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1. Introduction
1.1. Welcome

Welcome to the Saw Swee Hock School of Public Health! This handbook provides information on the School’s Master of Science (MSc) and Doctor of Philosophy (PhD) programmes. It contains important information such as University policies and regulations, programme requirements and procedures, and the facilities and support available to students. It is important that you read this handbook carefully and thoroughly. Any constructive feedback on the contents of this handbook will be most welcome.

Please note that the contents of this handbook will be updated regularly and every effort will be made to ensure that the information contained in this handbook is current at the time of going to press. If there are changes in policies, regulations or requirements, the School will notify students via email and provide students with the link to the latest version of the handbook.
1.2 About the Saw Swee Hock School of Public Health

Building upon more than 60 years of experience in research, training and practice in epidemiology and public health, the Saw Swee Hock School of Public Health (SSHSPH) was established in October 2011 as Singapore’s first and only full-fledged national public health tertiary education institution. The School is also a member of the National University Health System (NUHS).

The School is designed around domains which build upon strengths of the School and recognise opportunities in: Epidemiology; Biostatistics & Modelling; and Health Systems & Behavioural Sciences; with programmatic focus in the areas of Cardiovascular-Metabolic Disease, Major Cancers, Eye Disease, and Infectious Disease.

The School aims to continually foster healthier communities in Singapore and the region, and impact public health programmes and policies through its robust educational programmes and translational cross-disciplinary research work on cohort studies and life course epidemiology, infectious disease research, health technology assessments, health promotion, workplace safety and health, health systems evaluation and health services research. An interdisciplinary approach, augmented by rigorous training, applicable research and regional partnerships, places SSHSPH at the forefront of public health knowledge discovery and practice in Asia.

Today, SSHSPH continues to offer the Master of Public Health (MPH) degree to student cohorts from multiple disciplines. In August 2012, the Master of Science (MSc) and Doctor of Philosophy (PhD) programmes were launched to build upon SSHSPH’s strong research base. For undergraduate teaching, SSHSPH faculty teach in the NUS Yong Loo Lin School of Medicine curriculum, exposing medical students to the complexity and value of community and public health through student-driven Community Health Projects (CHP). The launch of the Minor in Public Health in AY2013/2014 provided the opportunity for all other NUS undergraduate students to be exposed to public health issues and its determinants combined with approaches and methods targeted at prevention or alleviation.
1.3 Key Contacts

1.3.1 Programme Management

The School's Master of Science (MSc) and Doctor of Philosophy (PhD) programmes are managed by a programme management committee and supported by an administrative staff from the Education Office:

<table>
<thead>
<tr>
<th>Graduate Research Programme Management Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A/Prof Lee Jen Mai</strong>, Jeannette</td>
</tr>
<tr>
<td>Vice Dean (Education)</td>
</tr>
<tr>
<td>Email: <a href="mailto:ephleej@nus.edu.sg">ephleej@nus.edu.sg</a></td>
</tr>
<tr>
<td><strong>A/Prof Luo Nan</strong></td>
</tr>
<tr>
<td>Graduate Research Programme Director</td>
</tr>
<tr>
<td>Domain Leader (Health Systems &amp; Behavioural Sciences)</td>
</tr>
<tr>
<td>Email: <a href="mailto:ephln@nus.edu.sg">ephln@nus.edu.sg</a></td>
</tr>
<tr>
<td><strong>A/Prof Alex Cook</strong></td>
</tr>
<tr>
<td>Vice Dean (Research)</td>
</tr>
<tr>
<td>Domain Leader (Biostatistics &amp; Modelling)</td>
</tr>
<tr>
<td>Email: <a href="mailto:ephcar@nus.edu.sg">ephcar@nus.edu.sg</a></td>
</tr>
<tr>
<td><strong>Prof Rob Martinus Van Dam</strong></td>
</tr>
<tr>
<td>Domain Leader (Epidemiology)</td>
</tr>
<tr>
<td>Email: <a href="mailto:rob.van.dam@nus.edu.sg">rob.van.dam@nus.edu.sg</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Research Programme Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ms Yang Chunxuan</strong></td>
</tr>
<tr>
<td>Email: <a href="mailto:chunxuan_yang@nus.edu.sg">chunxuan_yang@nus.edu.sg</a></td>
</tr>
<tr>
<td>Phone: 66012499</td>
</tr>
<tr>
<td>Office: Level 10, #10-01, Education Office</td>
</tr>
</tbody>
</table>

The **Graduate Research Programme Administrator** provides administrative support for the MSc & PhD programmes, and should be the first point of contact for administrative matters and general enquiries relating to the MSc & PhD programmes.

The **Graduate Research Programme Director** is responsible for all aspects of the MSc & PhD programmes and oversees the progress of all research students. All forms and procedures pertaining to research students will require the approval of the Graduate Research Programme Director and the Vice Dean (Education).

The **Vice Dean (Education)** oversees the MSc & PhD programmes and the rest of the School’s educational programmes. The Vice Dean (Education) chairs the Graduate Research Programme Management Committee and makes recommendations to the University’s Board of Graduate Studies.
The Graduate Research Programme Management Committee comprises the Vice Dean (Education), the Vice Dean (Research), the Graduate Research Programme Director and the Domain Leaders and is responsible for reviewing and making recommendations on the following:

- overall operational issues of the programme,
- management of the programme, including curriculum review and changes,
- management of programme modules,
- consider and review all potential applicants for admissions,
- review applications for scholarships and financial aid,
- make recommendations for awards and prizes and
- deliberate over any outstanding issues relating to students.

1.3.2 Research Student Representatives

The Research Student Representatives represent the Research Student Community and have a central role of liaising between the School management and the student body. Research Student Representatives should:

- Be responsible and mature
- Have no history of Academic or General Offences
- Preferably be a 2nd or 3rd year PhD student who is able to cope with coursework, research and GAP (if applicable) and has completed the PQE or is close to taking the PQE (Other year PhD student who has the passion to serve the research student community can also apply)
- Preferably based in SSHSPH (within Tahir Foundation Building), and is open to interact with students from different cohorts
- Have the support of his/her supervisor to take on the role of student representation

The roles of the Research Student Representatives include:

- Act as the channel of communication between the student body and the School’s management
- Attend Graduate Research Programme Management Committee meetings (upon invitation)
- Gather feedback from students on new curriculum/policy changes, if any, and summarise the information and present to the Graduate Research Programme Management Committee. Inform the Committee of any other concerns by students, not limited to Academic Matters
- Be a point of contact/befriender for new students, and welcome them during orientation
- Work with the Director of Student Life to enhance student life. Organize social events to bring the research student community together.

Research Student Representatives will serve for a term of one academic year, and can be re-elected for a second term. The incumbent student representatives are responsible for initiating the nomination process for the new representatives each year, facilitating the election process and ensuring a smooth handover to the new representatives.
Research Student Representatives are expected to embody the spirit of altruism and mentorship and be willing to go the extra mile to help their peers. The role will allow the individual to develop leadership, communication and management skills that will enhance personal and career development. However it is recognised that time and effort is required to be a student representative. Thus student representatives who are international research scholars can clock up to 40 hours for GAP (Developmental Assignments) per term of appointment whilst those who are local research scholars can be exempted from 1 TA duty per term of appointment.

Please see here for the contact details of the Research Student Representatives.

1.3.3 Student Counselling and Support

At the NUS Saw Swee Hock School of Public Health, we understand that while campus life can be exciting and fulfilling, there can be stress adapting to the varying demands of a new environment and academic studies. We aim to make this experience less stressful so that students can enjoy their learning experience and adapt smoothly to their new environment.

We regard students’ development, wellness and satisfaction to be of utmost importance. Do not hesitate to seek out help when you are feeling overwhelmed or lost.

Through the following avenues, we are here to provide a listening ear and encouragement to enable students mitigate the stress and overcome the various issues they might face. All counselling is free and confidential.

<table>
<thead>
<tr>
<th>Student Counselling &amp; Support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mrs Diane Lai</strong></td>
</tr>
<tr>
<td>Student Support Manager</td>
</tr>
<tr>
<td>Email: <a href="mailto:diane@nus.edu.sg">diane@nus.edu.sg</a></td>
</tr>
<tr>
<td>Phone: 65166914</td>
</tr>
<tr>
<td>Office: Level 10, #10-01, Education Office</td>
</tr>
<tr>
<td><strong>Dr Lim Boon Tar Raymond</strong></td>
</tr>
<tr>
<td>Director of Student Life</td>
</tr>
<tr>
<td>Email: <a href="mailto:ephlbtr@nus.edu.sg">ephlbtr@nus.edu.sg</a></td>
</tr>
<tr>
<td>Office: Level 10, #10-03C</td>
</tr>
<tr>
<td><strong>Dr Mary Chong Foong Fong</strong></td>
</tr>
<tr>
<td>Deputy Director of Student Life</td>
</tr>
<tr>
<td>Email: <a href="mailto:mary_chong@nus.edu.sg">mary_chong@nus.edu.sg</a></td>
</tr>
<tr>
<td>Office: Level 9, #09-01Q</td>
</tr>
<tr>
<td><strong>University Counselling Services</strong></td>
</tr>
<tr>
<td>Website: <a href="http://nus.edu.sg/uhc/services/mental-health/student.html">http://nus.edu.sg/uhc/services/mental-health/student.html</a></td>
</tr>
<tr>
<td>Address: University Health Centre</td>
</tr>
<tr>
<td>20 Lower Kent Ridge Road, Level 2</td>
</tr>
<tr>
<td>Monday to Wednesday: 8.30am - 6.00pm, Thursday: 8.30am - 5.00pm</td>
</tr>
<tr>
<td>Friday: 8.30am - 5.30pm</td>
</tr>
</tbody>
</table>
1.3.4 IT Support

Students who have problems with printing/photocopying access, school computers, network connections or card access within the school may approach the IT staff at level 8, #08-01D for help. Please see here for their contact details.

For all other IT issues, please contact NUS IT Care:
Email: itcare@nus.edu.sg
Phone: 6516 2080
Location: Level 1, Computer Centre Building
1.4 Facilities within Saw Swee Hock School of Public Health

**Workstation**

Full-time students will be provided with a desk in the level 9 student section and a locker for their personal belongings. Students who have submitted their thesis are not guaranteed a desk area and may be asked to move to accommodate other students. Due to space limitations, part-time students will not be given a desk and students who converted to part-time status during their candidature will be asked to vacate their desks.

**Computer**

Full-time students will be provided with a second-hand desktop computer, subject to availability. As these second-hand computers are of lower performance, supervisors are encouraged to purchase new computers for their research students using their research grants. Students who have submitted their thesis are not guaranteed the use of a school computer and may be asked to move to accommodate other students.

**Printing & Photocopying**

Full-time students who wish to have printing and photocopying access within the school will need to seek their supervisor’s approval as the cost of printing & photocopying will be charged to their supervisor’s research grant. Please check with the Graduate Research Programme Administrator for more information.

Printing facilities are also available at the Yusof Ishak House. For more information, please see [here](#).

**Computer Lab**

The Computer Labs (#08-01A and #08-01B) are open during office hours and are available for use when there are no classes. Students who wish to use the computer labs can check with the Graduate Research Programme Administrator for the class schedule.

**Card Access**

All students will be given the following access to the teaching facilities at levels 8 & 9:

- **Mon - Fri:** 8am – 9pm
- **Sat:** 8.30am – 1pm

In addition, full-time students who are based in the School will be given 24/7 access to the level where their workstation is located.
Students who require access to the lift lobby meeting rooms will need to complete a form which can be obtained from the Graduate Research Programme Administrator.

Students who have problems with their card access may approach the IT staff at level 8 for assistance.

**Booking of Meeting Rooms/ Teaching Facilities**

Students who need to book rooms should approach the Graduate Research Programme Administrator for assistance.

### 1.5 Facilities at NUS

**NUS Campus Map**

The Campus Map is available [here](#).

**Accommodation**

Information relating to on-campus or off-campus housing can be obtained from the Office of Student Affairs (OSA) website.

Students who are unsuccessful in their application for NUS accommodation may source for alternative private accommodation. Please see [here](#) for more information.

**Library Facilities**

The Medical Library is located at MD6, #05-01, while the Science Library is located at S6, Level 4. Please refer to [http://libguides.nus.edu.sg/](http://libguides.nus.edu.sg/) and [https://libportal.nus.edu.sg/](https://libportal.nus.edu.sg/) for the Library Guides and other information on library services provided to NUS students. Please also note the copyright matters with respect to photocopying of library materials as spelt out in the full set of Library Rules.

**Canteen**

The nearest canteen is Frontier, at the Faculty of Science. There is also “Jewel Coffee” at MD11, “Dilys Creation” at MD6 and “Platypus Food Bar” at S16.

For the locations of the rest of the F & B outlets, please see [here](#).
Internal Shuttle Bus

The NUS campus is serviced by an internal shuttle bus (ISB) service that plies the entire campus. More information on their specific routes and timings can be found at all NUS bus stops and on the NUS website.

Sports and Recreation

Please see here for information on booking of sports facilities.

Outpatient Medical Care and Student Counselling

The University Health Centre (UHC), which is located at 20 Lower Kent Ridge Road, Level 1, offers outpatient medical care to all students. Please visit the UHC’s website or call them at 6601 5035 for more information.

Student counselling services are also available at UHC. For more details, please see here.

Lost and Found

The Student Service Centre administers a Lost and Found Service. Staff and students are encouraged to submit an online report to enable the University to contact them if their lost items are found. A lost report can be filed by accessing the online Lost and Found System. Staff and students can also view the lost or found items filed in the system.

NUS Co-Op

The NUS Co-Op sells a variety of items such as books, stationery, snacks, sundries, computer accessories etc. The stores are located at:

- NUS COOP@AS6 – Blk AS6, Level 1 (at Faculty of Arts & Social Sciences, opp LT 14 & 15)
- NUS COOP@LT27 – Science Faculty – LT27, Block MD9
- NUS COOP@SDE – School of Design & Environment, Blk SDE1

The notebook sales, repair and servicing centre is located at NUS COOP@LT27. For opening hours, services & contact numbers, please see here.

Students may apply for membership. Members enjoy 10% discount on purchases of textbooks, general books, stationery, gifts, NUS memorabilia and personal computer accessories, with the exception of special offer items or items labelled as “NETT” Price and items priced $2 and below.
Parking at Campus

For information on parking at NUS, please see here.

Locations of ATM & AXS machines within the Kent Ridge Campus:

For the locations of ATMs and other self-service machines, please see here.

1.6 Academic Calendar

The academic year usually begins in August. There are two semesters in an academic year, and the period and duration of the semesters and vacations are indicated below:

Semester I : Early August to Early December (18 weeks)
Vacation* : Early December to Early January (4 to 5 weeks)
Semester II : Early January to Early May (17 weeks)
Vacation* : Early May to Early August (12 to 13 weeks)

*Please note that the university vacation periods do not apply to research students as research students are expected to work on their research projects on a full-time basis throughout the year. All full-time research students are required to apply for leave if they need to be away at any point of the year. Please refer to Leave Matters for more information.

Please visit the Registrar's Office's website to download the detailed calendar for the current academic year.

1.7 Student Card

Your student card, PIN and NUSNET account information will enable you to access not only physical facilities such as specific buildings/laboratories but also a variety of online resources via the NUS intranet. As such, please keep your PIN and NUSNET account absolutely confidential.

For more information on loss/replacement of Student Card, please see here.

1.8 NUS Email

All students will have an NUS email account. All email communications from NUS and SSHSPH will be sent to your student mail only. Students may choose to redirect the NUS emails to their personal email account via the following steps:
Accessing your NUS student email:
i. Go to https://outlook.com/u.nus.edu
ii. Login using your NUSNET ID and password

Re-directing emails to your personal email account:
i. Go to https://outlook.com/u.nus.edu
ii. Login using your NUSNET ID and password
iii. Click on at the top right hand corner → Go to “Your App Settings” and select “Mail”
iv. Go to “Accounts” → Select “Forwarding”
v. Enter your preferred email address and click “Save”

Creating a Friendly Email:
i. Go to https://outlook.com/u.nus.edu
ii. Click on “Friendly Email”.

Forget your NUSNET password?
i. Reset your NUSNET password via SMS. Please refer to the step-by-step guide.
ii. Alternatively, you may email itcare@nus.edu.sg, stating your full name, student ID and attach a scanned image of your student card.

1.9 NUS Business Cards for Students
Students who wish to print NUS business cards may contact Ms Fong Mew Hoe (ephf mh@nus.edu.sg) from the School’s External Relations Office for assistance. Each box of business cards contains 100 pieces and cost S$10.70 (inclusive of GST). The cost will be borne by the student.

1.10 NUS Student Insurance Scheme
All full-time NUS matriculated undergraduates, graduates and non-graduating students are required to subscribe to the university’s medical insurance scheme. This scheme provides all full-time students with basic medical and personal accident insurance coverage.

Please refer to the UHC website for more information on the insurance coverage.
1.11 NUS Student Travel Insurance

With effect from 1 January 2016, there will be travel insurance cover for all students travelling overseas for activities or purposes approved, endorsed, organized, sponsored or authorized by NUS. Such trips shall be referred to as “official NUS student trips” in short for the purpose of this policy.

Official NUS Student Trips must be approved / sanctioned by the relevant approving authority of the Faculty/ Department/ Centre/ Programme. Departments and Students are required to keep proper record of the approval/ endorsement of the official NUS student trips. Students must submit the approvals from Departments with their travel insurance claims.

For more information, please refer see here.

1.12 Student Portal

The Student Portal is the NUS intranet for students. It is a one-stop gateway to all student related information, systems and events.

Please visit our school’s page for forms and templates specific for graduate research students. Please note that some of the forms will require you to first login to the NUS Web VPN before you can access them.

1.13 Integrated Virtual Learning Environment (IVLE)

The Integrated Virtual Learning Environment (IVLE) is the NUS Course Management System. Students can access up-to-date online syllabi, download lecture handouts, submit assignments, manage projects, participate in discussion forums and online communities, take part in online quizzes and surveys and watch live webcast lectures, among other things.

IVLE has an SMS announcement service that enables students to receive announcements posted in IVLE via SMS (only applicable to local SG numbers). Please subscribe to this service through the following steps:

i. Click on your name which appears on the top right hand corner of the IVLE Workspace page.
ii. Click on “Profile”
iii. Select “Edit”
iv. Check the option next to (Yes, I wish to receive SMS from IVLE Announcement and Project) and click “Save”

For more information on IVLE, including access to the user guides, please see here.
1.14 Education Records System

The Education Records System (EduRec) is a student administrative system that integrates key activities of a student academic life cycle from admissions, module registration, student financials and progression to graduation.

To login to EduRec, you will need your NUSNET account that was given to you upon completing the online Registration Part One. You may refer to the user guides available in the student portal.

1.15 Notebook Ownership

NUS students can purchase notebooks at special prices offered under the Student Notebook Ownership Scheme. In addition, full-time postgraduate students may apply for the NUS interest-free loan to help finance the purchase of the notebook. The NUS interest-free loan is on a first-come first-served basis subject to loan fund availability. Please visit the notebook sales centre at NUS Co-Op @ LT-27 (next to Science Canteen) or see here for more information.

1.16 Software for Students

Microsoft Office 365 ProPlus

Office 365 ProPlus is the subscription-based version of Microsoft Office suite. It includes the latest version of Microsoft Office apps, consisting of Word, Excel, PowerPoint, Outlook, OneNote, Publisher, Access and Skype for Business.

NUS students can install Microsoft Office 365 ProPlus on up to 5 PCs or Macs for free. To install the mobile versions, please download from Apple Apps Store (iOS) or Google Play Store (Android). This is made available as part of NUS’ subscription to Microsoft licenses.

For more information, please refer to the step-by-step installation guide.

Other Software

Students can also download anti-virus and EndNote software from the NUS software catalogue. For more information, please see here.
1.17 NUS eSurvey System

eSurvey is a DIY tool that can be used to create web based surveys quickly and efficiently using the built in question types. Students who need to conduct online surveys or create a registration page for events are advised to use the NUS eSurvey System. For more information, please see here.
2. University Policies & Regulations
2.1 NUS Student Data Protection Policy

NUS takes responsibilities under the Personal Data Protection Act 2012 seriously. We also recognize the importance of the personal data you have entrusted to us and believe that it is our responsibility to properly manage, protect and process your personal data. The NUS Student Data Protection Policy is designed to assist you in understanding how we collect, use and/or disclose the personal data you have provided to us, as well as to assist you in making an informed decision before providing us with any of your personal data. If you, at any time, have any queries on this policy or any other queries in relation to how we may manage, protect and process your personal data, please do not hesitate to contact our Data Protection Officer at dpo@nus.edu.sg.

2.2 NUS Code of Student Conduct

NUS students are expected to maintain and uphold the highest standards of integrity and honesty at all times, as well as embrace community standards, diversity and mutual respect for one another, both within the University and the wider Singapore community.

The Code of Student Conduct (published by the Office of Student Affairs) is intended to guide students' conduct in both the academic and non-academic aspects of their University life by providing an overview of the behaviour generally expected of them as a member of the University community.

One of the fundamental principles on which this Code is based is that of "Academic, Professional, and Personal Integrity".

In this respect, it is important to note that all students share the responsibility for upholding the academic standards and reputation of the University. Academic honesty is a necessary condition in the pursuit and acquisition of knowledge, and the University expects each student to uphold academic honesty.

Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources. There are many forms of academic dishonesty and plagiarism is one of them. Plagiarism is generally defined as 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University does not condone plagiarism.

2.2.1 Plagiarism Warning

Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your
assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. In addition, the following guidelines will provide some assistance:

- When using the ideas, phrases, paragraphs and data of others in work presented for assessment, such materials should be appropriately credited and acknowledged, so that it is clear that the materials being presented is that of another person and not the student's own.

- The amount of detail required when referencing and acknowledging a source will vary according to the type of work and norms of the discipline. For instance,
  - Supervised examinations will require less detail in referencing and acknowledgement.
  - Papers written other than under examination conditions will require a full citation of all the sources utilised. While a particular style of citation is not prescribed, the citation should provide enough information for the reader to locate the sources cited.

- Research materials (including texts, graphics and data) obtained from the internet or other electronic resources should be treated in the same way as research materials obtained from traditional sources.

Any student found to have committed or aided and abetted the offence of plagiarism may be subject to disciplinary action. Plagiarism committed by graduate students will be subject to a higher level of scrutiny because graduate students have had ample or prior experience of academic practice compared to undergraduate students. Any complaint or allegation of plagiarism offence committed by a graduate student with regard to work submitted for assessment or any publications will be viewed as a possible "Serious" offence that should be appropriately determined by the Board of Discipline (BOD) after the relevant fact-finding has been rigorously performed. The student may receive a reduced grade (possibly even zero mark) for the relevant academic assignment, project, or thesis; and could receive a failed grade for the module. Any student caught plagiarising will be required to retain the plagiarised module as graded, and will not be allowed to exercise the S/U option for that module.

A student may not knowingly intend to plagiarise, but that should not be used as an excuse for plagiarism. Students should seek clarification from their instructors or supervisors if they are unsure whether or not they are plagiarising the work of another person. All students are also encouraged to:

- consult the resources compiled by the Centre for Development of Teaching and Learning (CDTL) on how to avoid plagiarism;
- use the service provided by the Centre for Instructional Technology (CIT) to help detect and prevent web-based plagiarism; and
- access the Academic Culture module online.
2.3 NUS Acceptable Use Policy for IT Resources

The NUS Acceptable Use Policy for IT Resources applies to the use of the IT resources owned, controlled or managed by the University, such as computer accounts, personal computers, servers, workstations, disk storage, software, administrative and academic applications, email, public folders, newsgroups, online discussion forums, dialup, network, Internet and databases, among others. All users who have been granted access to the IT resources, including students of the University, are to comply with this policy.

2.4 NUS Intellectual Property Policy

In addition to the provision of educational facilities at tertiary levels, the functions and objectives of the University include the promotion of research and scholarship and the advancement and dissemination of knowledge for the benefit of all. Consistent with its status as a publicly funded organisation, it is critical that the University ensures that the creation, dissemination and commercialisation of Intellectual Property is properly administered for the benefit of the public and the University. The NUS Intellectual Property Policy shall therefore apply to all Intellectual Property developed or created by a University member, including students, in the course of University research. The Industry Liaison Office manages all such issues.

2.5 NUS Do-Not-Call Policy

The University must comply with the Personal Data Protection Act 2012 (PDPA) and the Do Not Call (DNC) regime/framework. The PDPA aims to protect individuals' personal data against misuse, while promoting proper management of personal data in organizations. The PDPA requires that organizations collecting, using and disclosing personal data notify their consumers of the purposes of such data activities and seek the consent of these individuals. Personal data is defined as data about an individual who can be identified from that data. The DNC Registry will allow individuals with Singapore telephone numbers to opt out of unsolicited marketing calls, messages and faxes.

NUS must fully comply with the PDPA. To this end, NUS has developed a DNC Policy with our legal consultants to ensure compliance from our community.

2.6 NUS Student Confidentiality Agreement

All NUS students are required to acknowledge and agree to comply with the terms stated in the NUS Student Confidentiality Agreement. Students should keep absolutely confidential any Confidential
Information, whether belonging to the University or other third parties be it in writing or verbally in the course of their studies, internships, attachments and/or student life at the University.

Unless express written permission has been given by the relevant authority at the University or the third party that owns or otherwise is in control of the Confidential Information, students should not discuss, release, retain, copy or remove any document or data in any format.

Students found to have made unauthorised release of Confidential Information may be subject to immediate termination of their attachment, internship, assistantship, departmental work (paid or unpaid), or such other disciplinary action as the University may deem appropriate.

### 2.7 Student Discipline

Discipline with respect to students is governed by the University’s Statutes and Regulations. Any student who is alleged to have committed or attempted to commit offences listed in Clause 3 of Statute 6 may be subject to disciplinary proceedings. For more details, please see here.

Heads of academic and non-academic units are empowered to adjudicate any offences in relation to existing students of the University. In such cases, appeals can be brought before the Dean of the Faculty if the disciplinary action was initiated by the Head of a Faculty-based academic unit, or before the Dean of Students if it was initiated by the Head of a non-Faculty-based academic unit or the Head of a non-academic unit.

The Board of Discipline is empowered to adjudicate any offences in relation to any student of the University, whether existing or for whom the candidature has ceased, as long as the circumstances giving rise to the disciplinary proceedings arose while the person was a student of the University or in connection with the person’s admission into the University. The Board of Discipline is chaired by the Dean of Students or a Vice Provost and comprises two other members of the Senate and two members of the Student Union. Appeals against the decisions of this Board are heard by the Disciplinary Appeals Board.

Students of the National University of Singapore should familiarise themselves with the NUS Code of Student Conduct which is intended to guide students’ conduct in both the academic and non-academic aspects of their University life by providing an overview of the behaviour generally expected of them as members of the University community.

Students may also access the Discipline with Respect to Students - Guidance Note for Students on the NUS Student Portal for better understanding of factors relevant to the classification of offences by the University. NUS staff managing student disciplinary matters may also access relevant resources via the NUS Staff Portal.
2.8 Responsibility for Notices, Circulars and Update of Personal Particulars

All students will have an email account at NUS that will be their official point of contact. Most communications from the University to students will be via the official email account. As such, students are expected to check this account regularly. Students are also expected to be aware of the latest notices/circulars that may be posted on myPortal@NUS.

Throughout their candidature, students are responsible for keeping their personal particulars (including citizenship, official/legal name*, identity card/passport details, permanent and correspondence contact details, and next-of-kin details) updated in the University's records in a timely manner. This means that students must notify the University within 5 working days of the effective date of change of the affected personal particulars. The University will not be accountable for delayed or lost mail due to incorrect or obsolete students' addresses and contacts. Students may check their particulars or amend their contact details via the University's Education Records System.

*Please note that your Official Name in the University's Education Records System will be printed on your degree scroll and academic transcript. If you have changed your name during your course of study but failed to inform the University in a timely manner and you have already been conferred your degree, then your name as presently reflected in our official records, will be inscribed on your degree scroll. No further requests for name changes will be entertained.

2.9 Health Screening and Vaccination

In accordance with the Singapore Ministry of Health requirements, all students who experience direct patient contact or contact with patient specimens as a course of their training and/or research must undergo the following health screening and meet these vaccination requirements:

<table>
<thead>
<tr>
<th>Disease</th>
<th>Vaccination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>Students who do not have immunity against Hepatitis B should be vaccinated. Serological evidence is necessary. Records of past vaccinations alone are not sufficient as vaccine response failure is not insignificant in Hepatitis B.</td>
</tr>
<tr>
<td>MMR (Measles, Mumps, Rubella)</td>
<td>MMR vaccination should be offered to susceptible students. Serological evidence or documented record of vaccination can be considered as presumptive evidence of immunity. Self-reporting of past infection or vaccination is not sufficient.</td>
</tr>
<tr>
<td>Chickenpox</td>
<td>Chickenpox vaccination should be offered to susceptible students. Serological evidence or documented record of vaccination can be considered as</td>
</tr>
</tbody>
</table>
### Disease | Vaccination
---|---
 | presumptive evidence of immunity. **Self-reporting of past infection or vaccination is not sufficient.**
Influenza | Students who come into contact with patients or patient specimens should receive an annual influenza vaccine.

The cost of all health screenings and vaccinations will be borne by the student. If your research requires you to have direct patient contact or contact with patient specimens, please undergo the above health screenings and obtain the necessary vaccinations, and submit documentary proof of the health screening results/vaccination records to the Graduate Research Programme Administrator.

### 2.10 NUS Research Integrity Policy

Faculty, staff and students of the University community engaging in research should adhere to the highest standard of ethics and Research Integrity. This is to ensure that the reputation of the University for scholarly integrity is preserved.

Research Integrity includes the rigour, care and accountability that are the hallmarks of good scholarship and is not merely the avoidance of wrongdoing. Research Misconduct by the University community, defined as fabrication, falsification, plagiarism or other wrongdoing in proposing, designing, performing, recording, supervising or reviewing research, or in reporting research results is unacceptable and is grounds for disciplinary action.

Research Integrity Officers appointed by the University are responsible for assessing allegations of Research Misconduct and determining when such allegations warrant inquiries, and for overseeing formal inquiries. Allegations of Research Misconduct can be made by an individual in person, or in writing in a sealed envelope, signed and marked "strictly confidential" to the Office of the Deputy President (Research & Technology) who will assign a Research Integrity Officer to look into the case.

Students are advised to read and be familiar with the NUS Research Integrity policy available [here](#).

To harmonise policies and further establish the University’s commitment to research integrity, NUS has adopted a unified set of standards for research publications with A*STAR, NTU and SUTD. Please see [here](#) for details on the joint statement.

### 2.11 NUS Research Data Management Policy

There is a need to design and adopt policies on the management of research data, to ensure that valuable data are not lost. Such a policy also provides a basis to answer allegations of research
misconduct or questions about the results obtained. It also assists in the protection of intellectual property and assures auditors and industry that robust academic supervision is in place. Correct data handling can also allow limited access to others for certain datasets (e.g. in large cohort studies).

The NUS Research Data Management (RDM) Policy applies to all NUS faculty members, staff, students and any other persons at the University engaged in research, regardless of the source of funding for the project.

For SSHSPH, all staff and students have to abide by the SSHSPH Research Data Management (RDM) Policy, which elaborates for SSHSPH, the operation of the NUS RDM policy.

2.12 NUS Modular System

The undergraduate and graduate curricula are based on a modular system. The NUS modular system combines the rigour and depth of the British university system with the flexibility and breadth of the American system. Under this system, workloads are expressed in terms of Modular Credits (MCs), and academic performance is measured by grade points on a 5-point scale. Students can progress at their own pace and choose from a wide range of modules offered by different Faculties/Schools. The modular system offers students the possibility of accelerating their courses of study by taking more modules per semester (i.e., above the average of 20 MCs per semester), subject to the approval of their home Faculty.

Module

Each module of study has a unique module code consisting of a two- or three-letter prefix that denotes the discipline, and four digits, the first of which indicates the level of the module (e.g., 1000 indicates a Level 1 module and 2000, a Level 2 module).

Pre-requisites, Co-requisites, and Preclusions

Pre-requisites indicate the base of knowledge on which the subject matter of a particular module will be built. Before taking a module, a student should complete any pre-requisite module(s) listed for that particular module. Where pre-requisites are specified, equivalent modules will also be accepted. If in doubt, students should consult the module instructor or the Department academic advisor regarding the acceptable equivalent modules. Co-requisites are modules that are to be taken concurrently. A module may also specify certain preclusions. These are modules that have similar emphases and may not be taken together with that particular module.

Workload

The weekly workload of each module is given in the full module description. There are five workload components to each module. In the module description, these components are given in a series of
five numbers. For example, NM2217 Creating Interactive Media has a workload of ‘2-2-0-3-3’. If we represent the five numbers in a workload series as ‘A-B-C-D-E’, each letter would refer to:

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No. of Lecture hours</td>
<td>Actual contact hours per week</td>
</tr>
<tr>
<td>B</td>
<td>No. of Tutorial hours</td>
<td>Actual contact hours per week</td>
</tr>
<tr>
<td>C</td>
<td>No. of Laboratory hours</td>
<td>Actual contact hours per week</td>
</tr>
<tr>
<td>D</td>
<td>No. of hours for projects, assignments, fieldwork, etc</td>
<td>This caters to assignments, independent studies, fieldwork, and other forms of continuous assessment that contribute towards the final grade of the module.</td>
</tr>
<tr>
<td>E</td>
<td>No. of hours for preparatory work</td>
<td>This refers to the number of hours a student is expected to spend each week in preparing for lectures and tutorials.</td>
</tr>
</tbody>
</table>

**Modular Credits**

A modular credit (MC) is a unit of the effort, stated in terms of time, expected of a typical student in managing his/her workload. The MC-value of a module is derived by dividing the estimated total number of workload hours per week for that module by the credit factor of 2.5 (i.e., one MC is equivalent to 2.5 hours of study and preparation per week). Thus, a 4-MC module would require 10 hours of work a week, including lectures, tutorials, laboratory sessions, assignments, and independent or group study.

**Grade Points**

Students receive letter grades for each module taken, except for the cases listed below. Each grade corresponds to a grade point as shown below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>5.0</td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>4.5</td>
</tr>
<tr>
<td>B+</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>3.5</td>
</tr>
<tr>
<td>B-</td>
<td>3.0</td>
</tr>
<tr>
<td>C+</td>
<td>2.5</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>D+</td>
<td>1.5</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

As the above table indicates, a plus (+) or minus (-) suffix added to a grade raises or lowers the grade point value, except in the case of A+, which carries the same grade points as the A grade.
Cumulative Average Point (CAP)

Academic progress is tracked by the CAP, which is the weighted average grade point of all modules taken by a student. Therefore, a student's CAP is the sum of the module grade points multiplied by the number of MCs for the corresponding module, divided by the total number of MCs. This is represented as follows:

\[
\text{CAP} = \frac{\text{sum (module grade point} \times \text{MCs assigned to module})}{\text{sum (MCs assigned to all modules used in calculating the numerator)}}
\]

Modules with no assigned MCs or grade points are excluded from the calculation of CAP.

There are a number of situations for which no grade points are assigned:

*Completed Satisfactorily/Completed Unsatisfactorily (CS/CU)*

A module may be graded on a ‘CS/CU’ basis, i.e., whether the module has been ‘Completed Satisfactorily’ (CS) or ‘Completed Unsatisfactorily’ (CU). CS/CU modules are typically industrial attachment, internship or enrichment modules. Modular credits will be given for modules that are completed satisfactorily, although no grade point will be assigned. A module is designated ‘CS/CU’; unlike modules graded on an S/U basis, it is not an option.

*Exempted (EXE)*

This grade is awarded when a student is exempted from or given credit for a module under the Advanced Placement process.

*Incomplete (IC)*

The ‘IC’ grade is assigned when a student's work is of passing quality but is incomplete for good reasons (e.g., illness during the official examination period). However, even such good reasons will not warrant an ‘IC’ grade if the work already completed for the module is clearly not of passing quality; instead, students should note that the ‘F’ grade will be assigned in such cases. A module assigned an ‘IC’ grade normally cannot be used to fulfil the pre-requisite of a higher-level module. Should a student choose to repeat the module in a subsequent semester, none of the work done previously may be carried forward for assessment purposes.

*In Progress (IP)*

For a module that extends beyond more than one semester, evaluation of a student's performance is deferred until the completion of the module. The provisional grade of ‘IP’ is assigned in the intervening semesters. This is replaced with the final grade when the student completes the module.

*Satisfactory/Unsatisfactory (S/U)*

Students may elect to have certain modules graded on a ‘Satisfactory/Unsatisfactory’ (S/U) basis, subject to approval by the faculty. For modules graded on an S/U basis, an ‘S’ grade is assigned if a
student receives a ‘C’ grade or above for the module. Conversely, students will receive a ‘U’ if the grade obtained is lower than a ‘C’ grade. The S/U option, once exercised, will be irrevocable for the module.

Withdrawn (W)
When a student withdraws from a module between the first day of Week 3 of the instructional period and the last day of the Recess Week, a ‘W’ grade will be recorded in the transcript. Withdrawals after this period (i.e. from the first day of Week 7 of the instructional period) will result in an ‘F’ grade, which will be included in the computation of the CAP and will not be eligible for the S/U option.

2.13 Examination Rules & Instructions

It is the students’ responsibility to check the examination timetable and familiarize themselves with the Examination Rules, a breach of any of which will render a student liable to disciplinary action which may result in the student’s expulsion from the University. For more details, please see here.

If there are any circumstances, academic or otherwise, which have adversely affected a student’s academic performance during the course of Semester or examination, the student can submit a form, the Application for Special Consideration, together with any supporting documents, to the Education’s office within the stipulated deadline. Both the Special Consideration guidelines and form are downloadable from here.

Students who missed the examination without valid reasons (as determined by the Board of Examiners) will be deemed to have sat for and failed the examination (i.e. obtained zero marks).

If students do not achieve a passing grade in a module, they can apply to retake the module subject to the following guidelines:

a) Students can repeat the same module only once if a module, either core or elective, has not met the minimum grade requirement and is required for the graduate programme;

b) Students can repeat up to one-third of the coursework requirements, not exceeding three modules, whichever is lower although they can repeat the same module only once;

c) Only the better grade of a module taken more than once will be computed in the CAP.

Students are not allowed to retake a module if they have obtained a pass grade (i.e. grade D or above, or Satisfactory grade) for the module.
3. Candidature, Residency & Leave Matters
3.1 Candidature Matters

3.1.1 Candidature Period

The maximum candidature for the MSc and PhD programmes are as follows:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Maximum Candidature (for both full-time &amp; part-time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSc</td>
<td>36 months</td>
</tr>
<tr>
<td>PhD</td>
<td>60 months</td>
</tr>
</tbody>
</table>

The maximum candidature for research programmes is the same for both full-time and part-time students. Students are required to submit their thesis (approved by supervisor(s)) for examination by the maximum period of their candidature; failing which, their candidature will lapse automatically.

There is no minimum candidature for research programmes. However, students will need to fulfil the minimum residency requirements.

For more information, please see here.

3.1.2 Difference between Full-Time and Part-Time Candidature

The MSc and PhD programmes are highly intensive, and students must be able to commit to their research projects on a full-time basis. The only difference between full-time and part-time students is part-time students are allowed to hold full-time employment. All programme requirements (e.g. coursework and seminar requirements, maximum candidature, deadline to complete the PhD Qualifying Examination, tuition fees etc) are the same for both full-time and part-time students, and part-time students are required to meet the same timelines as full-time students. Some of the compulsory modules and seminars are held during office hours, and it is the responsibility of part-time students to arrange for time-off from their employers to attend the classes and seminars.

Most of our part-time students are Research Assistants who work for PIs within our school, and they use the research work that they do for their PI as their MSc/PhD project. Students whose employment is not related to their MSc/PhD will find it hard to juggle both studies and work as it is equivalent to doing a full-time MSc/PhD on top of their full-time job.

Students should note that commitments from employment will not be accepted as valid reasons for absence, uncompleted work, late submission of work, or poor performance.

3.1.3 Full-Time Students and Employment

Full-time students are discouraged from taking on paid work due to the demands of the research programmes. However, in cases where students may need to do paid work for financial reasons, full-
time students may apply to undertake part-time employment up to a maximum of 16 hours per week, subject to approval by the School. The cap of 16 hours per week applies to the university’s vacation terms too as research students are expected to work on their research projects on a full-time basis throughout the year.

Students should note that commitments from employment will not be accepted as valid reasons for absence, uncompleted work, late submission of work, or poor performance.

3.1.4 Transfer of Candidature from MSc to PhD

MSc students who wish to upgrade to PhD must complete the PhD coursework requirements and pass the PhD Qualifying Examination (PQE) within the first 2 years of their candidature. Please refer to Section 4.6 for more information on the PQE.

If the upgrading to PhD is successful, the maximum candidature will be five years from the original date of registration. Credit will be given for the work done towards the MSc degree. For research scholarship holders, the scholarship period will generally be extended to correspond to the period given to PhD students. The terms and conditions of the research scholarship award remain unchanged.

3.1.5 Transfer of Candidature from PhD to MSc

Students should complete and submit the prescribed application form, through their supervisor(s) to the Education Office. A student may also be advised to transfer if s/he has not been performing satisfactorily in his/her PhD. The student is advised to similarly complete and submit the prescribed application form.

As a result of the transfer, the maximum period of candidature will be reduced to three years from the original date of registration. The student will have to apply for extension of candidature, if necessary.

For research scholarship/fellowship/award recipients, the scholarship/fellowship/award may be terminated with the transfer. If the scholarship/fellowship/award is terminated before the end of the first two instructional weeks, the tuition fee for the semester will not be covered by the scholarship/fellowship/award. If excess payment has already been made, the student will be informed to make the necessary refund. If there is an over-consumption of leave, the appropriate amount arising from that will be added to the refund. In addition, for full-time international students whose spouse/children are here on a social visit pass sponsored by the University, the pass may also be cancelled once the application for conversion to part-time candidature has been approved.
3.1.6 Conversion of Candidature (between Full-time and Part-time)

Research students are to apply using the prescribed application form. The form needs to be endorsed by the student’s supervisor(s), and submitted to the Education Office for approval.

Generally, research students should have already submitted a satisfactory first draft of the thesis to the supervisor before the request for conversion from full-time to part-time candidature can be considered. For students who are or who have been on research scholarship/fellowship/award, under no circumstances should they start work before they obtain approval from the University. Otherwise, their candidature may be terminated immediately.

Fees are still payable until such time the thesis has been submitted for examination. Please note that there is no difference in fees between full-time and part-time students. For full-time international students, the University will inform the Immigration and Checkpoints Authority (ICA) of the conversion to part-time candidature. The student's pass must be cancelled/surrendered to ICA, using a prescribed "Cancellation/Surrender of Student's Pass/Long-Term Visit Pass" form, which is downloadable from the ICA website. Any spouse/child social visit pass sponsored by the University will also have to be cancelled accordingly.

For research scholarship/fellowship/award recipients, the scholarship/fellowship/award will be terminated with the conversion to part-time. If the scholarship/fellowship/award is terminated before the end of the first two instructional weeks, the tuition fee for the semester will not be covered by the scholarship/fellowship/award. If excess payment has already been made, the student will be informed to make the necessary refund. If there is an over-consumption of leave, the appropriate amount arising from that will be added to the refund.

3.1.7 Extension of Candidature

Students who are unable to submit their thesis for examination or complete their degree requirements by the maximum period of their candidature will have to apply for an extension of their candidature. This should be done at least three months before the expiry of the maximum candidature. Faculties may approve extension of candidature not exceeding two years on a cumulative basis. Beyond the two-year limit, the approval of the Board of Graduate Studies is required.

Students are to apply for extension using the “Application for Extension of Candidature for Graduate Research Students Form”. The form needs to be endorsed by the student’s supervisor(s), and submitted to the Education Office for approval.

A candidature would be considered lapsed (candidature terminated) once the maximum candidature period of the degree is reached unless an extension was previously approved.
3.1.8 Withdrawal of Candidature

Graduate research students who wish to withdraw from their course should submit the prescribed application form with their student card through their supervisor(s), Programme Director, to Vice Dean (Education). A letter confirming the withdrawal from the University will be sent to student within three weeks after submission of the form.

Please note that students who leave the University after the second instructional week of a semester are liable to pay fees for the whole semester. Not having attended any class or not having utilised university’s resources are invalid reasons for exemption from fee payment.

For students who have modules registered for the semester, depending on when during the semester they notify the University of the intention to withdraw, their module(s) and candidature withdrawal status will be recorded as follows:

<table>
<thead>
<tr>
<th>Notification of withdrawal</th>
<th>Module(s) registered for the semester</th>
<th>Withdrawal status</th>
</tr>
</thead>
<tbody>
<tr>
<td>By end of Instructional Week 2*</td>
<td>Remove from record completely.</td>
<td>Take effect from the date of application.</td>
</tr>
<tr>
<td>First day of Instructional Week 3* through to last day of Reading Week*</td>
<td>Record with a “WU” grade representing “withdrawal from university”.</td>
<td>Withdrawal will not be processed until after result release - Withdrawal will only take effect from the following semester.</td>
</tr>
<tr>
<td>First day of Examination Period* through to last day of Vacation*</td>
<td>Record with final grade(s) awarded by the University.</td>
<td></td>
</tr>
</tbody>
</table>

* Please refer to the NUS Academic Calendar for the actual date.

Students who withdraw after registering for modules during Special Term Part 1 and 2 will have their module(s) and candidature withdrawal status recorded as follows:

<table>
<thead>
<tr>
<th>Notification of withdrawal</th>
<th>Module(s) registered for the semester</th>
<th>Withdrawal status</th>
</tr>
</thead>
<tbody>
<tr>
<td>By end of Week 1*</td>
<td>Remove from record completely.</td>
<td>Take effect from the date of application.</td>
</tr>
<tr>
<td>First day of Week 2* through to the day before start of Examination*</td>
<td>Record with a “WU” grade representing “withdrawal from university”.</td>
<td>Withdrawal will not be processed until after result release. Withdrawal will only take effect from the following semester.</td>
</tr>
<tr>
<td>First day of Examination Period* through to last day of Vacation*</td>
<td>Record with final grade(s) awarded by the University.</td>
<td></td>
</tr>
</tbody>
</table>

* Please refer to the NUS Academic Calendar for the actual date.

The student card has to be returned to the Education Office/Student Service Centre.
For international students holding a student's pass, the University will inform the Immigration and Checkpoints Authority (ICA) of the withdrawal. The student's pass must be cancelled/surrendered to ICA, using a prescribed "Cancellation/Surrender of Student's Pass/Long-Term Visit Pass" form, which is downloadable from the ICA website. Any spouse/child social visit pass sponsored by the University will also have to be cancelled accordingly.

Students who have withdrawn from the University and subsequently intend to return to the same programme of study will have to apply for readmission and be subjected to the prevailing tuition fee rate and policy. Nevertheless, students may appeal to return within 12 months from date of withdrawal, by submitting a request with justifications for reinstatement of candidature to their Faculty for consideration. Reinstatement of candidature will be considered on a case-by-case basis and is not guaranteed. An administrative fee of S$250 is payable for approved reinstatement of candidature. For those on MOE-subsidised programmes and are successful in gaining readmission, they will be subjected to the eligibility guidelines for MOE subsidy.

3.1.9 Termination of Candidature

The candidature of a student can be terminated when:

- performance in coursework and/or research is unsatisfactory;
- student is the subject of a disciplinary case brought before the Board of Discipline;
- student is missing in action (without approved leave);
- student did not register for module(s) when s/he is expected to (without approved leave or other approval); or
- student has exceeded the maximum candidature (candidature has lapsed)
- student has overdue fees

The student will be notified officially in writing if the candidature is terminated.

Please note that students who leave the University after the second instructional week of a semester are liable to pay fees for the whole semester.

The student card has to be returned to the Education Office/Student Service Centre.

For international students holding a student's pass, the University will inform the Immigration and Checkpoints Authority (ICA) of the termination. The student's pass must be cancelled/surrendered to ICA, using a prescribed "Cancellation/Surrender of Student's Pass/Long-Term Visit Pass" form, which is downloadable from the ICA website. Any spouse/child social visit pass sponsored by the University will also have to be cancelled accordingly.

Students who have been dismissed due to poor Cumulative Average Point (CAP) can refer to the information from Registrar’s Office regarding appeal for reinstatement.
Students who have been dismissed and would like to return to the same programme of study generally will have to apply for readmission and be subjected to the prevailing tuition fee rate and policy. Nevertheless, students may appeal to return within 12 months from date of termination, by submitting a request with justifications for reinstatement of candidature to their Faculty for consideration. Reinstatement of candidature will be considered on a case-by-case basis and is not guaranteed. An administrative fee of S$250 is payable for approved reinstatement of candidature.

For those on MOE-subsidised programmes and are successful in gaining readmission, they will be subjected to the eligibility guidelines for MOE subsidy.

### 3.2 Residency Requirements

The minimum residency requirements for the MSc and PhD programmes are as follows:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Minimum Residency (for both full-time &amp; part-time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSc</td>
<td>6 months (^{(i)}) (^{(ii)}) (^{(iii)})</td>
</tr>
<tr>
<td>PhD</td>
<td>18 months (^{(i)}) (^{(ii)}) (^{(iii)})</td>
</tr>
</tbody>
</table>

\(^{(i)}\) Refers to all local NUS campuses, as well as NUS entities overseas (e.g., NUS Research Institute (Suzhou)).

\(^{(ii)}\) Includes research carried out in the establishments of approved NUS industry partners.

\(^{(iii)}\) The minimum residency requirements are the same for both full-time and part-time students.

Residency implies the following: a) payment of fees, b) satisfaction of all curricular requirements of the programme of study and c) satisfaction of other departmental requirements such as teaching assistance. Periods of study leave and overseas fieldwork do not count toward residency. In addition, students must be resident in Singapore during the semester in which they submit their thesis for examination, as well as throughout the tenure of the NUS research scholarship, if awarded, unless approval is granted otherwise.

### 3.3 Leave Matters

#### 3.3.1 Leave Matters for Full-time Self-Financing Students

*Short-term leave*

The university vacation periods do not apply to research students as research students are expected to work on their research projects on a full-time basis throughout the year. All full-time research students are required to apply for leave if they need to be away at any point of the year.
Full-time self-financing students who need to take leave should apply for Leave of Absence via EduRec. Students are required to submit their application at least two weeks prior to the proposed leave period, and attach any relevant supporting documents.

Students who are reading coursework modules should not go on leave on the days where they have classes. However if there are extenuating circumstances which necessitate the taking of leave during the instructional weeks, it is the responsibility of the student to contact the lecturers/tutors to make up for any missed classes or assignment(s) during the period of absence. Please note that if the period of absence coincides with an assessment e.g. quiz/test, there is no guarantee that a make-up assessment will be scheduled.

Long-term leave (i.e. leave of one semester or more)
Students who require Leave of Absence for one semester or more should obtain approval before the start of the semester. Please note that Leave of Absence is counted against the maximum candidature for graduate research students. In addition, Leave of Absence beyond two academic years (cumulative) requires approval from the Board of Graduate Studies. Please refer to the Leave of Absence Guidelines.

To apply, please submit your application via EduRec and attach the relevant supporting documents.

3.3.2 Leave Matters for Part-Time Self-Financing students

Short-term leave
In general, part-time self-financing students do not need to apply for short-term leave if they are not reading any coursework modules in the semester. Part-time students who are registered for coursework module(s) are expected to commit to all the classes for the module(s). If there are extenuating circumstances which require the student to be absent for a class, the student will need to apply for Leave of Absence via EduRec and attach the relevant supporting documents.

Please note that it is the responsibility of the student to contact the lecturers/tutors to make up for any missed classes or assignment(s) during the period of absence. Please also note that if the period of absence coincides with an assessment e.g. quiz/test, there is no guarantee that a make-up assessment will be scheduled.

Long-term leave (i.e. leave of one semester or more)
Students who require Leave of Absence for one semester or more should obtain approval before the start of the semester. Please note that Leave of Absence is counted against the maximum candidature for graduate research students. In addition, Leave of Absence beyond two academic years (cumulative) requires approval from the Board of Graduate Studies. Please refer to the Leave of Absence Guidelines.
To apply, please submit your application via EduRec and attach the relevant supporting documents.

3.3.3 Leave Matters for Research Scholars

Research Scholars should note that any leave taken during the candidature is counted against the maximum candidature, and there will not be a corresponding extension in the duration of the scholarship award.

Holiday Leave

All students receiving the following scholarships are eligible for paid holiday leave of 21 working days per calendar year for the duration of the scholarship:

- NUS Research Scholarship
- The Courage Fund PhD (Infectious Disease) Scholarship (Full-Time Award)
- President’s Graduate Fellowship
- Commonwealth Scholarship

i. Please login to EduRec to submit your holiday leave application. You may refer to the step-by-step guide.

ii. Depending on the start date and end date of the research scholarship, the leave entitlement for the year will be pro-rated accordingly.

iii. The scholar should give his/her leave approver sufficient time (two weeks) to approve his/her application. S/he should go for the leave only after the application has been approved.

iv. It is the responsibility of the student to contact the lecturers/tutors to make up for any missed classes or assignment(s) during the period of absence. If the period of leave coincides with an assessment e.g. quiz/test, there is no guarantee that a make-up assessment will be scheduled.

v. There will not be additional leave granted for periods of research scholarship extension. However, any unconsumed leave may be taken up to the end of the extended period of the scholarship or the end of the year of the original scholarship end date, whichever is earlier.

vi. Holiday leave excludes Saturdays, Sundays and Public Holidays. There is no half-day leave application.

vii. Holiday leave cannot be taken during periods of scholarship suspension.

viii. Unconsumed leave in any one year will not be carried forward to the next year.

ix. Medical leave that falls within the applied holiday leave period will not be considered.
x. When the research scholarship is terminated, the leave entitlement will be pro-rated according to the termination date. If excess leave had been taken, the scholarship stipend will be deducted accordingly. Holiday leave must be consumed before the scholarship end date (including the period of extended scholarship). Holiday leave not utilized prior to the scholarship termination date will lapse and there will be no payment of stipend in lieu thereof.

xi. For transfer of candidature (from Master’s to PhD and vice versa), the holiday leave entitlement will be adjusted accordingly.

xii. Students who are undertaking trial projects and have not formally registered as research scholars will not be entitled to holiday leave.

**Maternity Leave – (effective from 9 Jan 2017)**
Paid maternity leave is granted to female research scholars up to eight (8) weeks per confinement, i.e. delivery of a child. It is to be taken as one continuous block and can commence four (4) weeks prior to confinement or from the date of confinement. Please note that maternity leave is inclusive of Saturdays, Sundays & Public Holidays.

Supporting medical documents must be submitted with the application. A copy of the birth certificate of the child is to be submitted either with the application or to the Education Office within one month from the child’s birth.

Please submit applications via the Leave of Absence online system at EduRec.

**Medical Leave**
For research scholars, paid medical leave is granted up to 30 days per calendar year for out-patient and 60 days per calendar year if hospitalization is required. Please submit applications via the Leave of Absence online system at EduRec. Valid supporting medical certificates or letter must be submitted with the application.

**Compassionate Leave**
Each research scholar can be granted a maximum of five (5) consecutive days per demise of an immediate family member (including spouse, child, parent, grandparent, brother/sister, parent-in-law and son/daughter-in-law). Please submit applications via the Leave of Absence online system at EduRec.

**Reservist Leave**
For research scholars, paid leave will be granted unless the Faculty/School decides otherwise. Please submit applications via the Leave of Absence online system via EduRec. A copy of the notice must be
submitted with the application. Those who are required to serve the balance of the NS liability period will not be given paid leave.

**Leave Matters for Conferences, Courses, Field Trips & Overseas Attachments**
Research scholars are required to apply for leave to attend conferences, courses, field trips or overseas attachment, even if funding has been approved by the School. Please submit applications via the Leave of Absence online system via EduRec. If the leave application is approved, the stipend will still be paid for the leave period. Please note that leave of absence is inclusive of Saturdays, Sundays & Public Holidays.

For students going for overseas conferences approved by the school, leave will be granted as follows:

i. If the student goes strictly for just the conference, they will be given up to 2 extra days of leave for travelling: one day before and one day after.

ii. If the student goes on personal holiday before the conference, they will only be given 1 extra day of leave after the conference. Similarly, if the student goes on personal holiday after the conference, they will only be given 1 extra day of leave before the conference.

iii. If the student goes on personal holiday both before and after the conference, they will be granted conference leave only for the conference period.

**Leave of Absence (unpaid leave)**
For research scholars, leave of absence is unpaid leave. All holiday leave balance must be fully utilised before applying for unpaid leave of absence; unless the Faculty/School decides otherwise.

Leave of absence is inclusive of Saturdays, Sundays & Public Holidays. Please submit applications via the Leave of Absence online system via myEduRec. Please refer to the Leave of Absence guidelines before submitting your application.

Students who require leave of one semester (term) or more should obtain approval in advance of the semester. Please note that Leave of Absence is counted against the maximum candidature for graduate research students.

**Exemptions & Revisions**

i. The University may revise this Scheme from time to time in its absolute discretion.

ii. The University shall be entitled to make and issue additional guidelines with respect to this Scheme from time to time and to revise or amend such guidelines as it deems fit. All such guidelines shall be deemed to be part of the Scheme.

**Note:**
Research scholars are encouraged to purchase travel insurance for their personal leisure trips.
3.3.4 Application for leave to participate in internships (for full-time students only)

Full-time students can apply for leave to participate in an internship with external organizations, subject to the following guidelines:

i. The internship should be up to 3 months, preferably during May to July. Internships of longer duration are possible, but will be reviewed on a case-by-case basis.

ii. The internship should be related to the MSc/PhD research

iii. PhD students who wish to go on internships should preferably go in their 3rd or 4th year, after completing the PhD Qualifying Examination.

iv. For research scholars, the scholarship stipend and top-up (if applicable) will still be paid during the internship period if the leave application is approved.

v. For international students, please note that your internship period must fall within the University’s vacation period (please see here for the NUS Academic Calendar). Otherwise, you will need to surrender your student pass and apply for a Training Employment Pass (TEP) through the organization offering the internship, and re-apply for the student pass at the end of the internship. This is a requirement by the Ministry of Manpower. Please see here for more information.

vi. Please note that internships are optional, and should only be undertaken if students have the extra bandwidth. Students need to ensure that they are on track for the programme requirements (including GAP/teaching duties) before applying for internships. The candidature period and scholarship award period will not be extended for students who took leave for internships.

To apply, please complete the application form which can be downloaded from the student portal.
4. Programme Requirements
4.1 Aims & Objectives

4.1.1 MSc programme
Graduates of the MSc programme are expected to understand the basic assumptions, approaches, designs, analytic methods and ethical principles entailed in conducting public health research. They are also expected to become confident communicators of scientific knowledge through participation in the scholastic exchanges during research rounds and thesis defences. Graduates are fully prepared to participate as key collaborators, and co-authors in public health research projects. Some MSc graduates may be able to launch their own careers as independent Principal Investigators. However, in general, it is expected that more advanced training in the form of PhD degree will be needed to establish an independent research career.

4.1.2 PhD programme
Graduates of the PhD will be capable of forming, leading, and supporting a multi-disciplinary research team, of successfully applying for peer reviewed finding, and of providing high level, critical thinking in the development, evaluation and conduct of their research projects. They are also expected to become confident communicators of scientific knowledge through participation in the scholastic exchanges during the research rounds and thesis defences, and preparation for the presentation and defence of their thesis. Candidates who wish to become Public Health researchers would constitute the bulk of the PhD programme enrolment.
4.2 Overview of Programme Requirements

The MSc & PhD programmes comprise the following components: coursework, research seminars and thesis research.

Coursework

MSc students are required to complete 24 MCs of coursework, while PhD students are required to complete 28 MCs of coursework. The purpose of the coursework component is to provide a graduate-level foundation and prepare students for research. Please see Section 4.3 for more information on the coursework requirements.

Research Seminars

MSc & PhD students are strongly encouraged to participate actively in research seminars within the School. Participating in research seminars not only broadens the students’ insight into public health research, it also provides opportunities for students to develop presentation and communication skills.

Students who enrolled before August 2018 are required to achieve regular attendance in the school research rounds/ SSHSPH PhD thesis defences, and present at least once at the student research rounds. Please see Section 4.5 for more information on the student research round requirements.

Students who enrol in August 2018 and after are required to complete the SPH6770 Graduate Research Seminar in Public Health module (4 MCs). This is a new module that will replace the student research rounds. The module aims to equip public health research students with practical research skills, expose them to the breadth of public health research topics and provide students with opportunities to develop their presentation and communication skills.

Thesis Research

The thesis research forms the main component of the MSc & PhD programmes. Students should have identified a research topic and supervisor before their enrolment in the programme. MSc students are required to complete their research project and submit their thesis after 2 to 3 years in the programme. PhD students will need to complete a PhD Qualifying Examination within the first two years to be confirmed as PhD candidates. In the remaining years, PhD students will execute the rest of their research plans and submit and defend the thesis. Please refer to Section 4.7 for more information on the thesis requirements.
Suggested Workplans for MSc & PhD students:

From Year 1, both MSc and PhD students will embark on their research projects, complete core modules and choose from a range of elective modules that cater to individual research interests.

In Year 2, MSc students will start writing their thesis, while PhD students will complete a PhD Qualifying Examination (PQE) which assesses their ability to complete PhD requirements based on their academic progress and quality of their research. MSc students who wish to transfer to the PhD programme need to complete the PhD coursework requirements, and pass the PQE within 2 years.

In Years 3-5, PhD students will execute the rest of their research plans and submit and defend the thesis.

Please refer to Annexes 1 & 2 for the suggested workplan for PhD and MSc students

Annex 1: Suggested Workplan for PhD students

Annex 2: Suggested Workplan for MSc students
4.3 Coursework

4.3.1 Coursework Requirements

MSc students are required to complete 24 MCs of coursework, while PhD students are required to complete 28 MCs of coursework.

Students are required to read graduate-level modules (i.e. level-5000 and above) to fulfil the coursework requirements. However, to enable students to build expertise in a new field, up to 1 module (4 MCs) below level-5000 may be allowed, subject to the approval of the supervisor and the school. Students who wish to read a module below level-5000 to fulfil coursework requirements will need to provide the justification for the school’s review.

Please refer to the tables below for the coursework requirements of the different intakes. For elective modules, students should select modules that are relevant to their thesis research.

Coursework Requirements for students who enrol from August 2018 onwards:

<table>
<thead>
<tr>
<th>CORE MODULES</th>
<th>Master of Science (MSc)</th>
<th>Doctor of Philosophy (PhD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPH5002 Public Health Research Methods (8 MCs)</td>
<td>SPH5002 Public Health Research Methods (8 MCs)</td>
</tr>
<tr>
<td></td>
<td>SPH6770 Graduate Research Seminar in Public Health (4 MCs)</td>
<td>SPH6770 Graduate Research Seminar in Public Health (4 MCs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVE MODULES</th>
<th>3 Elective Modules (12 MCs)</th>
<th>4 Elective Modules (16 MCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• At least 8 MCs of electives must be modules offered by SSHSPH (this excludes Independent Study Modules [ISM])</td>
<td>• At least 8 MCs of electives must be modules offered by SSHSPH (this excludes Independent Study Modules [ISM])</td>
</tr>
<tr>
<td></td>
<td>• At least 8 MCs of electives must be level-6000 modules</td>
<td>• At least 8 MCs of electives must be level-6000 modules</td>
</tr>
</tbody>
</table>

Coursework Requirements for students who enrolled between Jan 2017 to Jan 2018:

<table>
<thead>
<tr>
<th>CORE MODULES</th>
<th>Master of Science (MSc)</th>
<th>Doctor of Philosophy (PhD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SPH5002 Public Health Research Methods (8 MCs)</td>
<td>SPH5002 Public Health Research Methods (8 MCs)</td>
</tr>
<tr>
<td></td>
<td>SPH5203 Advanced Epidemiology I (4 MCs) OR SPH6001 Advanced Epidemiology II (4 MCs)</td>
<td>SPH6001 Advanced Epidemiology II (4 MCs)</td>
</tr>
<tr>
<td></td>
<td>SPH5101 Advanced Quantitative Methods I (4 MCs) OR SPH6002 Advanced Quantitative Methods II (4 MCs)</td>
<td>SPH6002 Advanced Quantitative Methods II (4 MCs)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVE MODULES</th>
<th>2 Elective Modules (8 MCs)</th>
<th>3 Elective Modules (12 MCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• At least one elective module (4 MCs) must be at level-5000 or above</td>
<td>• At least one elective module (4 MCs) must be at level-6000</td>
</tr>
</tbody>
</table>

Please refer to the tables above for the coursework requirements of the different intakes. For elective modules, students should select modules that are relevant to their thesis research.
Coursework Requirements for students who enrolled between Jan 2012 to Aug 2016:

<table>
<thead>
<tr>
<th>CORE MODULES</th>
<th>Master of Science</th>
<th>Doctor of Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO5102 Principles of Epidemiology (4 MCs)</td>
<td>CO5102 Principles of Epidemiology (4 MCs)</td>
<td></td>
</tr>
<tr>
<td>CO5103 Quantitative Epidemiologic Methods (4 MCs)</td>
<td>CO5103 Quantitative Epidemiologic Methods (4 MCs)</td>
<td></td>
</tr>
<tr>
<td>CO5215 Advanced Epidemiology I (4 MCs) OR SPH6001 Advanced Epidemiology II (4 MCs)</td>
<td>SPH6001 Advanced Epidemiology II (4 MCs)</td>
<td></td>
</tr>
<tr>
<td>CO5218 Advanced Quantitative Methods I (4 MCs) OR SPH6002 Advanced Quantitative Methods II (4 MCs)</td>
<td>SPH6002 Advanced Quantitative Methods II (4 MCs)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVE MODULES</th>
<th>2 Elective Modules (8 MCs)</th>
<th>3 Elective Modules (12 MCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• At least one elective module (4 MCs) must be at level-5000 or above</td>
<td>• At least one elective module (4 MCs) must be at level-6000</td>
<td></td>
</tr>
</tbody>
</table>

Please refer to Annex 4 for the module descriptions.

4.3.2 Cross-Faculty modules

Students may also register for modules offered by other faculties, subject to approval by the Graduate Research Programme Director and acceptance by the relevant faculty/school. Students will need to justify, in the cross faculty module registration form, the relevance of the module(s) to their thesis research. Some faculties/schools may also require students to submit their CV for the lecturer’s review. Please refer to Annex 5 for the list of recommended cross-faculty modules.

4.3.3 Satisfactory/Unsatisfactory (S/U) Option

Students who have completed their coursework requirements but would like to read additional modules for credit can elect to have these modules graded on a “Satisfactory/Unsatisfactory” (S/U) basis. Modules graded on S/U basis cannot contribute towards graduation requirements, i.e. they cannot be one of the required core or elective modules. S/U declaration has to be done at the point of module registration. Please refer to the section on ‘NUS Modular System – S/U Option’ for more information on the S/U option.

4.3.4 Cumulative Average Point (CAP) computation

Please refer to the section on ‘NUS Modular System - CAP’ for information on how the CAP is computed.

For students who completed modules in excess of graduation requirements, the School will use the grades of the best elective modules to compute the CAP. For example, if a PhD student completes more than 2 level 5000 elective modules, the School will use the grades of the best 2 level 5000 elective modules to compute the CAP. The grades of modules that are excluded from CAP
computation will still be reflected on the student’s transcript, but with a remark stating that the module is excluded from CAP computation.

### 4.3.5 Module Registration & Add/Drop Deadlines

Please complete the following hardcopy registration forms (downloadable from the student portal):

- Module Registration Form for SSHSPH modules --- for SSHSPH modules
- Cross Faculty Module Registration Form --- for modules from other faculties

The time schedule for module registration is provided in the following table:

<table>
<thead>
<tr>
<th>For Graduates</th>
<th>Semester 1 &amp; 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Register for/add New Module(s)</td>
<td>To be confirmed by Education Office. Usually before the start of the semester.</td>
</tr>
<tr>
<td>except: Cross Faculty Module Registration</td>
<td>By end of Orientation Week/ Before Instructional Week 1</td>
</tr>
<tr>
<td>Drop module(s) without penalty¹</td>
<td>Up to Instructional Week 2</td>
</tr>
<tr>
<td>Drop module(s) with ‘Withdrawn’ Grade¹</td>
<td>1st Day of Instructional Week 3 through last day of Recess Week</td>
</tr>
<tr>
<td>Drop module(s) with ‘Fail’ Grade¹</td>
<td>1st day of Instructional Week 7 onwards</td>
</tr>
</tbody>
</table>

### 4.3.6 Independent Study Module (ISM) for PhD students

Public Health is a diverse field, and regular module offerings may not cater to the interests and needs of all students. The Independent Study Module (ISM) aims to fulfil this learning gap in the curriculum, by giving students the opportunity to design their own learning in consultation with a supervising lecturer, who should be an NUS academic staff member. The overall objective is to allow students to further tailor their learning experience according to their needs.

Students will first identify a topic they are interested to pursue, and an NUS academic staff member who has the relevant background to guide them in their learning. The topic should fall under one of the pre-approved areas of study. Together with the ISM supervisor, the student will identify the specific learning objectives, syllabus/topics that will be covered, and the learning activities and assessment tasks to be performed, and submit a detailed study plan to the School for approval. Regular meetings between the student and the ISM supervisor are expected. At the conclusion of the module, the student is required to submit a culminating essay or report concerning the findings of the module topic.

¹ For intensive modules, the deadline to drop the module(s) is by 5pm of the first day of the module.
As this is a level 6000 module, the ISM must meet the standards of doctoral study and inquiry. The proposed syllabus should include significant research content and cover the latest research trends.

The following are the pre-approved areas of study:

- SPH6201A Independent Study (Epidemiology and Disease Control)
- SPH6201B Independent Study (Biostatistics)
- SPH6201C Independent Study (Environmental / Occupational Health)
- SPH6201D Independent Study (Health Policy and Systems)
- SPH6201E Independent Study (Health Services Research)
- SPH6201F Independent Study (Health Promotion)
- SPH6201G Independent Study (Global Health)

Please note that students are allowed to complete only one ISM module throughout their candidature.

**APPLYING FOR AN ISM**

**Procedure**

Students wishing to undertake an ISM will need to apply to the Education Office three weeks prior to the start of the relevant Semester.

The student, in consultation with the ISM supervisor, will work out a study plan which includes the following details:

- General Theme or Topic
- Overall Learning Objectives (i.e. state the learning outcomes to be achieved)
- Relevance of the ISM to the student’s PhD research project
- Syllabus/ listing of topics that will be covered, and the specific skills that will be gained
- Modes of learning to be employed. Please list the specific learning activities that will be performed and the estimated workload (in terms of hours) for each activity.
- Reading List
- Assessment tasks to be performed and the grading criteria

The study plan must be reviewed and approved by the School before the student is allowed to undertake the ISM.

**Modes of Learning**

Learning activities could include, but need not be limited to literature review, courses/workshops, practical work/fieldwork etc. The workload (including self-study and preparation) should justify the number of credits to be earned (4MCs = 10 hours/week over one semester).
Full-time students who intend to take courses/workshops as part of their ISM may apply to the school for financial assistance for the course fee. For more details, please refer to Section 7.3 Financial Assistance for Conferences, Courses and Overseas Attachments.

Assessment and Grading
Assessment tasks could include, but need not be limited to written assignments, essays, quizzes, reports etc. This is to be based on mutual agreement between the student and the ISM supervisor; depending on the nature and topic of study. Evaluation criteria may comprise both continuous and/or final assessment, the % distribution of which will be worked out between the student and the supervising lecturer. The ISM supervisor will submit the assessment results to the Education Office by the end of reading week.

At the conclusion of the module, the student is required to submit a culminating essay or report concerning the findings of the module topic.

For all ISM modules, the school will appoint a second marker for the assessments. The weightage for each assessment will be ISM Supervisor 30% and ISM second assessor 70%.

Checklist for Submission
i. Application form signed by student, ISM supervisor and the student's research supervisor
ii. Detailed plan of study
iii. Plan for assessment and grading

4.3.7 Credit Transfer/ Exemption
Students who have completed relevant master-level or PhD-level modules in their previous degrees may apply for credit transfer/ exemption, subject to approval by the student’s supervisor, Graduate Research Programme Director and Vice Dean (Education).

Credit transfer/ exemption is subject to the following guidelines:

i. The module(s) which the student completed in his/her previous degree must be of comparable content and level of sophistication, and completed less than 10 years before the date of admission to the MSc/PhD programme. The module(s) must also be relevant to the student’s MSc/PhD research.

ii. Students must have obtained at least grade ‘B+’ for the module(s)

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2 Effective for students who enrolled from January 2018 onwards. For students who enrolled before January 2018, the module(s) must be completed less than 5 years before the date of admission to the MSc/PhD programme.
iii. Students who received credit transfer/exemption are **NOT** allowed to read excess modules on a graded basis. Modules in excess of their coursework requirements may only be read on audit or S/U basis\(^3\). If there are exceptional circumstances whereby a student needs to read excess modules on a graded basis, they can submit an appeal to the Education Office, subject to approval by the Graduate Research Programme Director and Vice Dean (Education). The appeal must be submitted by the first week of the semester (i.e. by instructional week 1).

iv. For students with previously completed modules from NUS:
   - Credit transfer can be considered for more than 50% of the total coursework requirement, i.e. more than 12 MCs (3 modules), on a case-by-case basis.
   - Both the modular credits and grades of the modules will be transferred if the student’s application is approved.

v. For students with previously completed modules from other universities:
   - Credit exemption can be considered for up to 50% of the total coursework requirement, i.e. up to 12 MCs (3 modules).
   - Only credit exemption is allowed (i.e. grade transfer is not allowed). However, students are still required to have obtained an equivalent of grade ‘B+’ for the non-NUS module before their application can be considered.

**How to Apply:**
Students must apply within the first month of their candidature. The following documents are required:

i. **Application Form**

ii. **Transcript:** For non-NUS modules, the transcript should include an interpretation or explanation of the grades and marks

iii. **Module outline and module schedule** (including the lecture titles and hours)

iv. **Module assessment criteria**

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\(^3\) For Satisfactory/Unsatisfactory (S/U) grading, an ‘S’ grade is assigned if a student receives a ‘C’ grade or above for the module. Conversely, students will receive a ‘U’ if the grade obtained is lower than a ‘C’ grade.
4.4 English Language Requirement

New students who are required to take the Diagnostic English Test (DET) must register online for the DET within the period specified in the offer letter. The DET is administered by the Centre for English Language Communication (CELC).

Depending on the results of the DET, students may need to enrol for Graduate English Modules conducted by CELC:

<table>
<thead>
<tr>
<th>Results</th>
<th>Modules to read</th>
</tr>
</thead>
<tbody>
<tr>
<td>Band 1</td>
<td>ES5000^ ES5001A* ES5002** (only for PhD students upon completion of ES5001A)</td>
</tr>
<tr>
<td>Band 2</td>
<td>ES5001A* ES5002** (only for PhD students upon completion of ES5001A)</td>
</tr>
<tr>
<td>Band 3</td>
<td>(Exempted from all English Courses)</td>
</tr>
</tbody>
</table>

^ES5000 Graduate English Course (Basic Level)
*ES5001A Graduate English Course (Intermediate Level)
**ES5002 Graduate English Course (Advanced Level)

SSHSPH students are required to obtain at least Grade ‘C+’ in all the required Graduate English Courses. Please note that students who do not meet the required grade and need to repeat any of the Graduate English Courses will need to pay S$2,000 per module. This cost will be borne by the student.

For more information on the Graduate English Modules and how to register for the modules, please refer to the CELC website.
4.5 Student Research Rounds (for students who enrolled before August 2018)

4.5.1 Overview

Effective communication of scientific findings is essential in a successful career as a researcher. In addition, Public Health is a multidisciplinary field and public health researchers often have to work with researchers and professionals from varied disciplines. Hence, successful graduates must be able to effectively communicate research findings to a general audience and demonstrate an appreciation of broader issues.

The objective of the student research rounds is to broaden the students’ insight into public health research, provide them with a platform to practise their presentation and communication skills, and to receive feedback from academic staff and fellow students on their research projects. Students are required to give a 30-minute presentation of their research work. Out of the 30 minutes, at least 10 to 15 minutes must be understandable by a general audience.

The student research round requirements only apply to students who enrolled before AY2018/2019. Starting from AY2018/2019, the student research rounds will be replaced by the SPH6770 Graduate Research Seminar in Public Health module. New students who enrolled in AY2018/2019 and after will complete the SPH6770 module instead of the student research round requirements.

Current students who enrolled before AY2018/2019 do not need to complete SPH6770. However, current students who have not yet completed the research round presentation by August 2018 will be scheduled to present to the junior students in the SPH6770 module.

4.5.2 Format of Student Research Rounds

Starting from AY2018/2019, the student research round presentations will be incorporated into the new SPH6770 Graduate Research Seminar in Public Health module. Students who have not yet given their research round presentations will be scheduled to present to the junior students taking the SPH6770 module. The following is the new format:

- Presentation by student: 40 minutes
- Synopsis by discussant and discussion between student and discussant: 10 minutes
- Q&A and feedback: 10 minutes

In the new presentation format, one of the junior students will be assigned as the discussant.
4.5.3 Requirements

Presentation
All research students who enrolled before August 2018 are required to present at the student research rounds. PhD students are required to give the presentation by their 3rd year. MSc students are required to give the presentation before thesis submission.

Attendance
Students who enrolled before August 2018 are also required to achieve regular attendance in the school research rounds/ SSHSPH PhD thesis defences. The minimum attendance required is:

- At least 8 seminars* per academic year for 3 years (for PhD students) and
- At least 8 seminars* per academic year for 2 years (for MSc students)

*The following seminars are counted towards the attendance requirement:
  i. SSHSPH Student Research Rounds
  ii. SSHSPH Staff Research Rounds
  iii. SSHSPH PhD Thesis Defences
  iv. SSHSPH Graduate Student Conference (students who attend 1 day of conference will get 1 attendance, while students who attend both days of conference will get 2 attendances)

Attendance is counted by academic year. Students who matriculate in January will need to attend at least 4 research rounds in the 1st semester, and at least 4 research rounds in the 4th semester (for MSc) and 6th semester (for PhD).

Please note that attendance at student research rounds is a criterion for graduation. Students who do not fulfil the attendance requirement will not be allowed to graduate even if they have completed other requirements satisfactorily.

4.5.4 Alternative arrangements for students unable to attend the research rounds

Students who are unable to attend sufficient research rounds in a particular year (e.g. overseas for attachment, exchange etc.) can seek permission from the Education Office to count external seminars on public health research towards the attendance requirement. This is subject to the following:

- Permission must be sought in advance; i.e. before the start of the semester or before the student embark on their overseas attachment, exchange etc.

- Students must specify the reason for not being able to attend the research rounds, and provide information on the external seminars they intend to attend as replacement.
• If approved, students will need to produce the list of external seminars attended and a written record of what they have learnt from each seminar. This has to be submitted before the start of the next academic year.

Students who are unable to attend sufficient seminars (both internal and external) in any year may be allowed to replace the attendance for that year with a well-researched and referenced essay on a public health topic unrelated to his/her MSc/PhD research project. This is subject to the following:

• All requests are subject to approval by the Education Office. Students will need to explain why they are unable to meet the attendance requirement.

• The essay must demonstrate the student’s insight in public health, and the various skill sets from different disciplines needed to address the selected public health problem. The essay has to reflect the student’s diligence in keeping abreast with public health research unrelated to his/her MSc/PhD research.

• The essay must be submitted to the Education Office before the start of the next academic year. The essay will be graded, and students have to achieve a pass grade. Students will need to submit an essay on a different topic for every year in which they fail to meet the seminar requirement.

4.5.5 Penalty for students who fail to attend at least 8 research rounds in any year

If a student fails to attend at least 8 research rounds in any year, his/her attendance for that year will not be counted. The student will need to either

• Attend an extra year of research rounds OR

• Subject to approval by the Education Office, the student may be allowed to replace the attendance for that year with a public health essay (as described above).

4.5.6 Schedule of Student Research Rounds and Thesis Defences

The schedule of upcoming Student Research Rounds and Thesis Defences is available in the SPH0001 IVLE Files.

4.6 PhD Qualifying Examination (PQE)

4.6.1 Overview

The PhD Qualifying Examination (PQE) is an examination which PhD students have to complete within the first two years of their candidature to be confirmed as PhD candidates. MSc students who wish to upgrade to PhD will also need to pass the PQE within the first 2 years of their candidature.
The objective of the PQE is to assess whether the student is able to complete the PhD successfully based on the research work that has already been conducted, the plans for further research as part of the PhD, and the student’s ability to defend his/her work during an oral presentation. It also provides an opportunity for students to receive detailed feedback on their ideas, research designs and plans from experts in their field.

Students are required to complete the PQE within 24 months of their enrolment. Students may take up to 2 attempts to complete each component of the PQE. If students are unable to complete their PQE within 24 months of their candidature or if they fail to pass the PQE after 2 attempts, they will be asked to transfer to the MSc programme where eligible.

### 4.6.2 Pre-requisites

Students must fulfil the following requirements before they are allowed to sit for the PQE:

a) Pass 24 MCs of coursework (including all core modules) with a minimum CAP of 3.50:
   i. Students who enrolled in August 2018 and after are required to complete SPH5002, SPH6770 and at least 12 MCs of electives, of which at least 4 MCs must be level-6000 module(s)
   ii. Students who enrolled between Jan 2017 to Jan 2018 are required to complete SPH5002, SPH6001, SPH6002 and at least 8 MCs of electives*
   iii. Students who enrolled between Jan 2012 to August 2016 are required to complete CO5102, CO5103, SPH6001, SPH6002 and at least 8 MCs of electives*

   *MSc students who enrolled before August 2018 and who intend to apply for transfer to the PhD candidature must complete SPH6001 and SPH6002 instead of CO5215/SPH5203 and CO5218/SPH5101, and pass the PQE within 24 months from the date of enrolment.

b) Substantial data published or publishable in international peer-reviewed journals

c) A coherent theme connecting the different topics planned for the PhD, and a feasible research plan for the rest of the PhD.

d) Students who do not qualify for waiver of the English Language requirement are also required to complete all the required English Courses up to the intermediate level (i.e. ES5000 & ES5001A), with a minimum grade of C+ for each of the courses.

### 4.6.3 Format of the PQE

The PQE comprises a written and an oral component.
**Written Component**

For the written component, students are required to submit:

a) A research proposal written in the prescribed format.

b) Students must demonstrate that they have substantial data published or publishable in international peer-reviewed journals by providing one of the following as an appendix:

   i. A publication as first author (submitted/published) in an international peer-reviewed journal. The publication should be an original research article or meta-analysis and not a narrative review. Systematic reviews may be allowed on a case-by-case basis. For systematic reviews, students will need to submit the protocol for the programme director’s review OR

   ii. A draft of a manuscript as first author planned for submission to an international peer-reviewed journal. The manuscript should be an original research article or meta-analysis and not a narrative review. Systematic reviews may be allowed on a case-by-case basis. For systematic reviews, students will need to submit the protocol for the programme director’s review OR

   iii. A draft of a chapter planned for the final thesis containing data publishable in an international peer-reviewed journal. This should be one of the chapters in the body of the thesis and not the introduction or literature review.

For the research proposal, it is important for students to present a coherent theme connecting the different topics planned for the PhD. In addition, students must have a feasible plan for the rest of the PhD. Students may find it helpful to look at previous research proposals, which can be obtained from the Graduate Research Programme Administrator. Note: The samples of previous research proposals are available only in hardcopy. Students can come to the Education Office to view the report, but they are not allowed to take the report away/photocopy/take photos/bring away the softcopy.

The PhD research proposal and appendix will be reviewed by two examiners. The PhD research proposal will be evaluated based on the following criteria:

a) Accurate and appropriate title and abstract

b) Evidence of scientific relevance of research question including importance and originality

c) Relevant introduction and background to justify the proposal

d) Clearly stated hypothesis and/or aims that relate in a cohesive manner to the overall title and objective of the proposal

e) Appropriate and clearly documented research methods and/or theoretical/conceptual framework, and where applicable, results.

f) Clear project timeline including key milestones/deliverables.

g) Evidence that the student has fully considered the ethical implications of his/her research, and has sought the necessary approvals from IRB (where applicable)
h) Use of good and succinct English with attention to detail such as use of standard referencing.

If the student passes the written component, the oral examination will be scheduled. If the student is asked to revise, he/she will be given 1-2 months to revise the proposal for re-submission. The student will be allowed to revise the research proposal only once. If the student fails the written component, he/she will be asked to transfer to / remain in the MSc programme.

**Important:** Students should not, under any circumstances, communicate with any examiner on matters relating to the PQE examination. In addition, students are not allowed to know the identities of their examiners until they have passed the written component.

If students have queries regarding the examiners’ comments on the written component, they should approach the Graduate Research Programme Administrator who will assist to seek clarification from the examiner(s).

**Oral Component**
For the oral component, the student will make an oral presentation (max 45 minutes) in front of the PQE panel. Students should not just provide answers to the examiner’s comments, but also provide a succinct introduction, methodology, results, and discussion.

Before the oral examination, students are required to submit a copy of their presentation slides to the Graduate Research Programme Administrator who will print copies for the examiners.

The oral component is usually of 2 hours duration, and the following is a summary of the format:
- Presentation by the student: max 45 minutes
- Q&A with examiners of variable duration. The student will be questioned on the work done as well as his/her research plans for the rest of the PhD.
- Deliberation of the examiners and the chair (student and supervisor will be asked to leave the room)
- Oral panel to give feedback to student and inform student of the outcome

In assessing the student, the examination panel will be concerned with answering the following questions:
- Will the scope of the PhD, both already completed and planned, enable the student to make an original and significant contribution to the field of study?
- Are the aims and objectives of the PhD and research questions clearly specified?
- Does the student have the sufficient academic knowledge and skill set to independently carry out the required research?
- Is the timetable realistic and achievable? Will the student be able to accomplish the research plans by the end of the 4th year of his/her candidature?
• Does the student have adequate funds to allow the fieldwork to be undertaken (if applicable)?
  If there is doubt, is there a viable ‘Plan B’ to enable timely successful completion of the
  research degree?

The Chairperson is empowered to make decisions on the outcome of the PQE in consultation with the
other two members.

The oral PQE is an important opportunity to provide feedback to the student and supervisor(s) to
better prepare the student for the PhD thesis defence. If there are doubts whether the student will be
able to finish the PhD successfully this is an important opportunity to have the student repeat the PQE
and possibly switch to an MSc if this remains unsuccessful.

For the oral component, supervisor(s) will be invited to sit in as observers. Supervisor(s) are not
allowed to speak on behalf of their student unless he/she is asked to do so by the PQE panel. The
supervisor(s) are also not allowed to participate in the deliberations on the PQE outcome.

4.6.4 Examination Panel

The examination panel comprises 3 independent assessors who are external to the student’s
research project:

A. Chairperson
  a. Usually a SSHSPH faculty member who is in the same discipline or subject area as the
     student’s thesis. The chairperson will be assigned by the School.
  b. The chairperson is only involved in the oral component. He/she is not an examiner for the
     written component.
  c. The chairperson, in consultation with the other 2 examiners:
     i. Identifies the outcome of the PQE. The Chairperson is empowered to make
        decisions on the outcome of the PQE in consultation with the other two members.
     ii. Writes a summary of the recommendations of the examination panel.
     iii. Is responsible for completing the PQE assessment form and submitting it to the
         Graduate Research Programme Administrator.

B. Two Examiners
  a. Examiners are expected to be academically reputable in the subject of the thesis, with a
     significant body of published work as appropriate. PQE examiners can be university
     faculty or Principal Investigators from national research centres/institutes. Postdoctoral
     staff are usually not permitted to act as examiners.
  b. Examiners are nominated by the main supervisor and approved by the Graduate
     Research Programme Director. In cases where the Graduate Research Programme
Director is a supervisor, the nomination will be reviewed and approved by the Vice Dean (Education).

c. Examiners will review both the written component and the oral component.

To ensure there is no conflict of interest, the main supervisor will be asked to confirm that all 3 members of the examination panel meet the following criteria:

- are not related (by family) to the main supervisor, the co-supervisor(s) or the student.
- are not the student’s research collaborators/co-authors.
- have not been supervised by the main supervisor or the co-supervisor(s).
- have not been heavily involved in the supervision of the student's thesis (for examiners who are also TAC members)

Important: Students should not, under any circumstances, communicate with any examiner on matters relating to the PQE examination. In addition, students are not allowed to know the identities of their examiners until they have passed the written component.

If students have queries regarding the examiners’ comments on the written component, they should approach the Graduate Research Programme Administrator who will assist to seek clarification from the examiner(s).

4.6.5 Deadlines and Documents Required

Students in the August intake are required to submit the following documents by end May of the second year of their candidature. Students in the January intake are required to apply for PQE by end October of the second year of their candidature. Please refer to the PhD Workplan for more information.

Documents Required:

i. Application Form

ii. A PhD research proposal for the PQE written component. Please refer to Annex 3 for the prescribed format

iii. Any manuscript(s) in draft, submitted, accepted or published, or a draft of a chapter planned for the final thesis. Please refer to Section 4.6.3 for more information.

Students are required to submit their PhD research proposal to iThenticate (plagiarism detection software) and indicate the percentage similarity in the PQE application form. Students are advised to apply for an iThenticate account as soon as possible as it takes time for NUS Computer Centre to create the account. Please refer to the document “How to check for plagiarism.pdf” in the SPH0001 IVLE Files for more information.
Examiners are usually given 1 month to review the PhD research proposal and submit their recommendation. If no revision to the PhD research proposal is required, the oral examination will usually take place 1 month after both examiners have submitted their recommendations.
4.7 Thesis Examination

4.7.1 Pre-requisites

MSc students must fulfil the following requirements before thesis submission:

- Completed coursework requirements with minimum CAP of 3.00

- [For students who enrolled before August 2018] Achieved regular attendance (at least 8 seminars per academic year for 2 years) in the school research rounds/ SSHSPH PhD thesis defences, and presented once in the student research rounds

- Satisfactory grade (at least Grade C+) in all the required Graduate English Courses, for students who do not qualify for waiver of English Language requirement

- Completed the requirements of the Graduate Assistantship Programme (GAP) (if applicable, only for international students receiving MOE-funded scholarships)

PhD students must fulfil the following requirements before thesis submission:

- Completed coursework requirements with minimum CAP of 3.50

- Pass in the PhD Qualifying Examination

- [For students who enrolled before August 2018] Achieved regular attendance (at least 8 seminars per academic year for 3 years) in the school research rounds/ SSHSPH PhD thesis defences, and presented once in the student research rounds

- Satisfactory grade (at least grade C+) in all the required Graduate English Courses, for students who do not qualify for waiver of English Language requirement

- Completed the requirements of the Graduate Assistantship Programme (GAP) (if applicable, only for international students receiving MOE-funded scholarships)

- Have at least 1 first-author\(^4\) publication accepted/published in an international peer-reviewed journal at the time of thesis submission. The publication should be an original research article or meta-analysis and not a narrative review. Systematic reviews may be allowed on a case-basis.

\(^4\) Joint-first author publications may be considered on a case-by-case basis, with justifications. Students who wish to use a joint-first author publication to fulfill the publication requirement will need to submit their reasons for the school’s review. Students who include joint-first author publications in their thesis will need to indicate clearly, in their thesis, which part of the publication is their own work.
by-case basis. For systematic reviews, students will need to submit the protocol for the programme director's review. In addition to the published article, the thesis should contain substantial data equivalent to at least 2 additional papers publishable in international peer-reviewed journals recognized within the student's domain/area of research. These could be chapters within the thesis or manuscripts that are ready to submit inserted as chapters within the thesis.

4.7.2 Examples of Theses

Students who are starting to write their thesis will find it useful to refer to theses of previous graduates. All theses of NUS graduates are available for viewing at ScholarBank@NUS. The list of past graduates and their thesis titles is available in the SPH0001 IVLE Files.

4.7.3 Requirements of a Thesis

The thesis must be written in English, and in a format that complies with NUS Guidelines.

The thesis must consist of the student's own account of the investigations and must indicate in what respect the study has advanced the subject. An MSc thesis must demonstrate scholarship and the student’s ability to perform original, independent research. The MSc thesis must make some contribution to knowledge and not be mere collation of existing material. A PhD thesis must make a significant contribution to the knowledge of the subject concerned or provide evidence of originality either by the discovery of new facts or by the exercising of independent critical ability. The PhD thesis should contain a substantial body of work that has been published or is publishable in international peer-reviewed journals.

Work which has been submitted for another degree, or for which a degree has already been conferred by the University or any other university, may not be submitted again as a thesis but students are not precluded from incorporating part of such work provided that, in the thesis, students clearly indicate the part of the work which has been incorporated. Please note that any work carried out before the student’s enrolment in the University cannot be used for submission in a thesis examination, unless the student has obtained approval from his/her supervisor and the School.

Before submission of the thesis, students should seek consent from copyright owners for the inclusion of any third party proprietary/confidential intellectual property in the thesis.

Politically and commercially-sensitive information; or proprietary/confidential information which is not critical to the thesis and for which consent is not granted, should be excluded from the thesis. If

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5 Students should note that the main criteria for a successful thesis are the overall substance of the completed research and ability of the student to defend this, and meeting the publication criterion by itself does not guarantee graduation.
necessary, such information could be included as appendices instead and be excluded from the final thesis to be uploaded to the Electronic Thesis & Dissertation (ETD) System.

\textbf{4.7.3.1 Expectation of an MSc thesis}

The scope of an MSc thesis shall be what might reasonably be expected after two years of full-time study.

An MSc student needs to demonstrate, in the thesis:

a. a critical evaluation of current research in the chosen field of study

b. a comprehensive understanding of methodology, including strengths and limitations, applicable to their own research

c. practical understanding of how knowledge and methodology can be combined to create novel knowledge in the chosen field of study

The MSc thesis shall:

a. consist of the student’s own account of their original research process and work;

b. give a critical assessment of the relevant literature, describe the method of research and its findings with in-depth discussion on findings, research methodology and relevance to field of study;

c. be presented in a logical and coherent manner

d. be written in good and succinct English; and include a full reference list.

\textbf{4.7.3.2 Expectation of a PhD thesis}

The scope of the thesis shall be what might reasonably be expected after four years of full-time study.

A PhD student needs to demonstrate, in the thesis and the subsequent oral examination:

a. the independent creation and interpretation of new knowledge, through original research that advances knowledge in selected field of study, of a quality to satisfy peer review, and merits publication

b. a systematic acquisition and understanding of substantial and current body of knowledge in selected field of study
c. a general ability to conceptualise, design, and implement a research project, with an understanding of strengths and limitations, and to adapt methodologies in the light of new knowledge and/or real time constraints.

d. a high level of practical understanding of how knowledge and methodology can be combined to create and interpret knowledge in the chosen field of study.

The PhD thesis shall:

a. consist of the student’s own account of their original research process and work;

b. justify how the student’s work forms a novel and significant contribution to the field of study;

c. give a critical assessment of the relevant literature, describe the method of research and its findings and include a discussion on findings, methodologies used and impact of work on the field of study;

d. be an integrated whole and presented a logical and coherent manner;

e. be written in good and succinct English; and include a full reference list.

4.7.4 Format of the Thesis

All students must refer to the NUS Guidelines for the required format. Students may refer to the SPH0001 IVLE Files for the contacts of the shops that offer thesis printing and binding services.

The content of the thesis should be in the following order. PhD students should also include a list of publications that have resulted from their PhD research. The publication listing can be inserted after the thesis summary.

• Title page
• Declaration page
• Acknowledgements
• Table of Contents
• Summary
• List of Publication(s) (required for PhD students)
• List of Tables
• List of Figures
• List of Illustrations
• List of Symbols
Within the main body of the thesis, published papers or ready-for-publication papers may be included as chapters in the thesis (in between the introduction and discussion), provided the following criteria are met:

- The introduction and discussion must be sufficiently comprehensive to integrate the theme of the thesis topic and ensure flow and continuity between chapters. The introduction should comprise a literature review of the thesis topic and a clear description of the research aims.

- The student should be the first author in all included publications. If there are multiple authors for an article, the student should clearly state his/her contribution to the research and writing of the publication in the introduction of the thesis.

- Each of the included publications must be properly referenced and proper credit should be given to the co-authors and publishers. Written permission from the publishers must be obtained for all copyrighted materials. For publications with multiple authors, students are also reminded to discuss and seek agreement from their co-authors with regards to the copyright clearance and embargo options.

- All published material included in the thesis must meet the formatting required by NUS (i.e. with regards to margins, font, line spacing etc). The formatting used should be consistent throughout the thesis.

4.7.5 Deadline for Submission

Students have to submit their theses for examination (after being approved by their supervisor(s) and the Graduate Research Programme Director) by the maximum period of candidature.

Students who wish to apply for extension of candidature need to complete the Application for Extension of Candidature for Graduate Research Students Form and submit it through their supervisor(s), Graduate Research Programme Director and Vice Dean (Education), at least three (3) months before the expiry date of their candidature.

A grace period of up to two (2) weeks can be given by the Registrar's Office without the need for the student to apply for extension of his/her candidature. This request has to be supported by the main supervisor. Request for grace period has to be submitted before the expiry of the candidature. The request for grace period is not applicable for students who have been granted prior candidature extension(s) nor students who are submitting their revised/final approved thesis. Any late request
would be considered as reinstatement of candidature and an administrative fee of S$250 will be imposed for all successful reinstatements.

Students who have been given the two (2) weeks grace period but are still unable to submit their theses should consult their supervisor(s) first before applying for any reinstatement-extension of candidature.

Students who wish to submit their theses before the minimum residency period must submit a written request, through their supervisors, to the Graduate Research Programme Director and Vice Dean (Education) for approval before submission.

4.7.6 Thesis Submission Date & Fees Payable

Tuition and miscellaneous fees are payable until the thesis is submitted for examination. However, the insurance premium will continue to be payable for full-time students unless the student converts his/her candidature to part-time. A student who converts his/her candidature to part-time after Instructional Week 2 is liable to pay the insurance premium for that semester.

The tuition fees payable for the semester in which the thesis is submitted for examination will depend on the thesis submission date (i.e. the date of receipt of the Thesis Submission Form by the Student Service Centre):

<table>
<thead>
<tr>
<th>Date of Submission of Thesis (Receipt Date of Thesis Submission Form by the Student Service Centre)</th>
<th>Tuition Fees Payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the end of Instructional Week 2</td>
<td>Exempted</td>
</tr>
<tr>
<td>After Instructional Week 2 but by end September/ end March</td>
<td>Half of Fee for the semester</td>
</tr>
<tr>
<td>Thereafter</td>
<td>Full fee for the semester</td>
</tr>
</tbody>
</table>

Notes:

i. To encourage research students to submit their thesis promptly, those who do so after Instructional Week 2, but by end September in Semester 1, or end March in Semester 2, would receive a half semester tuition fee refund.

ii. The fee refund is not applicable for miscellaneous fees.

iii. Research students (non-scholars) who submit their thesis for examination during the semester when they are on leave of absence or during the semester immediately after the
period of leave, will have to pay fees (tuition and miscellaneous) for one semester, even if the thesis is submitted within Instructional Week 2 or the first half of the latter semester.

iv. Research scholars whose research scholarship have expired and have not submitted their thesis are no longer eligible for tuition fee allowance. They are required to pay their own fees with effect from the current semester (if the last day of scholarship is within the first two instructional weeks of the current semester) or with effect from the subsequent semester (if the last day of scholarship is beyond the second instructional week of the current semester). Fees are payable until the thesis is submitted for examination.

For current research scholars, the last day of award of the scholarship will be the date of receipt of the Thesis Submission Form by the Student Service Centre (SSC). If the research scholar did not collect the Thesis Submission Form from the Education Office or submit the Form to SSC as soon as s/he could have, the School can terminate the scholarship earlier than the date the Form is received by SSC.

For more details, please refer to the information from Registrar’s Office.

4.7.7 Thesis Examiners Criteria

Important: Students should not, under any circumstances, communicate with any examiner on matters relating to the thesis examination. In addition, students are not allowed to know the identities of their thesis examiners until all examiners have submitted their evaluations of the thesis.

Examiners are expected to be academically reputable in the subject of the thesis, with a significant body of published work as appropriate. Postdoctoral staff are usually not permitted to act as examiners.

An MSc thesis will be examined by two examiners (either one internal examiner and one external examiner or two internal examiners). A PhD thesis will be examined by three examiners (at least one of whom must be an external examiner). Examiners who are NUS staff or who hold joint appointments or adjunct appointments with NUS are considered internal examiners.6

For PhD thesis, two of the examiners must be resident in Singapore and available to attend the oral examination. At least one of these two examiners must be a full-time regular7 faculty member.

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6 Staff on visiting appointments of 3 months or less will be considered as external examiners.
7 In general, the person should be a full-time faculty member who hold appointment and perform duties at the university for a minimum of 9 months a year (i.e. ≥75% appointment at NUS).
TAC members (except for the supervisor) can serve as examiners, though in particular cases where the committee member has been highly involved in the supervision of the thesis, this should be avoided. If the supervisor proposes a TAC member as an examiner, he/she will need to declare in the nomination form that the TAC member has not been heavily involved in the supervision of the student’s thesis.

External examiners who have to examine a thesis containing patentable/confidential materials will need to read and agree to the Terms & Conditions on the Non-Disclosure Agreement before the thesis can be sent to him/her. (Students and supervisors are reminded that proprietary/confidential information which is not critical to the thesis and for which consent has not been granted should be excluded from the thesis.)

4.7.8 Procedures for Thesis Submission

a. Propose Thesis Submission Date
   i. Students are required to propose their thesis submission date once they have reached the 22nd month of their candidature (for MSc students) and 46th month of their candidature (for PhD students). An auto-email will be sent to the student with instructions to login to EduRec to propose their thesis submission date.

b. Verify Thesis Title
   i. Students may check their thesis title by going to EduRec → Student Center → Academics → Click on the dropdown list and select “View My Milestones”
   ii. If there are changes to the thesis title, please complete and submit the “Application for Change of Thesis Title/Research Topic” form at least one month before the thesis is submitted for examination.

c. Nomination of Thesis Examiners
   i. Supervisors are required to submit the nomination of thesis examiners at least one month before thesis submission. This is to allow sufficient time for processing the nomination so that the thesis can be sent for examination upon submission.
   ii. Please refer to section 4.7.7 Thesis Examiners Criteria for more information.
   iii. Important: Students should not, under any circumstances, communicate with any examiner on matters relating to the thesis examination. In addition, students are not allowed to know the identities of their thesis examiners until all examiners have submitted their evaluations of the thesis.

d. Thesis Submission
   i. Students have to submit the following to the Graduate Research Programme Administrator at least 1 week before their intended thesis submission date:
      • Thesis Submission Form
• Thesis Submission – Plagiarism Check Form
• Two soft-bound copies (for MSc thesis); or four soft-bound copies (PhD thesis)
• Softcopy (pdf format) of the thesis in CD-ROM

ii. Once the Thesis Submission Form has been approved, the Graduate Research Programme Administrator will return the endorsed Thesis Submission Form and any balance copies of the theses with the CD-ROM back to the student.

iii. The student will need to proceed to the Student Service Centre (Level 1, Yusof Ishak House, Kent Ride Campus) during office hours and submit the following as soon as possible:
• Duly endorsed Thesis Submission Form
• Copies of soft-bound thesis received from Education Office
• Softcopy (pdf) of the thesis in CD-ROM
• Payment receipt of thesis examination fee and outstanding fees (if any)*

iv. For students who are in receipt of the Lee Kong Chian Graduate Scholarship, the Singapore ETH Centre (SEC) - NUS Scholarship or are on the AUN/SEED-Net programme, please submit the items mentioned above to the Registrar's Office (Level 4, Lee Kong Chian Wing, University Hall).

* Note for Payment:
• Please print a copy of the latest Student Bill and complete the Thesis Examination Fee Payment Form (if applicable).
• Thesis Examination Fee is not applicable for students from Semester 1, AY2013/14 intake onwards.
• Please refer to fees for graduate programmes for implications of outstanding fees.
• For students with outstanding fees, and research scholars who have received excess Research Scholarship stipend and have yet to refund the excess, the University reserves the right to withhold student status letters, result slips or transcripts, thesis examination and the confirmation of the award of the degree.

4.7.9 Process of Thesis Examination

A. Period of Thesis Examination
   a. The Education Office will send the thesis to Internal Examiners, while Registrar’s Office will send the thesis to External Examiners.
   b. Examiners are generally given seven (7) weeks from the thesis sent date to complete the examination of the thesis and submit an evaluation report. Reminders will be sent to examiners before the deadline and to those who failed to submit their evaluation reports by
the deadline. Students can track their Thesis Examination Status via EduRec > Self Service > Student Center > Academics Section > View My Milestone.

B. Outcome of Thesis Examination
   a. After all the examiners' reports are received:
      i. Master's thesis
         • Student may be asked to collect thesis (If any) and to consult supervisor(s) on the amendments, if any. Depending on the outcome of the examination, the revised thesis may be sent for further examination.
      ii. PhD thesis
         • If there are no/minor amendments, the Graduate Research Programme Administrator will proceed to schedule the oral examination date and inform the student. Please see Section 4.7.10 PhD Open Seminar and Oral Examination for the School's guidelines on thesis defence.
         • However, if major revision is recommended by the examiner(s), the student may be asked to revise and resubmit the thesis for further examination before the oral examination can be scheduled.
         • The student is required to attend the oral examination in person and to bring along a copy of their thesis to the oral examination venue.
         • After the oral examination, the Oral Panel will inform the student of the outcome, the amendments to the thesis, the person(s) to advise the student on the amendments, if applicable, and the deadline to submit the revised thesis.

Please note that if major revisions to the thesis are required, the student may have to pay fees for one semester, even if the period granted to do the revision is less than six months. If the student is unable to complete the revisions in six months, s/he will be required to pay another semester's fees. The total revision period generally cannot exceed 12 months.

After examination/re-examination, the final approved thesis must:
   a. Include the Name of Supervisor/Co-Supervisor(s) (if any), and Name of Examiners, on the thesis title page;
   b. Be uploaded electronically via the Electronic Thesis & Dissertation (ETD) System. Please refer to General Guidelines and Instructions on Format of Research Thesis and Electronic Submission. Students will be notified via email once the system is open for uploading.

Students are encouraged to register for an Open Researcher and Contributor ID (ORCID). More information can be found on our NUS Libraries' webpage.
The student is responsible to check and ensure that the uploaded thesis is the final, complete and correct version. The uploaded electronic thesis will be accepted without any further verification from either the Education Office or supervisor(s).

One copy (in any form agreed with the supervisors) of the final approved thesis should be submitted to the supervisors.

The student must also complete and submit the Feedback Form on Research Guidance and Career Survey Form to the Education Office.

C. Award of Degree

The student will be considered for award of degree by the Board of Graduate Studies:

a. when all minor/major revisions are incorporated in the thesis to the satisfaction of the supervisor(s) and the Oral Panel member (if applicable); and

b. the thesis has been successfully uploaded into the ETD System.

After the degree has been awarded by the Board of Graduate Studies, the Chancellor’s approval will be sought for the degree to be conferred in writing. The approximate timeframe for approval by Board of Graduate Studies and Chancellor is about two months after the thesis has been uploaded onto the system.

Important: Students are reminded to inform the Registrar’s Office of any change in their mailing address by updating it via EduRec so that the outcome of the thesis examination can be communicated to them promptly.

4.7.10 PhD Open Seminar and Oral Examination

All PhD students are required to give an open seminar where the oral examination panel will assess their presentation and ability to answer questions from the audience.

Composition of the Oral Examination Panel:

- Chairperson (appointed by the Deanery)
  
  The role of the chairperson is to facilitate the oral examination and ensure that it is conducted in a proper manner. The chairperson is also supposed to substitute the external examiner in his/her absence and to assess if the student has adequately addressed and responded to the external examiner’s comments on the thesis.

- 2 of the 3 thesis examiners (usually the 2 internal examiners)

The PhD thesis defence is usually of 3 hours duration, and the following is a summary of the format:
Summary of the proceedings:
i. Brief introduction by the Chairperson (1 to 2 minutes)
ii. Student present his/her work (max 40 minutes)
iii. Q&A with the audience (max 20 minutes)
iv. Closed door meeting with the Board of Examiners (2 hours)

Instructions to Students:
Students are required to attend the oral examination in person and to bring along a copy of their thesis to the oral examination venue.

The duration of the oral presentation should not exceed 40 minutes. Slide projector, overhead projector and PowerPoint through computer will be available for the presentation.

At this presentation, the student should not spend too much time on the literature review but highlight the:

- aims of research project
- development of new methodology used in the project (if applicable)
- original contribution made to the research area
- impact of scientific findings in the research area

After the student’s presentation, there will be a Q&A session where the student will address questions raised by the audience. The examiners may ask questions during the audience Q&A, but this will be limited to a few general questions and examiners will only be allowed to raise questions only after there are no more questions from the audience.

At the end of the open seminar, the student will meet privately with the oral examination panel. Students should expect in-depth questioning from the examiners on any aspects of the thesis and the implications of their PhD work. Students must also be prepared to explain the rationale behind their study design, and demonstrate some level of appreciation of broader issues. For example, for a student doing a PhD on urine metabolomics of diabetics, the student must be able to discuss the issues that need to be addressed before it can be used in clinical or Public Health setting.

Student who performs unsatisfactorily will be required to re-take the oral examination.
4.8 Progress Monitoring

The School monitors the progress of research students on a semestral basis via the online research progress reporting (for both MSc & PhD students) and the Thesis Advisory Committee meeting reports (only for PhD students):

4.8.1 Research Progress Reports

All MSc and PhD students are required to submit a bi-annual research progress report via EduRec (Self Service > Research Progress > My Progress Report). Students will need to provide a summary of the work done in the previous semester, self-assessment and comments. The progress report will be reviewed by the main supervisor, the Graduate Research Programme Director and the Vice Dean (Education) for continuation of candidature and scholarship renewal.

The Research Progress Report submission periods are September (for assessment of research progress in Semester 2 of the previous Academic Year) and in February (for assessment of research progress in Semester 1 of the current Academic Year).

Students will be notified via email of the submission period. Upon receiving the email, students should complete the submission online promptly to allow sufficient time for their supervisor(s), Graduate Research Programme Director and Vice Dean (Education) to complete their assessments and recommendations for continuation of candidature.

For scholars, your scholarship renewal will be tied in with the semestral progress report. Please note that your scholarship will be suspended if you do not complete the research progress report by the deadline. For scholars who are required to fulfil the requirements of the Graduate Assistantship Programme (GAP), you will also be required to report on the number of hours you have completed during the reporting semester. You will need to attach a completed and endorsed Summary Sheet for Graduate Assistantship Programme in your submission.

For non-scholars, you are also required to submit the progress report by the stipulated deadline, otherwise the status of your research progress will be reflected as "Deemed Unsatisfactory".

Students who are in their first semester of study are not required to submit the Research Progress Report.

4.8.1.1 Format of the Research Progress Reports

Students are required to provide:
i. A summary of the work done in the previous semester in a prescribed format, and upload it as a PDF attachment. Please go to the student portal to download the prescribed template in word format.

Students should cover the following points in their summary:

- Thesis Title
- Abstract of their PhD project (in no more than 150 words)
- Specific aims of their research projects, and the progress status (i.e. what was accomplished in the previous semester, and what are your plans for the current semester). Please list down the publications (if any) for each of the aim.
- Coursework modules taken in the previous semester and current CAP
- Status of PhD Qualifying Examination
- Any other relevant information

ii. Self-assessment and comments (e.g. achievements and problems encountered) should be provided in the free-text section titled “Student’s Comments”

4.8.2 Thesis Advisory Committee Meetings (for PhD students only)

All PhD students will have a Thesis Advisory Committee (TAC), which should be formed within 2 months after the student's enrolment in the PhD programme. For MSc students who successfully transferred to the PhD candidature, the TAC should be formed within 2 months after the student has passed the PhD Qualifying Examination.

Members of the TAC will be nominated by the Supervisor(s) and approved by the Graduate Research Programme Director and Vice Dean (Education).

4.8.2.1 Composition of TAC

i. The TAC can be made up of maximum 4 members, i.e. a Chairperson, the Main Supervisor and up to 2 other members. If the student has more than one co-supervisor, only one of the co-supervisors is allowed to be part of the TAC.

ii. TAC members can be SSHSPH faculty, other NUS faculty or investigators from national Research Institutes/Centers. If the supervisor is NOT a full-time NUS staff, one of the TAC members should be a full-time NUS staff.

iii. TAC members shall select a chairperson among themselves; the chairperson cannot be the main supervisor or the co-supervisor.

4.8.2.2 Roles of TAC

i. The TAC is responsible for helping to monitor the student’s progress.
ii. The supervisor is required to convene a TAC meeting with the student on a regular basis (at least once per semester). The chairperson will chair all TAC meetings and communicate decisions of the TAC to the Education Office. At least 2 of the TAC members (including the Chairperson) must be present at each of these meetings.

iii. At the end of each meeting, the TAC is required to complete the TAC report for submission to the Education Office. The TAC is required to submit reports on a biannual basis, by end February and end September of each year. The outcome of the TAC meetings can be incorporated into the student’s bi-annual online research progress reports.

4.8.2.3 Guidelines for TAC meetings

i. Although TAC reports are due by end February and end September every year, students do not need to wait till February/September to have the meetings. TAC meetings can be held anytime in the semester as long as the reports are submitted by end February and end September of each year.

ii. Students should be adequately prepared for TAC meetings and bring a printed copy of the TAC report for completion by the chairperson. Students who need to book a meeting room for their TAC meetings can approach the Graduate Research Programme Administrator for assistance.

iii. In the first meeting, the student should present the aims of the project, proposed methodology, and any preliminary results that are available. In subsequent meetings, depending on the recommendations of the TAC, the student can provide a summary of the results obtained and any new results since the last meeting. At the end of the meeting, the TAC will make recommendations for further work where appropriate.

4.8.2.4 Exemption from TAC Meetings

i. Students can be exempted from a TAC meeting in a semester if their supervisor(s) and TAC members are agreeable, but they cannot be exempted from 2 meetings consecutively. If the student and TAC members decide not to have a TAC meeting in a semester, the student will still need to complete the TAC report form and send a draft of his/her progress to the TAC members for review. The TAC chairperson is still required to complete the TAC report form, but members can sign off electronically.

ii. Students who are in their last semester before thesis submission can request for exemption from submitting the TAC report form, by doing the following:

   a. Student to obtain email confirmations from both the main supervisor and the TAC chairperson that they are agreeable for him/her not to have a TAC meeting.
b. Student to forward the email confirmations and a report of his/her research progress to the Graduate Research Programme Director (cc the main supervisor and the Graduate Research Programme Administrator) to seek approval for exemption.
4.9 Continuation Requirements

MSc
To continue in the MSc programme, a student cannot have:

• CAP below 3.00 (but ≥ 2.50) for three consecutive semesters; or
• CAP below 2.50 for two consecutive semesters.

For any semester in which the student's CAP falls below 3.00 (but ≥ 2.50), that student will be issued an academic warning. If, in the following semester, the student's CAP again falls below 3.00, s/he will be placed on probation. If the student's CAP remains below 3.00 for the third consecutive semester, the student will be issued a letter of dismissal by the Registrar and denied re-admission.

For students whose CAP falls below 2.50 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

<table>
<thead>
<tr>
<th>CAP</th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>3rd Semester</th>
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</thead>
<tbody>
<tr>
<td>Below 3.00</td>
<td>Academic Warning</td>
<td>Academic Probation</td>
<td>Dismissal</td>
</tr>
<tr>
<td>Below 2.50</td>
<td>Academic Probation</td>
<td>Dismissal</td>
<td></td>
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</tbody>
</table>

Such a student may appeal the dismissal if there are extenuating circumstances. The appeal must be submitted to the relevant Faculty/Department 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.

Appeals submitted after the two calendar week period, due to extenuating reasons, will be considered on a case-by-case basis and are not guaranteed. In such cases an administrative fee of S$250 will be charged for each successful appeal for readmission.

For more information, please refer to the information from Registrar's Office.

PhD
To continue in the PhD programme, a student cannot have:

• CAP below 3.50 (but ≥ 3.00) for three consecutive semesters; or
• CAP below 3.00 for two consecutive semesters.

For any semester in which the student's CAP falls below 3.50 (but ≥ 3.00), that student will be issued an academic warning. If, in the following semester, the student's CAP again falls below 3.50, s/he will
be placed on probation. If the student's CAP remains below 3.50 for the third consecutive semester, the student will be issued a letter of dismissal by the Registrar and denied re-admission.

For students whose CAP falls below 3.00 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

<table>
<thead>
<tr>
<th>CAP</th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>3rd Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 3.5</td>
<td>Academic Warning</td>
<td>Academic Probation</td>
<td>Dismissal</td>
</tr>
<tr>
<td>Below 3.0</td>
<td>Academic Probation</td>
<td>Dismissal</td>
<td></td>
</tr>
</tbody>
</table>

A student may also be issued a warning or placed on probation or be issued a letter of termination for poor performance in the PhD 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 relevant Faculty/Department 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.

Appeals submitted after the two calendar week period, due to extenuating reasons, will be considered on a case-by-case basis and are not guaranteed. In such cases an administrative fee of S$250 will be charged for each successful appeal for readmission.

For more information, please refer to the information from Registrar’s Office.
4.10 Graduation Requirements

To graduate from the MSc programme, the student must have:

- Completed coursework requirements with minimum CAP of 3.00
- Pass in the MSc thesis (word limit of 60,000)
- For students who enrolled before August 2018: Achieved regular attendance (at least 8 seminars per academic year for 2 years) in the student research rounds/staff research rounds/SSHSPH PhD thesis defences, and presented once in the student research rounds
- Satisfactory grade (at least Grade C+) in all the required Graduate English Courses, for students who do not qualify for waiver of English Language requirement

To graduate from the PhD programme, the student must have:

- Completed coursework requirements with minimum CAP of 3.50
- Pass in the PhD Qualifying Examination
- Pass in PhD thesis (word limit of 80,000) and Oral Examination.
- For students who enrolled before August 2018: Achieved regular attendance (at least 8 seminars per academic year for 3 years) in the student research rounds/staff research rounds/SSHSPH PhD thesis defences, and presented once in the student research rounds
- Satisfactory grade (at least grade C+) in all the required Graduate English Courses, for students who do not qualify for waiver of English Language requirement
5. Supervision
5.1 Responsibilities of Students & Supervisors

5.1.1 General Principles

Research students are usually members of their supervisors' research team, and are expected to work closely with their supervisors for the thesis research. It is important for students and supervisors to establish expectations of the student's training, supervision and project ownership early in the student's candidature. This should be revisited if there are changes in the composition of the supervision team.

Students and supervisors should mutually agree on a timeframe, in advance, for the student to submit written work (e.g. PQE research proposal, thesis chapters, scientific papers, abstracts for submissions to scientific conferences etc.) to the supervisors for review and for the supervisors to return feedback to the student. It is important that both student and supervisor agree when work will be submitted, so that students will have a clear deadline and supervisors will be able to schedule time to review the student's work.

5.1.2 Students' Responsibilities

General Aspect

i. Students must accept ultimate responsibility for his/her own research activity and candidacy for a degree.

ii. Students are expected to keep to agreed timelines, and maintain satisfactory progress at all times with respect to the research project and any programme of work agreed with the supervisor(s).

iii. Students must maintain regular contact with their supervisors (joint responsibility with supervisors), and provide supervisors with prompt updates on their progress.

iv. Students must make known to their supervisor(s) any circumstances that might require his/her mode of study to be modified or his/her candidature to be extended, suspended or withdrawn.

v. It is the student’s responsibility to check with the Education Office regarding fulfilment of graduation requirements for the degree admitted. Failure to do so and not fulfilling the requirements will lead to termination of candidature.

Research Aspect

i. Students must be responsible for the directions of any innovation in the development of the research project.

ii. Students must highlight to the supervisor(s) problems arising related to the project as well as provide adequate explanation of any failure to attend meetings, deadlines or other commitments, so that appropriate guidance may be offered.

iii. Students are encouraged to make use of appropriate teaching and learning facilities made available by the university. (e.g. computer clusters/center, laboratories, libraries etc)

iv. Students are to comply with the rules & regulations when using NUS facilities.
v. Students must familiarize themselves with the institutional regulations and policies that affect them, including health and safety regulations, intellectual property policy, research data management policy and ethical research guidelines.

Written Aspect
i. To submit written work in a specified and agreed time before meeting with the supervisor(s).
ii. To prepare periodic progress reports on the research project.
iii. To communicate research findings to others in the academic community, both orally and in written form.
iv. To successfully complete any training programme arranged by, provided, through the University or third party.
v. Please note that plagiarism is a serious offence. Any student caught plagiarising will be subject to disciplinary action. Offenders may have their candidature suspended/terminated. All students may refer to the academic culture module on what constitutes plagiarism and the consequences of plagiarism.

Teaching, Research Assignments & Developmental Assignments
a. Students who are scholarship recipients may be assigned teaching duties, research assignments or developmental assignments within the School
b. Research scholars are responsible for the work assigned to them, and to perform all assignments satisfactory and in a timely manner.
c. At any point in time, the scholar's award of scholarship can be terminated/suspended if the scholar is not executing his/her duties in a professional manner.

Most importantly, the research student must act as a responsible member of the institution’s academic community.

5.1.3 Supervisors’ Responsibilities
i. Provide satisfactory guidance and advice to the student
ii. Be responsible for monitoring the progress of the student's research programme. Provide timely and constructive feedback on the student's work, including his/her overall progress within the programme.
iii. Establish and maintain regular contact with the student, and ensure his/her accessibility to the student, by whatever means is most suitable and agreed upon.
iv. Ensure that the student is aware of the need to conduct his/her research according to ethical principles, and of the implications of research misconduct
v. Ensure that the student is aware of institutional-level sources of advice, including careers guidance and health and safety legislation
vi. Provide effective pastoral support and/or referring the student to other sources of such support, e.g. the student support manager, the Directors of Student Life, the programme management team or others within the student's academic community.

vii. Help the student to interact with others working in the field of research, for example, encouraging the student to attend relevant conferences, supporting him/her in seeking funding for such events; and where appropriate to submit conference papers and articles to refereed journals and explore relevant continuing professional development opportunities.

5.2 Problems with Supervision

Students or supervisors who are having problems with supervision should discuss these first with the supervisor/student. If either the student or the supervisor does not feel comfortable discussing problems with each other, they should approach the Director or Deputy Director of Student Life, the Graduate Research Programme Director or the Vice Dean (Education) for advice and help.
6. Teaching, Research & Other Assignments (for Research Scholars)
6.1 Overview

a. MSc and PhD students who are recipients of the following scholarships are required to perform teaching, research and other developmental assignments up to the hours stipulated by their scholarship:
   i. President’s Graduate Fellowship
   ii. Commonwealth Scholarship
   iii. NUS Research Scholarship

b. For scholars who are required to fulfil the requirements of the Graduate Assistantship Programme (GAP)\(^8\):
   i. No remuneration will be given for hours clocked under GAP
   ii. If funding is available, students who perform work in excess of the hours required by GAP can be remunerated at a rate in accordance with the NUS Student Work Scheme

c. For scholars who are exempted from the Graduate Assistantship Programme (GAP):
   i. The hours stipulated by the scholarship are reserved solely for teaching duties. The requirements are as follows:
      o MSc students are required to perform teaching duties for 2 modules in total
      o PhD students are required to perform teaching duties for 4 modules in total
   ii. Research and developmental assignments are optional. If funding is available, students can be remunerated at a rate in accordance with the NUS Student Work Scheme, subject to point d (see below).

d. The total time spent on teaching, research and developmental assignments (including both paid hours and unpaid hours) cannot exceed 16 hours per week. This applies to all research scholars regardless of nationality.

e. SSHSPH will only award the hours clocked if the work done is satisfactory.

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\(^8\) Graduate Assistantship Programme (GAP) is applicable for all international students receiving MOE-funded scholarships, for example, the NUS Research Scholarship, the Commonwealth Scholarship and the President's Graduate Fellowship (funded by MOE). Research Scholars who are Singapore Citizens and Singapore Permanent Residents do not need to fulfil GAP. In addition, international students receiving the President's Graduate Fellowship (funded by Jasmine Scholarship) and the President’s Graduate Fellowship (funded by Lee Kong Chian Scholarship) are exempted from GAP.
6.2 Teaching Assignments

6.2.1 Scope of Duties

The following table lists the scope of duties and expectations:

<table>
<thead>
<tr>
<th>Workload</th>
<th>For Modules/Classes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Workload per module is capped at <strong>max 65 hours per semester</strong> <em>(i.e. average 5 hours per week)</em>.</td>
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<td></td>
<td>• In cases where the module coordinator requires help in developing a module, the TA may be required to contribute additional hours. For such cases, the TA can clock more than 65 hours for the module if the module coordinator provides justification for the additional hours.</td>
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<tr>
<td></td>
<td>• For GEK1900/GEH1049, as the workload is heavier, the maximum hours is capped at <strong>max 78 hours per semester</strong> <em>(i.e. average 6 hours per week)</em>.</td>
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<p>| Scope of | For MPH practicums: |</p>
<table>
<thead>
<tr>
<th>duties</th>
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<td></td>
<td>• If students assist MPH students in their practicums <em>(e.g. guiding them on the use of statistical software or qualitative analysis software)</em>, this can be counted as teaching hours, subject to the following:</td>
</tr>
<tr>
<td></td>
<td>• Students need to obtain the approval of their supervisor before they agree to assist the MPH student. At the end of the assignment, students will need to complete a report and submit it to the Education Office.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For Modules/Classes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Be physically present at all lectures and tutorials to assist the lecturer <em>(≈40 hours)</em></td>
</tr>
<tr>
<td>• Assist in preparation work, marking, and other administrative work as assigned by the module coordinator <em>(≈25 hours)</em></td>
</tr>
<tr>
<td>• Students need to abide by the guidelines stated in section 6.2.3 Roles and Responsibilities of TAs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For MPH practicums:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students may assist MPH students by guiding them on the use of statistical software or qualitative analysis software. Students are not allowed to assist MPH students in their projects as MPH students are expected to work on their practicums independently.</td>
</tr>
</tbody>
</table>
| Expectations | • All students are expected to attend the **TA training course** organized by CDTL.  
• Students who have been assigned as TA for a module are required to seek the Module Coordinator’s permission if they wish to take leave during the semester.  
• TAs are required to keep a log of their duties and hours and provide the detailed breakdown in the **report** at the end of the semester. |

### 6.2.2 Administrative Procedures:

i. Before the start of the academic year, students will be provided with information on the modules that require teaching assistants (TAs) and the scope of duties and estimated workload.

ii. Students will be asked to list their top 3 choices, in order of preference.

iii. Education Office will try to match the needs of the modules and the preference of the students.

iv. Students are required to submit a **report** of what they have done and the hours clocked at the end of the semester.

v. Feedback will be collated from both the students they taught and the module coordinator. Education Office will provide a summary report for each student on the work done and the feedback received.
6.2.3 Roles and Responsibilities of Teaching Assistants (TA):

The roles and responsibilities of graduate students who are Teaching Assistants (TAs) will be defined as follows, and any deviation would require approval from the Education Office:

**Scope of Duties:**

i. Be physically present in all lectures and tutorials to assist the lecturer

ii. Assist to prepare teaching materials

iii. Assist in managing IVLE (e.g. upload lecture notes, post announcements, update module syllabus, manage the IVLE discussion forum etc)

iv. Demonstrator for computer practicals

v. Lead/ facilitate group discussions during class

vi. Lead/ facilitate tutorials sanctioned by module coordinator outside of class

vii. Provide consultation to students for review sessions or project presentations

viii. Assist in CA and Exam invigilation

If TAs are required to set questions or to mark, the following guidelines must be strictly adhered to:

<table>
<thead>
<tr>
<th>Undergraduate (non-medical) Modules</th>
<th>Graduate Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting of Questions</td>
<td>TAs can set questions for tests, quizzes and examinations.</td>
</tr>
<tr>
<td>Vetting of Questions</td>
<td>All questions set by TAs must be vetted by the module coordinator.</td>
</tr>
<tr>
<td>Marking of Questions</td>
<td>TAs are allowed to mark assignments and essays only.</td>
</tr>
<tr>
<td></td>
<td>If the module coordinator requires the TA to mark tests, quizzes or examination scripts, approval must be sought from the Education Office</td>
</tr>
</tbody>
</table>

Module coordinators are required to provide a marking scheme template (sample available in the Module Coordinator Guide Binder) to their TAs. TAs should only assess and comment on the good and the bad points of the essays, and indicate their comments in the remarks column of the prescribed marking scheme template.

Scripts assessed by TAs must be vetted and marks assigned by the module coordinator. **No marks should be given by the TA, and TAs are not allowed access to marks.**

Where only hardcopy scripts are submitted, TAs are required to collect the scripts from the Education Office, and mark them in a designated venue. Marking scheme templates and stationeries will be provided, and TAs are not allowed to bring in their personal belongings (including mobile phones).
### 6.3 Research/Developmental Assignments

The following table lists the scope of duties:

<table>
<thead>
<tr>
<th>Research Assignments</th>
<th>Research Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Assist your domain / supervisor in research assignments beyond the scope of your research project</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Supervision</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Assist your domain / supervisor in supervising attachment students, interns, undergraduate students etc.</td>
</tr>
<tr>
<td></td>
<td>• Assisting MPH students in their practicums is considered a teaching assignment (see above for details).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developmental Assignments</th>
<th>Organizing/ assisting in school-level events, for example:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• NUS Open Day, Commencement and other student activities</td>
</tr>
<tr>
<td></td>
<td>• Conferences and executive courses</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
</tr>
<tr>
<td></td>
<td>Develop case studies</td>
</tr>
</tbody>
</table>

*For international students who need to fulfil the Graduate Assistantship Programme (GAP):*

- On the completion of the research assignment or developmental assignment, students will need to submit a report to the Education Office detailing the scope of duties and the hours clocked. Please see [here](#) for the report form.
6.4 Graduate Assistantship Programme (for International Students)

International Students who are awarded the following scholarships from AY2014/2015 are required to perform duties under the Graduate Assistantship Programme as set out in the table below:

<table>
<thead>
<tr>
<th>Degree</th>
<th>Total Hours Required during Candidature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUS Research Scholarship &amp; Commonwealth Scholarship</td>
</tr>
<tr>
<td>PhD</td>
<td>416</td>
</tr>
<tr>
<td>2-year Master's by Research</td>
<td>156</td>
</tr>
<tr>
<td>1-year Master's by Research</td>
<td>78</td>
</tr>
</tbody>
</table>

The table below sets out the maximum hours that can be clocked under the respective categories:

<table>
<thead>
<tr>
<th>Category of Work</th>
<th>PhD (President's Graduate Fellowship)</th>
<th>PhD (NUS Research Scholarship &amp; Commonwealth Scholarship)</th>
<th>Master's (2-year)</th>
<th>Master's (1-year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Assistant (min 20%)</td>
<td>At least 63</td>
<td>At least 84</td>
<td>At least 32</td>
<td>At least 16</td>
</tr>
<tr>
<td>Research Assistant Duty (max 60%)</td>
<td>Up to 188</td>
<td>Up to 250</td>
<td>Up to 94</td>
<td>Up to 47</td>
</tr>
<tr>
<td>Developmental assignments (max 20%)</td>
<td>Up to 63</td>
<td>Up to 84</td>
<td>Up to 32</td>
<td>Up to 16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>312</strong></td>
<td><strong>416</strong></td>
<td><strong>156</strong></td>
<td><strong>78</strong></td>
</tr>
</tbody>
</table>

a. The Scholar will not be paid any remuneration for the hours clocked under the Graduate Assistantship Programme.

b. The Scholar should work with the supervisor(s) on the plan to fulfil the required hours on a yearly (Academic Year) basis.

c. The duties can only be clocked for work done and deemed satisfactory by the University.

d. If the required hours are not met according to the annual plan or the quality of the work done is unsatisfactory, the School can:
   i. reduce or withhold the stipend and/or the tuition fee subsidy, and/or suspend or terminate the Scholarship; and/or
ii. withhold the transcript (both unofficial and official) and the student status letter until the requirements are met.

e. Total required hours should be completed before expiry of the Scholarship or before thesis submission (whichever is earlier).

f. If the total required hours are not met by the time the thesis is submitted for examination, the Scholar will have his/her transcript (both unofficial and official) and student status letter withheld until the fulfilment of the requirement.
7. Fees & Financial Assistance
## 7.1 Fees

### 7.1.1 Tuition Fees

Tuition fees payable by SSHSPH students for AY2018/2019 are as follows:

**For new students admitted in AY2018/2019:**

<table>
<thead>
<tr>
<th>Faculty/School</th>
<th>Per Annum Amounts (S$) for Graduate Research Programmes (For both Full-Time and Part-Time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singapore Citizens</td>
</tr>
<tr>
<td>Public Health</td>
<td>S$9,000</td>
</tr>
</tbody>
</table>

**For existing students admitted in AY2017/2018:**

<table>
<thead>
<tr>
<th>Faculty/School</th>
<th>Per Annum Amounts (S$) for Graduate Research Programmes (For both Full-Time and Part-Time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singapore Citizens</td>
</tr>
<tr>
<td>Public Health</td>
<td>S$8,650</td>
</tr>
</tbody>
</table>

**For existing students admitted in AY2016/2017:**

<table>
<thead>
<tr>
<th>Faculty/School</th>
<th>Per Annum Amounts (S$) for Graduate Research Programmes (For both Full-Time and Part-Time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singapore Citizens</td>
</tr>
<tr>
<td>Public Health</td>
<td>S$8,300</td>
</tr>
</tbody>
</table>
For existing students admitted in AY2015/2016:

<table>
<thead>
<tr>
<th>Faculty/School</th>
<th>Per Annum Amounts (S$) for Graduate Research Programmes (For both Full-Time and Part-Time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singapore Citizens</td>
</tr>
<tr>
<td>Public Health</td>
<td>S$8,350</td>
</tr>
</tbody>
</table>

For existing students admitted in AY2014/2015:

<table>
<thead>
<tr>
<th>Faculty/School</th>
<th>Per Annum Amounts (S$) for Graduate Research Programmes (For both Full-Time and Part-Time students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singapore Citizens</td>
</tr>
<tr>
<td>Public Health</td>
<td>S$7,900</td>
</tr>
</tbody>
</table>

Please see here for more information.

For fee-related matters arising from change of citizenship/obtaining Singapore Permanent Residence and leave of absence, students should refer to the respective web pages:

- Change of Citizenship/Obtaining Singapore Permanent Residence
- Leave of Absence

7.1.2 MOE Subsidy for Tuition Fees

The substantial tuition subsidy from the Government of Singapore comes in the form of a MOE Subsidy which is administered by the Ministry of Education (MOE) and is offered to all eligible students up to the maximum course duration. Students need not apply for the MOE Subsidy if they meet the eligibility criteria.

7.1.3 Miscellaneous Student Fees

Miscellaneous student fees help meet costs incurred by the University in providing services to the student community that are either not covered or only partially covered by the tuition fee and
government subsidy. These services include healthcare for students; facilitating student cultural, social and recreational programmes; and maintaining the shuttle bus service, IT network and other essential campus infrastructure and services. All students, whether registered on a full-time or part-time basis, are charged the miscellaneous student fees. These are due at the same time as the tuition fees.

For detailed information on the annual miscellaneous fees payable, please see here.

7.1.4 Service Obligation Scheme

International Students reading a government-subsidised programme can apply for the Service Obligation Scheme to pay reduced tuition fees. For more information, please see here.

7.1.5 Payment of Fees

Students will be informed via their NUS email account to view their online Student Bill from EduRec at least two weeks prior to the scheduled deadline for fee payment. A step-by-step guide for viewing student bill and account transactions is available in the student portal.

Students are encouraged to make payment via GIRO. To make payment via GIRO, please update both your credit and debit bank accounts details via EduRec. You would be able to download the Interbank GIRO form from EduRec once your debit bank account details are updated. Please submit the GIRO form to the Student Service Centre (located at level 1, Yusof Ishak House) by the stipulated deadline.

For details on the fee payment deadline and other available modes of payment, please see here.

Students who do not meet fee payment deadlines stipulated by the Office of Financial Services may incur penalty fees. If fees are not paid, or only partially paid, by the due date indicated in the bill, a late fee will be stipulated.

Should fees remain outstanding after the relevant fee payment deadline, the University reserves the right to suspend academic rights and privileges, including withholding degree conferment certifications. In addition, students with overdue fees may have their candidature of study terminated.

Students should also familiarize themselves with information on fee payable upon

- termination/withdrawal of candidature
- application of leave of absence
- submission of thesis
7.2 Scholarships and Financial Assistance

7.2.1 Scholarships

(For students receiving the President’s Graduate Fellowship, Commonwealth Scholarship and the NUS Research Scholarship)

Research scholars are expected to abide by the terms and conditions of their scholarship.

All research scholars are also expected to perform teaching, research and other departmental duties up to the required hours stipulated by their scholarship. For more information, please refer to Section 6 Teaching, Research & Other Assignments (for Research Scholars).

Payment of stipend

The scholarship stipend will begin from the commencement date of the semester, or the date of enrolment, whichever is later. Where applicable, the stipend for the first and last month will be prorated as follows:

First / last month stipend = \[ \frac{\text{No. of Pro-rated working days}^*}{\text{Total no. of working days}^* \text{ in the month}} \times \text{Monthly Stipend} \]

* Working days exclude Saturdays and Sundays but include public/university holidays.

The monthly stipend will be paid on the 18th of each month. Please also note that the miscellaneous fees payable for the semester will be deducted from the stipend.

7.2.2 Staff Concession

Students who are full-time NUS staff members may be eligible to apply for the staff concession on the tuition fees of part-time, government-subsidised graduate programmes. Information on the staff concession is available here.

7.2.3 NUS Student Work Scheme

Full-time graduate research students may apply to work on a part-time basis (up to 16 hours per week) during the period of their candidature under the NUS Student Work Scheme. For more information, please see here.

7.2.4 Other Scholarships/ Financial Aid

For information on other financial assistance and scholarships/awards available for graduate students, please see here.
7.3 Financial Assistance for Conferences, Courses and Overseas Attachments

7.3.1 Funding Policy

a. Full-time graduate research students may apply for financial assistance to attend scientific conferences, courses or overseas attachments (e.g. student exchange programmes & internships):
   o Funding for PhD students is subject to a total limit of S$3,000 throughout their candidature
   o Funding for MSc students is subject to a total limit of S$2,000 throughout their candidature;
     ▪ MSc students who subsequently upgrade to PhD without graduating from the MSc programme will have their funding limit increased from S$2,000 to S$3,000.
     ▪ Students who graduated from the MSc programme and subsequently enrolled in the PhD programme will be eligible for up to S$3,000 of funding throughout their PhD candidature, regardless of the amount of funding they had received in their previous MSc programme.

b. This grant is a privilege and not a right, and is subject to availability of funds and approval by the school.

c. Only full-time students are eligible to apply. The applicant must
   o be registered as a full-time graduate research student with SSHSPH for at least 1 year (applications from year 1 students can still be considered on a case-by-case basis, subject to availability of funding); AND
   o at the time of the scientific conference/ course/ overseas attachment, be a full-time graduate research student and has not yet submitted his/her thesis (For students who have submitted their thesis, financial assistance can still be considered for conference presentations if the student is presenting on his/her MSc/PhD research).

d. For conferences, the applicant must be presenting an original scientific paper (oral/ poster etc). If the student is presenting the same abstract at more than one conference, he/she can apply for funding for only one of the conferences. The only exception is the Singapore International Public Health Conference (SIPHC) co-organized by the school. For the SIPHC, students can apply for funding for the registration fees even if they had already received funding from the school to present the same abstract at another conference.

e. Due to limited funds, students giving oral presentations will be given priority over students giving poster presentations. Similarly, students applying for conference funding will be given priority over students attending courses.
7.3.2 Fundable Items

<table>
<thead>
<tr>
<th></th>
<th>Items that can be funded:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas Conferences</td>
<td>• Economy class airfare (by the most economical and direct route)</td>
</tr>
<tr>
<td></td>
<td>• Visa fee (if applicable)</td>
</tr>
<tr>
<td>Local Conferences</td>
<td>• Registration Fee</td>
</tr>
<tr>
<td>Local Courses</td>
<td>• Course Fee</td>
</tr>
<tr>
<td>Course (Local/ Overseas)</td>
<td>• Course Fee</td>
</tr>
<tr>
<td>required for the Independent</td>
<td></td>
</tr>
<tr>
<td>Study Module (ISM)</td>
<td></td>
</tr>
<tr>
<td>Overseas Attachments (e.g.</td>
<td>• Economy class airfare (by the most economical and direct route)</td>
</tr>
<tr>
<td>Student Exchange</td>
<td>• Visa fee (if applicable)</td>
</tr>
<tr>
<td>Programmes &amp; Internships)</td>
<td></td>
</tr>
</tbody>
</table>

Please note that students are required to pay for the items first, and seek reimbursement from the school after the conference/course/overseas attachment is over.

7.3.3 Airfare Policy

For airfare, the school will fund the most economical and direct route for the conference period based on an online scan by an aggregator website e.g. Expedia, Zuji, Skyscanner or such similar websites offering online airfare comparison.

Students will need to do an online scan on an aggregator website based on the following criteria:

a. It should be a return trip from Singapore to the Conference Venue and back to Singapore
b. Date of arrival at the conference venue should not be earlier than 1 day before the conference start date
   c. Date of return should not be later than 1 day after the conference ends

The school will fund whichever is the lowest:

i) cheapest airfare by the most direct route, as quoted by an aggregator website; OR
ii) cost of air ticket purchased; OR
iii) remaining balance of funding the student is eligible for

If a student intends to purchase an air ticket that is more expensive than the cheapest airfare quoted by the aggregator website, he/she will need to provide the reasons and the relevant supporting documents for approval. If the request is not approved, the difference in pricing will be borne by the student.
7.3.4 How to Apply

Please submit the following AT LEAST TWO MONTHS before the start of the conference/ course/ overseas attachment to Chunxuan [e] chunxuan_yang@nus.edu.sg / [t] 660 12499, SSHSPH Education Office:

a. Application form (duly completed and signed)
b. Brochure for conference/ course
c. Proof of Acceptance
   o For conferences: abstract acceptance letter/ email from the organizers
   o For overseas attachments: proof of acceptance from the University/ Organization
d. Abstract of the paper which you will be presenting (for conferences)
e. For airfare, please provide the following:
   o Printout of the online scan by an aggregator website e.g. Expedia, Zuji, Skyscanner or such similar websites offering online airfare comparison (please refer to the above section on Airfare Policy for more information). Please ensure the printout shows the selected travel dates.
   o Quotation of the air ticket that you intend to purchase (if it is different from aggregator website)
f. Proof of Visa Fee amount (e.g. printout from the embassy website on the cost of the visa)
g. Printout from the conference/ course website on the cost of the Registration Fee/ Course Fee (for local conferences and courses)

7.3.5 Documents to submit for reimbursement

Please submit the following within 2 weeks after the conference/ course/ student exchange programme/ attachment:

a. Copy of certificate of attendance
b. Request for payment form, duly completed and signed
c. Original receipt for Registration Fee and bank/ credit card statement
d. Original receipt for Course Fee and bank/ credit card statement
e. Original receipt for Airfare and bank/ credit card statement
f. Original receipt for Visa Fee and bank/ credit card statement
g. Boarding Passes
h. [For overseas attachment/ internship/ student exchange] A brief account of your overseas attachment/ internship/ student exchange experience, e.g. the activities undertaken and how the overseas attachment/ internship/ student exchange has added value to your study/ future career.
8. SSHSPH Awards for Graduate Research Students
8.1 Teaching Assistant Award

Overview:

The SSHSPH Teaching Assistant Award was established by the School in February 2018 to recognize the contributions of our Teaching Assistants (TA) in the school's education programmes. It is hoped that the award would serve as an encouragement, in addition to recognition, for their efforts and excellence in carrying out the duties.

3 awards are made available each year. Awardees will receive a certificate of achievement and a cash prize of S$100, to be presented during the School Anniversary celebration.

Terms & Conditions:

a. The School will consider teaching done during the academic year, and presented during the School Anniversary in October of the following academic year.

b. There will be no call for nominations. Instead, all TAs who have completed TA duties during the period of review will be considered. Students may win the award more than once during their candidature.

c. Eligibility Criteria:
   i. The TA must be enrolled as a student in the SSHSPH Graduate Research Programmes when completing the TA duty.

   ii. In the event that the module spreads over 2 semesters, the end of the module will be used for the consideration of the award. For example, if the module starts in January 2018 and ends in Nov 2018, the consideration period for the award will be AY2018/2019.

d. Students will be assessed based on the following criteria:
   i. Official teaching feedback scores generated by the NUS/ NUSMED feedback system*
   ii. Number of best teaching nominations received
   iii. Feedback from module coordinator
   iv. Other module feedback collated in a survey/ poll done by module coordinator or school

* For feedback, the module coordinator should provide the necessary information to the programme administrative personnel during the collation of information for feedback if the student was not officially assigned TA duties by the Education Office.

e. Selection Process:
   i. Education Office will tabulate the student feedback scores, best teaching nominations and feedback scores from module coordinator for each TA.
ii. Vice Dean (Education) and Graduate Research Programme Director will review the scores and qualitative feedback for each TA and select up to 3 candidates for the award based on the criteria stated in point d.

iii. Awardees will be reviewed and approved by the Graduate Research Programme Management Committee.
8.2 Graduate Student Research Award

Overview:

The SSHSPH Graduate Student Research Award was established by the School in October 2017 to recognize the research achievements of the graduate research students.

3 awards are made available each year, one for each domain. Awardees will receive a certificate of achievement and a cash prize of S$100, to be presented during the annual AlumNite.

Terms and Conditions:

a. Eligibility Criteria:
   i. The award is open to all current MSc & PhD students, and students who were conferred the MSc or PhD degree between 1 July 2017 to 30 June 2018.

   ii. Previous winners of the award are not eligible

b. Selection Criteria:
   i. Students will be assessed based on the following criteria:
      • Quality and quantity of the publications since matriculation
      • Public health impact of the student’s work

   ii. Students need not have made outstanding contribution in both of the above criteria. For example, a student who has contributed significantly to translational work or whose research has influenced policy could be selected for the award based on the public health impact of his/her work even though his/her work may not be published.

   iii. Students will be assessed based on the work completed since enrolment. It can include work that is not related to their thesis.

c. Selection Process:
   i. Students who wish to be considered for the award must submit the following documents by the stipulated deadline:
      • Short write-up of their research and why they are deserving of the award (maximum 500 words). In the write-up, students should highlight the impact of their research and the public health significance of their work.
      • Include any relevant supporting information as appendix e.g. list of publications, media coverage etc
ii. Selection will be within the domain that the student's main supervisor belong to. Each domain will select their nominee and inform Education Office. Nominees will be reviewed and approved by Vice Dean (Education) and Vice Dean (Research). No award will be made unless there is a candidate of sufficient merit.
9. Appeals Procedures
9.1 Appeals Procedures

Students who meet with difficulties in the course of their study should first approach their supervisor, followed by the Graduate Research Programme Director and the Vice Dean (Education) for help and discussion. If the issue requires further deliberation, it will first be surfaced to the Graduate Research Programme Management Committee, and next to the Dean for resolution. If the issue cannot be resolved at the school level, it will be raised to the Vice Provost (Graduate Education) for resolution.
10. Annexes
Annex 1: Suggested Workplan for PhD students

a. For students who enrolled in August 2018 and after

### August Intake

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Core Modules</td>
<td>SPH6770 Graduate Research Seminar in Public Health (4 MCs)</td>
<td>1 Core Module</td>
<td>SPH6770 Graduate Research Seminar in Public Health (4 MCs)</td>
<td>1 Elective Module (4 MCs)</td>
<td>2 Elective Modules (8 MCs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Elective Module (4 MCs)</td>
<td>Work on Research Project.</td>
<td>• Submit PQE (written) by end May</td>
<td>• Pass both PQE (written) and PQE (oral) by early August</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Year 2

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Work on research project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 4</td>
<td>Work on research project and start writing the thesis</td>
</tr>
</tbody>
</table>

### January Intake

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
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</table>
Note:

- The workplan is just a suggested guide.

- The SPH6770 Graduate Research Seminar in Public Health module spreads over 2 semesters. Students will receive IP (In Progress) grade in the first semester, and the final grade at the end of the second semester.

- All students are required to pass both written and oral components of the PhD Qualifying Examination (PQE) by 24 months. Students can take up to two attempts for each component. Students should also attempt to complete all coursework requirements within 18 months.

- For students who are required to take the Graduate English Courses, please complete ES5000 (if applicable) and ES5001A (if applicable) with a minimum grade of C+ for each of the modules, before you apply for PQE. You will also need to complete ES5002 with a minimum grade of C+ before you submit your thesis.
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**Start working on the research project**

#### Year 2

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<th>Elective Module (4 MCs)</th>
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**Work on Research Project.**

#### Year 3

**Work on research project**

#### Year 4

**Work on research project and start writing the thesis**

### January Intake

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**Start working on the research project**

#### Year 2

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**Work on Research Project.**

- Submit PQE (written) by end October
- Pass both PQE (written) and PQE (oral) by early January

#### Year 3

**Work on research project**

#### Year 4

**Work on research project and start writing the thesis**

**Submit thesis**

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**Note:**

The workplan is just a suggested guide.
All students are required to pass both written and oral components of the PhD Qualifying Examination (PQE) by 24 months. Students can take up to two attempts for each component. Students should also attempt to complete all coursework requirements within 18 months.

For students who are required to take the Graduate English Courses, please complete ES5000 (if applicable) and ES5001A (if applicable) with a minimum grade of C+ for each of the modules, before you apply for PQE. You will also need to complete ES5002 with a minimum grade of C+ before you submit your thesis.

All PhD students are also required to achieve regular attendance (at least 8 seminars per academic year for 3 years) in the school research rounds/SSHSPH PhD thesis defences.
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Annex 1

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- All PhD students are also required to achieve regular attendance (at least 8 seminars per academic year for 3 years) in the school research rounds/SSHSPH PhD thesis defences
Annex 2: Suggested Workplan for MSc students

a. For students who enrolled in August 2018 and after

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Note:
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- The SPH6770 Graduate Research Seminar in Public Health module spreads over 2 semesters. Students will receive IP (In Progress) grade in the first semester, and the final grade at the end of the second semester.
- For students who are required to take the Graduate English Courses, please complete ES5000 (if applicable) and ES5001A (if applicable) with a minimum grade of C+ for each of the modules, before you submit your thesis.
# Annex 2

## b. For students who enrolled between Jan 2017 to Jan 2018

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### c. For students who enrolled between Jan 2012 to Aug 2016

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Annex 3: PhD Qualifying Examination (Format of the PhD Research Proposal)

1. THESIS TITLE
The title should be descriptive and specific rather than general, and should encapsulate the overall theme of your PhD project.

2. ABSTRACT OF THE PROPOSAL
Please provide a succinct and accurate description of the proposal in no more than 400 words. The abstract must capture the following:
   i. Academic significance of the research – this refers to how your research adds to existing literature. Please also highlight the potential public health implications of your work.
   ii. Hypotheses or research questions to be addressed
   iii. Approach and feasibility of the study.

3. DETAILS OF RESEARCH PROPOSAL
Give a description of the research in around 12 pages (Arial font size 10, single line spacing). Information SHOULD include
   i. Hypothesis
   ii. Specific aim(s) of the project
   iii. Scientific/clinical significance
   iv. Approach/methodology
   v. Results obtained thus far
   vi. Innovation/possible applications and potential public health implications of your work.
   vii. Ethical considerations relevant to your research, and where applicable, whether approval from IRB has been obtained.

Information provided should be sufficiently self-contained for an assessment of the proposal without further reference to other materials. Any published reports and submitted manuscript can be attached at the end of the grant proposal.

4. PROJECT IMPLEMENTATION SCHEDULE (GANTT CHART FORMAT)
The proposed schedule will be used for assessment and evaluation of the project.

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(Note: Year 1 refers to the first year of your candidature; Year 2 refers to second year and so on)

CONFIDENTIAL
Annex 4: Description of Modules offered by SSHSPH

SPH5002 Public Health Research Methods
Modular Credits: 8
Pre-requisites: Nil
Preclusions: CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods

This module provides students with the foundational knowledge of epidemiology and biostatistics, and introduces students to the key principles of qualitative research methods. Students will learn how to quantify the burden of disease in populations, identify potential risk factors, develop and test hypotheses. Key considerations for the design of observational, interventional, and screening studies, and basic skills related to the analyses and interpretation of data from such studies will be emphasised. Students will gain an appreciation of the complementary nature of qualitative and quantitative research methodologies in answering public health questions.

SPH5003 Health Behaviour and Communication
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5203 Lifestyle and Behavior in Health and Disease

This module applies concepts and methods in social and behavioural sciences to evaluate and inform development of health promotion policies, programmes and services. It provides students with the principles and skills to address the social, psychological and environmental factors influencing behaviour and behaviour change. Upon completion of this module, students will be able to apply commonly used behavioural theories and models to change and evaluate behaviour at the individual, group and community level for the development of effective public health promotion interventions.

SPH5004 Introduction to Health Policy and Policy Analysis
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5104 Health Policy & Systems

The module provides students with an overview of health systems and the origin, development, and the various components that make up an effective health policy. Theoretical frameworks and concepts will be introduced to help students understand and analyse health policies and the challenges faced by stakeholders in the health system. Through a mix of lectures, in-class group discussion, and group work with case studies, students will describe, analyse and develop health policy solutions for common public health problems faced by Singapore and regional countries.

SPH5101 Advanced Quantitative Methods I
Modular Credits: 4
Pre-requisites: 1) A minimum grade ‘B-’ obtained in CO5103 Quantitative Epidemiologic Methods OR SPH5002 Public Health Research Methods, and 2) and working knowledge of STATA.
Preclusions: CO5218 Advanced Quantitative Methods I

In this module, the principles of statistical modelling will be introduced, and statistical models such as multiple linear regression, logistic regression and Cox proportional hazards model will be applied to a variety of practical medical problems. Methods for analysing repeated measures data, assessment of model fit, statistical handling of confounding and statistical evaluation of effect modification will also be discussed.
SPH5102 Design, Conduct and Analysis of Clinical Trials
Modular Credits: 4
Pre-requisites: SPH5002 Public Health Research Methods; OR CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods
Preclusions: CO5220 Design, Conduct and Analysis of Clinical Trials

In this module, issues in clinical trials, including blinding randomisation, sample size, power, ethical, regulatory, and quality-of-life issues will be addressed. Interim and sequential analyses, analysis of multiple treatments and endpoints, stratification and subgroup analyses, as well as meta-analysis of randomised controlled trials will also be discussed. Although particular emphasis is given to the evaluation of treatment in Phase III clinical trials, early phase trials studies will also be covered.

SPH5103 Collection, Management & Analysis of Quantitative Data
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5232 Collection, Management & Analysis of Quantitative Data

This module is an introduction to collection, management and data analysis of quantitative surveys in public health research, with strong emphasis on acquiring hands-on experience for handling public health data with the STATA software. It will cover essential concepts such as sampling and design of questionnaires as well as practical components such as data storage, management, and basic statistical analysis of questionnaire data.

SPH5104 Healthcare Analytics
Modular Credits: 4
Pre-requisites: SPH5002 Public Health Research Methods; OR CO5103 Quantitative Epidemiologic Methods
Preclusions: CO5237 Healthcare Analytics

This module will cover major topics in healthcare analytics, including clinical related analytics (diseases, medication, laboratory test, etc.) and healthcare operations related analytics (resource planning/scheduling, care process analytics and improvement, admission and readmission, etc.). Students will learn the insights of these different healthcare analytics areas, and how to select the right analytics techniques for these healthcare analytics problems.

SPH5201 Control of Communicable Diseases
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5201 Control of Communicable Diseases

This module focuses on infectious diseases of public health concern in Singapore and internationally. The course will cover concepts in the prevention, surveillance and control of infectious diseases, with a focus on vector-borne diseases (in particular dengue and malaria), foodborne diseases, HIV/AIDS and sexually transmitted diseases, tuberculosis, acute respiratory illnesses, and nosocomial infections. In addition, students will be exposed to concepts in the evaluation of vaccines and vaccination programmes, and will obtain hands-on experience in outbreak investigation through a simulated outbreak exercise. Students will learn to critically appraise and discuss the application of current control strategies. This module is highly relevant for students who intend to work in infectious disease control in local and international governmental and non-governmental organisations, or who wish to pursue academic research on infectious diseases from a public health perspective.
SPH5202 Control of Non-Communicable Diseases

Modular Credits: 4
Pre-requisites: SPH5002 Public Health Research Methods
Preclusions: CO5201 Control of Non-Communicable Diseases

In this module, the public health approach to non-communicable disease control will be illustrated with integration of epidemiological parameters (i.e. risk factors, prevention, surveillance) and the WHO guidelines of Control of NCDs including life course and common lifestyle approach and evidence based practice. Students will read, critically appraise and discuss the application of some relevant epidemiological studies. Finally, they will perform a literature search to identify relevant community programmes to enhance current control of NCDs in Singapore.

SPH5203 Advanced Epidemiology I

Modular Credits: 4
Pre-requisites: SPH5002 Public Health Research Methods; OR
CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods
Preclusions: CO5215 Advanced Epidemiology I

This module covers advanced methods for the design, conduct, analysis and interpretation of epidemiologic studies. The main focus is on analytical studies that aim to identify risk factors for diseases particularly case-control and cohort studies. Topics include causal inference, study design, methods of handling confounding and identifying effect modification, measurement error and information bias, selection bias, lifestyle and molecular epidemiology, and meta-analysis.

SPH5204 Nutrition and Health - Fundamentals and Applications

Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5229 Nutrition and Health

This module introduces the concepts and principles underlying nutrition in relation to health and diseases, so as to better understand and address population nutrition challenges. Content areas include an overview of nutrition as a major determinant of health and disease; methods to assess nutritional status; maternal and child health through the lens of a life course perspective; nutrition during ageing and evaluation of effective nutritional interventions. This class will include discussion of nutrition policies and strategies, multi-sectoral approaches and the importance of public-partnerships aimed at preventing chronic diseases.

There will be a strong emphasis on gaining practical skills in dietary assessments, critical appraisal of scientific literature and media articles relating to diet and nutrition and communication of nutritional science to the public. The teaching approach involves class interaction and provides opportunities for self-reflection.

SPH5205 Urban Outbreak Management

Modular Credits: 4
Pre-requisites: Nil
Preclusions: Nil

An effective outbreak management system is core to safeguarding public health and reducing morbidity and mortality. Outbreak investigation, when properly managed, fosters cooperation between stakeholders in rapid mobilization, community engagement, communications, and business continuity.

Annex 4
By introducing a combination of hard and soft skills, as well as knowledge and tools related to field epidemiology, environmental health, microbiology, communication and social sciences, it is designed for application of knowledge and skills to manage, foresee and solve outbreak problems efficiently and effectively.

**SPH5401 Health Economics and Financing**

Modular Credits: 4  
Pre-requisites: Nil  
Preclusions: CO5204 Health Economics and Financing

This module addresses the economic and financing aspects of the production, distribution, and organisation of health care services and delivery. This includes the structure of health care delivery and insurance markets, demand for and supply of health services, pricing of services, cost of care, financing mechanisms, and their impact on the relevant markets. A special emphasis will be given to market failures and the role of government in the market for health services. Through textbook readings and discussions of seminal articles and more recent empirical applications in health economics, students will learn the economic way of thinking. They will be given the opportunity to showcase these skills through a series of research papers written throughout the semester that will culminate with a final manuscript that provides an in-depth analysis of a critical health issue.

**SPH5403 Medical & Humanitarian Emergencies**

Modular Credits: 4  
Pre-requisites: Nil  
Preclusions: CO5206 Medical & Humanitarian Emergencies

This module provides a practical introduction to disaster management.

Medical and humanitarian emergencies are complex challenges requiring urgent, thoughtful and coordinated action. Participants will be equipped with the basic knowledge and skills to plan and manage humanitarian assistance to disaster-affected populations, in accordance with internationally recognised guidelines in life-saving areas of humanitarian response. The course is designed for individuals involved in disaster response, mitigation or preparedness, in a professional or voluntary capacity, within the regional or international humanitarian and development sectors.

**SPH5404 Measuring and Managing Quality of Care**

Modular Credits: 4  
Pre-requisites: Nil  
Preclusions: CO5208 Measuring and Managing Quality of Care

This module provides an introduction to the concepts and techniques used to measure and improve the quality of healthcare. It will address current concerns with patient safety and medical errors, and explore systemic approaches to harm reduction. Participants will understand the methodologies and instruments for the measurement of quality in healthcare, including clinical outcome indicators, healthcare professionals’ performance measurement and patient satisfaction surveys. Strategies for managing quality, including the tools for continuous quality improvement in healthcare organisations, will be presented.

**SPH5405 Introduction to Health Services Research**

Modular Credits: 4  
Pre-requisites: SPH5002 Public Health Research Methods; OR CO5102 Principles of Epidemiology and
CO5103 Quantitative Epidemiologic Methods
Preclusions: CO5214 Introduction to Health Services Research

This module is an introduction to the various domains of and methods for health services research. It is designed to provide students with a panorama of health services research and its applications and the information for further learning. The module integrates elements of statistics, psychometrics, health economics, and incorporates a diverse range of subjects including patient-reported outcomes, decision analytic modelling, and cost-effectiveness analysis.

SPH5406 Contemporary Global Health Issues
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5221 Contemporary Global Health Issues

This module offers students a panoramic overview of the evolving global health landscape in today’s globalised society which is characterised by unprecedented interconnectedness. Public health problems and consequences are now easily trans-national, if not global. We will focus on key cross-cutting thematic areas linking Health with the Sustainable Development Goals (SDGs).

SPH5407 Programme Evaluation
Modular Credits: 4
Pre-requisites: SPH5002 Public Health Research Methods OR CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods
Preclusions: CO5222 Programme Evaluation

This module will equip the students in skills to conduct different forms of programme evaluations (formative/summative, process/outcome/impact, cost effectiveness analysis etc) in different contexts (as an internal or external evaluator of a programme). The students will acquire practical skills on how to prepare for an evaluation, conduct an evaluation and appropriately disseminate the evaluation results to the relevant stakeholders.

SPH5408 Public Health and Ageing
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5230 Public Health and Aging

In this module, an overview of the ageing population and its increasing relevance for public health planning and policy, both in Singapore and internationally. Major topics include demography of ageing, normal (physiological and biological) and abnormal (physical and mental) ageing, prevention of ageing-related diseases and compression of morbidity, health and social services and policies for older persons, and medico-legal and ethical issues of care for the older persons. Students will learn how to apply their knowledge to critically appraise health and social programmes and policies for older persons and apply medico-legal and ethical principles in the care for older persons.

SPH5409 Qualitative Methods in Public Health
Modular Credits: 4
Pre-requisites: Nil
Preclusions: CO5233 Qualitative Methods in Public Health

Qualitative methods in Public Health will familiarise students with the range of related data collection and analytic methods, as well as ethical considerations and ways to best communicate this approach.
Students will learn practical techniques to improve the quality of data collection, including: in-depth interviews, focus groups and observational methods. We will also explore lesser-known approaches such as using photo voice or how to ‘walk through spaces’.

Emphasis will be given to data management and transparency in analyses, the best ways of doing these, using practical policy relevant methods.

**SPH5410 Developing health proposals using DME skills & tools**
- Modular Credits: 4
- Pre-requisites: Nil
- Preclusions: CO5234 Developing health proposals using DME skills & tools

Two of the most important skills that public health practitioners need to develop are programme design and proposal writing. These two skills are inseparably linked: they are two sides of the same coin. A poorly designed project or programme will have very little chance of successfully competing for funds, while an innovative, well-conceived project will never get funded unless it gets written into a good proposal. A good programme design in a good proposal can lead to better implementation and management, and sets the stage for good monitoring and evaluation. In turn, a project executed well has better chances for re-funding and expansion by donors.

This skills building design, monitoring and evaluation (DME) course is designed to introduce the potential proposal writer to the working environment that he will eventually confront repeatedly. It requires living through the process of applying good principles of programme/project design in developing a proposal.

**Remarks:**
It is recommended that students have completed CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods or SPH5002 Public Health Research Methods prior to reading this module

**SPH5411 Information Technology in Healthcare**
- Modular Credits: 4
- Pre-requisites: Nil
- Preclusions: CO5235 Information Technology in Healthcare

Students will learn about use of Information Technology in Singapore healthcare. They will gain knowledge and skills on managing IT projects in their workplace, learn about key considerations for IT project success, and be able to conduct a basic evaluation of healthcare IT products.

**SPH5412 Economic Methods in Health Technology Assessment**
- Modular Credits: 4
- Pre-requisite: Nil
- Preclusions: CO5236 Economic Methods in Health Technology Assessment

This course aims to provide an applied introduction to Health Technology Assessment (HTA) research in order to enable students to begin conducting their own research and/or to understand research conducted by others. Health econometrics, cost-effectiveness and economic evaluation in healthcare, and conjoint analysis will be covered. Examples of economic analyses that have been used in all stages of HTA research, starting with quantifying economic burden of illness studies, to cost-effectiveness of particular health technologies, to budget impact and pricing will be included. Prior knowledge of basic statistics is recommended.
SPH5413 Women’s, Children’s and Adolescents’ Health
Modular Credits: 4
Pre-requisite: Nil
Preclusions: Nil

Investing in the health of women, children and adolescents is critical for every nation’s development. The course applies a life-course perspective to critically explore the issues affecting the health of mothers, young children and adolescents. We will examine the socioeconomic, behavioural and political determinants of maternal, child and adolescent health, as well as policies, programs and services to reach them. The challenges, strategies and potential innovations to more effectively improve their health and wellbeing will be a major focus. These will be linked to global efforts towards achieving the Sustainable Development Goals (SDGs) related to health and well-being, education, gender equity, and poverty reduction.

SPH5414 Informatics for Health
Modular Credits: 4
Pre-requisite: Nil
Preclusions: Nil

Health informatics transforms health care by analyzing, designing, implementing, and evaluating information and communication systems that enhance individual and population health outcomes, improve care, and strengthen the clinician-patient relationship.

SPH5501 Public Health Communication
Modular Credits: 4
Pre-requisites: Students must pass the MPH core module CO5203 Lifestyle and Behaviour in Health and Disease or SPH5003 Health Behaviour and Communication
Preclusions: CO5226 Public Health Communication

This module focuses on the design, implementation, and evaluation of communication programmes designed to change or reinforce health behaviour. Emphasis will be on the step-by-step process of

1. formative research and analysis (including use of conceptual frameworks, audience research, and assessment of the media, policy and service environment),
2. theory-based and evidence-based strategic design,
3. message development, pretesting, and materials production,
4. implementation and monitoring, and
5. theory-based evaluation and dissemination of findings.

Upon completion of this module, students will be able to develop a work plan for a health communication project.

SPH6001 Advanced Epidemiology II
Modular Credits: 4
Pre-requisites: SPH5002 Public Health Research Methods; OR CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods
Preclusions: Nil

This module covers advanced methods for the design, conduct, analysis and interpretation of epidemiologic studies. Students will apply these methods to the interpretation of published research and the design of a new research project. The main focus is on analytical studies that aim to identify
risk factors for diseases particularly case-control and cohort studies. Topics include causal inference, study design, methods of handling confounding and identifying effect modification, measurement error and information bias, selection bias, lifestyle and molecular epidemiology, and meta-analysis. Students will be expected to critique research articles and participate in facilitated group discussions.

**SPH6002 Advanced Quantitative Methods II**

Modular Credits: 4

Pre-requisites: A minimum grade of ‘B-’ obtained in SPH5002 or CO5103 and working knowledge of STATA

Preclusions: Nil

In this module, the principles of advanced statistical modelling will be introduced, and statistical models such as multiple linear regression, logistic regression and Cox proportional hazards model will be applied to a variety of practical medical or public health problems. For time-to-event data analysis involving the Cox proportional hazards model, the proportional hazards assumption will be discussed, and strategies for handling non-proportional hazards, such as via stratification or modelling using time-dependent covariates will be introduced. We also consider the situation where several competing event types define the event of interest in a time-to-event study. Methods for analysing repeated measures data, assessment of model fit, statistical handling of confounding and statistical evaluation of effect modification will also be discussed. The statistical models introduced will be applied to real life clinical or public health data.

**SPH6003 Nutritional Epidemiology**

Modular Credits: 4

Pre-requisites: SPH5002 Public Health Research Methods; OR CO5102 Principles of Epidemiology and CO5103 Quantitative Epidemiologic Methods

Preclusions: Nil

Dietary exposures have an important impact on health, but are highly complex and difficult to assess. This module covers methods for the assessment of diet and nutritional status including specific topical areas such as the use of dietary patterns, and application of nutritional epidemiology in birth-cohort studies. It also covers the design, conduct, analysis, and interpretation of epidemiological studies on diet and health. Students will be trained in the interpretation of published studies, the design of studies, and the analysis of data on diet and health. The emphasis of this course will be on the application of methods to provide skills that can be applied by students to their own research projects.

**SPH6004 Advanced Statistical Learning**

Modular Credits: 4

Pre-requisites: Nil

Preclusions: Nil

This module will introduce advanced topics for analyzing large or complex datasets, with a particular emphasis on various biomedical data. We will cover fundamental techniques in machine learning with emphasis on both computing and data analysis. The topics will include regression and classification, resampling-based techniques to evaluate performance, variable selection, tree-based methods for regression and classification, support vector machines, unsupervised data clustering methods and factor analysis, neural networks, neural network-based deep learnings, etc.

*Remarks: Students interested in this module should have background in Statistics.*
SPH6770 Graduate Research Seminar in Public Health

Modular Credits: 4
Pre-requisites: Nil
Preclusions: Nil

This module aims to equip public health research students with practical research skills, expose them to the breadth of public health research topics and provide students with opportunities to develop their presentation and communication skills.

Note:
- This module spreads over 2 semesters. Students will receive IP (In Progress) grade in the first semester and the final grade at the end of the second semester.
- This module is graded on CS/CU basis i.e. whether the module has been ‘Completed Satisfactorily’ (CS) or ‘Completed Unsatisfactorily’ (CU). Modular credits will be given if the module is completed satisfactorily, although no grade point will be assigned.
Annex 5: Recommended Cross-Faculty Modules

Note: Module offerings are subject to availability and may change with each academic year.

Modules offered by Alice Lee Centre for Nursing Studies

NUR6004 Systematic Review and Meta-Analysis
Modular Credits: 4
Pre-requisites: Nil
This module provides comprehensive discussion in the theoretical and practical issues in conducting a systematic review and meta-analysis. Students will learn the importance of evidence-based practice in nursing and the steps in conducting a systematic review. Topics covered include judging the quality of a review, how and why high quality reviews can reach different conclusions, and steps in conducting a systematic review.

NUR6005 Measurement Theory and Instrument Validation
Modular Credits: 4
Pre-requisites: Nil
This module provides an overview of the psychometric measurement theory and the best practice in measurement. The module will cover the topics of essential concepts of measurement, essential tools and characteristics of psychological measurement, development and validation of instrument, and application of measurement.

NUR6006 Intervention Research in Nursing and Health Sciences
Modular Credits: 4
Pre-requisites: Nil
This module will introduce principles and in depth knowledge of designing and conducting an intervention research in nursing and/or health sciences successfully. The knowledge conveyed in this module will enable MSc/PhD students who are interested in conducting intervention studies to generate research questions and hypotheses, design their study scientifically, select a relevant theoretical/conceptual framework to guide their intervention to achieve intended outcomes, calculate sample size, conduct randomisation, select appropriate outcomes and measurements, as well as conduct the data collection and analysis.

NUR6007 Research Leadership and Professional Development
Modular Credits: 4
Pre-requisites: Nil
This module will provide students a practical approach in appraising the development and leading research, the team research, and the challenges and opportunities for academics with leadership aspirations. The topics include attributes of research leaders, collaboration and leadership in research and academia, and frameworks for academic and professional development.

Modules offered by Duke-NUS Graduate Medical School

GMS6801 Research Methods from Medicine to Population Health
Modular Credits: 4
Pre-requisites: Students who are interested to take this module should have read introductory statistics textbook or attended introductory course in statistics.
Medical and health research is a multi-step and multi-faceted process. Early phase experiments assess safety, tolerability, dose-response and other parameters of candidate interventions to make Go/No-Go decisions for further research. Later phase clinical trials seek to verify and augment the earlier findings. Observational studies investigate medicine and health in the population and identify avenues for improvement.

This 4-credit module covers the key concepts in the research process and the major study designs involved. This module provides a general background in quantitative studies of medicine and health. This is tailored for students interested in biostatistics, clinical trials, epidemiology, and related fields. The focus will be on concepts, study designs, and research practice; statistical techniques will be elementary-to-intermediate.

**GMS6803 Design and Analysis of Modern Clinical Studies**
Modular Credits: 4  
Pre-requisites: Core Concepts in Biostatistics (GMS6820) or Basic knowledge (undergraduate) in Probability/Statistics

This module will enable students to design various kinds of clinical trials and analyse the resulting data, to answer research questions in biomedical research.

- Design and analysis of various kinds of trials such as factorial, cross-over and stepped wedge trials
- Regulatory affairs in clinical trials
- Design and analysis of various kinds of adaptive and sequential designs
- Design of early phase dose-finding trials
- Pharmacovigilance
- Dynamic Treatment Regimens and SMART designs

**GMS6820 Core Concepts in Biostatistics**
Modular Credits: 4  
Pre-requisites: Strong undergraduate training and background in statistics, mathematics or epidemiology.

This one-semester module covers core concepts in statistics with an emphasis on working with biomedical data. Covered topics:
- Concepts in probability
- Theory of point estimation and hypothesis testing.
- Large sample theory and maximum likelihood estimation.
- Linear models and linear algebra.
- Sampling techniques and resampling methods.
- Classification and discrimination techniques.

**GMS6904 Principles of Infectious Diseases**
Modular Credits: 4  
Pre-requisites: Students should have followed course GMS6901 “Molecules to Medicines” or equivalent.

This module will provide an overview of parasitic, bacterial, and viral diseases with an emphasis on emerging infectious agents and those of regional importance. The module is directed towards graduate students with basic cell biology, microbiology, and immunology background. The first part of the module with focus on general principles of the biology, dynamics, detection, control, and pathogenesis of infectious agents, followed by case studies of selected agents.
GMS6910 Evolutionary Genetics
Modular Credits: 4
Pre-requisites: Nil

This module will provide theory and practical exercises in methods of evolutionary genetic analysis including, multiple sequence alignment, evolutionary models, phylogenetic tree reconstruction, temporal phylogenetics, natural selection, population dynamics, and experimental design and hypothesis testing. The module is directed towards graduate students with basic cell biology, microbiology, and immunology background. In addition to theory the students will gain extensive experience in the use of computer programs used in evolutionary analysis.

GMS6921 Cardiovascular Molecular Biology
Modular Credits: 4
Pre-requisites: Students should have followed course Molecules to Medicine (GMS6901) or equivalent Introductory Graduate Biochemistry course.

Cardiovascular disease accounts for approximately 30% of annual deaths in Singapore, and research advances in recent years have shed tremendous insight into the molecular basis of this cadre of diseases. This course is offered jointly to graduate students at NUS, Duke-NUS and Duke (USA) to explore the molecular basis of the disease. Topics included in this course are congenital cardiac diseases, cardiovascular genetics, cardiac regeneration, cardiac cell therapy, coronary artery disease, lipoprotein metabolism, diabetic cardiomyopathy, cardiovascular bioengineering, Systems-Genetics in cardiac diseases and heart failure.

GMS6950 Health Services and Systems Research
Modular Credits: 4
Pre-requisites: Nil

After defining health services and systems research (HSSR), this course will provide the students with a structured review of the topics that have been and are being studied. Strong emphasis will be given on the interdisciplinary nature of HSSR by presenting how multiple disciplines can contribute to improving the financing, organization, quality, access, and cost of the health system. The course will include four major thematic areas of HSSR: i) aging and long-term care, ii) decision science and modelling, iii) health economics, and iv) implementation science and clinical investigation.

GMS6951 Dynamic Modelling of Healthcare Services and Systems
Modular Credits: 4
Pre-requisites: Nil

Healthcare is a complex system of interacting entities. Achieving effective and sustainable behavior requires more than a reactive approach. System dynamics is a robust way to evaluate potential solutions to complex system problems. This module is relevant to individuals with a wide range of backgrounds including biology, business, engineering, public policy. Students develop expertise in identifying system structures such as accumulations, feedbacks, and time delays that generate and perpetuate particular system behaviors. The module covers qualitative methods for representing complex causal relationships as well as simulation model construction to gain quantitative insights into system behaviors and suggest effective, sustainable solutions.
Modules offered by the Department of Statistics and Applied Probability, Faculty of Science

ST5206 Generalized Linear Models
Modular Credits: 4
Pre-requisite: ST4233 or Departmental approval

Model fitting and selection, models for continuous and discrete data, models for polytomous data, log-linear models, conditional and quasi-likelihoods, diagnostics. This module is targeted at students who are interested in Statistics and are able to meet the pre-requisites.

ST5210 Multivariate Data Analysis
Modular Credits: 4
Pre-requisite: ST3240 or Departmental approval

Dimension reduction, cluster analysis, classification, multivariate, dependencies and multivariate statistical model assessment with emphasis on non-normal theory, computer intensive data-dependent methods. This module is targeted at students who are interested in Statistics and are able to meet the pre-requisites.

ST5212 Survival Analysis
Modular Credits: 4
Pre-requisite: ST2132 or Departmental approval

Censoring, probability models for survival times, graphical procedures, Inference procedures. Parametric and nonparametric models, Cox proportional hazards model, regression models for grouped data, Bayesian predictive distributions. This module is targeted at students who are interested in Statistics and are able to meet the pre-requisites.

ST5213 Categorical Data Analysis II
Modular Credits: 4
Pre-requisite: ST3131 or Departmental approval

Categorical response data and contingency tables, loglinear models, building and applying loglinear models, loglinear and logit models for ordinal variables, multinomial response models. This module is targeted at students who are interested in Statistics and are able to meet the prerequisites.

ST5215 Advanced Statistical Theory
Modular Credits: 4
Pre-requisite: ST2131 and ST2132 or Departmental approval

This module provides the students with theoretical foundations in statistics and the theory of statistical point estimation. It consists of four parts. 1. Selected Topics in Probability: convergence modes and stochastic orders; convergence in distribution; convergence of transformations; law of large numbers; central limit theorem; Edgeworth and Cornish-Fish expansions. 2. Fundamentals of Statistics: Population, sample and models; Statistics, sufficiency and completeness; Elements of statistical decision theory; Statistical inference; criteria for point estimation, Neyman-Person framework of hypothesis testing, confidence sets; Asymptotic criteria of inference. 3. Unbiased Estimation: Uniform minimum variance unbiased estimators (UMVUE); U-statistics; Least square estimators (LES) in linear models; Asymptotically unbiased estimators. 4. Estimation in Parametric Models: Bayes estimators, maximum likelihood estimators and the properties of estimators such as invariance, minimaxity, admissibility and asymptotic efficiency.
ST5217 Statistical Methods for Genetic Analysis
Modular Credits: 4
Pre-requisite: LSM1102 and ST2132 and ST3236, or Departmental approval

This is a level 5000 course on genetic data analysis focusing on human and population genetics. The emphasis will be in understanding the role of statistics and data analysis in modern genetics research and its applications. Numerical and computational methods will be discussed with applications to real data sets. To equip the students with the tools to conduct genetic data analysis. Topics include introduction to genetics, gene mapping, sequence data, population genetics and coalescent theory, phylogeny reconstruction, pedigree analysis, genetic epidemiology, role of genetic factors in human diseases, familial aggregation, segregation and linkage analysis, analysis of complex and quantitative traits. This module is targeted at students who are interested in Statistics and are able to meet the pre-requisites.

ST5219 Bayesian Hierarchical Modelling
Modular Credits: 4
Pre-requisite: Departmental approval

The objective of the module is to familiarise the students with advanced strategies for Bayesian modelling. The major topics to be covered are: (1) Bayesian treatment of non-hierarchical regression models, (2) Stimulation based computation for inference and posterior predictive model checking, (3) Multilevel structures in Bayesian regression, (4) Multilevel models and analysis of variance, (5) Prior sensitivity analysis and (6) Advanced modelling and computation using statistical software packages.

ST5221 Probability and Stochastic Processes
Modular Credits: 4
Pre-requisite: ST2131 or its equivalent
Preclusion: ST5214, MA5259

This module aims to provide graduate students in the PhD Biostatistics program a solid background and a good understanding of basic results and methods in probability theory and stochastic models. These skills are relevant for them to take advanced modules in biostatistics, and to apply state-of-the-art Biostatistics research methodologies.

Modules offered by the Lee Kuan Yew School of Public Policy

PP5167 Public Policy and Economics of Health Systems
Modular Credits: 4
Pre-requisites: Nil
Preclusions: Applicable to those who have taken PP5246 and PP5278

This module is an introduction to public policy and health economics, with a special focus on the health care systems in Asia. It examines the roles and relationships between public policy in planning, implementation and evaluation processes, and different approaches of national systems in providing, regulating and paying for health care. Regional innovations in the organization, delivery and financing of health care systems will be analysed through selected country case-studies. Seminars and exercises on current topical issues include comparative health and economic policies, private-public participation in the health care industry, stakeholder analysis in health sector reforms and a final project to conduct a public policy and economic analysis of a health system in Asia.
PP5173 Economics and Health in Developing Countries
Modular Credits: 4
Pre-requisites: Students should have taken a course covering basic microeconomic theory.

The course will cover key issues in health economics. Students will learn why health is different from other goods and why health care markets are difficult to organize. They will examine the determinants of health and the demand and supply of health care services. They will study the health insurance market and why there is often market failure in health insurance. There will study cost effectiveness analysis. Through individual and group assignments they will apply this knowledge to the health sector problems of a particular country.

PP5222 Population, Health and Social Policy
Modular Credits: 4
Pre-requisites: Nil

This module is an introduction to social policy in population and health issues, with a special focus on countries in Asia that are experiencing rapid demographic and epidemiological transitions. It examines the relationships between population health and development issues, and the different approaches and methods of social policy utilized to compare present and future health and population-related challenges. Past experiences of population growth, movement and decline and the longer term effects on health and related sectors will also be studied with their policy implications. The course takes a systematic life-cycle approach and is a practice-based and policy-oriented module. The practical applications of public health and population sciences are thus employed to the organization of public programs to meet the needs of specific population age groups. In practice, existing government departments in Ministries of Health or Ministries of Social Welfare have been organized to deliver social services by age-groups – from birth to death across childhood, youth, adulthood and old age. Similarly, the organization of the class schedule takes on such a structure, and will have participation from invited practitioners from relevant government agencies. Selected regional experiences in population health policies and programs will be analysed in various case studies. Seminar topics on current topical issues include comparative national population policies, family planning and reproductive health, maternal and child health, adolescent health, adult health, health of the elderly, end-of-life issues, population ageing and the future of population health in Asia.

PP5246 Public Policy and Management of Health Systems
Modular Credits: 4
Pre-requisites: 4

This module is an introduction to public policy in health care management, with a special focus on health care systems in Asia. It examines the roles and relationships between policy planning, implementation and evaluation processes, and different approaches of national systems in providing, regulating and paying for health care. Regional innovations in the organisation and financing of health care systems will be analysed through selected country case-studies. Seminar topics on current topical issues include comparative health care systems and health sector reforms, private-public participation, health care evaluation, and the future of health care in Asia.

PP5266 Global Health Policy and Issues
Modular Credits: 4
Pre-requisites: Nil

This module gives an overview of global health policy and issues, with special focus on changing social, economic, technological and political conditions across the diverse countries and populations of Asia. It examines the roles and relationships among major players at the global level, and different
approaches taken by various international organisations and national governments in tackling health and related problems. This module will examine global health trends and issues using a macro policy framework. Significant challenges in the organisation of global health programmes and the complexities involved in international cooperation will be analysed through selected case-studies. Topics on current issues will include: population health and development, role of international health organizations, international aid and development assistance, emerging epidemics and disasters, cross-border health issues, migration of health human resources (brain drain), international trade in health services and the future of global health.

**PP5278 Health Economics and Public Policy**  
Modular Credits: 4  
Pre-requisites: Nil

This module gives an overview of health and economic issues, with a special focus on the implications for public policy. It examines health policies using an economic framework, including supply and demand factors, market structure, market failure and public-private roles as they apply to health care. Topics include: health care financing and payment methods, health resources, costs and cost-containment; resource allocation and issues of equity, efficiency and cost-effectiveness; valuation of health status and outcomes including utilities like QALYs, and application of economic evaluation techniques.

**Modules offered by the Faculty of Arts and Social Sciences**

**NM5216 Culture, Communication & Health**  
*Offered by the Department of Communications & New Media*  
Modular Credits: 4  
Pre-requisite: Nil

Culture, Communication & Health explores the intersection of culture, communication and health, and seeks to understand health communication from cross cultural perspectives. It is organized around answering the fundamental questions: “How does culture impact communication about health and illness? How do communicative practices vary across cultures?”

**SC5102 Quantitative Data Analysis**  
*Offered by the Department of Sociology*  
Modular Credits: 4  
Pre-requisites: Nil  
Preclusions: SC6101 (obsolete)

This module provides a systematic exposition of general linear models in social science research. Topics include relative frequencies, probability distribution, model specification, estimation, hypothesis testing, and remedies for violations of statistical assumptions. The main emphasis is on the hands-on application of statistical techniques to social research. Research articles in sociology are used to illustrate the application of these models and techniques. Extensions to nonlinear models and panel data analysis are introduced in the latter part of the module. The course aims to help students to strengthen their understanding of statistical concepts and modelling techniques, and enrich their capacity to interpret statistical findings.

**SC5103 Qualitative Data Analysis**  
*Offered by the Department of Sociology*  
Modular Credits: 4  
Pre-requisites: Nil
Increasingly, more qualitative research work is being undertaken in its own right rather than as preliminary research for subsequent quantitative surveys. This explains the broadening of the range of qualitative research techniques. In addition to dealing with the traditional fieldwork and participant observation methods, the module will examine a number of qualitative approaches. These include techniques of analyzing data generated by laypersons (as in life-documents: diaries, journals, travelogues) communications materials, material artifacts, and visual information. This course is open to postgraduate students with an interest in qualitative research methods.

**SC6102 Sociological Theory**  
*Offered by the Department of Sociology*  
Modular Credits: 4  
Pre-requisites: Nil  

Modern society is highly complex and differentiated. Sociological theories help us to make sense of this complexity, to understand and penetrate realities at all levels of social aggregation - at the micro-level of individual interaction and of small collective units (such as the family), at the meso-level of organizations and intermediate institutions (such as business firms) and at the macro-level of society's basic structure. They enlighten us about hidden forces, principles and interests which shape our daily lives and the reproduction of social structures. This module aims to demonstrate the usefulness and limitations of different theories both as tools of analysis and as concrete guides to social practices.

**SW6102 Policy & Research in Social Welfare**  
*Offered by the Department of Social Work*  
Modular Credits: 4  
Preclusions: SW5102  

This module provides a framework for analysis of public policy in particular social policy. The use of social indicators, trend analysis and policy evaluation tools for specific fields of social welfare will be discussed. The use of applied research evaluation including techniques of social surveys, focus groups and the systematic analysis of data will also be covered in this module.