

# GUIDELINES FOR THE SPH5005 MPH PRACTICUM

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## INTRODUCTION

Students are required to complete the SPH5005 Practicum course to fulfil the graduation requirement for the Master of Public Health programme. This guide informs the details regarding:

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

The necessary forms for each component are found in [Annex B](#) of this coursebook.

## 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 course only upon satisfactory completion of SPH5002 Public Health Research Methods. Students on a one-year, full-time programme may register for these courses as co-requisites for SPH5005 Practicum. These students should register for the practicum course 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 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 Course (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 [Annex B](#).

## **1.6 Student's Responsibilities**

The practicum project is a compulsory core that is required for completion of the MPH programme. It is an 8 units course and will contribute to a significant proportion of the student's final GPA. 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 (Lectures 1-9). Topics will include a general briefing on the practicum which will be done during the orientation week, library orientation and citation practices, sessions on how to conduct a literature review and meta-analysis, basics of writing a good practicum report, and effective communication skills. We will release the schedule for these sessions via Canvas.

## 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 Canvas 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.

## 1.12 Ethics 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

Ethics review and approval to conduct practicum projects typically come from either Domain Specific Review Boards (DSRB), NUS Institutional Review Board (NUS-IRB) or SSHSPH Departmental Ethics Review Committee (DERC). One approval from any one of these bodies is sufficient to conduct the practicum project.

Research projects generally fall under two research categories: Human Biomedical Research (HBR) and Social, Behavioural, and Educational Research (SBER), and students need to check which category their study falls under before preparing an application.

SSHSPH DERC can only approve practicum projects that fall under the social, behavioural and educational research (SBER) that is of minimal risk, but excludes any human biomedical research (HBR) that falls within section 3 of the Human Biomedical Research Act (HBRA).

Research that can be considered for SSHSPH DERC review:

- Have minimal risk.
- Does not place the research participants at risk of criminal or civil liability and is not damaging to the research participants' financial standing, employability, or reputation if their responses are disclosed outside the research study.
- Has no physical, psychological or economic harm to research participants.
- Does not involve vulnerable populations (e.g. children, prisoners, pregnant women, non-healthy volunteers, cognitively impaired etc.).
- Does not touch on sensitive topics, i.e., topics that potentially pose a substantial threat to either the PI or participant and can make problematic the collection, storage or dissemination of research data. Research on sensitive topics could include issues on race, religion, sexual behaviour, domestic violence, illegal conduct, or criminal activities,

Do note if DERC has reviewed and issued approval for a project, and journals require NUS-IRB approval, the DERC can submit the DERC-approved study documents on the researchers' behalf to the NUS-IRB for endorsement.

For questions on SSHSPH DERC please email DERC at [sshsphderc@nus.edu.sg](mailto:sshsphderc@nus.edu.sg)

Students may apply for SSHSPH Departmental Ethics Review Committee (DERC) or 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.

Ethics review and approval may take between several weeks to 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. More details on NUS ethics review procedures can be found at the NUS IRB website: <http://www.nus.edu.sg/irb/>

**For training of ethical research practice and/or application of practicum projects for ethics review ALL students are required to complete:**

- (i) **Research Ethics lecture**  
Resources (TBA) will be updated on Canvas
- (ii) **Collaborative Institutional Training Initiative (CITI) Programme certification**  
<https://www.citiprogram.org/>
  - (a) CITI Responsible Conduct of Research **AND**
  - (b) CITI for Biomedical Research Investigators **OR** CITI for Social & Behavioural Research Investigators
- (iii) **NUS IRB001 Course for NUS Researchers.**  
Please refer to the [Guide to Self-Enrol in IRB001 Canvas Course](#).

**Please submit the Certificate of Completion of the 3 courses when submitting the practicum proposal.**

### 1.13 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).

### 1.14 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.

### 1.15 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:  
<https://www.americanscientist.org/blog/the-long-view/the-science-of-scientific-writing>
- Vancouver style referencing.  
[http://www.nlm.nih.gov/bsd/uniform\\_requirements.html](http://www.nlm.nih.gov/bsd/uniform_requirements.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:  
<https://www.bmj.com/content/348/bmj.g2039>
- “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.microsoft.com/en-us/office/tips-for-creating-and-delivering-an-effective-presentation-f43156b0-20d2-4c51-8345-0c337cefb88b?ui=en-us&rs=en-us&ad=us>



## 1.16 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.

Please refer to [Annex A](#) for key milestones and events.

## 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 and **2-3-page outline of the proposed project**, which will need to be endorsed by their advisor/supervisor.

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)

If your practicum project involves patient contact or contact with patient specimens, please ensure that you undergo the **health screenings/vaccinations** detailed in the table below and submit a photocopy of the health screenings/ vaccination reports to the Education Office.

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

After submission to the Education Office the practicum proposal will be reviewed and approved by the Practicum course 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.

Please refer to [Annex A](#) for submission due date.

### 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 course.

This will be reviewed by the supervisor and practicum course 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 course coordinator to read through and provide any feedback and recommendations.

Please refer to [Annex A](#) for submission due date.

#### 4. PRACTICUM LOG

The practicum log consists of brief notes about meetings, either face-to-face or online with the supervisor or other relevant individuals. It serves as a log for students to prepare, reflect upon and take action after meetings, as well as, a record of supervision.

The log should be structured as a table and includes information on:

- Date/time
- Duration
- Issues discussed
- Action plan
- Comments/reflections

The log should be a maximum of 2-3 pages. It will be reviewed by the supervisor and can serve as a useful reference for the practicum effort mark. **The practicum log is to be submitted together with the Practicum Final Report.**

Please refer to [Annex A](#) for submission due date.

#### 5. PRACTICUM FINAL REPORT

This will take the form of a written report of approximately 4,000 to 6,000 words, (excluding figures, tables and references, acknowledgements and author disclosures). 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 stipulated in [Annex A](#) in order to meet requirements for completing the course.

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.

**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.

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 course. Such a student caught plagiarizing would have to take that course for grade and not be allowed to exercise the S/U option for that course.

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

(<https://www.nus.edu.sg/registrar/administrative-policies-procedures/graduate/acceptance-record>)

### **Instructions for submitting final report for Turnitin checks**

Please submit your final report via the Turnitin enabled assignment folders in Canvas and input the filename as your official name as per NUS records.

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 the submission title as Turnitin does not capture the filename. Without a submission title, the file will be untitled.

### **Use of AI tools for academic work**

Keep in mind that even though AI tools are not authors and thus cannot be harmed by someone stealing an idea from them, it is still wrong of students to represent yourselves as having produced something when you did not produce it. Anyone found to have committed improper use of AI tools will be dealt with in accordance with NUS policies on academic honesty.

Students should acknowledge the use of AI tools through a note or "methods section" at the end of the assignment. If an AI tool was used to generate a more extensive set of intermediate outputs that were then developed into a final product, you should preserve a full transcript of the relevant interactions with the AI as an appendix for submission with your assignment.

Please refer to the [Academic Integrity Essentials](#).

## **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)

## 6. PRACTICUM SYMPOSIUM

### 6.1 Background

The practicum symposium is held over a 2 - 3 day period (see [Annex A](#)). All students are required to:

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

### 6.2 Practicum Symposium 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 Canvas 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.

### 6.3 Practicum Presentation

**The presentation should be prepared for a general public health audience.** The student's presentation should be approximately 10 minutes and will be followed by 5 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 practise 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).

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

## 7. PRACTICUM GRADING CRITERIA

The practicum final grade will be determined by the following:

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

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%)

The grading rubric for the practicum presentation is shown below:

Area 1: Overall clarity of presentation and keeping to time (30 %)					
	Band 1	Band 2	Band 3	Band 4	Band selected
Clarity of presentation and key concepts derived from the research project (20%)	Unable to follow.  Key concepts not presented or done so in a confusing or incorrect manner with minimal alignment with overall research question and findings.	Can follow but with effort.  A few of the key concepts are presented well but may not be in alignment with overall research question and findings.	Most of the presentation is clear but a few points are confusing.  Most of the key concepts are clearly presented with some alignment with overall research question and findings	Audience can follow easily.  Key concepts are clearly presented and aligned with overall research question and findings	1A:
Time keeping (10%)	Band 1  Finishes far too quick	Band 2  Overruns	Band 3  Rushes some parts to finish on time	Band 4  Completes on time	1B:

Area 2: Rationale for choice of topic and related approaches and methods (20%)					
Rationale for project (7%)	Band 1	Band 2	Band 3	Band 4	2A:
	None presented	Poor rationale	Satisfactory	Strong or compelling	
Relevant background and literature (6%)	Band 1	Band 2	Band 3	Band 4	2B:
	Not discussed. No theoretical reasons, empirical support or practical reasons to justify the project	Discussed, but inadequately. Few theoretical or practical reasons and little empirical support to justify the project	Adequately discussed, including some theoretical or practical reasons, or empirical support, to justify the project	Thoroughly discussed, with strong justification for the project	
Explanation of methods (7%)	Band 1	Band 2	Band 3	Band 4	2C:
	Missing	Disorganised	Reasonably clear	Clear, and systematic	
<b>Area 3: (30%)</b> <ul style="list-style-type: none"> <li>• Discussion of findings related to methodological or practical issues</li> <li>• Connection of findings with public health relevance</li> </ul>					
Discussion and Conclusion (30%)	Band 1	Band 2	Band 3	Band 4	3:
	No discussion of methodological or practical issues related to findings and connection of findings to public health relevance.	Some general discussion of methodological or practical issues related to findings and connection of findings to public health relevance.	Good but still general discussion of methodological or practical issues related to findings and connection of findings to public health relevance.	Strong and robust discussion of methodological or practical issues related to findings and connection of findings to public health relevance.	
<b>Area 4: Ability to sustain interest of audience, to answer questions (20%)</b>					
Delivery (10%)	Band 1	Band 2	Band 3	Band 4	4A:
	The information is read with limited or no eye contact with the audience.	Much of the information is read.	Some reference to slides as aide de memoire	Presentation is paced for audience understanding.	
Questions (10%)	Band 1	Band 2	Band 3	Band 4	4B:
	Presenter answered questions from audience inadequately.	Presenter is able to answer questions from audience somewhat adequately.	Presenter is able to answer questions from audience adequately.	Presenter is able to answer questions from audience very adequately.	



**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 (Total 100 %)</b>
Integrated Analysis & Writing <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

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

<b>Band</b>	<b>Student has demonstrated</b>
1	<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>
2	<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>
3	<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>
4	<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>

## **8. OTHER MATTERS**

### **8.1 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.

## 8.2 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 Global Relations Office: [https://share.nus.edu.sg/goabroad/SEP/Pre-Departure\\_Guide.pdf](https://share.nus.edu.sg/goabroad/SEP/Pre-Departure_Guide.pdf)

### 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://sph.nus.edu.sg/wp-content/uploads/2019/02/Release-of-Liability-Form\\_Overseas-Travel-for-Practicum-or-ISM.pdf](https://sph.nus.edu.sg/wp-content/uploads/2019/02/Release-of-Liability-Form_Overseas-Travel-for-Practicum-or-ISM.pdf)

### NUS Blanket Insurance

The University has purchased 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/docs/summary-of-policy-cover-ian-2017-jun-2018.pdf>

## ANNEX A: KEY MILESTONES AND EVENTS

Activity	Approximate Duration/Timeline
<b>Lecture 1: General Briefing about Practicum</b>	Orientation Week (SPH5001) – Thu, 03 Aug 2023 (10.30AM – 11.30AM) MD1, Seminar Room 1 (#08-01E)
<b>Lecture 2: Research Ethics</b>	Semester 1 Thu, 17 Aug 2023 Recorded lecture
<b>Tutorial 1</b>	Semester 1: before submission of practicum proposal Week 4 - 5 04 Sep – 15 Sep 2023
<b>Lecture 3: Library Orientation: Database searching skills using PubMed</b>	Semester 1 Tue, 05 Sep 2023 (2.00PM to 3.30PM) MD1, Comp Lab 1 (#08-01A)
<b>Lecture 4: Library Orientation &amp; Endnote Training</b>	Semester 1 Tue, 05 Sep 2023 (3.30PM to 5.30PM) MD1, Comp Lab 1 (#08-01A)
<b>Lecture 5: Overview of Literature Review</b>	Semester 1 Tue, 03 Oct 2023 (2.00PM to 4.00PM) MD1, Comp Lab 1 (#08-01A)
<b>Lecture 6: Searching in Context of Systematic Reviews</b>	Semester 1 Tue, 10 Oct 2023 (2.00PM to 4.30PM) MD1, Comp Lab 1 (#08-01A)
<b>Lecture 7: Exercise &amp; Q&amp;A on Reviews and Meta-Analysis</b>	Semester 1 Tue, 24 Oct 2023 (2.00PM to 4.00PM) MD1, Comp Lab 1 (#08-01A)
<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 1 month
<b>Submit practicum proposal, CITI and NUSIRB001 course certificates to Education Office</b>	Mid-Semester 1 Wed, 20 Sep 2023
<b>Obtain institutional approvals if required</b>	Mid to late Semester 1 (1-2mths)*
<b>Conduct project</b>	Mid-Semester 1 up to Special Term II (2-10mths)

<b>Tutorial 2</b>	Semester 2: before submission of progress report Week 3 & 4 29 Jan – 09 Feb 2024 (Note: Dates may change based on tutors' availabilities)
<b>Submit progress report to Education Office</b>	Early Semester 2 Week 5 Wed, 14 Feb 2024
<b>Lecture 8: Writing Good Public Health Reports</b>	Semester 2 Week 5 Fri, 16 Feb 2024 (4.00PM to 6.00PM)
<b>Lecture 9: Effective Communication in Public Health</b>	Semester 2 Fri, 10 May 2024 (6.00PM to 8.00PM)
<b>Preparation of Oral Presentation</b>	Special 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>	Special Term I & II (1-2mths)
<b>Tutorial 3</b>	Special Term I: 20 May – 31 May 2024 (Note: Dates may change based on tutors' availabilities)
<b>Submit Abstract &amp; Presentation Slides to Canvas</b>	Special Term I & II Sun, 16 Jun 2024
<b>Practicum Symposium</b>	Special Term II: 27 & 28 Jun 2024 MD1, Seminar Room 1/2 (#08-01E / #08-03E)
<b>Submit Final report and Practicum log to Education Office</b>	Special Term II: Mon, 01 Jul 2024

*\*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.*

## **ANNEX B: PRACTICUM FORMS**

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

**1. Practicum Proposal Form**

<https://sph.nus.edu.sg/wp-content/uploads/2019/02/MPH-Practicum-Proposal-Form.pdf>

**2. Practicum Progress Report**

<https://sph.nus.edu.sg/wp-content/uploads/2020/01/MPH-Practicum-Progress-Report.docx>

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

<https://sph.nus.edu.sg/wp-content/uploads/2020/07/MPH-SPH5005-Practicum-Final-Report-Supervisor-Endorsement-Form-1.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://sph.nus.edu.sg/wp-content/uploads/2023/06/Fund-Claims-Guidelines.pdf>

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

<https://sph.nus.edu.sg/wp-content/uploads/2023/08/MPH-Expenses-Claim-Form.pdf>