

# GUIDELINES FOR THE SPH5005 MPH PRACTICUM

Satisfactory completion of the Practicum module is a compulsory graduation requirement for the Master of Public Health programme. This guide describes the requirements and other information regarding:

1. Practicum Project, in general
2. Practicum Proposal
3. Practicum Progress Report
4. Practicum Final Report
5. Practicum Symposium
6. Grading Criteria
7. Other Matters

The necessary forms for each component are found in Section C of this handbook.

## 1 PRACTICUM PROJECT IN GENERAL

### 1.1 Overview

The Practicum project is an opportunity for students to:

- Critically apply public health skills and knowledge to explore and address health problems or answer research questions
- Synthesise and integrate knowledge across a variety of disciplines in public health
- Identify, assess, and critically appraise public health information
- Communicate public health information both orally and writing in a logical, clear, and concise manner

### 1.2 Co/Pre-requisites

Students may register for the SPH5005 Practicum module only upon satisfactory completion of SPH5002 Public Health Research Methods or C05102 Principles of Epidemiology and C05103 Quantitative Epidemiologic Methods. Students on a one-year, full-time programme may register for these modules as co-requisites for CO5210 Practicum. These students should register for the practicum module at the beginning of their first semester.

### 1.3 Areas of study

The practicum project must address questions and issues likely to be encountered in public health practice and allow for the application of competencies acquired in the MPH programme. The project must involve systematic analysis and interpretation of information. The project should also be specific enough to be answered within the time and resources that are available to the student.

Students can work with their academic advisors to identify an area of study that is of interest to them. Students may choose to collect primary quantitative or qualitative data, or or utilise extant data, for example, those collected by school staff or are publicly available, to conduct in depth analysis.

Research projects proposed by SSHSPH faculty will be e-mailed to students and students may meet with individual faculty to explore taking these up as their practicum project.

Students may also browse the faculty directory and the research section of the school website to understand other faculty interests and identify a faculty member who may be willing to supervise them. Part-time students may conduct practicum projects at their own

workplace. However they should seek consultation with their academic advisor/supervisor early (i.e. before submission of the practicum proposal form) to determine if the research work to be done is appropriate for MPH practicum.

The supervisor need not be the student's academic advisor. In particular, for projects that students identify themselves, students may seek out and obtain approval from other SSHSPH faculty who may have a better fit for their projects to be their supervisor.

*If the study involves human subjects, please note that ethical approval may be required in some cases, and should be included in the research plan. Please refer to Section 2.0 below for further information.*

#### **1.4 Types of practicum projects**

Practicum projects can be field-based research (i.e. students undertake primary data collection on their own) or analysis of an existing dataset, depending on the study and methods specific to the student. Students may undertake several types of practicum projects, including but not limited to:

- **Epidemiological study:** may take the form of a cross-sectional, case-control study, a cohort study or an experiment to examine the relationship of various factors with specific health outcome(s).
- **Qualitative study:** uses methods such as in-depth interviews, focus group discussions and community participatory methods to describe, and measure the size, scope, and variability of a public health problem and its relationship with associated factors.
- **Quantitative study:** emphasises statistical or modelling aspects more than an epidemiological study. This would typically involve analysis of extant data and may involve the use of non-routine methods such as Markov models, competing risks models, or methods for big data.
- **Mixed methods study:** combines and integrates both quantitative and qualitative methods to describe, examine, and measure the relationship of factors with specific outcomes or a public health issue or intervention.
- **Programme evaluation:** is a systematic way to address specific questions about a health programme. Using scientific methods, the evaluation can measure the extent in which the programme was able to accomplish its goals and explore the underlying factors driving the programme.
- **Economic evaluation:** is the systematic identification, measurement and valuation of the inputs and outcomes of health products or activities, and the subsequent comparative analysis of these to inform better policy, practice, and resource allocation.
- **Policy analysis:** involves systematically gathering information from a variety of sources (e.g. published literature, grey literature, media reports, interviews with key stakeholders) to bring about comprehensive understanding, evaluation, and discussion of a public health policy issue of interest and the key policy options, including public health and/or clinical implications.
- **Systematic review:** involves the systematic collection, synthesis, and critical appraisal of multiple qualitative and/or quantitative research studies. It aims to provide a complete, exhaustive summary of current literature relevant to a research question using accepted protocols that can be replicated.

Please contact the Education Office to view examples of practicum projects.

### **1.5 Financial support**

The school provides some support towards the practicum project. This is up to SGD 500 for local projects and SGD 1,000 for projects conducted outside of Singapore.

The maximum claimable amount for both the Independent Study Module (ISM) and practicum is SGD 1,000 per student. This should be taken into consideration when planning the utilisation of funds.

Details about what items are claimable and how to make claims are found in Section C.

### **1.6 Student's Responsibilities**

The practicum project is a compulsory core that is required for completion of the MPH programme. It is an 8MC module and will contribute to a significant proportion of the student's final CAP. The practicum project is an opportunity for students to independently apply competencies acquired in the MPH programme.

There are several ways in which students can identify a practicum project:

- Draw from the list of projects provided by SPH faculty
- Develop your own project with the guidance of your supervisor/co-supervisor
- Tap on existing project/s at your workplace

Students who are still unclear on what practicum project to embark on should approach their academic advisor or A/Prof Jeannette Lee to discuss available options based on their personal goals and area/s of interest.

The research process and outputs of the practicum project should be completed independently by students themselves with support and guidance from the supervisor, any co-supervisor or other relevant individuals.

Students need to initiate and co-ordinate meetings with supervisor/co-supervisor/other relevant individuals. Please note that meetings may need to be scheduled some weeks in advance as supervisors, as faculty members, also have other work obligations that they need to attend to.

Students should also develop a feasible and adaptable work-plan and timeline, taking into consideration their coursework load and if applicable, other work commitments, in conjunction with the supervisor/co-supervisors.

Students are required to monitor and keep to the planned timeline and submit the necessary presentations, reports and forms as and when required. Please also note that students should submit these documents for supervisor's review in a timely manner and to allow for this in the timeline.

Students should inform supervisors at an early stage of deviations to the timeline to discuss possible options and solutions.

### **1.7 Student Disabilities**

You may wish to inform your supervisor if you have a disability or ongoing medical condition. Examples include learning difficulties like dyslexia, physical or sensory impairments, or difficulties affecting your mental and emotional well-being. Supervisors are better able to assist and support you if they are aware of your circumstances. Any information you disclose will be kept confidential. Students who have any questions regarding this are encouraged to get in touch with the Education Office.

## 1.8 Supervisor's Responsibilities

Supervisors should meet students at least three times. These meetings are to:

- i. Discuss the practicum project and proposal
- ii. Review the presentation
- iii. Review the draft practicum report

Most supervisors will meet more often than this, depending on the project and level of supervision required by the student.

Meetings should be complemented by contact via email, teleconference, or Skype. In some instances, it is acceptable, if agreeable to both student and supervisor, for these modes to replace face-to-face meetings.

Since the practicum report will be graded, the assumption is that the report will be independently developed by the student. Supervisors will only make comments for students to consider. They will not make detailed edits to the practicum presentation and report.

### **The Supervisor's Role: A Brief Guide**

The supervisor's role includes:

- Assisting/facilitating identification of a dataset for a student to work on/use
- Assisting with refining the student's practicum research question
- Assisting with defining and refining the student's analytical approach, including use of appropriate analytical methods and/or software
- Advising on development of the practicum project proposal, including giving feedback and making suggestions for improvement
- Providing guidance over the course of the student's practicum project
- Providing feedback on the final draft of the practicum project report

The supervisor's role does not include:

- Deciding on the content of the student's practicum project report/ practicum presentation
- Writing commands/code for the student
- Running analyses on statistical software (e.g. STATA, SPSS, R) for the student
- Performing analyses on qualitative analysis software (e.g. NVIVO, Atlas.ti) for the student
- Rewriting the student's practicum report/practicum presentation

## 1.9 Co-Supervisors

In consultation with their advisor/supervisor, students may propose the appointment of a co-supervisor who is agreeable to lend their expertise, guidance and support to the project.

Potential external co-supervisors may include, but are not limited to:

- Faculty members at SSHSPH
- NUS faculty members whose primary appointments are at other faculties or departments
- Faculty/staff from other universities or public health/healthcare or other institutions

If the co-supervisor is external to NUS, a brief curriculum vitae should accompany the request so that an official letter of appointment can be extended.

### **1.10 Didactic sessions**

Students are advised to attend several didactic sessions that will occur throughout the academic year. Topics will include a general briefing on the practicum which will be done during the orientation week, two sessions on how to conduct a literature review, the basics of scientific writing, and public speaking and communication skills. We will release the schedule for these sessions via IVLE.

### **1.11 Small group tutorials**

Apart from supervisor support, students are also required to attend three small group tutorials to share and discuss the scope and progress of their practicum projects. Each tutorial session will be overseen by a tutor whose role will be to provide guidance to students and facilitate peer discussion and peer learning among students. These sessions will provide additional support to students and allow for learning about practicum projects other than their own. Tutorial session times will be posted on IVLE and students may enrol on a first come first serve basis.

The general structure of the three tutorials is:

- 1<sup>st</sup> tutorial: discuss practicum proposal and any challenges, queries, doubts, concerns.
- 2<sup>nd</sup> tutorial: progress update (addressing roadblocks, sharing insights), data acquisition and analysis-related roadblocks, preparation for writing practicum report.
- 3<sup>rd</sup> tutorial: presentation preparation/draft sharing/feedback session + discussion of strengths, limitations, and public health relevance of practicum.

## **2.0 Ethical Approval**

Ethics review and approval is required for all research that:

- Involves human subjects and/or tissues
- Involves vulnerable groups (minors, pregnant women, and prisoners etc.)
- Is funded by NUS or other agencies once in-principle approval of funding has been received
- Has requirements imposed by external funding agencies, external collaborators or journals

Students may apply for NUS Institutional Review Board (NUS-IRB) approval as the principal investigator or the co-investigator, while the supervisor must be at least the co-investigator.

To be eligible for ethics review application, students are required to complete Collaborative Institutional Training Initiative (CITI) Programme certification. The CITI Programme is an international web-based research ethics education programme, designed for training in protection of human subjects in research. The CITI Programme offers Basic and Refresher courses in Human Subjects Protections, Good Clinical Practice and Health Information Privacy and Security (HIPS). More information on the CITI Programme can be found here: <https://www.citiprogram.org/>

Ethics review and approval may take between several weeks and several months, depending on the project. In general, if your practicum involves vulnerable groups (e.g. minors, pregnant women and prisoners etc.) or is an intervention study, this would be subjected to a full IRB board review and approval could be longer than expected. This time should be factored into the practicum project work-plan timeline. The School strongly encourages all students to apply for IRB approval as early as possible.

Please also take note of the two research categories: Human Biomedical Research (HBR) and Social, Behavioural, and Educational Research (SBER), and check which category the study falls under before preparing an application.

More details on NUS ethics review procedures can be found at the NUS IRB website: <http://www.nus.edu.sg/irb/>

## Data protection principles

Students using personal data for their practicum project should abide by basic data protection principles during the data collection and management phases. Personal data is data collected from individuals, whether in hard or soft copy, including but not limited to names, contact information, other factual details, answers given to survey questions, consent forms containing names and signatures of participants, audio or written transcripts, human biological specimen like blood, tissue etc. **Students are expected to maintain data confidentiality by incorporating measures like anonymising the data after collection. They should have clear security measures in place to guard against unauthorized access or accidental loss of the data such as encryption.** Students should consult their supervisor and seek advice before the start of collection phase. For further information, students are advised to read the Saw Swee Hock School of Public Health (SSHSPH) Research Data Management Policy (RDMP), at <https://myportal.nus.edu.sg/studentportal/sph/gd/forms/RDMP.pdf>

### 2.1 Safety and other Risk Assessment

All students are required to complete the section on risk assessment and mitigation in the MPH proposal form. This section should address both risks to the investigator and any risks to participants/subjects. For students doing their practicum overseas, please include risks related to sociocultural context, local laws, norms and practices, and access/transport challenges related to the context in which your practicum will be taking place.

### 2.2 Other Useful Resources

#### *Scientific writing*

- Writing scientific papers – a guide by *Nature*: <http://www.nature.com/scitable/ebooks/english-communication-for-scientists-14053993/writing-scientific-papers-14239285>
- A guide to scientific writing by American Scientist magazine: <http://www.americanscientist.org/issues/pub/the-science-of-scientific-writing/1>
- Follow the Vancouver style of referencing. For examples of proper referencing, refer to any of the articles published on this web site or go to [http://www.nlm.nih.gov/bsd/uniform\\_requirements.html](http://www.nlm.nih.gov/bsd/uniform_requirements.html).

#### *Writing about public health for a public audience*

- US Centres for Disease Control (CDC) Health Literacy online training series - "Writing for the Public": <http://www.cdc.gov/healthliteracy/writing-course/index.html>

#### *Effective oral presentations*

- Effective oral presentations – a guide by *Nature*: <http://www.nature.com/scitable/topicpage/effective-oral-presentations-13906743>
- "How to prepare and deliver an effective oral presentation – by BMJ Careers: [http://careers.bmj.com/careers/advice/How\\_to\\_prepare\\_and\\_deliver\\_an\\_effective\\_oral\\_presentation](http://careers.bmj.com/careers/advice/How_to_prepare_and_deliver_an_effective_oral_presentation)

- “Ten Simple Rules for Making Good Oral Presentations” by Philip E Bourne, *PLoS Computational Biology* 2007: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1857815/>
- Microsoft Office’s tips for effective PowerPoint presenting: <https://support.office.com/en-sg/article/Tips-for-creating-and-delivering-an-effective-presentation-f43156b0-20d2-4c51-8345-0c337cefb88b?ui=en-US&rs=en-SG&ad=SG>

### 1.5 Summary of Key Milestones and Events: Time taken for completion and suggested timeline

Regardless of the data source(s), the work done for the practicum should be equivalent to 7-8 weeks’ full-time workload which may be spread out over a 6-12-month period as there will usually be concurrent coursework to be completed. Approval is required for extension of duration.

Activity	Approximate Duration/Timeline
<b>Lecture 1: General Briefing about Practicum</b>	Orientation Week (SPH5001)
<b>Lecture 2 &amp; 3: Conducting Literature Review I &amp; II</b>	Semester 1
<b>Selection of project</b>	Semester 1
<b>Preparation of proposal</b> <ul style="list-style-type: none"> <li>• Draft proposal</li> <li>• Review of proposal by supervisor/co-supervisor</li> </ul>	Semester 1 1month
<b>Tutorial 1</b>	Semester 1: before submission of practicum proposal
<b>Submit practicum proposal to MPH office</b>	Mid-Semester 1
<b>Obtain institutional approvals if required</b>	Mid-late Semester 1 (1-2mths)*
<b>Conduct project</b>	Mid-Semester 1 up to Vacation Term I (2-10mths)
<b>Lecture 4: Good Scientific Writing and the practicum report</b>	Semester 2
<b>Tutorial 2</b>	Semester 2: before submission of progress report
<b>Submit progress report to MPH office</b>	Early Semester 2
<b>Lecture 5: Effective Public Health presentations</b>	Semester 2
<b>Preparation of Oral Presentation</b>	Vacation Term I&II (1-2mths)
<b>Preparation of the Final Report</b> <ul style="list-style-type: none"> <li>• Draft report</li> <li>• Review by supervisor/co-supervisor</li> </ul>	Vacation Term I&II (1-2mths)
<b>Tutorial 3</b>	Vacation Term II: before practicum symposium
<b>Submit Final report to MPH office</b>	Vacation Term II: Late July
<b>Practicum Symposium</b>	Vacation Term II: Late July

\*Education Office will e-mail students on exact submission dates.

\*\*Please note that in general, if your practicum involves vulnerable groups (e.g. minors, pregnant women and prisoners etc.) or is an intervention study, this would be subjected to a full IRB board review and approval could be longer than expected.

## 2. PRACTICUM PROPOSAL

Students should consult their academic advisor/supervisor early in their candidature so that they can begin to identify and plan their practicum project. The project to be selected should be of interest to the student. However, the project should also be feasible to carry out given the available resources and within a reasonable period. Once a project is identified, it is essential to discuss the scientific and practical aspects of the project with the supervisor.

Upon enrolment into SPH5005, students are expected to submit a Practicum Proposal Form (see section C) and **2-3-page outline of the proposed project**, which will need to be endorsed by their advisor/supervisor.

**The deadline for submission of the Practicum Proposal Form is 11 September 2017.**

The proposal should cover:

- i. Background/Introduction and Public Health Significance:

*This section should provide a review of the relevant literature. At a minimum, you should provide the background information that a reader with no prior background knowledge on your topic of choice would require to understand the topic of your project and the rationale for the proposed work. The public health significance of the project should also be explicitly stated in the proposal.*

- ii. Specific Aims/Hypotheses/Objectives/Research question or statement of the issue to be addressed

*This section should include a statement about the aims, objectives, or research question that you wish to address. It should be written in a clear, succinct, and focused manner.*

- iii. Methodology

*This section tells the reader exactly "how" you are going to achieve your aims and/or answer your research questions. The methods section should cover, as appropriate to your research project: study design (including rationale), study setting (include rationale, location, and dates), study subjects, sample size calculations and/or study power, how data will be collected, laboratory and other methods where relevant, data analysis, ethical, safety (risk assessment), and other considerations. It is important to be as specific as possible to allow faculty to determine the feasibility and scientific rigor of the research to be done.*

- iv. Relevant references

- v. Comments on feasibility, if there are any conditions to be fulfilled (e.g. Ethics IRB approval, approval from other organisations) before the project can be conducted. This includes risk assessment and management (i.e. what risks may be present for the investigator, potential risks for participants, and how these risks can be overcome or managed)

- vi. Timeline and work plan: from proposal submission to practicum report submission

- vii. Budget (see financial support above)



After submission to the Education Office the practicum proposal will be reviewed and approved by the Practicum module co-ordinator.

In some instances, students may be asked to provide further justification, clarification or other details of the proposed project. This is to ensure successful completion of the project and is done in the best interest of the student.

### **3. PRACTICUM PROGRESS REPORT**

All practicum students are required to submit a brief one-page practicum progress report for each semester that they are enrolled in the practicum module.

This will be reviewed by the supervisor and practicum module co-ordinator to ensure that the student is progressing as expected. Any problems should be highlighted to allow faculty to intervene and assist as required.

Students will be notified via email of the submission period. Upon receiving the email, students should submit their practicum progress report promptly to allow their supervisor and module coordinator to read through and provide any feedback and recommendations.

**The deadline for submission of the Practicum progress report is 9 February 2018.**

### **4. PRACTICUM FINAL REPORT**

This will take the form of a written report of approximately 4,000 to 6,000 words, (excluding references). The exact structure will depend on the nature of the project. The style of the report will be at the discretion of the supervisors, who will endorse the final version.

Students should submit a draft version of the final report to supervisors to review and comment in a timely manner. In most cases, about a month is required for review and several revisions to be made to come up with the practicum final report.

Students should submit the **endorsed** final report to the Education Office by the deadline which will be announced for each semester, to meet requirements for completing the module.

The practicum proposal submitted earlier will provide the starting point for the practicum final report. However, students may need to update the background section to reflect any new developments in the field. In addition, students may need to expand and/or revise the methods section to accurately reflect the procedures that were used. Students will also need to write the sections that were not included in the proposal (e.g. results and discussion) and update your references.

Students are required to use Turnitin to check for plagiarism before submitting your report. Once submitted, we will check the Turnitin report. Turnitin is good at detecting plagiarism, and any student who is found to have done so will be penalised.

**The deadline for submission of the Practicum Final report is 15 July 2018.**

<p><b>Academic dishonesty</b> 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.</p>
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**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.

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. In addition, the student may receive no grade for the relevant academic assignment, project, or thesis; and he/she may fail or be denied a grade for the relevant subject or module. Such a student caught plagiarizing would have to take that module for grade and 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 they are plagiarising the work of another person.

Source: NUS Registrar's Office website  
(<http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html>)

### **Instructions for submitting essays for Turnitin checks**

Please submit the file via the Turnitin workbin folder in IVLE. The originality report for initial submission is usually ready within minutes but it can take up to 24 hours to be generated. All resubmissions have a processing period of 24 hours, this means the earliest you can view the originality report is 24 hours later. After viewing the report to check for plagiarism, students can make revisions to the file and submit an updated file to overwrite the previous submission. Students can submit files multiple times before the workbin is closed. When uploading the file to the workbin, please note that a submission title as Turnitin does not capture the filename. Without a submission title, the file will be untitled.

## Suggested format for Practicum Final Report

The structure of the final report will depend on the nature of the project. The following outline should serve as a guide:

- i. Table of Contents
- ii. Abstract (max. 300 words)
- iii. Introduction
  - a. Background and context (e.g. if writing about Singapore, explain the Singaporean context)
  - b. Literature review (i.e. what existing research is there around your practicum topic/area of interest/research question?)
  - c. Significance of the project/programme (*previously described in practicum proposal*) – based on the gaps identified in the current literature summarised above)
- iv. Objectives / Aims of the study / Goals of the programme (*previously described in practicum proposal*)
- v. Methods / Programme description (*previously described in practicum proposal*)
- vi. Results

*This section should clearly and logically describe your findings and accomplishments, without comment or discussion. Findings may be presented in tables and figures as well as text.*
- vii. Discussion and conclusion
  - a. Summary of key findings and their relevance in relation to the literature
  - b. Recommendations
  - c. Implications for public health or for your area of work

*This section should discuss the results of your project relative to what is already known about the topic. It should also highlight novel findings. In addition, the conclusions and/or recommendations that can be made based on the results of the project should be stated. Finally, the strengths and limitations with discussion of effect on study findings should be addressed.*
- viii. Acknowledgements:

*This includes any development, technical, funding, or writing support received from individuals or organisations*
- ix. References
- x. Appendices (if any)

## 5. PRACTICUM SYMPOSIUM

### 5.1 Background

The practicum symposium is held over a 2 - 3 day period. All students are required to:

- Complete a short summary and practicum presentation
- Attend other peer practicum project presentations

### 5.2 Practicum Abstract

Students are required to provide a brief 100-word abstract of their practicum project. This should include a rationale for the project, brief methods, key findings and implications. Practicum project abstracts will be published on IVLE for other students and form the basis of a abstract booklet for invited guests. This abstract should be submitted to the Education Office at least **two weeks** before the symposium.

**The deadline for submission of the Practicum Abstract is 28 June 2018.**

### 5.3 Practicum Presentation

**The presentation should be prepared for a general public health audience.** The student's presentation should be approximately 15 minutes and will be followed by 10 minutes of Q&A.

The presentation outline should include the following:

- i. Background and design of the study, or of the public health issue to be analysed
- ii. Findings and interpretation
- iii. An in-depth discussion of the methodological (e.g. design or analysis) or practical (e.g. management, ethical, fiscal) issues relevant to the project
- iv. The public health relevance of the project and potential ways forward (e.g. future research, future scale-up or programme or project)

Although there is no specific format for the presentation, it is suggested that students use a standard software package (e.g. PowerPoint). To keep strictly to time, it is advisable to keep presentations to a maximum of 15 slides.

Students who would like feedback ahead of your presentation, should submit a copy of their slides to their supervisor (and co-supervisor, if any) in a timely manner (e.g. 2-3 weeks before the presentation date) for their comments. Meetings to practice with supervisors may also be scheduled, if deemed necessary. Additional presentation practice sessions with other students, colleagues, or mentors can also be helpful. It is good practice to be able to present without, or with minimal reference, to written notes and be prepared to answer questions from the audience. We advise students to prepare adequately prior to presentations to ensure smooth and confident delivery. It is also important to complete the presentation in the allotted time. Students who exceed the time will be told to stop.

A copy will also be sent to a faculty member, with relevant expertise, to evaluate the presentation and ask questions (see assessment below).

Students must submit their final deck of slides to the Education Office **latest by 3 July 2018.**

**Failure to attend the Practicum Symposium without good reason will result in a lower grade.**

## 6. PRACTICUM GRADING CRITERIA

The practicum final grade will be determined by the following:

- i. Attendance and participation in 3 practicum tutorial sessions (5%)
- ii. Effort in independently developing and completing the practicum project (10%)
- iii. Practicum report (60%)
- iv. Practicum presentation (25%)

**Effort in independently developing and completing the practicum project (10%)** will be evaluated by the supervisor, guided by the below criteria:

Mark (out of 10%)	Student has demonstrated
0-3 %	<ul style="list-style-type: none"> <li>• Very limited ability to carry out practicum project without prompting</li> <li>• Very limited ability to see the big-picture relevance of their project</li> <li>• The need for constant supervisor guidance and assistance throughout the planning, organisation, and execution of the practicum project</li> <li>• Low proactivity and independence – does not ask questions, expects instructions</li> <li>• Very limited ability to consider facts, theories and recommendations for project improvement</li> <li>• Very limited ability to construct and evaluate reasons to support decisions and choices made throughout the project, even with much prompting and guidance</li> </ul>
4-6 %	<ul style="list-style-type: none"> <li>• Ability to carry out practicum project with some prompting</li> <li>• Ability to see the big-picture relevance of their project, but with much guidance</li> <li>• The need to be guided heavily throughout the planning, organisation, and execution of the practicum project</li> <li>• Ability to ask questions, but with few to no inputs to facilitate discussion</li> <li>• Limited consideration of facts, theories and recommendations for project improvement</li> <li>• Limited ability to construct and evaluate reasons to support decisions and choices made throughout the project</li> </ul>
7-8 %	<ul style="list-style-type: none"> <li>• Ability to carry out practicum project with only minor prompting</li> <li>• Ability to see the big-picture relevance of their practicum project, but with some guidance</li> <li>• Ability to plan, organise, and execute most work with some guidance</li> <li>• Ability to seek assistance and ask questions, with some inputs to facilitate discussion</li> <li>• Some consideration of facts, theories and recommendations for project improvement</li> <li>• Ability to construct and evaluate reasons to support decisions and choices made throughout the project, with some guidance</li> </ul>
9-10 %	<ul style="list-style-type: none"> <li>• Ability to carry out practicum project without prompting</li> <li>• Ability to independently see the big-picture relevance of their practicum project</li> <li>• Ability to plan, organise, and execute work independently</li> <li>• Ability to complete the practicum within discussed timeline</li> <li>• Ability to thoughtfully discuss project-related issues and suggest constructive, practical options, proposals, and potential solutions</li> <li>• Careful deliberation of facts, theories, and recommendations for project improvement</li> <li>• Ability to construct or evaluate reasons to support decisions and choices made throughout the project</li> </ul>

**Practicum final report (60%)** will be graded by both the student's supervisor and another faculty member. The MPH programme director will also grade the report if there is a significant discrepancy between the marks awarded by the supervisor and the other faculty member. Evaluation of the report will be based on the below rubric:

<b>Category</b>	<b>Weightage 100 %</b>
General, including writing quality <ul style="list-style-type: none"> <li>• Originality of research</li> <li>• Independent thought and work</li> <li>• Coherence of whole study: does it follow from the research question?</li> <li>• Demonstration of capabilities in multiple PH sub-disciplines</li> <li>• Appropriate and up-to-date references</li> <li>• Clear and logical reporting structure and formatting</li> <li>• Good grammar and spelling</li> <li>• Attention to sentence structure, e.g. no run-on sentences</li> <li>• Succinct and concise language</li> <li>• Appropriate use of terminology, e.g. technical terms, avoidance of unnecessarily complex words</li> </ul>	20
Background/Objectives/Research question <ul style="list-style-type: none"> <li>• Relevant and thoughtful research question, informed by thorough literature review</li> </ul>	10
Methods <ul style="list-style-type: none"> <li>• Selection of optimal study design for research question</li> <li>• Clear description of methods employed</li> <li>• Appropriate and coherent use of theoretical/conceptual framework, if any</li> </ul>	20
Results <ul style="list-style-type: none"> <li>• Clear presentation of findings</li> <li>• Appropriate use of tables and figures</li> </ul>	20
Discussion and conclusion <ul style="list-style-type: none"> <li>• Results correctly interpreted and placed in context of broader literature</li> <li>• Critically evaluate and synthesise findings with current knowledge</li> <li>• Strengths and limitations elaborated on</li> <li>• Limitations adequately addressed</li> <li>• Discussion of public health/healthcare/clinical/policy impact/future research</li> </ul>	30

As a general guide, quality of reports will fall into one of the five categories below based on their key features:

<b>Quality</b>	<b>Key features</b>
<b>Excellent</b>	Detailed, clear and systematic description of the background, aims, methods and findings Compelling discussion of the relevance and implications of the project to PH Insightful discussion of the strengths and limitations of the project
<b>Very good</b>	Good description of the background, aims, methods and findings. Relevant and fair discussion of the relevance and implications of the project to PH Good discussion of the strengths and limitations of the project
<b>Good</b>	Limited description of the background, aims, methods and findings Relevant but limited discussion of the relevance and implications of the project to PH Fair discussion of the strengths and limitations of the project
<b>Poor</b>	Incomplete description of the background, aims, methods and findings Incomplete and limited discussion of the relevance and implications of the project to PH Little discussion of the strengths and limitations of the project
<b>Fail</b>	Not submitted, or: Substantial evidence of plagiarism Major components of report missing or incomplete

The **symposium presentation** (25%) will be jointly graded by two SSHSPH faculty members who are not the supervisors.

This evaluation will be based on the following weightage:

- Overall clarity of presentation and keeping to time (30%)
- Rationale for choice of topic and related approaches and methods (20%)
- Discussion of findings related to methodological or practical issues and connection of findings with public health relevance (30%)
- Ability to sustain interest of audience and answer questions (20%)

The grading rubric for the practicum presentation is shown below:

<b>Areas and Bands of Grading with weightage (100%)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Overall clarity of presentation and keeping to time 30%</b>	(0-7marks) Listener unable to follow presentation. No evidence of organisation in presentation. Does not complete presentation within allocated time.	(8-15 marks) Listener can follow presentation only with effort. Organisation seems haphazard. Rushing to complete presentation within allocated time.	(16-23 marks) Presentation is generally clear and well organised. A few minor points may be confusing. Completes most of presentation within allocated time.	(24-30 marks) Presentation is clear, logical, and organised. Listener can follow line of reasoning. Keeps to time.
<b>Rationale for choice of topic and related approaches and methods 20%</b>	(0-5 marks) Presents no rationale for project. Relevant literature not discussed, including no theoretical reasons, no empirical support and no practical reasons to justify development and/or evaluation of the project. Key concepts either not identified or are identified in a confusing manner. Contains too much irrelevant information that seriously detracts from focus. Explanation of methods missing.	(6-10 marks) Presents poor rationale for project. Relevant literature is inadequately discussed, including little theoretical reasons, little empirical support and little practical reasons to justify development and/or evaluation of the project. Few of the key concepts are identified and operationally defined. Contains too much irrelevant information that detracts from focus. Provides a disorganised explanation of methods.	(11-15 marks) Presents satisfactory to strong rationale for project. Relevant literature is adequately discussed, including some theoretical reasons, some empirical support and some practical reasons to justify development and/or evaluation of the project. Most of the key concepts are identified and operationally defined. Contains some irrelevant information but does not detract from focus. Provides reasonably clear and systematic explanation of methods	(16-20 marks) Presents compelling rationale for project. Relevant literature is thoroughly and completely discussed, including theoretical reasons, empirical support and practical reasons to justify development and/or evaluation of the project. Key project components are identified and operationally defined. Provides a clear and systematic explanation of methods.
<b>Discussion of findings related to methodological or practical issues and connection of findings with public health relevance 30%</b>	(0-7 marks) No discussion of methodological or practical issues related to findings and connection of findings to public health relevance. No conclusions or very general conclusions that extend beyond scope and practicum findings.	(8-15 marks) Some general discussion of methodological or practical issues related to findings and connection of findings to public health relevance. Provides minimal conclusions that are within reasonable scope of practicum findings.	(16-23 marks) Good but still general discussion of methodological or practical issues related to findings and connection of findings to public health relevance. Provides some general and specific conclusions that are within reasonable scope of practicum findings.	(24-30 marks) Strong and robust discussion of methodological or practical issues related to findings and connection of findings to public health relevance. Provides strong, clear, convincing conclusions that are clearly within scope of practicum findings.
<b>Ability to sustain interest of audience, to answer questions 20%</b>	(0-5 marks) The entire presentation is too elementary or too sophisticated for audience. The information is read with limited or no eye contact with the audience. Presenter is uncomfortable and cannot be heard by listener. Presenter answered questions from audience inadequately.	(6-10 marks) Aspects of presentation are too elementary or too sophisticated for audience. Much of the information is read. Presenter seems uncomfortable and can be heard only if listener is very attentive. Presenter is able to answer questions from audience somewhat adequately.	(11-15 marks) Level of presentation is generally appropriate. Pacing is sometimes too fast or too slow. The presenter seems slightly uncomfortable at times, and the audience occasionally has trouble hearing him/her. Presenter is able to answer questions from audience adequately.	(16-20 marks) Level of presentation is appropriate for the audience. Presentation is paced for audience understanding. It is not a reading of a paper. Speaker is clearly comfortable in front of the group and can be heard by all. Presenter is able to answer questions from audience very adequately.



## **7. Other Matters**

### **Publishing of projects and media release**

Publishing of the practicum report in a journal or presenting via a poster/oral presentation at a conference is encouraged. However, much public health work and related practicum projects may be impactful but not necessarily need to lead to publications.

Publishing or presenting requires the support of supervisors, any collaborators (institutional or individuals), as well as the Vice Dean of Education, and in some instances, the Dean. Students who intend to publish must ensure that ethical approval is obtained from the NUS IRB or equivalent IRB from the outset.

Publishing or presenting the practicum project should also take place after the practicum report has been marked. Further analyses and editing of the report is usually required to meet specific requirements and the student needs to be prepared to put in the extra effort even after completion of the MPH programme to do so. Authorship also needs to be resolved with the supervisor and any collaborators.

There may be interest from the media about a student's practicum project. Please direct this to the supervisors who will then discuss with any collaborators, the MPH programme director and the SSHSPH External Relations Office. Do bear in mind that practicum projects may not be publishable following media coverage of project results.

In some cases, supervisors or their research team may wish to publish data collected by the student. This may be allowed if the student has agreed/a reasonable time has elapsed whereby the student has been given an opportunity to publish but has not done so.

## **PRACTICUM FORMS**

Information and forms related to the MPH Practicum project may be found here:

**1. Practicum Proposal Form**

<https://www.sph.nus.edu.sg/sites/default/files/MPH%20Practicum%20Proposal%20Form.pdf>

**2. Practicum Progress Report**

<https://www.sph.nus.edu.sg/sites/default/files/MPH%20Practicum%20Progress%20Report.pdf>

**3. Practicum Final Report : Supervisor's Endorsement Form**

<https://www.sph.nus.edu.sg/sites/default/files/MPH%20SPH5005%20Practicum%20Final%20Report%20Supervisor%20Endorsement%20Form.pdf>

### **Practicum Fund**

A Practicum Fund has been set up to support students regarding expenses that occur during the Practicum project. It is not the purpose of the Fund to support students regarding general expenses that occur during their research and education.

### **Claim for Practicum Expenses – Guidelines**

<https://www.sph.nus.edu.sg/sites/default/files/Guidelines%20on%20Claims%20for%20OISM%20Expenses.pdf>

### **Claim for Practicum Expenses Form**

<https://www.sph.nus.edu.sg/sites/default/files/MPHGDAE%20Expenses%20Claim%20Form.pdf>

## GOING OVERSEAS

The following checklist has been devised in order to help students plan for international travel in regards to MPH related matters.

### Check List for MPH Students Travelling Abroad

- Please take care to review the following checklist and take the corresponding actions before leaving for overseas travel.
- Vaccinations and necessary insurance coverage (e.g. personal health, malpractice, travel insurance)
- Check if VISA is required
- Check that passport is valid for period of trip
- Exit permit (for Singaporean male students only)
- Register your personal particulars at the Diplomatic Mission of your nationality (e.g. Singaporeans may contact the Singapore Diplomatic Mission in a capital city, or register on-line at <http://www.mfa.gov.sg>)
- To check Ministry of Foreign Affairs (MFA) and World Health Organisation (WHO) websites for the latest updates, esp. a few days before the departure date.
- Please also read the useful information provided by the NUS International Relations Office:  
<http://www.nus.edu.sg/iro/sep/out/prepare/index.html>

### Release of Liability Letter

Students who participate in overseas field trips as part of their MPH should complete the Release of Liability letter and submit it to Education Office before going on their trips.

The form may be downloaded here:

[https://www.sph.nus.edu.sg/sites/default/files/Release%20of%20Liability%20Form\\_Overseas%20Travel%20for%20Practicum%20or%20ISM.pdf](https://www.sph.nus.edu.sg/sites/default/files/Release%20of%20Liability%20Form_Overseas%20Travel%20for%20Practicum%20or%20ISM.pdf)

### NUS Blanket Insurance

The University has purchased a blanket travel insurance policy from Federal Insurance Company to cover all students travelling overseas for activities or purposes approved, endorsed, organised, sponsored or authorised by NUS.

More Information at:

<http://www.nus.edu.sg/finance/TravelInsurance.html>

<http://www.nus.edu.sg/finance/InsuranceCoverforOfficialNUSTrips.html>