SOMS3001

Research Internship

Course Outline

Terms 2 & 3, 2022

School of Medical Sciences

Faculty of Medicine & Health

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1. Staff

Position	Name	Email	Consultation times and locations	Contact Details
Course Convenor	Prof Patsie Polly	patsie.polly@unsw.edu.au	Room 420, Level 4, Wallace Wurth EAST Building or via MS Teams Consultation time: Wednesday 4-5pm	(02) 9385 2924
Course Co-convenor	Dr Matthew Nguyen	matthew.nguyen3@unsw.edu.au		
Lecturer	Prof Patsie Polly	patsie.polly@unsw.edu.au	Room 420, Level 4, Wallace Wurth EAST Building or via MS Teams Consultation time: Wednesday 4-5pm	(02) 9385 2924

2. Course information

Units of credit: 6UOC

Pre-requisite(s): WAM above 75

Note: Enrolment in this course is by invitation and subject to availability of places: interested students should contact a suitable supervisor and the course convenor, Prof. Patsie Polly in SoMS. WAM requirement 75+.

Teaching times and locations: Timetable - 2022/SOMS3001

2.1 Course summary

The School of Medical Sciences - SOMS3001 – course is largely based on a short theoretical or experimental research project, supervised by a member of academic staff. The internship may encompass project planning, literature review, project development, fieldwork, experimental work, statistical analyses and oral and written reporting. Internships may also involve 'placements' outside UNSW, in the form of externally funded research programs, industrial placements or other programs either during usual session or in the session breaks. In these cases, students will require an academic member of staff to supervise the internship. Workshops in academic skills development are also offered as part of SOMS3001.

2.2 Course aims

The main aim of the course is to introduce undergraduate students to research in the biomedical sciences. Students will undertake a supervised research project that places emphasis on advanced disciplinary knowledge, the use of specialised techniques relevant to their chosen research area, critical thinking and scientific communication. Students gain experience in semi-independent research activity, scientific writing and oral presentation. Academic skills development for students is supported by workshops.

2.3 Course learning outcomes (CLO)

At the successful completion of this course you (the student) should be able to:

1. Describe and critically evaluate scientific literature that informs their research topic
2. Demonstrate practical skills in research, including attempting techniques directly related to their specific research topic and accurate recording of experimental data
3. Critically evaluate research data, integrate it into the wider field and communicate findings effectively in both oral and written formats

2.4 Relationship between course learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Related Tasks & Assessment	
CLO 1	Describe and critically evaluate scientific literature that informs their research topic	Journal Club Presentation Project Proposal Research Report	30% 20% 50%
CLO 2	Demonstrate practical skills in research, including attempting techniques directly related to their specific research topic and accurate recording of experimental data	Research Report	50%
CLO 3	Critically evaluate research data, integrate it into the wider field and communicate findings effectively in both oral and written formats	Journal Club Presentation Project Proposal Research Report	30% 20% 50%

3. Strategies and approaches to learning

3.1 Learning and teaching activities

The learning and teaching philosophy underpinning this course is centred on students taking on the role of a researcher, under close supervision. The student serves as an intern or, more appropriately, an apprentice. In doing so, they develop advanced disciplinary knowledge, the use of specialised techniques relevant to their chosen research area, critical thinking, evaluation and synthesis of information in addition to scientific research communication in the oral and written forms. The principal form of teaching is based on research supervision and direction by specialist researchers within the Faculties of Science or Medicine. The technical knowledge for this course, in the form of techniques, protocols, technical tips and materials, is provided by each laboratory and supervisor. The scientific knowledge is gathered independently, using Web-based and other resources. It is up to the student to take major responsibility for their own learning and completion of tasks within the course. SOMS3001 engages students in research thinking and practice and therefore research-integrated learning by working on research projects supervised by an academic within research teams.

3.2 Expectations of students

Students are reminded that UNSW recommends that a 6 units-of-credit course should include 4 hours of class contact hours (per term) and 10 hours of laboratory/project contact hours/week. You are expected to take an additional 5-10 hours /week of non-class contact hours to complete assessments, readings and the journal club presentation preparation. Course-specific expectations of students, include:

- a good level of engagement during class and outside of class – in your research team
- attendance at lectures and workshops/seminars, labs, or technical workshops
- online component requirement
- to follow policy and protocols governing email, social networks and discussion forums that include professional behaviours

3.3 Guidelines for Supervision

The primary supervisor should be a SoMS Academic member of staff.

3.4 Guidelines for Examination

SOMS3001 GRADES

Satisfactory/Unsatisfactory

4. Course schedule and structure

This course consists of 4 hours of class contact hours (per term) and 10 hours of laboratory/project contact hours/week. You are expected to take an additional 5-10 hours /week of non-class contact hours to complete assessments, readings and journal club presentation preparation. The hours are dependent on the nature of the research activity.

Week [Date/Session]	Topic [Module]	Activity [Learning opportunity]	Related CLO
Week 1	**Orientation to SOMS3001 Research Internship**	**Course Overview** Lecture: outlining the **course** expectations, requirements, and assessment tasks	1,2,3
Week 2	**Journal Club Presentation Skills Workshop**	Skills Workshop: outlining the **Journal Club Presentation** assessment task expectations, requirements	1,2,3
Week 3		Continue with laboratory/project activities	
Week 4	**Project Proposal** **Skills Workshop**	Skills Workshop: outlining the **Project Proposal** assessment task expectations, requirements	1,2,3
Week 5		Continue with laboratory/project activities	
Week 7		Continue with laboratory/project activities	
Week 8	**Research Report** **Skills Workshop**	Skills Workshop: outlining the **Research Report** assessment task expectations, requirements	1,2,3
Week 9		Continue with laboratory/project activities	
Week 10		Continue with laboratory/project activities	

5. Assessment

5.1 Assessment tasks

Assessment task	Length	Weight	Mark	Due date and time
Assessment 1: **Journal Club Presentation**	20 mins in duration: 15 mins presentation, 5 mins question time	30%	Total 30	Week 3
Assessment 2: **Project Proposal**	**Length:** 500 words +/- 10% **Copies:** One soft copy must be submitted via Turnitin© via Moodle.	20%	Total 20	Week 4
Assessment 3: **Research Report**	**Length**: 2,000 words +/- 10% **Copies:** One soft copy must be submitted via Turnitin© via Moodle.	50%	Total 50	Week 10

Further information
UNSW grading system: https://student.unsw.edu.au/grades
UNSW assessment policy: https://student.unsw.edu.au/assessment

Journal Club Presentation 30%

Description: The Journal Club Presentation is of 20 minutes duration, with 15 minutes for presentation and 5 minutes for questions. The presentation should describe and critically evaluate three (3) primary peer reviewed scientific journal articles most directly relevant to the project being undertaken. The key experiments and methods need to be identified, and the relevant background and rationale described.

Evaluation of the results and integration of key findings across these three (3) articles should be presented and connected to your Internship Project, reaching a conclusion as to what gaps your project hopes to address. The Journal Club Presentation should be critical, highlighting limitations of the literature and/or areas of controversy.

The seminar should have clear and logical flow, good pace (i.e., neither hurried nor laboured) and use good quality visual aids. The student should demonstrate understanding of the three (3) papers during question time by giving appropriate answers.

Feedback Process: Assessment and feedback are based on a rubric aligned with that used for Honours in SoMS. Criteria within the rubric address the following: Background, Hypotheses, Aims, Methods, Project Plan, Rationale and Significance, Presentation Skills and Questions. The seminar will be marked, and feedback provided by the supervisor and guest academics and/or research group members.

Learning Outcomes Assessed: Describe, critically evaluate and reference three (3) primary scientific articles that informs their research topic. Critically assess research data, integrate it into the wider field, and effectively communicate the findings in oral format. This task addresses learning outcomes 1 and 3 (see page 4).

Date: Week 3

Venue: TBA (see Moodle)

Length: 20 minutes in duration. 15 mins presentation, 5 minutes question time

Feedback Process:

- one round of review from supervisor prior to presentation day – ideally by the end of Week 2
- examiner and convener feedback – ideally by the end of Week 3, in time for students to consider for the project proposal due in Week 4

Project Proposal **20%**

Description: The project proposal should be 500 words or 1 page (12-point font and single spaced) and should give a detailed project plan, rationale, and significance. A brief background project context incorporating relevant published scientific literature to support the project plan, rationale, significance and methods should be given.

The hypothesis, aims and integration of the methods to be used should be given. It should be adequately referenced with recent and appropriate studies and have clear and logical flow. The word count for the project proposal excludes non-text elements such as diagrams and tables, which can be used. References are not included in the word count. Penalties will apply for an inability to observe the word limit. The general and referencing style should follow that of the SOMS3001 convention.

Feedback Process: Assessment and feedback are based on a rubric aligned with that used for Honours in SoMS. Criteria within the rubric address the following: Background Project Context, Project Rationale, Hypotheses, Aims, Integration of Methods, References and Presentation. The project proposal will be marked and feedback provided by the supervisor and examiner.

Learning Outcomes Assessed: Describe, critically evaluate and integrate relevant research findings. Referencing published scientific literature that informs their research topic. This task addresses learning outcomes 1 and 3 (see page 4).

Due: Week 4

Length: 500 words +/- 10%

Copies: One soft copy must be submitted via Turnitin© via Moodle.

Feedback Process:

- one round of review from supervisor prior to submission day – ideally by beginning of Week 4
- examiner and convener feedback - ideally by 10 working days after submission of the Project Proposal

Research Report **50%**

Description: The general format of the research report is aligned with the guidelines for the project manuscript assessment item submitted for Honours in the School of Medical Sciences. It should contain an abstract, acknowledgements, brief scientific background with aims and hypotheses, materials and methods, results, discussion and references sections. The word count should be 2,000 words. This word limit excludes the abstract, acknowledgements and references sections, as well as supplementary data (if present), tables, figures and legends used in the text. Penalties will apply for an inability to observe the word limit. The abstract should succinctly and accurately summarise the aims and outcomes of the project. The acknowledgments are to be used to indicate how much of the research was performed independently or cooperatively. The brief introduction, aims and hypothesis section should define the problem being examined and place it in the context of published work in the area without being a complete review of the literature. It should identify the limitations of the literature and areas of controversy and give clear and valid aims and hypotheses. The methods should be appropriate and valid for the stated aims and clearly described and fully referenced. The results should reflect the body of laboratory work including controls and analysis of data using appropriate statistical tests (if applicable). Material needed for a complete understanding or evaluation of the work, but which does not fit well in the manuscript format, should be included as supplementary data. Presentation of the results should be clear and logical and should communicated appropriately (using figures and tables as well as text). The discussion should be relevant to the scientific background, methods, and results sections, logical in presentation and scientific content, show critical/creative analysis, place the findings of the study in the context of past studies and have suggestions for future studies. Please note that all work which is integral to the manuscript but was not performed by the student (i.e., undertaken by another member of the research group) is to be clearly disclosed in the Methods and/or Results sections of the report, where appropriate. This work may then be referred to in the Discussion and be assessed in the context of the methods and results attained by the student. The referencing style of the project manuscript should align with the requirements of the literature review.

Feedback Process: Assessment and feedback are based on a rubric aligned with that used for Honours in SOMS. Criteria within the rubric address the following: Scientific background, Hypothesis, Aims, Materials and Methods, Results, Discussion, References and Overall Presentation. The report will be marked and feedback provided by the supervisor and examiner.

Learning Outcomes Assessed: Describe, critically evaluate and reference a body of scientific literature that informs their research topic and findings.

Critically assess their research data, integrate it into the wider field, and communicate effectively the findings in written format. This task addresses learning outcomes 1, 2 and 3 (see page 4).

Due: Week 10

Length: 2,000 words +/- 10%

Copies: One soft copy must be submitted via Turnitin© via Moodle.

Feedback Process:

- one round of review from supervisor prior to submission day – ideally by end of Week 8
- examiner and convener feedback - ideally by 10 days after submission of the Research Report

ePortfolio and Reflective Practice

Reflective practice is an important aspect to developing critical thinking and evaluation of outcomes in medical research. Students have the option to engage in this practice and can reflect on their research experience within their ePortfolios/reflective blogs.

Students should also be aware that research data discussions should be kept within lab meetings and for presentation as part of course requirements via Moodle or within the scheduled assessment tasks. Therefore, due to the competitive nature of medical research communication, please be advised that any data should be kept confidential and not shared online. This is how research integrity is maintained.

NOTE: The ePortfolios/reflective blogs should be used as a reflective space, rather than discussing research content and any data or unpublished methods that may have been generated as part of your own research project or the laboratory you have trained in. Students should NOT upload research data or methods into any digital space or their ePortfolios/reflective blogs if they chose to keep a digital reflective space. Always set your ePortfolio or any digital workspaces to 'private' in order to avoid general visibility and retain confidentiality.

While this is recommended, this activity is **totally optional.** It is up to the individual student if they would like to engage with ePortfolio/reflective blogging.

Assessment of ePortfolio/reflective blogs will be based on the following criteria or elements: demonstration engagement with ePortfolio/reflective practice, building an awareness of skills, including subject/course related skills, professional development and related skills, transferrable skills, development of career awareness and skills for future employability or post-graduate programs, work experience, personal values, strengths, and weaknesses.

5.2 Assessment criteria and standards

5.2.1 School of Medical Sciences SOMS3001 Research Report - Instructions to Authors

(Adapted from the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, the British Journal of Pharmacology, the Journal of Anatomy, the Journal of Pathology and the Journal of Physiology)

Manuscripts must include: 1. Title Page, 2. Abstract, 3. Introduction, 4. Methods, 5. Results, 6. Discussion, 7. Acknowledgements, 8. List of references, 9 Tables, 10. Figures and 11. Supplementary Data (optional).

Title Page

Title: The title should contain no more than 150 characters (including spaces) and clearly indicate the subject matter of the paper.

Authors: The author's name in full and the name and addresses of the department(s) and institution(s) to which the work should be attributed.

Word Count: The word count excluding abstract, acknowledgments, references and figure legends should be listed.

Abbreviations: list all abbreviations used

Abstract

An abstract of up to 200 words should follow the title page. The abstract should provide the background for the study, experimental approach, major findings and conclusions. It should be understandable without reference to the rest of the paper. References may not be cited.

Introduction

The introduction should give a clear account of the background for the study, and the research objective or hypothesis tested should be stated. The introduction should be understandable to a non-specialist.

Methods

The methods must be described in sufficient detail to allow the experiments to be interpreted and repeated by an experienced investigator. Give references to established methods, provide references and brief descriptions for methods that have been published but are not well known; describe new or substantially modified methods. Identify the apparatus, drugs and chemicals used, give the manufacturer's name and address in parentheses after each item. Describe the statistical methods used and define all statistical terms, abbreviations, and symbols. Specify the computer software used. Where appropriate, describe your selection of the subjects (patients or laboratory animals, including controls), identify the age, sex, strain, number used and other important characteristics of the subjects.

Results

Present your results in logical sequence in the text, tables, graphs and illustrations. The description of the experimental results should be succinct, but in sufficient detail to allow the experiments to be analysed and interpreted by the reader. Where data is presented the mean results with standard errors, the number of observations, and statistical significance, should be given where appropriate. The rationale for performing the experiments may be briefly mentioned in the Results section, but conclusions or interpretation of results should not be presented. Do not repeat in the text all the data that is presented in the tables or graphs. Headed paragraphs maybe used to aid in the presentation of the results.

Please note that all work which is integral to the research report but was not performed by the SOMS3001 student (i.e., was undertaken by another member of the supervisor's and/or co-supervisor's research group) is to be clearly disclosed in the Methods, Results and/or Acknowledgments as appropriate.

Discussion

In the discussion explore possible mechanisms or explanations for the findings of your study, compare and contrast your results with those from other relevant studies, state the limitations of the study, and explore the implications of the findings for future research. Do not repeat in detail data or other material given in the Introduction or the Results sections. The main conclusions should be conveyed in the final paragraph.

Acknowledgements

The author should acknowledge those who have provided funds, reagents, technical help and scientific advice.

References

In the text, references to other work should take the form: (Bolton and Kitamura, 1983) or 'Bolton and Kitamura (1983) showed that…' When a paper written by two authors is cited, both names are given; for three or more authors, only the first name is given, followed by 'et al.' References to unpublished observations or personal communications should be mentioned in the text only, and not included in the list of references. Direct reference to original research sources should be used whenever possible.

The reference list at the end of the manuscript must be arranged alphabetically according to the surname of the first author. When the names of first authors are identical, the alphabetical order of the surnames of subsequent authors takes precedence over the year of publication. The authors' names are followed by the year of publication in brackets. If more than one paper by the same authors in one year is cited, a, b, c, etc. are placed after the year of publication, both in the text and in the list of references. All authors should be quoted for papers with up to seven authors; for papers with more than seven authors, the first six should be quoted followed by et al.

The format for references to papers and books, and to chapters in books, is as follows:

Lipp P, Egger M & Niggli E (2002). Spatial characteristics of sarcoplasmic reticulum Ca^{2+} release events triggered by L-type Ca^{2+} current and Na^{+} current in guinea-pig cardiac myocytes. *J Physiol* 542, 383-393.

Adrian ED (1932). *The Mechanism of Nervous Action.* Humphrey Milford, London.

Buchan AMJ, Bryant MG, Polak JM, Gregor M, Ghatei MA & Bloom SR (1981). Development of regulatory peptides in the human fetal intestine. In *Gut Hormones*, 2nd edn, ed. Bloom SR & Polak JM, pp. 119-124. Churchill Livingstone, Edinburgh.

For those articles published on online ahead of print, that have not been assigned full publication details the DOI (digital object identifier) should be used. See example below:

Lipp P, Egger M & Niggli E (2002). Spatial characteristics of sarcoplasmic reticulum Ca^{2+} release events triggered by L-type Ca^{2+} current and Na^{+} current in guinea-pig cardiac myocytes. *J Physiol*; DOI: 10.1113/jphysiol.2001.013382.

The format for an online article:

Provide the URL of the homepage where the online version of the article is available via search.

Poniewozik, J. (2015, November 17). When TV turns itself off. The New York Times. Retrieved from http://www.nytimes.com

Project for Excellence in Journalism. (2006). A day in the life of the media. The State of the News Media, 2006. Retrieved from http://www.stateofthemedia.org/2006/

Tables

Each table should be given on a separate page. Tables are numbered consecutively according to the order in which they have been first cited in the text. Tables should be numbered with Arabic numerals and the number should be followed by a brief descriptive title at the head of the table. Tables should be self-explanatory, with necessary descriptions provided in footnotes underneath the table. Give each column a short or abbreviated heading.

Figures and Legends

Figures should be numbered consecutively according to the order in which they have been first cited in the text. Figure legends can appear below the figure and/or on a separate page. Each figure should be given a title and a legend that explains the figures in sufficient detail that, whenever possible, they can be understood without reference to the text. All symbols and abbreviations should be explained within the legend. If a figure has been published, acknowledge the original source.

Supplementary Data

Material needed for an in-depth evaluation of the work, but which does not fit well in manuscript format, should be included as Supplementary Data. These data should only be included if they enhance the overall understanding of the research but should not be essential for the understanding of the manuscript.

Abbreviations, Units and Symbols

Use only standard abbreviations; the full term for which an abbreviation stands should precede its first use in the text. SI units and symbols should be used for physicochemical quantities. Gene names and loci should be in italics, and proteins should be in roman. Virus nomenclature (and acronyms) should follow the guidelines of the International Committee on the Taxonomy of Viruses (ICTV). Chemical nomenclature should follow the International Union of Pure and Applied Chemistry (IUPAC) definitive rules for nomenclature. Pharmacological units should follow the guidelines given in the British Journal of Pharmacology.

Formatting and Technical Instructions

Text should be Times New Roman, 12-point font, with 1.5 line-spacing throughout the manuscript. Margins should be 3 cm on the left-hand side, 2 cm on the right-hand, 2 cm at the top and 2 cm at the bottom. The manuscript should be no more than 2000 words excluding: the abstract, acknowledgements and references, tables, figures, legends, and supplementary data.

Journal Club Presentation (Mark out of 10 for each marking criteria)			
Criteria	**9** **Excellent**	**7** **Good**	**5** **Needs improvement**
Background, Hypotheses & Aims & Methods	• Very clear & concise description of background leading to the papers. Can be easily understood by a non-expert audience. Identifies and describes clearly hypotheses, aims, major methods	• Less well clearly defined background and/or difficult to understand. Some lapses in defining and describing hypotheses, aims and major methods	• Lacking sufficient background. Often hard to understand. Unclear what the hypotheses and aims were. Methods not clear or described
Results and Integration	• Identifies key results and describes them clearly • Links results across 3 papers well • Identifies how outcomes from each paper builds or adds to others	• Some key results glossed over • Some aspects of linking or descriptions unclear • Some integration of outcomes	• Insufficient results presented • Descriptions of results unclear • Results presented but poorly linked
Project Plan, Rationale and Significance	• Integrates how Internship project plan builds on or integrates with background literature presented • Rationale and significance of project clearly outlined • Specific and “Big picture” significance given	• Describes Internship project plans clearly • States significance and rationale of project • Specific or “Big picture” significance given	• Internship project plans unclear • Fails to describe why it’s important • Significance poorly described
Presentation: **Structure & Material** **Engagement**	• Display / layout enhances the presentation. • Figures clearly labelled. • Clear and logical structure throughout • Timing precise • Articulate and professional delivery. No errors • Well-paced and timing perfect. • Good body language and pitch style	• Display good, but sometimes distracting. • Figures copied from papers with labels unclear. • Mostly clear and logical structure • Timing within 2 mins • Occasional lapses in clarity and/or speed. • Some major lapses in body language	• Display too crowded or distracting. • Figures not always used and hard to follow • Disorganised in structure • Timing over 2 mins long or short • Some bits - poor clarity and pitch. • Major lapses in body language
Questions	• Demonstrated clear understanding of the papers. • Could link project to presented papers and their methods	• Good understanding of the papers. • Could link aspects of project to presented papers	• Responses didn’t demonstrate adequate understanding of the papers or how they link to the project
Overall Level (circle as appropriate)	10/10 > >> >> > >> >> > >> >> > >> >> > >> >> > >> >> > >>> > >>> > >4/10		
Feedback Comments			

Project Proposal			
Criteria	**9** **Excellent**	**7** **Good**	**5** **Needs improvement**
Background Project Context	Succinct yet focused Orientates project in the context of the literature. Cites 3-5 key references	Areas were not focused or relevant	Background seems less relevant to project Verbose or unclear.
Hypotheses & Aims	Clearly outlined Link to background. Link to plan and methods	Stated but aspects unclear Some links but could be improved.	No hypotheses or aims apparent.
Project Plan and Methods	Description of proposed experiment(s) is concise yet clear Methods concise and clear Analysis mentioned Methods link to plan.	Experiment(s) described but too ambitious or too minimal. Methods missing aspects Links between plan and method inconsistent.	Experiments poorly described. Feasibility weak Methods generally not clear or appropriate
Rationale and Significance	The rationale for doing the experiments relates to the background and aims Broader significance of potential outcomes clear and justified (not overstated). More focussed outcome of results identified.	Project rationale stated but unclear or not linked to background Big picture outcome overstated or absent. Impact in field a bit vague	Project rationale or outcomes not well articulated or unrealistic.
Presentation	No grammatical or spelling errors. Professional expression and style Length adheres to criteria Balance and length appropriate Citations free from errors	Some grammatical and spelling errors. Over or under length, poorly balanced Some citation errors	Frequent errors. Poor style and length Missed citations
Overall Level (circle as appropriate)	10/10 > >> >> > >> >> > >> >> > >> >> > >> >> > >> >> > >>> > >>> >4/10		
Feedback Comments			

Research Report			
Criteria	**9** **Excellent**	**7** **Good**	**3-5** **Needs improvement**
Introduction	• Concise and clear background • Integrates different sources • Hypotheses / aims stated and linked to literature. • Cites recent/classical relevant papers, 10-20	• Sources listed more than integrated • Hypotheses / aims stated but links to literature weaker. • Excessive or irrelevant citations	• Background descriptions unclear and parts not relevant • Hypotheses / aims unclear. • Insufficient citations
Materials & Methods	• Clear and detailed description of experiments and analysis (including statistics if relevant) • Clear identification of what was done by student and by others in the lab. • Written so procedures can be readily reproduced	• Good description of experiments and data analysis, with minor errors. • Some areas of methods unclear and/or difficult to reproduce	• Some major details in methods lacking. • Frequent errors in methods or lacking clarity. • Procedures can't be followed or reproduced
Results:	• Data and/or analysis presented clearly using Figures, graphs and tables as relevant • Graphs, tables, figures clearly and fully labelled • Minimal interpretation of results presented. • Reflect a suitable body of work • Demonstrate experience in at least one technique (be it wet-lab or dry-lab) and associated analysis • Controls and samples identified and presented clearly (at least n=1)	• Aspects of results or analysis unclear • Some poor examples of Figures, Tables, Graphs • Some aspects hard to follow • Lacking appropriate recognition of control or samples .	• Description of the experimental results lacks required detail and appropriate reference to figures and tables. • Results do not reflect a body of laboratory work that demonstrated experience in techniques used • Graphs, tables, Figures poorly presented • Insufficient controls and samples used (n <1). • Major errors or omissions in data analysis.
Discussion	• Insightful, clear and logical. • Results interpreted with reference to previous studies. • Significance of findings clear. • Critical analysis of strengths and limitations • Future directions identified and clearly justified.	• Clear and logical. • Some integration with literature but lacks depth • Significance of findings stated. • Some critical analysis but superficial in parts • Future directions identified	• Lacks clarity • Only minimal integration with literature • Significance of findings unclear or not justified. • Lacks critical analysis of approach • Future directions vague
Overall Presentation	• No grammatical or spelling errors • Professional expression and style used consistently. • All figures accurate, focussed and informative • Word count 2000±200	• Some grammatical or spelling errors • Professional expression / style occasionally. • Some errors in figures and/or irrelevant • Word count > +/- 250	• Frequent grammatical or spelling errors • Poor expression and style throughout. • Frequent errors in figures or not clear • Word count > +/- 500
References	• Good spread of primary articles and key reviews • 20-30 articles cited • Many articles from recent or seminal publications. • Citation style correct and consistent • Reference list completely accurate with no errors	• Excessive use of reviews or selected papers • 20-30 articles cited • Most articles from recent or seminal publications. • Occasional errors in citation style or reference list	• Too few articles • Excessive articles cited • Insufficient use of seminal publications. • Frequent errors in citation style or reference list
Overall Level (circle as appropriate)	10/10 > >> >> > >> >> > >> >> > >> >> > >> >> > >> >> > >>> > >>> >4/10		
Feedback Comments			

5.3 Submission of assessment tasks

Late Submission

UNSW has standard late submission penalties as outlined in the UNSW Assessment Implementation Procedure, with no permitted variation. All late assignments (unless extension or exemption previously agreed) will be penalised by 5% of the maximum mark per day (including Saturday, Sunday and public holidays). For example, if an assessment task is worth 30 marks, then 1.5 marks will be lost per day (5% of 30) for each day it is late. So, if the grade earnt is 24/30 and the task is two days late the student receives a grade of 24 – 3 marks = 21 marks.

Late submission is capped at 5 days (120 hours). This means that a student cannot submit an assessment more than 5 days (120 hours) after the due date for that assessment.

Special Consideration

If you experience a short-term event beyond your control (exceptional circumstances) that impacts your performance in a particular assessment task, you can apply for Special Considerations.

You must apply for Special Consideration **before** the start of your exam or due date for your assessment, except where your circumstances of illness or misadventure stop you from doing so.

If your circumstances stop you from applying before your exam or assessment due date, you must **apply within 3 working days** of the assessment, or the period covered by your supporting documentation.

More information can be found on the Special Consideration website.

5.4. Feedback on assessment

Feedback to students for each assessment task will be provided as outlined from pages 7-9.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Please refer to section 5.2.1 School of Medical Sciences SOMS3001 Research Report - Instructions to Authors

Further information about referencing styles can be located at
https://student.unsw.edu.au/referencing

***Academic integrity** is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage.*[1] *At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.*

*Further information about academic integrity and **plagiarism** can be located at:*

[1] International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

- *The Current Students site* https://student.unsw.edu.au/plagiarism*, and*
- *The ELISE training site* https://subjectguides.library.unsw.edu.au/elise

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

7. Administrative matters

Student enquiries should be submitted via student portal https://portal.insight.unsw.edu.au/web-forms/

8. Additional support for students

- The Current Students Gateway: https://student.unsw.edu.au/
- Academic Skills and Support: https://student.unsw.edu.au/academic-skills
- *Student Wellbeing and Health* https://www.student.unsw.edu.au/wellbeing
- UNSW IT Service Centre: https://www.myit.unsw.edu.au/services/students
- *UNSW Student Life Hub:* https://student.unsw.edu.au/hub#main-content
- *Student Support and Development:* https://student.unsw.edu.au/support
- *IT, eLearning and Apps:* https://student.unsw.edu.au/elearning
- *Student Support and Success Advisors:* https://student.unsw.edu.au/advisors
- *Equitable Learning Services (Formerly Disability Support Unit):* https://student.unsw.edu.au/els
- *Transitioning to Online Learning* https://www.covid19studyonline.unsw.edu.au/
- *Guide to Online Study* https://student.unsw.edu.au/online-study

9. Students Rights and Responsibilities

See https://student.unsw.edu.au/policy

10. Academic Honesty

The School of Medical Sciences will not tolerate plagiarism in submitted written work. The University regards this as academic misconduct and imposes severe penalties. Evidence of plagiarism in submitted assignments, etc. will be thoroughly investigated and may be penalized by the award of a score of zero for the assessable work. Flagrant plagiarism will be directly referred to the Division of the Registrar for disciplinary action under UNSW rules.

See student.unsw.edu.au/plagiarism

11. Health and Safety

UNSW aims to provide a physically safe, healthy and secure learning and working environments for all students. Your supervisors in this course are responsible for your safety during dedicated research time. In return you are expected to behave with respect toward them and your fellow students; you are expected to follow instructions from your supervisors and complete the necessary training. If you are concerned about your health or safety during the course, please tell your supervisor immediately. You may also access the NSW Work and Heath Safety (WHS) regulation 2017 and NSW Work and Health Safety Act 2011 for more information.

It is important that you familiarise yourself with the risks and hazards involved with your research work and the control measures in place to prevent harm to you and others. At the start of your SOMS3001 research internship you must complete mandatory H&S courses and identify with your supervisor other H&S courses or training you need to undertake. Before commencing specific laboratory tasks, you should familiarise yourself with any relevant risk assessments and safe work procedures. You should document your completion of these H&S activities. You should discuss specific training and other requirements with your supervisor.

Information and contacts regarding H&S training and requirements can be found at:

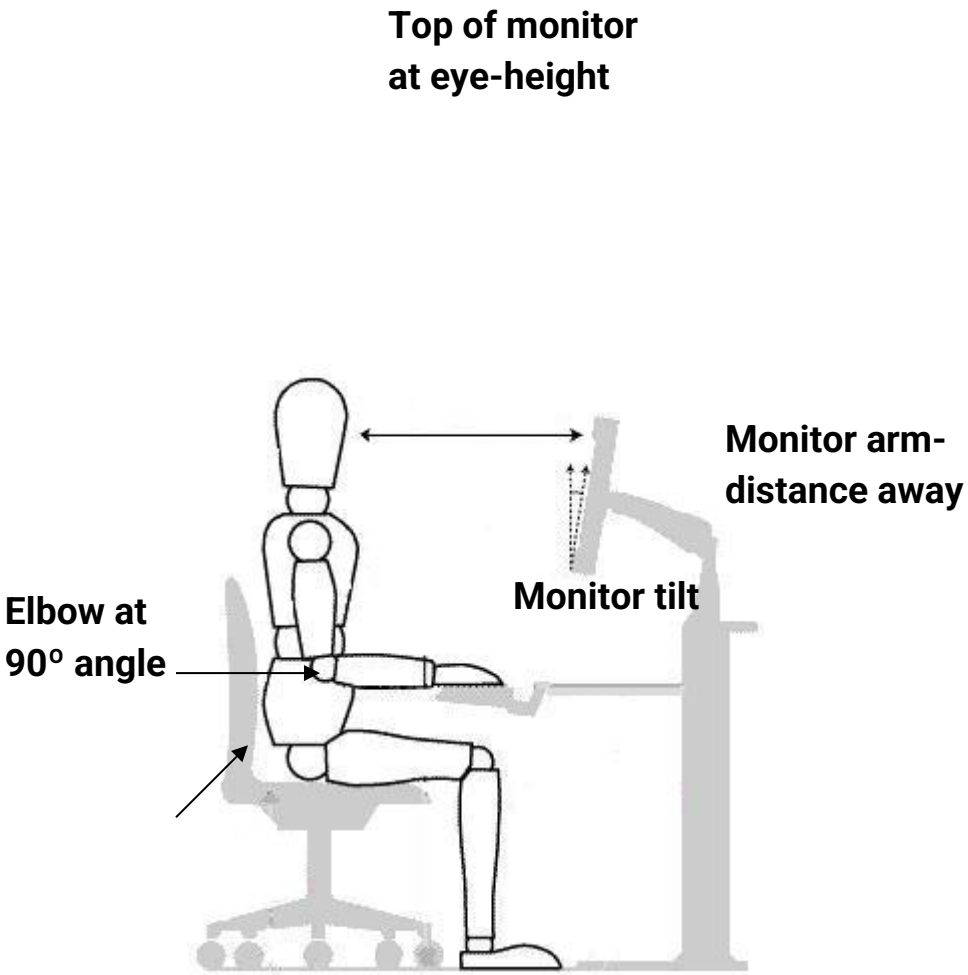
http://medicalsciences.med.unsw.edu.au/staff/health-safety/induction-and-training

Below is a list of the mandatory and other common H&S courses that students taking part in research activities within SOMS undertake training. Students need to enrol into the mandatory courses following course enrolment.

- OHS awareness training (online, mandatory for all students)
- Ergonomics training (online, mandatory for all students)
- Green lab (online, mandatory for all students undertaking laboratory work)
- Lab safety awareness and hazardous substances for students (online, mandatory for all students undertaking laboratory work)
- PC2 Biosafety training (mandatory for all students who will be working in a PC2 laboratory, enrol via myUNSW)
- Ionising radiation training (mandatory for all students who will be working with radiation, enrol via myUNSW)
- Others – Animal Handling, S8 drugs, GMOs – as required (discuss with supervisor)

Medicine Teaching Laboratory Student Risk Assessment	UNSW SYDNEY	Laboratories in Wallace Wurth, 2022

Workstation set-up



Personal Protective Equipment Required

All pots contain real human tissue that has been generously donated to medical science and **must be treated with appropriate respect and dignity.**

Specimens are preserved in Perspex and contain a range of preserving chemicals that may be harmful. Chemicals used include **formalin, pyridine, sodium dithionate**. A full list of chemicals and associated MSDS information is available in the H&S Station and on the SoMS website.

MANUAL HANDLING OF POTS

It is recommended that all students wash their hands thoroughly as they leave practical class Chemical residues may be present on pots.
Carry one pot at a time. Use two hands at ALL TIMES and support the base of pot.
Avoid rough handling and/or tilting of pots. This can cause leaking joints or tear tissue in specimen.
Limit the number of pots on a table at any one time.

SPILLS AND LEAKAGES

If a specimen is leaking or broken, do not attempt to wipe up the spillage. Clear the area and immediately inform the Museum Manager or a member of academic staff. A spill kit will then be used to absorb the chemicals.

Emergency Procedures

In the event of an alarm, follow the instructions of the demonstrator. The initial sound is advising you to prepare for evacuation and during this time start packing up your things. The second sound gives instruction to leave. The Wallace Wurth assembly point is in the lawn in front of the Chancellery. In the event of an injury inform the demonstrator. First aiders and contact details are on display by the lifts. There is a first aid kit in the laboratory.

Clean up and waste disposal

Not necessary in these practicals.
No open-toe shoes allowed

I have read and understand the safety requirements for this practical class, and I will observe these requirements.

Signature:……Date:……

Student Number:……..

Date for review: 13/2/2023

Science Teaching Laboratory Student Risk Assessment	UNSW SYDNEY	Laboratories in Wallace Wurth, 2022

Hazards		
Physical		
Sharp plastic	'Stabbing' wound of hand	• Use disposable gloves • Do not eat, drink or smoke in the teaching laboratory • Use disposable gloves
Biological	Inoculation/Irritant	
Antibody		
Chemical	Corrosive/Flammable	• Low concentrations of chemicals used • Use disposable gloves
Acrylamide	Irritant/neurotoxic	
Azide	Irritant	
...PBS	Mild Irritant	

Pipetting ergonomics

Pipetting is another work aspect that can cause aches and pains. Here are some handy hints:

- Adjust your chair or stool so that your elbow is at a 90° angle while pipetting.
- Adjust the height and position of sample holders, solution container, and waste receptacle so that they are all approximately the same.
- Try to work with your hands below shoulder height.
- Let go of the pipette from time to time and give the fingers/hand a break
- Do not twist or rotate your wrist while pipetting
- Use minimal pressure while pipetting
- Try to switch periodically between different types of work.

Personal Protective Equipment required

	 optional		 optional

For more information on preventing repetitive strain while pipetting: https://www.anachem.co.uk/Protect-Yourself-from-RSI

Emergency Procedures

In the event of an alarm sounding, stop the practical class and wait for confirmation to evacuate from demonstrators. Then wash your hands and pack up your bags.
Follow the instructions of the demonstrators regarding exits and assembly points.

Clean up and waste disposal

- Remove your gloves and dispose in the biowaste bins provided.
- Dispose of all pipette tips in the bin provided

Ethics Approval

This type of practical does not require ethics approval.

I have read and understand the safety requirements for this practical class, and I will observe these requirements.

Signature:.....Date:.....

Date for review: 13/2/2023