate a thorough knowledge of the basic medical sciences and their relationship to the practice of medicine.
- Understand and apply the scientific basis of medicine as well as principles of the social-behavioural sciences to the diagnosis, management and prevention of disease, and to the maintenance of health.

Patient Care

- Have achieved a sufficient level of medical knowledge and clinical skill
 to be a highly competent medical practitioner who will be an effective
 house officer on graduation and have the capacity for further training to
 be a proficient general practitioner or specialist.
- Demonstrate the ability for effective and efficient data collection, synthesis and critical analysis in the prevention, diagnosis and management of disease.
- Provide patient care that is compassionate, appropriate, and effective

for the treatment of health problems and the promotion of health.

Interpersonal and Communication Skills

- Be effective in communicating with patients and their relatives, with colleagues and for scholarly communication.
- Have leadership skills and team skills to be an effective member of the healthcare delivery team.

Professionalism

Medical professionalism includes all aspects of the practice of medicine: clinical competence; effective communication; a capacity to address ethical and legal issues arising from the practice of medicine; as well as exhibiting professional attributes:

- honesty and integrity
- responsibility and participation
- respect and sensitivity
- compassion and empathy

Practice-based Learning and Improvement

- Demonstrate intellectual curiosity and the habit and skills for life-long learning and professional development.
- Have the skills necessary to engage in the investigation and evaluation of patient care based on scientific evidence, and proactively contribute to improve patient care.

Systems-based Practice

 Have sufficient knowledge of the system of healthcare, and be able to garner resources for optimal treatment and quality delivery of healthcare to patients.

Longitudinal Tracks

There are several broad-based curricular components that are integrated with biomedical sciences and clinical teaching, running through various Phases of the undergraduate medical course:

• Health Ethics, Law and Professionalism

The Health Ethics, Law and Professionalism (HELP) longitudinal track aims to develop ethical sensitivity, theoretical understanding, reflective and critical skills, and professional attitudes in medical undergraduates through all five years of the curriculum. It is student- and patient-centred; case-related, multidisciplinary and inter-professional; fully integrated into all phases of the curriculum; and regularly assessed, both formatively and summatively.

• Information Literacy

This longitudinal track aims to enable all students to gather and critically evaluate research information, effectively incorporate the selected information into their knowledge base and apply the knowledge in patient care, and also to lay the foundation for future training in carrying out high quality research.

• Medicine and Society

This longitudinal track aims to expose students to the concepts of preventive healthcare at the population and individual level, with emphasis on the epidemiology of common communicable and non-communicable diseases, as well as on vulnerable groups. It also aims for students to gain an understanding of the influence and relevance of behavioural, social, cultural, environmental and economic factors that will assist in their promotion of health and management of illness as future doctors.

• Patient-based Programme and Clinical Skills Foundation Programme

These two Programmes aim to give medical students an introduction to the Singapore healthcare system, the practice of medicine and the importance of the preclinical sciences. Students will be trained to become practitioners with skills in listening and questioning, and who understand and reflect on patient-centred care. Examples of skills that the students are expected to achieve are the ability to conduct and manage an open interview; introduction to the physical examination; the ability to evaluate and reflect on their interviewing skills; and to understand another person from that person's point of view. These longitudinal tracks begin in Phase I (Year One) and will run through to the end of Phase II (Year Two) of the curriculum.

Course of Study

Satisfactory completion of all components of the curriculum is required for graduation. The course of study for students admitted from AY2008/09 onwards is as follows

Phase I (Year 1)	Introduction to Health & Disease	Longitudinal Tracks: • Health Ethics, Law & Professionalism;
	Musculoskeletal System	Medicine & Society;
	Blood, Respiratory & Cardiovascular Systems	Information Literacy;Patient-based Programme;
	Renal, Fluid & Electrolyte Systems	Clinical Skills Foundation Programme.
	Gastrointestinal, Nutrition & Metabolism Systems	
	Endocrine & Reproduction Systems	
	Neuroscience with Head & Neck	
Phase II (Year 2)	Genetics and Genomics	
	Cancer Biology	
	Immunology	
	Clinical Microbiology & Infection	
	Principles of Pharmacology and Systemic Pharmacology	
	Principles of Pathology and Systemic Pathology	
	Neuroscience & Musculoskeletal	
	Foundations in Geriatric Medicine	

	Clinical Skills Foundation Course	
Phase III (Year 3)	Family Medicine	
	Medicine	
	Orthopaedic Surgery	
	Paediatrics	
	Surgery	
	Electives	
Phase IV (Year 4)	Acute Care comprising Anaesthesia and Emergency Medicine	
	Obstetrics and Gynaecology	
	Psychological Medicine	
	Forensic Medicine	
	Ophthalmology	
	Otolaryngology	
	Community Health Posting	
	Electives	
Phase V (Year 5)	Medicine Student Internship Programme	
	Surgery Student Internship	

Programme	
Paediatrics Student Internship Programme	
Geriatric Medicine Student Internship Programme	
Orthopaedic Surgery Student Internship Programme	
Dermatology	
Infectious Diseases	
Clinical Skills and Life Support Training	
Electives	

Examinations

At the end of each year of study, examinations leading to the degrees of Bachelor of Medicine and Bachelor of Surgery (M.B.,B.S.) are held as set out below. A candidate must pass each examination before proceeding to the next stage of study leading to the degrees.

The examinations for students admitted from AY2008/09 onwards are as follows:

YEAR OF STUDY	EXAMINATION	MODULES
Phase I (Year 1)	First Professional	Normal Structure and Function (MD1140):
		 Introduction to Health & Disease Musculoskeletal system Blood, Respiratory and Cardiovascular systems Renal, Fluid & Electrolyte systems Gastrointestinal, Nutrition &

YEAR OF STUDY	EXAMINATION	MODULES
		Metabolism systems • Endocrine & Reproduction systems • Neuroscience with Head and Neck
Phase II	Second Professional	Abnormal Structure and Function (MD2140):
(Year 2)		Genetics and Genomics Cancer Biology Immunology Clinical Microbiology & Infection Principles of Pharmacology and Systemic Pharmacology Principles of Pathology and Systemic Pharmacology Principles of Pathology and Systemic Pathology Neuroscience & Musculoskeletal Foundations in Geriatric Medicine Clinical Skills Foundation Programme (MD2150)
Phase III (Year 3)	Third Professional	Core Clinical Practice (MD3140):
		Family MedicineMedicineOrthopaedic SurgeryPaediatricsSurgery
Phase IV (Year 4)	Fourth Professional	Acute and Specialty Clinical Practice (MD4140):
		 Obstetrics and Gynaecology Psychological Medicine Acute Care comprising Anaesthesia and Emergency Medicine Specialties Posting comprising Forensic Medicine,

YEAR OF STUDY	EXAMINATION	MODULES
		Ophthalmology and Otolaryngology
Phase V	Final Professional	Medicine (MD5140)
(Year 5)		 Medicine Student Internship Programme (SIP) Geriatric Medicine SIP Paediatrics SIP Specialties Posting comprising Dermatology and Infectious Disease Surgery (MD5150) Surgery SIP Orthopaedic Surgery SIP
		Clinical Skills and Life Support Training

Policies and Rules on Examinations

(Contact for queries: Nicholas Wong 6772-3746 email: medwmhn@nus.edu.sg)

Policies on Examination

- 1. The course of study for the degrees of Bachelor of Medicine and Bachelor of Surgery lasts five years and consists of modules and tracks prescribed by the Yong Loo Lin School of Medicine.
- 2. The Examination Policies and Rules described below apply to students entering the respective year of study for academic year 2015/2016.
- 3. There are five examinations leading to the degrees of Bachelor of Medicine and Bachelor of Surgery, namely:

The First Professional, Second Professional, Third Professional, Fourth Professional and Final Professional Examination. A candidate must pass all requirements as set out in the Rules on Examination before proceeding to the next stage of study leading to the degree.

- 4. A candidate who fails the main examination or any part thereof may be permitted to take a supplementary examination for the part(s) that was failed.
- 5. A candidate may be granted up to a maximum of two calendar years of medical leave or leave of absence during the whole course of study. This may be extended only under extenuating circumstances, with the approval of the Dean.
- 6. Candidates shall not be permitted to take more than <u>six (6) years, excluding approved leaves</u> <u>of absence</u>, from the time of his/her admission to the course of study, to complete the prescribed examinations for the degrees of Bachelor of Medicine and Bachelor of Surgery.
- 7. A distinction in any module of the course may be awarded by the Board of Examiners to a

- candidate who at his/her first sitting at the main examination obtains not less than 85% of the aggregate marks assigned to the module and not less than 50% in any other required module of that Phase.
- 8. Students may submit an application for Special Consideration, if they have circumstances that may adversely affect their examination performance. The application will be reviewed on a case-by-case basis, according to principles set by NUS Special Consideration Guidelines (https://myportal.nus.edu.sg/studentportal/academics/all/docs/Guidelines-on-Special-Consideration.pdf).

Rules on Examinations

First Professional Examination

- 1. A candidate for the First Professional Examination must have followed and completed, to the satisfaction of the Dean of the Yong Loo Lin School of Medicine, for not less than two semesters, the courses of study prescribed by the Yong Loo Lin School of Medicine for Phase I of the undergraduate medical programme.
- 2. A candidate may be eligible to enter Phase II when he/she has:
 - Obtained 50% of the aggregate marks assigned to each required module;
 - Obtained 50% of the aggregate marks assigned to the end of academic year examination; and
 - Obtained 50% of the marks assigned to each paper of the end of academic year examination.
- 3. Subject to Policies 1 to 8 above, a candidate who fails the First Professional Examination shall be re-examined at a supplementary examination in that Phase as follows:
 - where the candidate failed to obtain 50% of the aggregate marks assigned to the required module's end of academic year examination and continual assessments – to retake all the papers of the required module's end of academic year examination.
 - where the candidate failed any paper of the required module's end of academic year examination to be re-examined in that paper only.
- 4. A candidate who fails or for whatever reason misses a supplementary examination must repeat the whole course of study for that Phase.
- 5. No candidate shall be permitted to take more than <u>two (2) years</u> from the time of his/her admission to the course of study for the degrees of Bachelor of Medicine and Bachelor of Surgery to complete the First Professional Examination.

Second Professional Examination

- 1. A candidate for the Second Professional Examination must have followed and completed, to the satisfaction of the Dean of the Yong Loo Lin School of Medicine, for not less than two semesters, the courses of study prescribed by the Yong Loo Lin School of Medicine for Phase II of the undergraduate medical programme.
- 2. A candidate may be eligible to enter Phase III, when he/she has:
 - Obtained 50% of the aggregate marks assigned to each required module (theory and clinical):
 - Obtained 50% of the aggregate marks assigned to each required module's end of academic year examination (theory and clinical); and
 - Passed a prescribed number of assessment points of the clinical module at the end of academic year examination.
- 3. Subject to Policies 1 to 8 above, a candidate who fails the Second Professional Examination shall be re-examined at a supplementary examination in that Phase as follows:
 - where the candidate failed to obtain 50% of the aggregate marks assigned to the required module's end of academic year examination and continual assessments to retake the required module's end of academic year examination.
 - where the candidate failed any of the required module's end of academic year examination to retake the required module's end of academic year examination.
- 4. A candidate who fails or for whatever reason misses a supplementary examination must

repeat the whole course of study for that Phase.

Third Professional Examination

- 1. A candidate for the Third Professional Examination must have followed and completed, to the satisfaction of the Dean of the Yong Loo Lin School of Medicine, for not less than two semesters, the courses of study prescribed by the Yong Loo Lin School of Medicine for Phase III of the undergraduate medical programme.
- 2. A candidate who fails or who does not complete any one (1) continual assessment prescribed for Phase III shall be permitted to take the Third Professional Examination. A candidate who fails or who does not complete any two (2) continual assessments prescribed for Phase III shall not be eligible to take the Third Professional Examination and shall only be eligible to take the supplementary examination as his/her first and final attempt. A candidate who fails or who does not complete any three (3) continual assessments prescribed for Phase III shall have to repeat the whole course of study for that Phase. For any failed continual assessment, a candidate will need to remediate and pass all the failed continual assessments before embarking on Phase V clinical postings.
- 3. A candidate may be eligible to enter Phase IV, when he/she has:
 - Obtained 50% of the aggregate marks assigned to each required module;
 - Obtained 50% of the aggregate marks assigned to each component (theory and clinical) of the end of academic year examination; and
 - Passed a prescribed number of assessment points of the clinical component of the end of academic year examination.
- 4. Subject to Policies 1 to 8 above, a candidate who fails the Third Professional Examination shall be examined at a supplementary examination in that Phase as follows:
 - where the candidate failed to obtain 50% of two continual assessments to take the supplementary examination as his/her first and final attempt.
 - where the candidate failed to obtain 50% of the aggregate marks assigned to the required module's end of academic year examination and continual assessments to retake all the components of the required module's examination.
 - where the candidate failed any component of the required module's end of academic year examination – to be re-examined in that component only.
- 5. A candidate who fails or for whatever reason misses a supplementary examination must repeat the whole course of study for that Phase.

Fourth Professional Examination

- 1. A candidate for the Fourth Professional Examination must have followed and completed, to the satisfaction of the Dean of the Yong Loo Lin School of Medicine, for not less than two semesters, the courses of study prescribed by the Yong Loo Lin School of Medicine for Phase IV of the undergraduate medical programme.
- 2. A candidate who fails or who does not complete any one (1) continual assessment prescribed for Phase IV shall be permitted to take the Fourth Professional Examination. A candidate who fails or who does not complete any two (2) continual assessments prescribed for Phase IV shall not be eligible to take the Fourth Professional Examination and shall only be eligible to take the supplementary examination as his/her first and final attempt. A candidate who fails or who does not complete any three (3) continual assessments prescribed for Phase IV will have to repeat the whole course of study for that Phase. For any failed continual assessment, a candidate will need to remediate and pass all the failed continual assessments before embarking on Phase V clinical postings.
- 3. A candidate may be eligible to enter Phase V, when he/she has:
 - Obtained 50% of the aggregate marks assigned to each required module;
 - Obtained 50% of the aggregate marks assigned to each component (theory and clinical) of the end of academic year examination; and
 - Passed a prescribed number of assessment points of the clinical component of the

end of academic year examination.

- 4. Subject to Policies 1 to 8 above, a candidate who fails the Fourth Professional Examination shall be examined at a supplementary examination in that Phase as follows:
 - where the candidate failed to obtain 50% of two major continual assessments to take the supplementary examination as his/her first and final attempt.
 - where the candidate failed to obtain 50% of the aggregate marks assigned to the required module's end of academic year examination and continual assessments – to retake all the components of the required module's end of academic year examination.
 - where the candidate failed any component of the required module's end of academic year examination to be re-examined in that component only.
- 5. A candidate who fails or for whatever reason misses a supplementary examination must repeat the whole course of study for that Phase.

Final Professional Examination

- 1. A candidate for the Final Professional Examination must have followed and completed, to the satisfaction of the Dean of the Yong Loo Lin School of Medicine, for not less than two semesters, the courses of study prescribed by the Yong Loo Lin School of Medicine for Phase V of the undergraduate medical programme. There are two modules in Phase V, namely Medicine and Surgery. For the avoidance of doubt and without limitation to the foregoing, a candidate must:
 - pass all continual assessments prescribed for the Third and Fourth Year of Study, at first attempt or during remedial postings done as part of his/her electives, before he/she is eligible to undergo any posting in the Medicine and Surgery modules of Phase V; and
 - pass all final year continual assessments in order to be eligible for the Final Professional Examination
- 2. A candidate who fails or who does not complete any one (1) or two (2) continual assessment(s) in any module prescribed for Phase V shall not be eligible to take the Final Professional Examination for that module, and shall only be eligible to take the supplementary examination as his/her first and final attempt. A candidate who fails or who does not complete any three (3) continual assessments in a module prescribed for Phase V shall have to repeat the whole course of study (Phase V) for that module.
- 3. A candidate has passed a module when he/she:
 - Obtained 50% of the aggregate marks assigned to each required module;
 - Obtained 50% of the required module's end of academic year examination;
 - $\circ\,$ Obtained 50% of the aggregate marks assigned to the clinical component of the end of academic year examination of the module; and
 - Passed a prescribed number of assessment points of the clinical component of the end of academic year examination.
- 4. Subject to Policies 1 to 8 above, a candidate who fails any module shall be examined at a supplementary examination in that module as follows:
 - Where the candidate failed to obtain 50% in one (1) or two (2) continual
 assessment(s) in a module to take the supplementary examination in that module
 as his/her first and final attempt.
 - Where the candidate failed to obtain 50% of the aggregate marks assigned to the required module's end of academic year examination and continual assessment – to retake all the components of the required module's examination.
 - Where the candidate failed to obtain 50% of the aggregate marks assigned to the required module's end of academic year examination – to retake all the components of the required module's examination.
 - Where the candidate failed the clinical component of the end of academic year examination for that module – to retake all the components of the required module's examination.
- 5. A candidate who fails or for whatever reason misses a supplementary examination in any module must repeat the whole course of study for that module.

3.2.2 Bachelor of Science (Nursing) / Bachelor of Science (Nursing) (Honours)

Admissions

Admission of candidates into the B.Sc. (Nursing) programme will be based on the academic merit of and in open competition with all eligible applicants. Candidates must fulfil the minimum university requirements for admission to full-time undergraduate studies.

To be eligible to apply for admission, applicants need to present:

- The Singapore Cambridge GCE 'A' Level certificate, or
- A diploma from a polytechnic in Singapore, or
- Equivalent international qualifications.

Subject Requirement

Applicants should also satisfy the subject prerequisites which require a H2 or HL pass in any two of the following at GCE 'A' Level or International Baccalaureate respectively: Biology, Chemistry, Computing, Physics, and Mathematics.

Advanced Placement / Exemption (APC)

Polytechnic graduates of certain diplomas admitted into the B.Sc. (Nursing) programme may be granted advanced placement credits as follows:

Polytechnic	Diploma	Modules granted APC	Modular Credits	(MCs)
Nanyang Polytechnic	Nursing	NUR1113 Active Ageing in Singapore	4	44
		NUR1116 Psychology for Health Professionals	4	
		SC2211 Medical Sociology	4	
		NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	
		NUR1104 Professional Issues and Practice	3	

Polytechnic	Diploma	Modules granted APC	Modular Credits	(MCs)
		NUR1109 Healthcare Ethics and Law	3	
		NUR1110 Effective Communication for Health Professionals	3	
		NUR1114 Fundamentals of Nursing	4	
		NUR1115 Maternal and Child Health Nursing	4	
		NUR1107 Clinical Practicum 1.1	3	
		NUR1108 Clinical Practicum 1.2	4	
	Social Sciences (Social Work)	1 Unrestricted Elective (UEM)	4	4
Ngee Ann Polytechnic	Health Sciences (Nursing) (HSN)	NUR1113 Active Ageing in Singapore	4	44
		NUR1116 Psychology for Health Professionals	4	
		SC2211 Medical Sociology	4	

Polytechnic	Diploma	Modules granted APC	Modular Credits	(MCs)
		NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	
		NUR1104 Professional Issues and Practice	3	
		NUR1109 Healthcare Ethics and Law	3	
		NUR1110 Effective Communication for Health Professionals	3	
		NUR1114 Fundamentals of Nursing	4	
		NUR1115 Maternal and Child Health Nursing	4	
		NUR1107 Clinical Practicum 1.1	3	
		NUR1108 Clinical Practicum 1.2	4	
	Arts Business Management	1 Unrestricted Elective (UEM)	4	4

Polytechnic	Diploma	Modules granted APC	Modular Credits (MCs)	
	Biomedical Science (BMS)	1 Unrestricted Elective (UEM)	4	4
	Molecular Biotechnology (MBIO)	1 Unrestricted Elective (UEM)	4	4
	Pharmacy Science (PHARM)	1 Unrestricted Elective (UEM)	4	12
		NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	
	Optometry	1 Unrestricted Elective (UEM)	4	4
	Veterinary Bioscience	1 Unrestricted Elective (UEM)	4	4
Republic Polytechnic	Biomedical Sciences	1 Unrestricted Elective (UEM)	4	12
		NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	
	Biotechnology	1 Unrestricted Elective (UEM)	4	12
		NUR1117 Anatomy and	4	

Polytechnic	Diploma	Modules granted APC	Modular Credits (MCs)	
		Physiology I		
		NUR1118 Anatomy and Physiology II	4	
	Health Management and Promotion	1 Unrestricted Elective (UEM)	4	4
	Pharmaceutical Sciences (DPS)	1 Unrestricted Elective (UEM)	4	12
		NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	
	Sports and Exercise Sciences (DSES)	1 Unrestricted Elective (UEM)	4	12
	Sciences (DSLS)	NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	
Singapore Polytechnic	Applied Chemistry with Pharmaceutical Sciences 1	1 Unrestricted Elective (UEM)	4	4
	Biomedical Sciences	1 Unrestricted Elective (UEM)	4	4
	Biotechnology	1 Unrestricted	4	4

Polytechnic	Diploma	Modules granted APC	Modular Credits (MCs)	
		Elective (UEM)		
	Material Sciences 2	1 Unrestricted Elective (UEM)	4	4
	Nutrition, Health & Wellness	1 Unrestricted Elective (UEM)	4	4
	Perfumery and Cosmetic Science 3	1 Unrestricted Elective (UEM)	4	4
Temasek Polytechnic	Pharmaceutical Sciences	1 Unrestricted Elective (UEM)	4	12
		NUR1117 Anatomy and Physiology I	4	
		NUR1118 Anatomy and Physiology II	4	

- 1. Applied Chemistry with Pharmaceutical Sciences was previously known as Diploma in Chemical Process Technology (Industrial Chemistry)
- 2. Material Sciences was previously known as Diploma in Chemical Process Technology (Polymer Option)
- 3. Perfumery and Cosmetic Science was previously known as Diploma in Chemical Process Technology (Industrial Chemistry)

Interview of Candidates

All short-listed candidates, local and foreign, will be asked to attend an interview in April. The selection of students for the B.Sc. (Nursing) programme will be determined by traits such as communication skills, emotional maturity and ability to be reflective about one's work as well as academic achievement.

Health Requirements

Please refer to Health Requirements in Section 3.2.1.

Scholarships, Sponsorships and Bursaries

Scholarships, sponsorships and bursaries are offered by the Alice Lee Centre for Nursing Studies, the National University of Singapore, Ministry of Health (MOH) and various healthcare agencies. For more information regarding scholarships, sponsorships and bursaries, please visit http://medicine.nus.edu.sg/nursing/prg_ug_scholarship.shtml.

Bond

Candidates who are in receipt of scholarships/sponsorships/bursaries are required to serve the bond as stipulated by the respective funding agencies.

Educational Objectives

On completion of the B.Sc. (Nursing) / B.Sc. (Nursing) (Honours) programme, a graduate will be a:

- Competent registered nurse who provides safe and informed care with compassion based on current knowledge, theory and research evidence.
- Critical thinker able to question, interpret, apply, analyse and evaluate knowledge to make independent decisions.
- Coordinator of primary, secondary, and tertiary healthcare resources to meet patients' needs
- Effective communicator who collects, uses, and disseminates information to optimise care outcomes.
- Advocate for the promotion and maintenance of good health, and for the rights of patients in the healthcare system.
- Exemplary professional nurse role model committed to the learning of self and others.
- Leader and researcher in nursing and related healthcare fields.

Curriculum Structure for B.Sc. (Nursing) (Honours) for Nursing Diploma students admitted in AY2015/16

Year 1 Semester 1	Semester 1	NUR1104	Professional Issues and Practice
	NUR1110	Effective Communication for Health Professionals	
		NUR1113	Active Ageing in Singapore (GEM1901/SSM1206)
		NUR1114	Fundamentals of Nursing
		NUR1117	Anatomy and Physiology I
		NUR1107	Clinical Practicum 1.1

Semester 2	Semester 2	NUR1109	Healthcare Ethics and Law	
		NUR1115	Maternal and Child Health Nursing	
		NUR1116	Psychology for Health Professionals	
		NUR1118	Anatomy and Physiology II	
		MC1000	Infection and Immunity	
		NUR1108	Clinical Practicum 1.2	
Year 2	Semester 1	NUR2113	Mental Health Nursing	
		NUR2114	Medical/Surgical Nursing I	
		NUR2115	Comprehensive Health Assessment	
		NUR2117	Pathophysiology and Pharmacology I	
		NUR2106	Clinical Practicum 2.1	
		Unrestricted Elective (or Year 2 Sem 2 or Yea	r 3 Sem 1)	
	Semester 2	NUR2116 Medical/Surgica Nursing II	Medical/Surgical Nursing II	
		NUR2118	Pathophysiology and Pharmacology II	
		SC2211	Medical Sociology	

1			•
		NUR2107	Clinical Practicum 2.2
		Unrestricted Elective (if not done in Year 2 So	em 1)
Year 3	Semester 1	NUR2119	Primary Health Care (GEM2023)
		NUR3103	Clinical Decision Making
		NUR 3109	Introduction to Research and Evidence-Based Practice
		NUR3113	Medical/Surgical Nursing III
		NUR3105	Clinical Practicum 3.1
		Unrestricted Elective (if	f not done in Year 2)
	Semester 2	NUR3114	Leadership and Management
		NUR3115	Issues for Contemporary Nursing Practice
		NUR3116	Transition-to-Practice
Honours		NUR4101	Evidence-based Health Care Practice (Sem 1 & 2)
		NUR4102	Consolidated Clinical Practice (Sem 1 & 2)
		NUR4103	Applied Research Methods (Sem 1 only)

NUR4104	Honours Project in Nursing (Sem 2 only)
Unrestricted Elective	

Curriculum Structure for B.Sc. (Nursing) (Honours) for students other than Nursing Diploma admitted from AY2015/16 onwards $\!\!\!^*$

Year 1 Semester 1	Semester 1	NUR1110	Effective Communication for Health Professionals
		NUR1113	Health and Well- being for Older Adults
		NUR1114	Fundamentals of Nursing
		NUR1117	Anatomy and Physiology I
		NUR1107A	Nursing Practice Experience 1.1
	Semester 2	NUR1118	Anatomy and Physiology II
		NUR1119	Medical/Surgical Nursing I
		NUR1120	Comprehensive Health Assessment
		NUR1121	Pathphysiology and Pharmacology for Nurses I
		NUR1108A	Nursing Practice Experience 1.2

Year 2	Semester 1	NUR2113	Mental Health Nursing
		NUR2116	Medical/Surgical Nursing II
		NUR2118	Pathophysiology and Pharmacology II
		NUR2120	Professionals Nursing Practice, Ethics and Law
		NUR2106A	Nursing Practice Experience 2.1
	Semester 2	NUR2000	Infection and Immunology
		NUR2211	Medical Sociology
		NUR2121	Maternal and Child Health Nursing
		NUR2121	Psychology for Nurses
		SC2107A	Nursing Practice Experience 2.2
Year 3	Semester 1	NUR3109	Introduction to Research, Evidence and Nursing Practice
		NUR3113	Medical/Surgical Nursing III
		NUR 3117	Community Integrated Health Care
		NUR3105A	Nursing Practice

			Experience 3.1
	Semester 2	NUR3114	Leadership and Management
		NUR3118	Consolidated Clinical Simulation Nursing Practice
		NUR3116A	Transition to Professional Practice Experience
Honours		NUR4101	Evidence-based Health Care Practice (Sem 1 & 2)
		NUR4102	Consolidated Clinical Practice (Sem 1)
		NUR4103	Applied Research Methods (Sem 1 & 2)
		NUR4104	Honours Project in Nursing (Sem 1 & 2)
		Unrestricted Elective	

^{*}Students have to take 2 Unrestricted Elective Module to make up 120MCs for the BSc (Nursing) programme requirement.

Assessment

A basic tenet in the application of assessment principles is the need to ensure that assessment strategies, both formative and summative, must be consistent with and match the desired learning outcomes identified. A fundamental and commonly known fact in education is that assessment drives student learning, and that well-designed assessment instruments will have a positive steering effect on student learning and learning outcomes. In the selection and design of assessment instruments it is critical, therefore, to adopt best practices which will ensure matching with the desired learning outcomes that will drive students learning in a positive way.

Assessment strategies that will be implemented for the B.Sc. (Nursing) programme will:

• Be holistic and designed to test the cognitive, psychomotor and affective domains of

- learning.
- Test the various levels of learning (knows, knows how, performs, does) as described in the Miller's pyramid (Miller, 1990).
- Ensure the validity and reliability of test instruments used for both formative and summative assessments e.g. integrated, scenario-based multiple-choice questions (MCQs) and extended matching items (EMIs) which test higher-order thinking skills will replace recall, rote-memory-based Multiple Choice Questions (MCQs).
- Include testing of clinical skills, log book record of clinical practice and case presentations at clinical conferences in its clinical assessment.
- Include multiple test instruments based on their utility with respect to the validity, reliability and practicality.
- Base pass/fail judgement on, whenever applicable, pre-determined criteria (i.e. criterion-based assessment).

Grading of Assessment and Cumulative Average Points (CAP)				
Grade	Grade Point	Grade	Grade Point	
A+	5.0	C+	2.5	
А	5.0	С	2.0	
Α-	4.5	D+	1.5	
B+	4.0	D	1.0	
В	3.5	F (Fail)	0.0	
B-	3.0			

3.3 Special Programmes

Undergraduate Research Opportunities Programme (UROP)

The Yong Loo Lin School of Medicine is committed to training outstanding doctors to serve the community and patients with care and integrity. We strive to establish the School as a centre of research excellence. To achieve this, a key approach is to develop and nurture our students to meet the research challenges of the 21st century. A research programme called the Undergraduate Research Opportunities Programme (UROP) is available for our medical undergraduates. Undergraduate research in non-clinical and clinical departments, under the supervision of faculty staff, is usually conducted during the vacation period in Phase I to Phase III of the curriculum. The clinical departments also offer opportunities for research in Phase IV and V. Students who participate and contribute in UROP will have due credits endorsed in their final-year academic transcripts. In addition, research projects of excellence may be submitted for consideration for research prizes

3.4 Financial Assistance and Awards

The School has several bursaries available to full-time undergraduate M.B.,B.S. students who are in need of financial assistance to help them though their course of study. For more information regarding these financial assistance and the application procedure, please visit: http://medicine.nus.edu.sg/corporate/education.html#/medicine_admission

There are several bursaries available to full-time undergraduate B.Sc (Nursing) students who are in need of financial assistance to help them through their course of study. For more information regarding these bursaries, the conditions of award and application, please visit: http://medicine.nus.edu.sg/nursing/prg_ug_scholarship.shtml

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Home > NUS Bulletin AY2015/16 > Yong Loo Lin School of Medicine > Graduate Education

• 4 Graduate Education

- 4.1 Research Programmes
 - 4.1.1 <u>Degrees Offered</u>
 - 4.1.2 <u>Degree Requirements</u>
 - 4.1.3 Financial Assistance and Awards
- 4.2 Cancer Science Institute of Singapore (CSI) Ph.D Programme
 - 4.2.1 Degrees Offered
 - 4.2.2 <u>Admission Requirements</u>
 - 4.2.3 Financial Assistance and Awards
- 4.3 <u>Graduate Coursework Programme in Clinical Investigation</u>
- 4.4 Research Programmes in Nursing
 - 4.4.1 <u>Degrees Offered</u>
 - 4.4.2 <u>Degree Requirements</u>
 - 4.4.3 <u>Financial Assistance and Awards</u>
- 4.5 <u>Coursework and Clinical Training Programmes: Division of Graduate Medical Studies (DGMS)</u>
- 4.6 Graduate Coursework Programme in Nursing

4 Graduate Education

4.1 Research Programmes

The School of Medicine has a strong graduate programme that will be a significant factor in making the University a world-class tertiary institution, and providing the industry with highly competent biomedical scientists and clinician-scientists who will spearhead and drive the medical biotechnology efforts.

4.1.1 Degrees Offered

The students are enrolled for the M.Sc. or Ph.D. programme at admission and fulfil requirements to graduate either with a generic M.Sc. or Ph.D. degree. There is no specialisation of the degrees awarded. Students will engage in supervised research with staff members from any of the departments for their period of candidature, at the end of which, they submit a thesis that is examined by a Board of Examiners.

Only those candidates who have fulfilled the criteria for Ph.D. will be awarded the Ph.D. degree. All other candidates will have to fulfil the criteria for the M.Sc. in order to be awarded the M.Sc. degree.

4.1.2 Degree Requirements

Admission Requirements

M.Sc. Programme

- A relevant Bachelor's degree with at least a Second Upper Class Honours or its equivalent
- The degree of Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.) or
- The degree of Bachelor of Dental Surgery and
- The ability to pursue research in the candidate's proposed field of advanced study.

- A good Master's degree in a relevant discipline or
- A relevant Bachelor's degree with at least a Second Upper Class Honours or its equivalent
- The degrees of Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.) or
- The degree of Bachelor of Dental Surgery and
- The ability to pursue research in the candidate's proposed field of advanced study.

Other Requirements

TOEFL

As the medium of instruction is English, applicants whose native tongue and medium of undergraduate instruction is not English must submit TOEFL scores as evidence of their proficiency in the English Language. Exemptions will be given to applicants with distinctions in the Cambridge GCE 'O' level examination English Language Paper 1119. The minimum TOEFL score required is 580/237/85 for the paper-based, computer-based and internet-based tests respectively. For IELTS, the minimum score required is 6.5.

GRE

Applicants (except NUS & NTU graduates from relevant disciplines) <u>must also submit GRE scores</u> to support their application. A minimum total GRE score of 320 for the verbal and quantitative sections and 3.5 for the Analytical section is required.

Credit Transfer and Exemptions

Credit transfer and exemption are allowed subject to the following conditions:

- [There is no limit to the transfer of credit for relevant modules that have not been used towards another degree at NUS or elsewhere.
- For relevant modules that have been credited towards another degree elsewhere, up to 50% of the modular credits (MCs) required in the coursework component of the NUS graduate research programme into which the candidate seeks admission may be exempted.
- For relevant <u>NUS</u> modules that have been credited towards another degree at NUS, on a caseby-case basis and subject to approval, more than 50% of the MCs required in the coursework component of the NUS graduate research programme may be allowed credit and grade transfer.
- Only graduate modules at Level-5000 and above which are relevant to the degree programme to which the candidate seeks admission at NUS can be considered for credit transfer or exemption. In addition, only modules that have substantially the same learning objectives, content, and level of sophistication as the corresponding NUS module can be considered for credit transfer/exemption.
- Credit transfer and exemption is allowed only for modules that are taken less than five years before the date of admission.
- Applications for credit transfer or exemptions must be submitted within two weeks from the date of admission.

Curriculum Structure and Requirements

Candidates admitted to the graduate programme will undertake research under the supervision of staff members from the School for their period of candidature, at the end of which, they submit a thesis that is examined by a Board of Examiners. In addition, they are required to fulfil a coursework component comprising the following, to graduate either with a M.Sc. or a Ph.D. degree:

M.Sc. : A total of 16 modular credits comprising of two core modules + elective modules (at Level-5000)

Ph.D.: A total of 24 modular credits comprising of two core modules + elective modules (at Level-5000 & 6000)

To be confirmed a Ph.D. candidate, a student is required to pass a Ph.D. qualifying examination

within two years from the date of admission.

Candidates deemed weak in English by the School would also have to sit for the Diagnostic English Test and take additional English Language courses conducted by the Centre for English Language Communication.

All Ph.D. candidates are required to take ES5002 (Advanced Level Writing) regardless of their performance in the Diagnostic English Test. Ph.D. candidates are also required to take ES5002 (Advanced Level Writing) regardless of their performance in the Diagnostic English Test.

Residency Requirements and Candidature

Residency requirements

All candidates must spend a minimum period of residence in Singapore as follows:

M.Sc.: 6 months (one semester)
Ph.D.: 18 months (three semesters)

Residency Requires:

1. Payment of fees

- 2. Satisfying all curricular requirements of the programme of study
- 3. Satisfying other departmental requirements such as teaching assistance

Periods of study leave and overseas fieldwork do not count toward residency. In addition, M.Sc. and Ph.D. candidates must be resident during the semester in which they submit their thesis for examination.

Candidature

The following maximum candidature periods are inclusive of periods of approved study leave and leave of absence.

M.Sc.: 36 months Ph.D.: 60 months

Continuation and Graduation requirements

Continuation

For continuation of candidature, candidates have to meet the following CAP set for coursework:

M.Sc. : CAP should not fall below 2.5 for two consecutive semesters or 3.0 for three consecutive semesters

Ph.D. : CAP should not fall below 3.0 for two consecutive semesters or 3.5 for three consecutive semesters

Termination of candidature would result if a student fails to maintain the minimum CAP as stipulated above.

For any semester in which the M.Sc. candidate's CAP falls below 3.0 (but \geq 2.5), he/she will be issued an academic warning. If, in the following semester, the candidate's CAP again falls below 3.0, he/she will be placed on probation. If the candidate's CAP remains below 3.0 for the third consecutive semester, the candidate will be issued a letter of dismissal by the Registrar and denied re-admission.

For M.Sc. candidates, if the CAP falls below 2.5 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

For any semester in which the Ph.D. CAP falls below 3.5 (but \geq 3.0), he/she will be issued an academic warning. If, in the following semester, the candidate's CAP again falls below 3.5, he/she will be placed on probation. If the student's CAP remains below 3.5 for the third consecutive semester, the student will be issued a letter of dismissal by the Registrar and denied re-admission.

For Ph.D. candidates, if the CAP falls below 3.0 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

A student may also be issued a warning or placed on probation or be issued a letter of termination for poor performance in the Ph.D. qualifying examination, research thesis, or other programme requirements.

Graduation Requirements

M.Sc.

- Pass all prescribed core and elective modules with a minimum CAP of 3.0 (B-) for the prescribed modules
- Pass the Master's Thesis
- A minimum grade of C+ for all levels of English course(s), where applicable

Ph.D.

- Pass all prescribed core and elective modules with a minimum CAP of 3.5 (B) for the prescribed modules
- Pass the Qualifying Examination
- Pass the Ph.D. Thesis and Oral Examination
- A minimum grade of C+ for all levels of English course(s), where applicable

Leave of absence

The University policies on leave of absence shall apply.

Examination rules

The University policies on examination rules shall apply.

4.1.3 Financial Assistance and Awards

Financial support in the form of scholarships is available for qualified candidates. These range from S\$1,500 - S\$3,300 per month for M.Sc. and Ph.D. candidates respectively.

Some additional support for projects in certain strategic research areas is also available. There may also be opportunities for earning additional income as part-time tutors and demonstrators.

To be eligible for the research scholarship, applicants must possess at least a Second Class Upper Honours degree.

4.2 Cancer Science Institute of Singapore (CSI) Ph.D Programme

The CSI Singapore Ph.D. Graduate Programme in Cancer Biology seeks to attract top scientific and medical talents interested in a career in cancer research. Graduate students will have access to world-class facilities dedicated to cancer research and can look forward to working with a dynamic global team of renowned specialized scientists and clinicians in an intellectually stimulating environment.

This programme also aims to produce high-calibre researchers who are capable of independent

research investigation, who will contribute original ideas that advance their specific field of cancer research, and are well-equipped to pursue careers in basic or translational cancer.

4.2.1 Degrees Offered

The students are enrolled for the Ph.D. programme at admission and fulfil requirements to graduate with a generic Ph.D. degree. There is no specialisation of the degrees awarded. Students will engage in supervised research with staff members from the Institute for their period of candidature, at the end of which, they submit a thesis that is examined by a Board of Examiners. Only those candidates who have fulfilled the criteria for Ph.D. will be awarded the Ph.D. degree.

4.2.2 Admission Requirements

Ph.D. Programme

- A good Master's degree in a relevant discipline; or
- A relevant Bachelor's degree with at least a Second Upper Class Honours or its equivalent;
- The degrees of Bachelor of Medicine and Bachelor of Surgery (M.B.,B.S.) and;
- The ability to pursue research in the candidate's proposed field of advanced study.

Other Requirements

TOEFL/IELTS

As the medium of instruction is English, applicants whose native tongue and medium of university undergraduate instruction is not English must submit TOEFL scores as evidence of their proficiency in the English Language. The minimum TOEFL score required is 580/237/85 for the paper-based, computer-based and internet-based tests respectively. Exemptions will be given to applicants with distinctions in the Cambridge GCE 'O' level examination English Language Paper 1119.

For IELTS, the minimum score required is 6.

The TOEFL/IELTS scores are valid for 2 years from the test date.

GRE

Applicants (except NUS & NTU graduates from relevant disciplines) must also submit GRE scores to support their application. A minimum total GRE score of 320 for the verbal and quantitative sections and of 3.5 for the Analytical section is required.

The GRE scores are valid for 5 years from the test date.

Curriculum Structure and Requirements

Candidates admitted to the graduate programme will undertake research under the supervision of staff members from the Institute for their period of candidature, at the end of which, they submit a thesis that is examined by a Board of Examiners. In addition, they are required to fulfil a coursework component comprising the following, to graduate with a Ph.D. degree:

Ph.D. : A total of 24 modular credits comprising of four core modules + 2 elective modules (at Level- 5000 & 6000)

To be confirmed a Ph.D. candidate, a student is required to pass a Ph.D. qualifying examination within two years from the date of admission.

Candidates deemed weak in English by the School would also have to sit for the Diagnostic English Test and take additional English Language courses conducted by the Centre for English Language Communication.

All Ph.D. candidates are required to take ES5002 (Advanced Level Writing) regardless of their performance in the Diagnostic English Test.

Residency Requirements And Candidature

Residency requirements

All candidates must spend a minimum period of residence in Singapore as follows:

Ph.D.: 18months (three semesters)

Residency Requires:

- a) Payment of fees (not applicable to full-time candidates)
- b) Satisfying all curricular requirements of the programme of study
- c) Satisfying other departmental requirements such as teaching assistance

Periods of study leave and overseas fieldwork do not count toward residency. In addition, Ph.D. candidates must be resident during the semester in which they submit their thesis for examination.

Candidature

The following maximum candidature periods are inclusive of periods of approved study leave and leave of absence.

Ph.D.: 60 months

Laboratory Rotation Scheme

All full-time candidates will be subjected to laboratory rotation scheme to identify a suitable supervisor. This scheme requires candidates to participate in a minimum of two to a maximum of three laboratory rotations before choosing a supervisor. Each rotation will last two months. Candidates should confirm a supervisor by the end of the laboratory rotation scheme.

To achieve an even distribution of students among the labs, each supervisor in CSI Singapore will only be allowed to take in one full-time candidate per intake. As such, candidates may not be able to join the lab of their choice.

Continuation and Graduation Requirements

Continuation

For continuation of candidature, candidates have to meet the following CAP set for coursework:

Ph.D. : CAP should not fall below 3.0 for two consecutive semesters or 3.6 for three consecutive semesters

Termination of candidature would result if a student fails to maintain the minimum CAP as stipulated above.

For any semester in which the Ph.D. CAP falls below 3.6 (but \geq 3.0), he/she will be issued an academic warning. If, in the following semester, the candidate's CAP again falls below 3.6, he/she will be placed on probation. If the student's CAP remains below 3.6 for the third consecutive semester, the student will be issued a letter of dismissal by the Registrar and denied re-admission.

For Ph.D. candidates, if the CAP falls below 3.0 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

A student may also be issued a warning or placed on probation or be issued a letter of termination for poor performance in the Ph.D. qualifying examination, research thesis, or other program requirements.

Graduation Requirements

- Pass all prescribed core and elective modules with a minimum CAP of 3.6 for the prescribed modules
- Pass the Qualifying Examination
- Pass the Ph.D. Thesis and Oral Examination
- A minimum grade of C+ for all levels of English course(s), where applicable

Leave of absence

The University policies on leave of absence shall apply.

Examination rules

The University policies on examination rules shall apply.

4.2.3 Financial Assistance and Awards

Financial support in the form of scholarships is available for qualified candidates. Full-time Ph.D. candidates will be provided monthly stipend of S\$3,200. Scholarship includes conference allowance of up to S\$10,000, laptop allowance along with book and software allowance.

Interviews

All shortlisted applicants will be required to attend an interview.

Application

Application opens from 15 October to 15 February every year. Please visit our website at http://www.csi.nus.edu.sg/ws/graduate-program/introduction/admission-reg....

4.3 Graduate Coursework Programme in Clinical Investigation

The Master of Clinical Investigation (MCI) is a new programme which commenced in August 2008. The programme, which is completed in 2 years, aims to equip clinicians with basic methodological and practical skills to design and conduct clinical investigations that are relevant to patient care. The MCI programme will also provide a good foundation for those aiming to pursue advanced clinical research training, including training programmes leading to a Ph.D. degree.

Degree Requirements

- An MBBS or equivalent degree from a recognised university
- Candidates have entered specialist training or residency programme
- At least two years of post-registration clinical experience

Curriculum Structure

The MCI programme caters only for part-time students with a candidature period of two years, open to extension to a maximum of three years if more time is required for the research component. The 40-modular credit (MC) programme structure would comprise 8 modules (32 MCs) for coursework (80%) and a research component (20%) of 8 MCs. For the research component, students would work under the supervision of a group of mentors (established clinical investigators/researchers).

4.4 Research Programmes in Nursing

Current challenges facing the health care system offer opportunities for nursing research to make a

substantial impact on the health of the population and to improve approaches to patient care. There is a shift in emphasis from treatment to prevention of illness and from acute illness to chronic conditions as well as an urgent need to translate successful research findings into clinical practice. The research training agenda in the Alice Lee Centre for Nursing Studies (ALCNS) aims to position nursing research at the forefront of the health care sciences. Teaching processes in the graduate research programmes aim to develop a dynamic, vital, and productive community of investigators who conduct rigorous research to establish the scientific and evidence base for patient care.

Objectives:

The M.Sc. (Nursing) and Ph.D. programmes aim to develop graduates characterised by their:

- ability to identify, formulate, and address problems through research;
- drive for evidence based nursing research and practice;
- creative and strategic approach to lead the nursing profession nationally and internationally;
- entrepreneurial spirit to lead innovation which will impact on the profession and the health care industry.

4.4.1 Degrees Offered

The following degrees will be offered:

- Master of Science (Nursing) [M.Sc. (Nursing)]
- Doctor of Philosophy [Ph.D.]

The M.Sc. (Nursing) degree is designed to provide research training specifically for nurses who have a Bachelor Degree without an Honours component. It will provide both stand-alone postgraduate research training as well as a pathway into the Ph.D. programme for nurses without an Honours degree.

The Ph.D. will be offered with two flexible options:

Option A: A traditional thesis of a maximum of 80,000 words; or

Option B: An integrated thesis by publication of a maximum of 80,000 words.

4.4.2 Degree Requirements

Admission Requirements

M.Sc. (Nursing) Programme

- Possess a current Registered Nurse licence with the Singapore Nursing Board
- Have a minimum of 3 years nursing experience at the point of entry into the course
- A Bachelor's degree with at least a Second Honours class or its equivalent; or
- Coursework Master's degree with a CAP of 3.5 or above; or
- Bachelor's degree and evidence of outcomes from a research project equivalent to 25% of one year's full-time study

Ph.D. Programme

- Possess a current Registered Nurse licence with the Singapore Nursing Board
- Have a minimum of 3 years nursing experience at the point of entry into the course
- A Bachelor's degree with at least a Second Upper Honours class or its equivalent; or
- Coursework Master's degree with a CAP of 3.5 or above.
- Candidates are also expected to have the ability to pursue research in their proposed field of

advanced study.

Other Requirements

TOEFL/IELTS

As the medium of instruction is English, applicants whose native tongue and medium of university undergraduate instruction is not English must submit TOEFL scores as evidence of their proficiency in the English Language. The minimum TOEFL score required is 580/237/85 for the paper-based, computer-based and internet-based tests respectively. Exemptions will be given to applicants with distinctions in the Cambridge GCE 'O' level examination English Language Paper 1119.

For IELTS, the minimum score required is 6.

The TOEFL/IELTS scores are valid for 2 years from the test date.

GRE

Applicants (except NUS, NTU and SMU graduates from relevant disciplines) should also submit GRE scores to support their application. The minimum total GRE score of 320 for both Verbal and Quantitative sections and a minimum of 3.5 for the Analytical section are required.

The GRE scores are valid for 5 years from the test date.

Credit Transfer and Exemptions

Credit transfer and exemption are allowed subject to the following conditions:

- There is no limit to the transfer of credit for relevant modules that have not been used towards another degree at NUS or elsewhere.
- For relevant modules that have been credited towards another degree elsewhere, up to 50% of the modular credits (MCs) required in the coursework component of the NUS graduate research programme into which the candidate seeks admission may be exempted.
- For relevant NUS modules that have been credited towards another degree at NUS, on a caseby-case basis and subjective to approval, more than 50% of the MCs required in the coursework component of the NUS graduate research programme may be allowed credit and grade transfer.
- Only graduate modules at Level-5000 and above which are relevant to the degree programme to which the candidate seeks admission at NUS can be considered for credit transfer or exemption. In addition, only modules that have substantially the same learning objectives, content, and level of sophistication as the corresponding NUS module can be considered for credit transfer/exemption.
- Credit transfer and exemption is allowed only for modules that are taken less than five years before the date of admission.
- Application for credit transfer or exemption must be submitted to ALCNS within two weeks from the date of admission.

Curriculum Structure and Requirements

The M.Sc. (Nursing) is comprised of 20 module credits and a 40,000 word thesis.

The Ph.D. is comprised of 28 module credits and an 80,000 word thesis.

Students will undertake research under the supervision of staff members from the ALCNS for their period of candidature, at the end of which, they submit a thesis for examination by the Thesis Examination Panel. In addition to the research component, students are required to fulfil a coursework component comprising of the following:

M.Sc. (Nursing): 3 core + 1 elective modules

Ph.D.: 3 core + 3 elective modules

Modules taken will be at levels 5000 and 6000 and must be equivalent to at least 4 module credits. Elective modules can be chosen from those offered by ALCNS or any School or Research

Institutes/Centres affiliated with the National University of Singapore (subject to the university guidelines). These are subject to the approval of the supervisors and the Head of ALCNS.

To be confirmed a Ph.D. candidate, a student is required to pass a Ph.D. Qualifying Examination (QE) to be taken between 12 to 24 months from the date of admission (12 months for full-time students and 24 months for part-time students). The QE shall consist of a written comprehensive examination and an oral defence of the Ph.D. thesis proposal.

Candidates deemed weak in English by the ALCNS would also have to sit for the Diagnostic English Test and take additional English Language courses conducted by the Centre for English Language Communication.

Candidates from Universities where the medium of undergraduate instruction is not in English are required to take ES5001B (Intermediate Listening & Speaking) regardless of their performance in the Diagnostic English Test. In addition to ES5001B (Intermediate Listening & Speaking), Ph.D. candidates are also required to take ES5002 (Advanced Level Writing) regardless of their performance in the Diagnostic English Test.

Residency Requirements and Candidature

Residency requirements

All candidates must spend a minimum period of residence in Singapore as follows:

M.Sc. (Nursing) : 6 months (one semester)

Ph.D.: 18 months (three semesters)

Residency requires:

- 1. Payment of fees;
- 2. Satisfying all curricular requirements of the programme of study; and
- 3. Satisfying other departmental requirements such as teaching assistance

Periods of study leave and overseas fieldwork do not count toward residency. In addition, M.Sc. (Nursing) and Ph.D. candidates must be resident during the semester in which they submit their thesis for examination.

Candidature

The following maximum candidature periods are inclusive of periods of approved study leave and leave of absence.

M.Sc. (Nursing): 36 months (Full-time & Part-time)

Ph.D.: 60 months (Full-time & Part-Time)

Continuation and graduation requirements

Continuation

For continuation of candidature, candidates have to meet the following Cumulative Average Point (CAP) set for coursework:

M.Sc (Nursing) : CAP should not fall below 2.5 for two consecutive semesters or 3.0 for three consecutive semesters

Ph.D. : CAP should not fall below 3.0 for two consecutive semesters or 3.5 for three consecutive semesters

Termination of candidature would result if a student fails to maintain the minimum CAP as stipulated above.

For any semester in which the M.Sc. (Nursing) candidate's CAP falls below 3.0 (but \geq 2.5), he/she will be issued an academic warning. If, in the following semester, the candidate's CAP again falls below

3.0, he/she will be placed on probation. If the candidate's CAP remains below 3.0 for the third consecutive semester, the candidate will be issued a letter of dismissal by the Registrar and denied re-admission.

For M.Sc. (Nursing) candidates, if the CAP falls below 2.5 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

For any semester in which the Ph.D. candidate's CAP falls below 3.5 (but \geq 3.0), he/she will be issued an academic warning. If, in the following semester, the candidate's CAP again falls below 3.5, he/she will be placed on probation. If the student's CAP remains below 3.5 for the third consecutive semester, the student will be issued a letter of dismissal by the Registrar and denied re-admission.

For Ph.D. candidates, if the CAP falls below 3.0 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

A student may also be issued a warning or placed on probation or be issued a letter of termination for poor performance in the Ph.D. qualifying examination, research thesis, or other programme requirements.

Such a student may appeal the dismissal if there are extenuating circumstances. The appeal must be submitted to the ALCNS within two calendar weeks of the last day of the release of each semester's examination results. Generally, a student is allowed only one such appeal per candidature. If the appeal is rejected, the student will not be readmitted. If the outcome of the appeal is positive, the student will be given one semester in which to achieve the minimum CAP required for continuation and graduation.

Graduation Requirements

M.Sc. (Nursing)

- Pass three core and one elective modules (with 20 module credits)
- A CAP of at least 3.0 (B-) in the elective module
- A Satisfactory grade in the three core modules
- Pass the M.Sc. (Nursing) Thesis
- A minimum grade of C+ for all levels of English course(s) where applicable

Ph.D.

- Pass three core and three elective modules (with 28 module credits)
- A CAP of at least 3.5 (B) or above in the elective modules
- A Satisfactory grade in the three core modules
- Pass the Qualifying Examination comprising of a comprehensive written examination and oral defence of the Ph.D. Thesis proposal
- Satisfactory performance at the annual Ph.D. Symposium (formative assessment)
- Pass the Ph.D. Thesis and Oral Examination
- A minimum grade of C+ for all levels-of English course(s), where applicable

Leave of absence

The University policies on leave of absence shall apply.

Examination rules

The University policies on examination rules shall apply.

4.4.3 Financial Assistance and Awards

Financial support in the form of scholarships is available for qualified candidates on full-time study. These range from S\$1,500 - S\$300 per month for M.Sc. and Ph.D. candidates respectively. Additional support for projects is also available.

To be eligible for the research scholarship, applicants must possess at least a Second Class Upper Honours degree.

4.5 Coursework and Clinical Training Programmes: Division of Graduate Medical Studies (DGMS)

Master of Medicine

The Master of Medicine offered by the Division is based on two to four years of clinical training in approved training hospitals. Assessments are based on examinations.

The Master of Medicine degree is offered in the following disciplines:

- Anaesthesiology
- Diagnostic Radiology
- Emergency Medicine
- Family Medicine
- Internal Medicine
- · Obstetrics & Gynaecology
- Ophthalmology
- Orthopaedic Surgery
- Otorhinolaryngology
- Paediatric Medicine
- Psychiatry
- Surgery

DGMS also offers short one-to-two-week examination preparatory courses to specifically help candidates prepare for their examinations. These are usually held three-to-four weeks before the examinations. Any doctor may enrol although priority may be given to those taking the examinations.

Graduate Diploma Programmes

The Division offers part-time Graduate Diploma programmes in Family Medicine, Family Practice Dermatology, Geriatric Medicine, Mental Health, Occupational Medicine and Palliative Medicine for doctors (mainly GPs practising in Singapore). A Diploma programme in Tissue Banking, also a part-time programme, is offered, in joint collaboration with the Department of Orthopaedic Surgery, National University Hospital.

For more information, please visit: http://www.med.nus.edu.sg/dgms

Master of Science (Speech and Language Pathology)

The Master of Science (Speech and Language Pathology) programme is a two-year professional practice training course with 18 compulsory modules. The programme is designed for graduates from any discipline who are seeking a career working with children and/or adults as a speech and language pathologist.

For more information, please visit: http://medicine.nus.edu.sg/dgms/SLP/Home.html

Master of Science (Audiology)

This graduate-entry programme is set up to address the public demand for locally trained Audiologists. It is the only coursework based study of its kind in Singapore and offered in collaboration with the University of Melbourne. It is customised with a distinct Asian framework and distinguishes itself from other programmes by incorporating a multi-disciplinary approach with related modules covering psychology, public health, engineering, business and innovation. Students are given the opportunity to integrate academics, clinical practice and research, which will be carried out in a purpose built facility, clinic and in collaboration with government research institutes, universities, industry and international partners.

For more information, please visit: http://medicine.nus.edu.sg/dgms/audiology

4.6 Graduate Coursework Programme in Nursing

Master of Nursing Programme

The 24-month Master of Nursing (MN) programme is established to meet a national need to equip nurses with advanced knowledge and skills for clinical management of patients, and to enhance the use of research findings as the basis of effective practice.

Graduates of the MN programme are eligible to apply for certification as an Advanced Practice Nurse (APN) with the Singapore Nurses Board (SNB).

The Curriculum

The MN programme aims to prepare graduate Registered Nurses to:

- 1. perform as Advanced Practice Nurses in various healthcare settings;
- 2. demonstrate advanced knowledge and skills to perform as clinical leaders in their respective speciality;
- 3. acquire an academic and clinical foundation for Advanced Practice Nursing in Singapore;
- 4. perform health and physical assessments, including ordering and interpreting diagnostic tests;
- 5. utilise advanced nursing skills and competencies to plan and manage patients with altered health status in collaboration and consultation with other healthcare professionals;
- 6. furnish/ prescribe medications within a defined formulary and evaluate therapies;
- 7. evaluate cost-effectiveness and outcomes of advanced practice nursing;
- 8. perform as clinical nursing leaders in various healthcare environments;
- 9. demonstrate an ability to critique, synthesise and evaluate research literature;
- 10. demonstrate an ability to conduct research;
- 11. apply ethical principles to resolve complex dilemmas encountered by Advanced Practice Nurses: and
- 12. apply evidence-based knowledge to improve patient outcomes.

The competencies of MN graduates reflect the SNB's competences for APN practice in Singapore.

Admission Requirements

To be eligible for the programme, applicants must:

- a) be registered with the Singapore Nursing Board as a Registered Nurse; and
- b) possess a Bachelor's degree in nursing from an accredited programme; and
- c) have a CAP of 3.5 or equivalent (for those not graduated in NUS); and
- d) have a minimum TOEFL score of 580/237/85 for the paper-based, computer-based and internet-based respectively. (for applicants whose native tongue or medium of undergraduate instruction is not English);

and

- e) have an Advanced Diploma and a minimum of 2 years of post-Advanced Diploma experiences in the area of specialty; or
- f) have a minimum of 5 years of post-graduation experiences with at least three years in the area of specialty. (This will apply until year 2017 when Advanced Clinical Programme is formalized)

** Note: Singapore Nursing Board will not allowed exceptional cases to be admitted.

Fee

Tuition fees (covering 4 semesters): S\$38, 720 (inclusive of GST)

Application

Application opens from 1 March to 30 April every year. Please visit our website at http://medicine.nus.edu.sg/nursing/prg_mn_intro.shtml for more information.

Programme Structure

The 24-month Master of Nursing programme comprises of 80 modular credits (MCs). It has 4 tracks: Adult Health, Mental Health, Acute Care and Paediatrics. All students, regardless of track, will be required to complete and pass 19 modules. The table below illustrates the modules to be taken under the different tracks.

Core Clinical	NUR5101 Advanced Health Assessment (6MC) (AH, MH & AC only)
Module s	NUR5601 Advanced Health Assessment (Paediatrics) (6MC)
(22MC)	NUR5102 Advanced Pathophysiology (6MC) (AH, MH & AC only) NUR5602 Advanced Pathophysiology (Paediatrics) (6MC) PA1113A Basic Pharmacology (4MC) NUR5208 Advanced Pharmacology (6MC)
Generic / Theor etical Module s (20MC)	NUR5201 Foundations of Advanced Practice Nursing (4MC) NUR5202 Advanced Research Methods (4MC) NUR5203 Evidence-based Healthcare (4MC) NUR5206 Health Care Policy and Quality Management (4MC) NUR5207 Ethics in Healthcare (4MC)

E1				
Electives	NUR5006 Geriatrics and Gerontology (4MC)			
Choose any	NUR5007 Primary Care (4MC)			
three	NUR5008 Rehabilitative Care(4MC)			
	NUR5009 Principles and Practice of Palliative Care (4MC)			
12MC	NUR5101 F	rinciples and	d Practice of (Case Management (4MC)
	NUR5205 F	Patient Educa	ition and Hea	alth Promotion (4MC)
	NUR5004 L	eadership in	Healthcare (4MC)
	NUR5002 S	Statistic for H	ealth Resear	ch (4MC)
	NUR6002 (Qualitative Re	esearch in He	ealth Sciences (4MC)
Clinical	Adult	Mental	Acute	Paediatrics
Module s	Health	Health	Care	
(16MC)	NUR530	NUR540	NUR550	NUR5603 Advanced Practice Nursing I (6MC)
	1 Advance	1 Advance	1 Advance	NUR5604 Advanced Practice Nursing II (6MC)
	d Practice	d Psycho	d Practice	_
	Nursing I	patholog y (6MC)	Nursing I	NUR5605 Advanced Practice Nursing III (Paed) (4MC)
	(6MC)	NUR540	(6MC)	
	NUR530	2 Advance	NUR 55	
	2 Advance	d Psycho social Int	02 Advance	
	d	erventio ns (6MC)	d Practice	
	Practice Nursing	NUR540	Nursing II (6MC)	
	II	3 Commun	NUR550	
	(6MC)	ity Mental	3 Advance	
	NUR530	Health	d	
	3 Advance	(4MC)	Practice Nursing	
	d		III (4MC)	
	Practice Nursing			
	III			
	(4MC)			
au				
Clinical Practic	NUR531 1	NUR541 1	NUR551 1	NUR5611 Clinical Practicum I (4MC)

um	Clinical	Clinical Practicu	Clinical Practicu	NUR5612 Clinical Practicum II (4MC)
(10MC)	Practicu m I (4MC)	m I (4MC)	m I (4MC)	NUR5211 Consolidated Clinical Practicum (2MC)
	NUR531 2 Clinical Practicu	NUR541 2 Clinical Practicu m II (4MC)	NUR551 2 Clinical Practicu m II (4MC)	
	m II (4MC)	NUR521 1	NUR521 1	
	NUR521 1	Consolid ated Clinical	Consolid ated Clinical	
	Consolid ated	Practicu m (2MC)	Practicu m (2MC)	
	Clinical			
	Practicu m			
	(2MC)			

For more information, please visit the programme website: http://medicine.nus.edu.sg/nursing/prg_ngrp_intro.shtml.