

Programme	Master of Science (Science)				
Name of Course/Module	Master's Seminar				
Course Code	SMMS5103				
Name(s) of academic staff					
Rationale for the inclusion of the course/module in the programme	To provide the experience of reviewing literature and reporting.				
Semester and Year offered	First Semester				
Total Student Learning Time (SLT) L = Lecture T = Tutorial P = Practical O= Others	Face to Face 15 hours				Total Guided and Independent Learning 120 hours
	L 0 hours	T 15 hours	P 0 hours	O 105 hours	- Reading textbook and journals (50) - Online discussion (15) - Completing Assignments (40)
Credit Value	3 Credits (120 hours of learning in a semester)				
Prerequisite (if any)	None.				
Learning outcomes	<p>Upon the completion of this course, the students should be able to:</p> <ul style="list-style-type: none"> • Discuss impacts of a selected research to society at large and related ethical issues; • Review scientific journal articles; • Write and present literature review for selected research objective; and • Explain the underlying theory or principles of the selected scientific study. 				
Transferable Skills: Skills and how they are developed and assessed, Project and practical experience and Internship	<p>Critical Thinking Argumentation and Rationalising Writing Presentation</p> <p>which are developed by requiring students to engage in assignments that involve:</p> <ol style="list-style-type: none"> 1. introduction of a research problem in science; 2. review of current research journal articles related to the identified research problem; 3. writing and presentation of literature review for a selected research objective; and 4. explanation of related theory or principles of the selected scientific study. <p>The application of the above skills will also be assessed as a whole upon completion of the actual research thesis.</p>				
Teaching-learning and assessment strategy	<p>Teaching-learning strategies include assignments, presentation and writing research proposal.</p> <p>The assessment based on the assignments and class presentation.</p>				

Table 3

Synopsis	In this course, students will be exposed to the issue of ethics in scientific research before they are exposed to resources in research. They are then expected to engage actively in searching for journal articles and learn to review selected articles. Students are also expected to improve their writing and presentation skills in presenting the literature review for a selected research objective. The final part of this course requires students to study and explain related theory or principles of the selected scientific study.	
Mode of Delivery Lecture, Tutorial, Workshop, Seminar, etc.	Seminars.	
Assessment Methods and Types	100% Assignment	
Mapping of the course/module to the Programme Aims	This course is designed to match the programme aim of developing a critical aspect of research skills involving review of recent literatures and related theory to support the objective of their research in science.	
Mapping of the course/module to the Programme Learning Outcomes	<p>This course is designed to match the following programme outcomes:</p> <ul style="list-style-type: none"> • explore, review and identify research objectives that contributes to development of knowledge and skills with a positive impact; • an in-depth literature review; supported by sound theoretical framework, and • write and present a thesis describing their research work. 	
Content outline of the course/module and the SLT per topic		
Course Structure	Topic	Learning Hours
Topic 1	Capturing Your Thoughts and Observations – Topic 2	15
Topic 2	Think-Plan-Write-Review – Topic 5	15
Topic 3	Illustrations in Writing – Topic 9 & 10	15
Topic 4	Finding Information – Topic 11	15
Topic 5	Critical Reading – Ridley	15
Topic 6	Critical Writing – Ridley	15
Topic 7	Thesis Writing – Topic 12 and 13	15
Topic 8	Presentation Skills – Topic 14	15
	Total	120
Main references supporting the course	Barrass, R. 2002. <i>Scientists Must Write: A Guide to Better Writing for Scientists, Engineering and Students</i> . Routledge. London	
Additional references supporting the course	Ridley, D. (2009). <i>The Literature Review: A Step-by-step Guide for Students</i> . London: Sage Publications Ltd.	
Other additional information	Journals in selected area of science	

Table 3

Programme	Master of Science (Engineering)				
Name of Course/Module	Master's Seminar				
Course Code	EMMS5103				
Name(s) of academic staff					
Rationale for the inclusion of the course/module in the programme	To provide the experience of reviewing literature and reporting.				
Semester and Year offered	First Semester				
Total Student Learning Time (SLT) L = Lecture T = Tutorial P = Practical O= Others	Face to Face 15 hours				Total Guided and Independent Learning 120 hours
	L 0 hours	T 15 hours	P 0 hours	O 105 hours	- Reading textbook and journals (50) - Online discussion (15) - Completing Assignments (40)
Credit Value	3 Credits (120 hours of learning in a semester)				
Prerequisite (if any)	None.				
Learning outcomes	<p>Upon the completion of this course, the students should be able to:</p> <ul style="list-style-type: none"> • Discuss impacts of a selected research to society at large and related ethical issues; • Review scientific journal articles; • Write and present literature review for selected research objective; and • Explain the underlying theory or principles of the selected scientific study. 				
Transferable Skills: Skills and how they are developed and assessed, Project and practical experience and Internship	<p>Critical Thinking Argumentation and Rationalising Writing Presentation</p> <p>which are developed by requiring students to engage in assignments that involve:</p> <ol style="list-style-type: none"> 5. introduction of a research problem in science; 6. review of current research journal articles related to the identified research problem; 7. writing and presentation of literature review for a selected research objective; and 8. explanation of related theory or principles of the selected scientific study. <p>The application of the above skills will also be assessed as a whole upon completion of the actual research thesis.</p>				
Teaching-learning and assessment strategy	<p>Teaching-learning strategies include assignments, presentation and writing research proposal.</p> <p>The assessment based on the assignments and class presentation.</p>				

Table 3

Synopsis	In this course, participants will identify the basic area of study for research. Participants will present the literature review, methodology, and theories relevant for the proposed research area. After each meeting with the coordinator/supervisor, participants will make the necessary amendments and improvements of the paper for subsequent meeting/seminars.	
Mode of Delivery Lecture, Tutorial, Workshop, Seminar, etc.	Seminars.	
Assessment Methods and Types	100% Assignment	
Mapping of the course/module to the Programme Aims	This course is designed to match the programme aim of developing a critical aspect of research skills involving review of recent literatures and related theory to support the objective of their research in science.	
Mapping of the course/module to the Programme Learning Outcomes	<p>This course is designed to match the following programme outcomes:</p> <ul style="list-style-type: none"> • explore, review and identify research objectives that contributes to development of knowledge and skills with a positive impact; • an in-depth literature review; supported by sound theoretical framework, and • write and present a thesis describing their research work. 	
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Topic 6	Critical Writing – Ridley	15
Topic 7	Thesis Writing – Topic 12 and 13	15
Topic 8	Presentation Skills – Topic 14	15
	Total	120
Main references supporting the course	Barrass, R. 2002. <i>Scientists Must Write: A Guide to Better Writing for Scientists, Engineering and Students</i> . Routledge. London	
Additional references supporting the course	Ridley, D. (2009). <i>The Literature Review: A Step-by-step Guide for Students</i> . London: Sage Publications Ltd.	
Other additional information	Journals in selected area of engineering	

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