

DEPARTMENT OF PSYCHOLOGY

Honours Year Programme Handout

(for Cohort 2018 - 2020)

1. Honours Degree in Psychology

- 1.1 Graduation Requirements (Applicable to Cohort 2018-2020) https://fass.nus.edu.sg/psy/honours-programme/
 - 1. Pass PL1101E Introduction to Psychology. This will be counted towards the Faculty Core or UE requirements.
 - 2. Pass at least 84 units of PL courses or PL-recognised courses which include the following:
 - i. PL2131 Research and Statistical Methods I
 - ii. PL2132 Research and Statistical Methods II
 - iii. PL3232 or PL3102 Biological Psychology
 - iv. PL3233 or PL3103 Cognitive Psychology
 - v. PL3234 or PL3104 Developmental Psychology
 - vi. PL3235 or PL3105 Social Psychology
 - vii. PL3236 or PL3106 Abnormal Psychology
 - viii. PL3231 Independent Research Project OR one of the PL328x lab courses[#]
 - ix. A minimum of 52 units at level-2000 or higher, with
 - a. a minimum of 12 units at levels-2000 or 3000 (excluding the courses above).
 - b. a minimum of 40 units at level-4000 or higher, including a minimum of 10 units from PL4201 (5 units)/PL4201HM (5 units), PL4202 (5 units)/PL4202HM (5 units), PL4242 (5 units)/PL4242HM (5 units), PL4245 (5 units)/PL4245HM (5 units) and PL4246 (5 units)/PL4246HM (5 units).
 - c. a maximum of one other PL328x lab course not taken in (viii) above#
 - d. maximum of 2 PL courses at level-5000.
 - e. a maximum of 2 PL-recognised courses.

Note:

Please refer to the "Note" section of the <u>Honours Programme Graduation Requirements webpage</u> for more details.

1.2 Degree Classification

Information is available here:

https://myportal.nus.edu.sg/studentportal/fas/ug/graduatingstudents/conferment-of-degree-and-classes-2012onwards.html

http://www.nus.edu.sg/registrar/academic-informationpolicies/undergraduate-students/continuation-and-graduationrequirements.

1.3 Notes

- 1.3.1 Honours students may access PL5XXXR courses. Honours students and postgraduate students (if any) will attend the same class and will be evaluated together.
- 1.3.2 Register online for **all** courses except PL4401HM and PL4660HM.
- 1.3.3 Check your email and the Canvas platform regularly for updated announcements.

2. Course Description

Please refer to the Psychology Department website at: <u>https://fass.nus.edu.sg/psy/courses-undergraduate/</u> or the Canvas platform for the description and other details of the courses.

Should you require further details or information related to the course content, please refer to the respective course lecturers and instructors.

3. PL4660HM Independent Study Course (5 units)

- 3.1 Ensure that you have met the prerequisites and take note of the preclusion for PL4660HM.
 Prerequisites:
 Cohort 2016 to 2020: Completed 100 units, including 44 units in PL, with a minimum GPA of 3.20.
 Preclusion: PL4401, PL4401HM, XFA4405, XFA4405HM and PL4660
- 3.2 Complete the relevant portion of the Application to Undertake PL4660/PL4660HM Independent Study form, which is available via the department website (above).
- 3.3 Ask your supervisor to complete the supervisor portion of the form.
- 3.4 Submit the soft copy of the form via email to psybox1@nus.edu.sg by the deadline (typically in late July if you intend to undertake PL4660HM in Semester 1 and in late December if you intend to undertake PL4660HM in Semester 2). Check notices for the submission deadlines. Late applications will not be accepted.
- 3.5 The Department will preallocate the course to you.

- 3.6 The word limit for the PL4660HM final report is 4,000 words (excluding all appendices and references).
- 3.7 The submission deadline for the Independent Study Course report is typically at the beginning of Week 13 of each semester. Be sure to source the exact deadline and submit on time.
- 3.8 The penalty for late submission of the Independent Study Course report is 5 marks per day.

4. PL4401HM Honours Thesis (15 units)

4.1 If you wish to embark on the Honours Thesis then you must ensure that you meet the requirements.

Prerequisites:

Cohort 2018 onwards:

- 1. Completed 110 units, including 44 units of PL major requirements
- 2. A minimum SJGPA of 4.00
- 3. A minimum GPA of 3.50

Students may seek a waiver of the SJGPA pre - requisite from the department if they have a minimum GPA of 4.25 after completing 110 units. Preclusion: PL4660, PL4660HM and PL4401

The thesis is a two-semester academic exercise and you must meet the requirements at the time you start the first semester of the thesis.

- 4.2 The Honours Thesis is a major undertaking both for the student and supervising faculty. You should ensure that you complete the following administrative procedures in an efficient and timely manner:
 - 1. Attend a **compulsory** Honours Thesis information session conducted by the Honours Thesis Coordinator.
 - a. There will be four information sessions held over the course of the Academic Year (two per semester) in recess and reading weeks.
 - b. Details of the information sessions will be sent out to all Psychology majors by the Honours Thesis Coordinator.
 - c. Students must have attended ONE briefing BEFORE registering for the Honours Thesis/submitting the Thesis Topic and Supervisor Form.

- 2. Submit the Thesis Topic and Supervisor Form in December for Semester 1 submission, and in July for Semester 2 submission. Be sure to source the exact deadline and submit on time (https://fass.nus.edu.sg/psy/forms-and-resources/).
- 3. Submit the Thesis Title Form in October for Semester 1 submission, and in March for Semester 2 submission. Be sure to source the exact deadline and submit on time.
- 4. Submit the Thesis in November for Semester 1 submission, and in April for Semester 2 submission. Be sure to source the exact deadline and submit on time.

4.3 Selection of Supervisors/Topics

4.3.1 You must secure a supervisor for your Honours Thesis. Most faculty members in NUS Psychology are actively engaged in research and their research interests will colour their lectures and other teaching engagements. If you are interested in a particular area of research then you should approach a relevant faculty member and start a conversation about potential Honours Thesis projects.

Faculty members vary widely in the scope of projects they are prepared to supervise. Some faculty may lack the bandwidth to supervise a thesis project even if the topic is very close to their immediate specialist interest, other faculty may be willing to range quite far from their specialist subject. We strongly encourage that students remain flexible and open to a range of research topics when considering their research topic if they are committed to pursuing an Honours Thesis.

The ideal Honours Thesis student will have already begun a research interaction with a faculty member well in advance of the Thesis Topic deadline. They *may* have already completed a research project with the faculty member through a UROP, an IRP, or other arrangement. The ideal student will be familiar with the research area, and may have written a short background justifying their proposed research question. They will have at least a working idea of the method they will use to answer their proposed research question. **The key message is that you should be preparing the ground for your Honours Thesis well in advance of your final year. Students that only begin their search in the semester before their final year are rarely successful.** Not all students will meet the ideal described, but students who demonstrate none of the above characteristics are likely to be less attractive as an Honours Thesis student.

Faculty members will vary in how much time they are able to provide to assist students, and will vary in how much guidance they are able to provide in crafting the research question and project. Some faculty may request a detailed proposal, some may require you to demonstrate specific research skills and abilities (such as advanced statistical expertise or ability in a specific research method), and some may be willing to work with you even if your research question is vague and your skills less certain. The onus is on you to begin a conversation with faculty members early enough that you are familiar with their expectations well before the deadline to submit the Thesis Topic and Supervisor Form. *The Honours Thesis is not an assignment that is handed to you.* The Honours Thesis is a major piece of self-motivated work that requires considerable time commitment, independence and dedication to complete.

After you have obtained a supervisor, you must complete the online Thesis Topic and Supervisor Form and submit before the required deadline. Your supervisor is not officially confirmed until the Psychology Department has processed the form. The online form is available through the department website.

- 4.3.2 External supervision arrangements with academics or industry experts outside of the Psychology Department are not permitted unless arranged in the first instance by an NUS Psychology faculty member and his/her external collaborator. All external arrangements must be approved by the Honours Thesis coordinator before they can move forward, and these arrangements will be carefully vetted. These arrangements cannot be sourced by the student. Approval must be obtained in the first instance before the student moves forward with his/her supervision arrangement.
- 4.3.3 Sometimes a potential supervisor relationship may fail for reasons outside the student's control. Faculty, for example, may leave the department, face a personal issue, or become ill. If your research relationship with a faculty member breaks down unexpectedly then you can approach the Honours Thesis coordinator for assistance in finding an alternate supervisor. The department does not guarantee that this effort will be successful. Nevertheless, students who have an organized project plan and who are committed to completing the Honours Thesis can generally expect to be matched with a new supervisor. There is also the option of "downgrading"

your Honours Thesis to an Independent Study Course and submitting the work in fulfillment of PL4660HM. In that case, you will need to also make up the remaining credits that would have been covered by your Honours Thesis in order to graduate.

- 4.3.4 Although you are responsible for your Honours Thesis performance, your supervisor is available for guidance. Supervisors are obliged to advise their students on all matters pertaining to the Honours Thesis, including the subject matter of the project, method and design, data collection, statistical analysis, and write-up. It is advised that you work out standing arrangements with your supervisor on various issues of the project, which include, but are not limited to, the following:
 - Consultation schedule (e.g., once per week, once per two weeks). There is no standard rule for how often you and your supervisor should meet. How often you meet depends on the needs of the project and the ability of the student. Typically, meetings are more regular during project setup, much less regular during data collection, and more often again during analysis and write-up. The critical consideration is the extent to which your learning needs are met.
 - How much time should be devoted to each stage of the project (e.g., literature review, data collection, data analyses, writing).
 Supervisors are more aware of the time, effort, and resources it takes to complete these various stages and hence you should seek to establish an agreed timeline with your supervisor for completing these stages.
 - Problems that may arise in the course of the project (e.g., time taken for ethics review, purchase of research materials, difficulty in obtaining certain participant samples, booking of labs). Your supervisor should be able to advise you on the typical timelines for tackling standard procedures (i.e., ethics review), and guide you in solving common problems (i.e., recruitment and booking lab spaces). Unexpected issues, however, can always arise and you might need to be flexible to resolve unexpected delays and problems. Working out contingency plans with your supervisor in advance of problems will help ensure that you complete the project on time.
 - How and when your supervisor will provide feedback on your draft thesis. Supervisors are obliged to read at least one draft of your entire thesis, *excluding the discussion*. Some supervisors

prefer to read the entire draft in one go, others will be happier to see sections delivered over a longer period of time, still others will be happy with a combination of submissions. Your final grade depends to a large extent on the quality of your write-up, and so your supervisor's comments on your draft are important. Late submission of drafts will mean that your supervisor will be unable to provide as much feedback as they may want to. You are also being assessed based on your conduct, including your ability to meet deadlines and work independently. Submission of late drafts with unreasonable demands for immediate feedback, or submission of multiple drafts with the expectation of repeated feedback, could mean that your supervisor will negatively assess your conduct, your ability to work independently, or both.

If you have any problems or concerns regarding your working relationship with your supervisor, please contact the Honours Thesis Coordinator, Dr Lee Li Neng (psylln@nus.edu.sg), for advice. In the event that Dr Lee is your supervisor you should contact the Department Head, A/P Winston Goh (psyhead@nus.edu.sg), for advice.

- 4.3.5 Take note of the final date for changes to your thesis title and be sure to submit your Thesis Title online form before or on that date.
- 4.4 Ethics
 - 4.4.1 Psychologists are bound by professional obligations to not perform procedures that can harm their subjects. Harm is not limited to physical harm but also includes financial harms (i.e., encountered when taking time off work) and social harms (i.e., reduced perception of expertise or competence). Broadly, psychologists strive to treat their research subjects with dignity. Treating subjects with dignity means not allowing a participant to be demeaned, belittled or otherwise unfairly treated; not discriminating based on age, sex, disability, education, ethnicity, gender, language, national origin, religion, sexual orientation, marital or family situation and socioeconomic status unless for clearly articulated scientific reasons; not using tricks, spin or unreasonable marketing practices to keep participants involved in a study they would otherwise avoid; and not performing research with the deliberate intent of demeaning any section of society.

Students are recommended to consult the following for further details of the typical ethical standards that psychologists subscribe to:

https://singaporepsychologicalsociety.org/sps-code-of-ethics/

In addition to the professional standards psychologists impose on their own activity, Singapore law, especially the Human Biomedical Research Act (HBRA), also provides a regulatory framework that impacts some psychology research practices. The full text of the HBRA can be found here:

https://sso.agc.gov.sg/Act/HBRA2015

Broadly speaking, students completing their Honours Thesis can best ensure that they are compliant with the guiding principles of psychological research and Singapore law by submitting their procedures for ethical review before any data collection begins. That approach, however, is complicated by the following considerations:

- The NUS Internal Review Board (IRB) does not construe pilot studies as research and will return pilot applications as not requiring review. Broadly, the Psychology Department does not advise any student to begin any subject testing of any kind without ethical review. The Psychology Departmental Ethics Review Committee (DERC) can review pilot procedures and full research procedures. The Psychology Department recommends that pilot procedures be reviewed by the DERC, but given that the IRB does not mandate such review, neither will the Psychology Department. Pilot testing of procedures to check face validity, ensure timing and so on can proceed without committee approval. Students that abuse this privilege, however, risk failing their Honours Thesis outright and may face other disciplinary procedures. Students are also warned that if they are accused of abuse then their defence may be compromised by the lack of ethical approval.
- The DERC is not able to provide review of research that forms part of an ongoing IRB approved study. In those cases it is typical that the Honours Thesis student is added as a Co-PI to the IRB approval.
- The DERC is not able to review applications that pose more than a "minimal risk" to research subjects. Minimal risk is not an entirely straightforward concept and you should consult the ethics documents (i.e., the BPS document linked above) for further details. Broadly speaking, if the research exposes the subject to

risks that do not exceed what would be encountered in everyday life then the project is "minimal risk".

- The DERC is not able to review applications that are biomedical and which fall under the remit of the HBRA. The precise definition of "biomedical" is also not straightforward but, broadly, the IRB are defining biomedical as meaning any study involving efforts to diagnose or alleviate a medical disorder, involving any therapeutic test or intervention, involving measures of endurance, or involving any identifiable health information or biological material. That list may not be exhaustive and is subject to change. Students and faculty are advised to review the HBRA and the IRB interpretation, and consider whether their research is HBRA compatible.
- The DERC typically reviews applications within two weeks and often more quickly but, occasionally, less quickly. The IRB typically reviews applications within 4-8 weeks but that is often fronted by administrative checks that can also take several weeks. Students and supervisors should aim to submit ethical applications in a timely manner to avoid undue delays in the start of their data collection.
- 4.4.2 Many psychology research procedures involve deception. Psychologists use deception because many psychological processes are modifiable if participants are aware of what is being studied. The use of deception, however, is broadly discouraged by the Psychology Department for two reasons. First, the HBRA criminalises deception in consent, which is punishable by a fine up to \$100,000, or up to ten years imprisonment, or both. A researcher may defend themselves against prosecution by proving all of the following:

i) the deception or misrepresentation was a necessary requirement of the research

ii) the possibility of the deception or misrepresentation was disclosed to the research subject

iii) the research was conducted in accordance with the research proposal approved by the reviewing authority

Second, most of the research subjects in Singapore are taken from the research participation pool. Recent surveys of that pool have revealed that over 80% of the respondents do not believe that studies involving the use of a partner actually involve a partner; do not believe the report of another person's experience is true; do not believe that the outcome of random events is truly random; and so

on. Students are advised to consider whether the use of deception is likely to be successful given the skepticism of the research pool.

4.4.3 You will not be allowed access to the research participation pool until the IRB or DERC has cleared your proposal. You must attach a copy of your ethics approval when you submit your thesis for examination.

4.5 Plagiarism

Plagiarism will be severely penalized as per NUS guidelines. Most plagiarism is now detected electronically where your written material is compared to virtually all published books, papers, blogs, articles, and all written online material. If you plagiarise then you should expect to be caught and should not presume that any benefit of the doubt will be given.

Difficulties can arise when a thesis involves standard methods or procedures that are often written in a standard format. In such cases, you must ensure that it is clear to the reader that you are describing standard methods or procedures in standard language, and you must cite your sources. It is also critical to consult your supervisor for advice in these matters. Information about plagiarism and the university's plagiarism policies may be obtained from the e-course available here: <u>https://libguides.nus.edu.sg/new2nus/acadintegrity</u>

4.6 Data Fraud

Data fraud, which means the direct fabrication of data or manipulation of the data in a deliberate effort to create a misleading account of the underlying findings, is a very serious offence. Cases of data fraud have emerged over the past decade that have seriously damaged the reputation of science in general and psychology in particular (see, for example, <u>this report</u> in the *New Scientist*).

You will be required to share your raw data with your supervisor and your data will be assessed for evidence of fraud. Any student who is discovered to have deliberately fabricated or manipulated their data in an effort to mislead their supervisor or examiners is likely to fail the Honours Thesis outright and may face further sanction.

4.7 Format

4.7.1 In writing your thesis, the style of the latest edition of the Publication Manual of the American Psychological Association should be adhered to. The exception is that figures and tables should be sensibly integrated into the text (placing each table and figure on a separate page is one option, but that is not required) and not at the end of the thesis.

Write the thesis as if you are writing a paper to be submitted to a good journal. You should consult your supervisor and also follow the style of papers published by the American Psychological Association (e.g., *JEP:HPP, JPSP*), the Psychonomics Society (e.g., *Memory & Cognition, Attention, Perception & Psychophysics*), or the American Psychological Society (e.g., *Psychological Science*). Theses written by previous Honours students, stored on the NUS institutional repository (<u>https://scholarbank.nus.edu.sg/</u>), may also be consulted.

The word limit for the thesis, excluding all appendices and references, is 8,000 words. The word count includes everything within the main body of the document (abstract through to discussion), and as stated, excludes references and appendices. This includes tables and figures if they are in the main body of the thesis. Anything before the abstract also does not count towards the word limit. Note that the word limit is a *limit*, it is not a *target*. A thesis can include substantially fewer words than 8,000 words will often be better than a longer thesis. Marks will be deducted for exceeding the word limit at the rate of 5 marks for every 100 words, or part thereof, over the limit.

4.7.2 The thesis submission is now fully electronic. Your thesis should be converted to <u>a single PDF file</u> (not exceeding 6MB) and submitted through the Honours Thesis course on Canvas.

The submission process typically opens on the Monday prior to the Friday deadline, and will close at noon on the deadline day. Detailed instructions and a reminder of the deadline will be emailed to you about a week prior to the submission process opening.

You may create a bound, hard copy, of your thesis for your supervisor to keep if you wish to. There is no requirement to do so.

4.8 Marking

- 4.8.1 Marks will be deducted for late submissions at a rate of 10 marks per day.
- 4.8.2 A copy of ethics approval and any approved waiver of primary data collection must be included as an appendix. Note that if you are working with previously collected and anonymised data then you may receive an IRB waiver indicating that ethics is not necessary. You

do, however, need to apply for the waiver and you should include a copy of the approved waiver as an appendix.

- 4.8.3 Your supervisor and another internal examiner will mark your thesis. They will each submit comments on your thesis. Comments will be made available after the official results for the semester are released. You will receive an email notification indicating how to obtain the reports.
- 4.8.4 Markers mark the Honours Thesis solely on the basis of the final product (i.e., the thesis that is submitted). Supervisors, in particular, will avoid being influenced by extraneous considerations, such as the amount of effort the Honours Thesis necessitated, independence (or lack thereof) shown by the student, and other supervision-related student attributes (such as punctuality and diligence). This is to ensure that marking is fair and consistent.

5. Supervisors and Topics for PL4401HM and PL4660HM

The list of staff research interests to guide your choice of supervisor, as well as staff contact information, is available at: https://fass.nus.edu.sg/psy/faculty/

As detailed in section 4.3.1, however, obtaining a supervisor is an involved process and the Honours Thesis is not an assignment that is given to you, it must be earned. If you wish to complete an Honours Thesis then developing a good working relationship with potential supervisors is something you should begin working on as soon as possible, typically more than a year before your Honours project begins.

6. Forms and Resources

Various departmental forms and information can be found through these webpages:

- 6.1 Submission Dates and Add/Drop Timeline <u>https://fass.nus.edu.sg/psy/forms-and-resources/</u> > Level 4000 (Honours) Course Resources > PL4401/PL4401HM - Submission Dates and Add/Drop Timeline
- 6.2 Department Thesis Support Fund https://fass.nus.edu.sg/psy/student-research-funding/

- 6.3 Forms for DERC application <u>https://fass.nus.edu.sg/psy/ethics-review-of-projects/</u>
- 6.4 NUS Institutional Review Board (NUS-IRB) http://www.nus.edu.sg/irb/