

# FINAL YEAR PROJECT GUIDELINE

FACULTY OF EARTH SCIENCE EDITION 2016



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**Faculty of Earth Science** 

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# PREFACE

This document is prepared as a guideline for the writing of the Final Year Project Proposal and Project Report which will be conducted by the students in Semester 6 and Semester 7 for traditional programs and semester 7 and semester 8 for 3+1 programs. in fulfilment of the requirements for the Bachelor of Applied Science (Hons.). There are two types of final year project report writings to be covered in this guideline, namely project proposal and project report. Therefore, it is hoped that students and supervisors would give attention to and write according to this guideline. Please take note that the assessment of this course is not based merely upon the writing of the project paper. Other aspects relating to the student's commitment are also assessed by the supervisors.

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# CHAPTER 1

#### INTRODUCTION

#### 1.1 FINAL YEAR PROJECT GUIDELINE

The final year project (FYP) guideline is designed to guide the undergraduate student in conducting their final year research project before submitting to Faculty of Earth Science, Universiti Malaysia Kelantan (UMK). The FYP report is a partial requirement in awarding the Bachelor of Applied Science (Hons.). This guideline is intended to help student to produce a good research proposal and report writing within the standard and requirement which had been practiced by local universities.

The FYP is conducted in semester 6 (FYP I) and semester 7 (FYP II) for traditional programs and semester 7 (FYP I) and semester 8 (FYP II) for 3+1 programs. The students are expected to finish their research proposal and Chapter 1, 2 and 3 at the end of semester 6 for traditional programs and at the end of semester 7 for 3+1 programs. They must frequently meet their supervisors to discuss the research topics and clarify the problem statement, scope of research and past literature review.

In semester 7 for traditional programs and semester 8 for 3+1 programs, students will be focusing on experimental works, field works and data collection. Later, students should analyse the data obtained and prepare the final version of the project report. Finally, students need to present their findings to two examiners. This is to train the students in expounding statements of facts and defend such statement in front of audiences.

Towards the end of Final Year Project I, students should be able to:

- Apply the acquired knowledge and understanding for research purposes.
- Show a good effort and initiative in learning new knowledge.
- Identify the method used for research purposes and its preliminary results.
- Present theory, concept and research methodology in proposal presentation.

While for Final Year Project II, students should be able to:

- Carefully organize and conduct their research work based on research proposal that have been presented in the FYP I.
- Conduct research project with enthusiasm and full of determination.
- Explain the relevance of the data obtained in research with the theory and reference materials.
- Propose recommendations for any problem encountered in the research for future improvement.

The activities, duration, credit hours and mode of assessment in implementing FYP courses are as shown in Table 1.1.

Table 1.1 Activities of Final Year Project (FYP)

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Activities	Duration	Credit Hours	Mode of Assessment	Evaluator
	Final Ye	ear Projec	t I (FYP I)	
Writing research proposal			Proposal and presentation	Two examiners
Writing Chapter     1, 2 and 3	6 Months	onths 3	Evaluation     of Chapter     1, 2 and 3	Two     examiners     and main     supervisor
	Final Ye	ar Projec	t II (FYP II)	
Data analysis and result interpretation			Oral presentation	Two examiners
Final Report     writing (complete     chapters)	6 Months	3	Final report	Two     examiners     and main     supervisor

# 1.2 OVERALL PERFORMANCE

The grading system for FYP is as shown in the Table 1.2.

Table 1.2 Grading system for FYP

Mark	Grade	Description
90 – 100	A+	
80 – 89	А	
75 – 79	A-	
70 – 74	B+	
65 – 69	В	
60 – 64	B-	Pass
55 – 59	C+	
50 – 54	С	
45 – 49	C-	]
40 – 44	D	]
0 – 39	F	Fail

#### 1.2.1 Pass

- A report is passed if no substantive changes are required.
- A report is passed if it is acceptable in its present form or pending minor revisions.
- Changes in the form of corrections include:
  - a. Grammatical errors
  - b. Minor modifications to the thesis
  - c. Editorial revisions

#### 1.2.2 Fail

- A report is failed if it is unacceptable to the discipline even with substantive revisions.
- Fail to fulfil the supervisor-student meeting requirement.
- Fail to give own input for the project.
- Fail to perform all require presentations and report submissions (Table 1.1).

#### 1.3 PLAGIARISM

#### 1.3.1 Definition

The act of taking someone else's work or ideas and passing them off as one's own.

#### 1.3.2 Highlighted Issue

- Plagiarism is a serious academic offence and can result in penalties, including dismissal from the university.
- To avoid it, use quotations and paraphrases with proper referencing. When you are reading, keep careful notes of your sources, including all the bibliographic information that you need to write a full reference for the sources.

#### 1.3.3 Types of Plagiarism

- a. Word-by-word plagiarism copying exactly from someone else's text.
- b. Section-by-section plagiarism lifting phrases from someone else's text.
- c. Select-term plagiarism lifting a special term from a text not one's own.
- d. Paraphrasing using someone else's ideas as if they were one's own thoughts.
- e. Borrowing facts, statistics or illustrative material borrowing all listed information without acknowledging the author unless the information is common knowledge.

#### 1.3.4 Steps to Avoid Plagiarism

- a. Make notes while reading, keep careful notes of your sources, including all the bibliographic information that you need to write a full reference for the sources and include some terms that are used in the quoted source as they are technical terms.
- b. It is alright as long as you incorporated them within your own writing style.
- c. Acknowledge the author/reference gives credit to the original author whose idea, opinion or theory, any pieces of information that are not common knowledge (facts, statistics, graphs, drawings) you have used (it is known as documentation).

- d. Paraphrasing is an organized, systematic way of acknowledging sources of information, ideas, another person's actual spoken or written words and paraphrase of another person's spoken or written words within your own work.
- e. Paraphrasing means putting author's ideas or information into your own words. *Examples*:
  - Original: This has led to the conclusion that out of the US population at large, 90% watch television to excess (Wu, 1994).
  - <u>Paraphrased:</u> In contradiction to Suzuki's claim, Wu (1994) argues that 90% of Americans watch too much television.
  - (Avoid using Wu's exact words)
- f. Also with paraphrasing, it is easier to comment on the work you are referring to (eg. Here it is compared to Suzuki's).
- g. You should be careful to indicate which are your ideas and which are the author's by carefully use of references and by where and how you break sentences.

#### 1.3.5 Turnitin software

Turnitin is a coursework submission system, available that has main function of checking submitted work for plagiarism. The final similarity result should be below **20%**.

- a) Plagiarism Checking
- Turnitin compares submitted assignments to material held in the Turnitin database, allowing staff and students to check that their work is properly referenced. The software itself makes no decisions as to whether or not the work has been plagiarised, but highlights sections of text, and returns an overall percentage of material that has been found in other sources.
- Turnitin compares the assignment with current and archived web pages, a
  database of previously submitted student work, about 4000 electronic journal titles,
  and about 5000 copyright-free books.
- FYP supervisor can check that the matching work has been referenced fully and decide if work has been plagiarised. The option also exists to allow students to see their originality reports and to submit their work multiple times until the due date for the assignment, and if necessary take corrective action thus avoiding accidental plagiarism.
- Availability of electronic material on the internet has allowed uses of the material that couldn't have been envisaged when the majority of material was paper based.
- Allowing students to take an active part in discovering what academic honesty means will be more successful than a lone statement at the start of students' courses and modules that they must not use the materials of others and claim them to be their own.

#### 1.3.5.1 What Turnitin Can Do

- Quickly identify sources of plagiarised material.
- Encourage students to think about their referencing and citation skills.
- Help to prevent against accidental plagiarism (when used as part of the development of academic writing skills).
- Act as a deterrent against plagiarism.
- Work as a positive aid to marking by highlighting where students have referenced correctly and used the work of others well.

# CHAPTER 2

## **ROLES, RESPONSIBILITIES AND TIMELINES**

#### 2.1 RESPONSIBILITIES OF STUDENT

Student responsibilities are as listed below:

- a. Decide a research topic, preferably based on area of student's interest. Students are encouraged to propose a research topic to potential supervisor.
- b. Plan the work properly and prepare work schedule for one year with the guidance of the supervisor.
- c. Follow strictly the timeline to ensure the project can be completed within provided time frame.
- d. Students will be given a report card to keep record on academic discussion with supervisor.
- e. Ensure the supervisor to endorse the report card and the student has to submit it to the coordinator at the end of semester.
- f. Each student must meet his/her supervisor once a week so that the progress of their works can be monitored closely.
- g. Prepare and submit research proposal, Chapter 1, 2 and 3 and Final Report according to the timeline. Students are also required to prepare proposal and final report presentations.
- h. Students are encouraged to do their experimental and field work during semester break in order to avoid problem at the end of semester.
- Students are not allowed to obtain data from other agencies in any ways (email, call, message, face to face) either in hard copy or soft copy without the permission of supervisor.
- j. Ensure no grammatical errors and minimal plagiarism on the reports before submitting to respective supervisors and examiners.
- k. Make necessary correction after the presentation and before submitting the hard bind copy to the faculty. Submit the hard cover on or before the given deadline.
- I. Face certain penalties if unable to follow the FYP schedule accordingly.
- m. Student is considered fail if he/she fail to follow all the requirements of FYP.

#### 2.2 RESPONSIBILITIES OF SUPERVISOR

The faculty members who are going to supervise FYP students must at least graduate with Master Degree to qualify he/she to become a main supervisor. The role and responsibilities of supervisors are as listed below:

a. Submit sufficient project topics and scope of research to FYP Coordinator according to the specified schedule set by faculty. The scope of research must comply with undergraduate level.

- b. Explain the objectives and scope of project to the students and set regular meeting with them.
- c. Remind students on the issues of plagiarism and its consequences. Originality of the work and report should be stressed out at the beginning of semester.
- d. Guide, supervise, encourage, and motivate the student from commencing until the end of FYP. Supervisors are encouraged to build a good relationship with their students without any prejudice.
- e. Keep and endorse students' report card and ensure they follow the timeline closely.
- f. Guide students in preparing research proposal, chapter 1, 2, 3 and final report.
- g. Evaluate student's chapter 1, 2 and 3 based on criteria listed in Rubrics Form <u>UMK/FSB/FYP-R-B1-SV</u> (Appendix A) and final report based on criteria listed in Rubrics Form <u>UMK/FSB/FYP-R-C1-SV</u> (Appendix B)/Rubric Form <u>UMK/FSB/FYP-R-C2-SV</u> (Appendix C) and submit the evaluation forms to FYP Coordinator according to the timeline.
- h. Student is considered fail if he/she fail to follow all the requirements of FYP.
- i. Work closely with the laboratory staffs in purchasing the consumable items and using the lab's apparatus and equipment for field work.
- j. Consult FYP coordinator for any issues related to students under supervision.
- k. Write a letter of recommendation for student's application to extend the proposal or final report submission date (if applicable).

#### 2.3 RESPONSIBILITIES OF EXAMINER

Examiners are appointed by the FYP Coordinator according to their area of specialization. Their duties are:

- a. Evaluate student's proposal report and presentation based on criteria listed in Rubrics Form <u>UMK/FSB/FYP-R-A-EX</u> (Appendix D), Chapter 1, 2 and 3 Rubrics Form <u>UMK/FSB/FYP-R-B1-EX</u> (Appendix E) and final report based on criteria listed in Rubrics Form <u>UMK/FSB/FYP-R-C1-EX</u> (Appendix F)/<u>UMK/FSB/FYP-R-C2-EX</u> (Appendix G).
- b. Attend project presentation or find a representative if examiner is not available during the time of presentation.
- c. Instruct students to make corrections after their presentation.
- d. Submit all students' presentation marks after presentation to FYP Coordinator and report marks according to timeline.

**Note:** Action will be taken for examiners who are absent during student's presentation without a replacement.

#### 2.4 RESPONSIBILITIES OF FYP COORDINATOR

FYP coordinator is appointed by the Dean with the following responsibilities:

a. Acquire the student list according to the Bachelor of Applied Science program and distribute number of students to each supervisor.

- b. Collect research field and project titles from supervisors.
- c. Display the research field of potential supervisors for students to choose based on their area of interest.
- d. Collect list of students from their supervisors including title of research project.
- e. Vetting of FYP titles with head of program and supervisors.
- f. Release the final FYP titles to students.
- g. Organize a workshop in the beginning of FYP I to brief the final year students on the implementation of FYP.
- h. Appoint two examiners for each student. One of the examiners should be in the same area of specialization.
- i. Issue appointment letters for supervisors, co-supervisors and examiners.
- j. Prepare a schedule for proposal (FYP I) and final defend (FYP II) presentation.
- k. Collect and distribute the Proposal Report, Chapter 1, 2, 3 and Final Report to supervisors and examiners.
- I. Compile student evaluation forms from supervisors and examiners and fill in the marks in the system for grading purposes.
- m. Coordinator has the right to appoint a new examiner if the current examiner fail to fulfil the task with approval from Academic Deputy Dean (TDA).
- n. Relay any information or news regarding FYP to supervisors, examiners, and students from time to time.
- o. Organize meetings with students, if needed, to clarify any problems during the duration of FYP.
- p. For any special cases on supervisors, examiners or students, coordinator should refer those cases to Head of FYP Coordinator, Deputy Dean, and Dean before making any final decisions.

#### 2.5 LABORATORY STAFF

Laboratory staffs coordinated and instructed by Senior Technician and Senior Laboratory Assistant to:

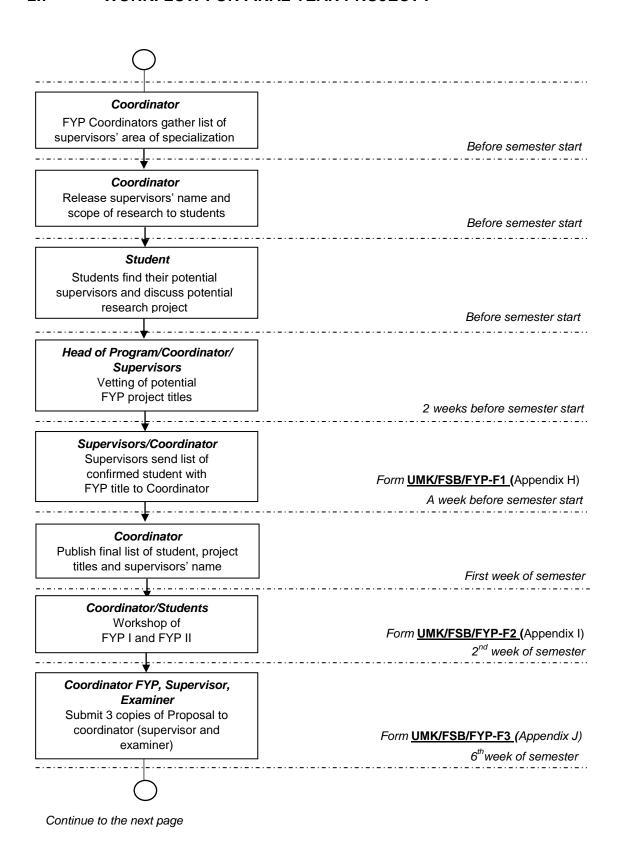
- a. Assist the students in conducting experimental work in the laboratory and field.
- b. Advice and assist the students in operating machines, testing equipments, calibrating instruments and related facilities.
- c. Handle and purchase consumable/usable materials.

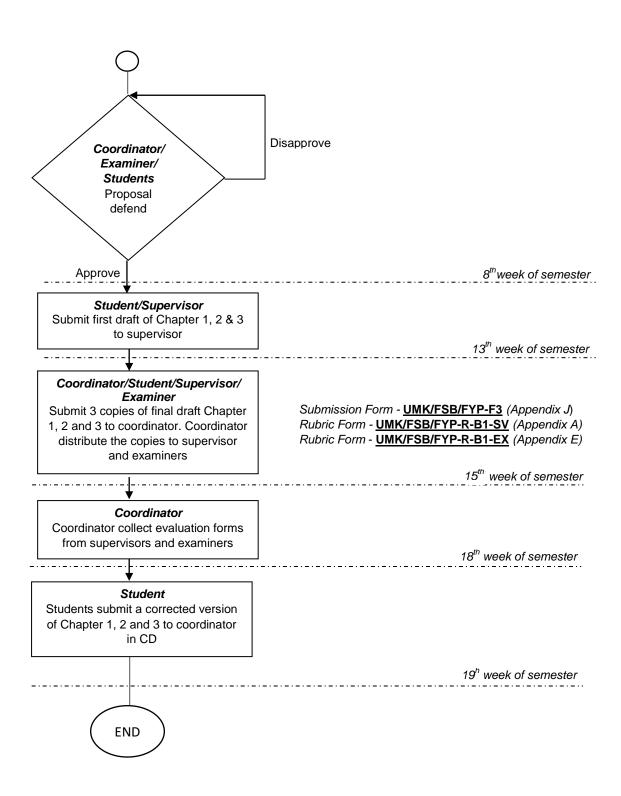
#### 2.6 ADMINISTRATIVE STAFF

The administrative/ supporting staffs of the faculty are headed by an Assistant Registrar. Their duties are:

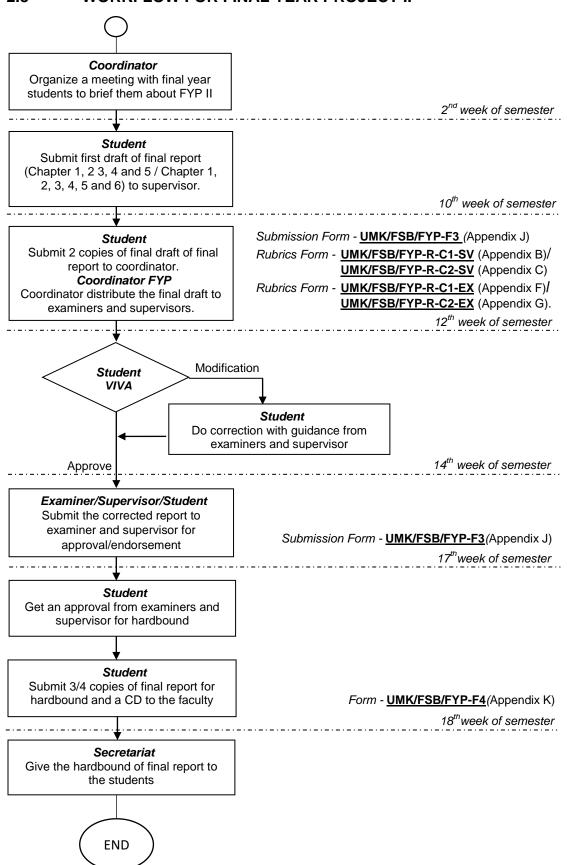
- a. Assist FYP Coordinator in maintaining FYP database.
- b. Perform some clerical works related to FYP.

#### 2.7 WORKFLOW FOR FINAL YEAR PROJECT I





#### 2.8 WORKFLOW FOR FINAL YEAR PROJECT II



# 2.9 TIMELINE FOR FINAL YEAR PROJECT I

* Academic Week	Student	Supervisor	Examiner	FYP Coordinator
Before semester starts	-	-	-	Send email to supervisors asking for their area of specialization
Before semester starts	-	-	-	List the supervisors' name and their area of specialization and release it to the students
Before semester starts	Start to find their potential supervisor and discuss the project with potential supervisors	-	-	-
Before semester starts	-	Send list of the potential students and titles to Coordinator	-	Receive the list of the potential students and titles from supervisors
2 weeks before semester starts	-	Vetting of FYP titles in each program	-	Vetting of FYP titles in each program
A week before semester starts	-	Submit the final project titles and students' name to coordinator     List the potential examiners for each project to Coordinator	-	Release the final project titles and students' name to Faculty news board Receive list the potential examiners for each project from examiners

Week 2	1. Attend Final Year Project Workshop 2. Submit UMK/FSB/FYP-F2 (Appendix I) to Coordinator	-	-	UMK/FSB/FYP-F1 (Appendix H)  Organize Final Year Project Workshop Receive UMK/FSB/FYP-F2 (Appendix I) from student  Receive form students:
Week 6	Submit to Coordinator:  1. 3 copies of Research Proposal  2. 2 copies of UMK/FSB/FYP-F3 (Appendix J) form signed by supervisor Marks will be deducted for late submission (1 day = 1 mark)	Receive one copy of Research Proposal from Coordinator	Receive from Coordinator: 1. One copy of Research Proposal 2. UMK/FSB/FYP-F3 (Appendix J) form 3. UMK/FSB/FYP-R- A-EX (Appendix D) rubric form	3 copies of Research Proposal and distribute the proposal to supervisors and examiners 2 copies of <i>UMK/FSB/FYP-F3</i> (Appendix J) form and distribute the forms to examiners Receive <i>UMK/FSB/FYP-R-A-EX</i> (Appendix D) rubric form to examiners
Week 8	-	-	Evaluate the Research Proposal	Set the date, time and place for Research Proposal defend
		Mid T	erm Break	

Week 9	<ol> <li>Students present and defend their Research Proposal</li> <li>Receive their Research Proposal from examiners after presentation</li> </ol>	Attend students' proposal presentation (if available)	<ol> <li>Give the Research Proposal to the students after presentation</li> <li>Give UMK/FSB/FYP-R- A-EX (Appendix D) rubric form to Coordinator</li> </ol>	Collect two <i>UMK/FSB/FYP-R-A-EX</i> (Appendix D) rubric forms from examiners Organize the proposal defend, ensure everything run as scheduled
Week 11	Submit one copy of Draft Chapter 1,2,3 to supervisor	Receive one copy of Draft Chapter 1,2,3 from student	-	-
Week 15	Submit to Coordinator:  1. 3 copies of final Draft Chapter 1,2,3  2. 2 copies of UMK/FSB/FYP-F3 (Appendix J) form signed by supervisor Marks will be deducted for late submission (1 day = 1 mark)	Receive from Coordinator: 1. one copy of final Draft Chapter 1,2,3 2. <i>UMK/FSB/FYP-R-B1-SV</i> (Appendix A) rubric form	Receive from Coordinator: 1. one copy of final Draft Chapter 1,2,3 2. UMK/FSB/FYP-F3 (Appendix J) form 3. UMK/FSB/FYP-R- B1-EX (Appendix E) rubric form	Receive from students: 3 copies of final Draft Chapter 1,2,3 and distribute the final draft to supervisors and examiners 2 copies of <i>UMK/FSB/FYP-F3</i> (Appendix J) and distribute the forms to examiners Receive <i>UMK/FSB/FYP-R-B1-EX</i> (Appendix E) rubric form to examiners and <i>UMK/FSB/FYP-R-B1-SV</i> (Appendix A) rubric form to supervisors
Week 16		Stu	dy week	

Week 15-18		<ol> <li>Evaluate final Draft Chapter 1,2,3</li> <li>Submit UMK/FSB/FYP-R- B1-SV (Appendix A) rubric form to coordinator when done evaluating the final draft</li> </ol>	<ol> <li>Evaluate final Draft Chapter 1,2,3</li> <li>Submit UMK/FSB/FYP-R- B1-EX (Appendix E) rubric form to coordinator when done evaluating the final draft evaluate</li> </ol>	Coordinator collect:  1. <i>UMK/FSB/FYP-R-B1-SV</i> (Appendix A) rubric form from supervisors  2. <i>UMK/FSB/FYP-R-B1-EX</i> (Appendix E) from examiners
Week 18	Do correction and submit the corrected version to examiner and supervisor for correction approval (UMK/FSB/FYP-F3 (Appendix J) form)	Receive  UMK/FSB/FYP-F3  (Appendix J) form	Receive  UMK/FSB/FYP-F3  (Appendix J) form	Collect <i>UMK/FSB/FYP-F3</i> (Appendix J) form
Week 19	Submit corrected version of final Draft Chapter 1,2,3 to coordinator in CD	-	-	Receive corrected version of final Draft Chapter 1,2,3 from students in CD

<sup>\*</sup>Subject to changes according to the academic calendar

# 2.10 TIMELINE FOR FINAL YEAR PROJECT II

* Academic Week	Student	Supervisor	Examiner	FYP Coordinator
Week 1-2				Organize a meeting with final year students to brief them about FYP II
Week 8		Mid To	erm Break	
Week 10	Submit first draft to supervisor	Evaluate the first draft and the corrected version of FYP Report	-	
Week 13	Submit to the faculty: - Final report - UMK/FSB/FYP-F3 (Appendix J) form (signed by supervisor)	1) Sign the  UMK/FSB/FYP-F3  (Appendix J) form  2) Receive: - FYP final report -UMK/FSB/FYP-R-C1- SV (Appendix B)/ UMK/FSB/FYP-R-C2-SV (Appendix C)	Receive: - FYP final report - UMK/FSB/FYP-F3 (Appendix J) - UMK/FSB/FYP-R- C1-EX (Appendix F) / UMK/FSB/FYP-R- C2-EX (Appendix G)	Make sure all examiners receive their FYP final report
week 13-14	-	Evaluate the FYP Final report	Evaluate the FYP Final report	Set the date, time and place for FYP II's presentation/viva
Week 15	1) FYP II' Presentation/Viva 2) Receive their final report from examiners after presentation	Submit <i>UMK/FSB/FYP-R-C1-SV</i> (Appendix B)/ <i>UMK/FSB/FYP-R-C2-SV</i> (Appendix C) to FYP coordinator	Submit to FYP Coordinator: - FYP Final report (on the day of presentation) - UMK/FSB/FYP-R-	Collect: - FYP final report (on the day of presentation) - UMK/FSB/FYP-R-C1-SV (Appendix B)/ UMK/FSB/FYP-R-C2-SV

			C1-EX (Appendix F) / UMK/FSB/FYP-R- C2-EX (Appendix G)	(Appendix C) - UMK/FSB/FYP-R-C1-EX (Appendix F) / UMK/FSB/FYP-R-C2-EX (Appendix G)
Week 16		Stu	dy week	
Week 15 - 16	Do correction			
Week 17	Submit corrected version to examiner and supervisor for correction approval (UMK/FSB/FYP-F3 (Appendix J) form)	Receive <i>UMK/FSB/FYP-F3</i> (Appendix J) form	Receive  UMK/FSB/FYP-F3  (Appendix J) form	Collect <i>UMK/FSB/FYP-F3</i> (Appendix J) form
Week 18	Submit 3 copies for hardbound to the faculty ( <i>UMK/FSB/FYP-F4</i> ( <i>Appendix K</i> ) form)	-	Compile all the marks from supervisor and examiner	

<sup>\*</sup>Subject to changes according to the academic calendar

# CHAPTER 3

#### **FORMAT**

#### 3.1 REPORT FORMAT

#### 3.1.1 Language and Report Length

The final year report should be in ENGLISH. Maximum pages are as followed:

Research Proposal	2000 – 4000 words
Chapter 1,2 & 3	6000 – 10000 words (excluding the references and appendices).
Final Year Report	Not more than 18000 words (excluding the references and appendices)

#### 3.1.2 Printing

Microsoft Word format should be used. All final copies of the report should be printed using laser printer to ensure good quality of the printing. White A4 paper (210 mm x 297 mm) of 80 grams weight should be used. If paper of larger size is used (e.g. schematics, drawings, etc.), they must be folded into A4 size. Printing is on one side of the paper only. When binding, these printed pages must be in the right hand side. The use of colour in the report is advisable.

#### 3.1.3 Font Size

- The body text size is 12 point for "Times New Roman" (TNR). Text should not be scripted or italicized except for:
  - a. scientific names
  - b. terms in a different language
  - c. quotations
- Footnotes, caption and content of tables and figures should be 10 point TNR font size.

#### 3.1.4 Headings and Subheadings

- These should be in **bold** print in 12 point TNR font size. Chapters must be numbered without any decimals.
- Headings within chapters must be numbered according to the format Chapter i.e. CHAPTER 1, CHAPTER 2, CHAPTER 3.
- The title of a chapter should be typed using CAPITAL LETTERS and centred. A new chapter must start on a new page. Chapters and their sub-headings must be given titles. The title of sub-heading should be Capitalized Each Word. The titles should be typed using **bold** letters and should not be underlined.
- 4 line spacing should be used between Chapter and Title of the Chapter; last paragraph of Sub-heading and Sub-sub-heading; last paragraph of sub-sub-heading

- and a new sub-sub-heading. However, 6 line spacing should be used between Title of the Chapter and Sub-heading.
- Sub-headings with a decimal indicating the depth level. A depth level of not more than three (3) is recommended (2 decimals) levels as follows:
  - **1.1 Second level** (Title of the sub-heading)
  - **1.1.1 Third level** (Title of the sub-sub-heading)
- If the length of a title of a chapter or any level is more than one line, same line spacing as in the text should be used. Examples are shown in Appendices L.

#### 3.1.5 Margins

 Margin specifications are meant to facilitate binding and trimming. The stipulated margins for the general text (body of report) are as follows:

Top edge : 2.5 cm Right side : 2.5 cm Left side : 4.0 cm Bottom edge : 2.5 cm

 All information including text headings, footnotes and illustrations should be within these margins.

## 3.1.6 Paragraphs

- A new paragraph at bottom of a page must have at least two full lines of text. Otherwise, it should begin in the next page.
- Paragraphs must be indented with not more than one (1) tab-key spacing.
- Double line spacing is required between paragraphs and captions; between paragraphs and floats.
- Double line spacing in between lines.
- Single line spacing should only be used for Abstract and References.
- Paragraphs must be left-aligned and justified.
- The following spacing should be followed for the report document:

SPACING	PART
1.0 spacing	Title page
	Abstract/ Abstrak
	References
1.5 spacing	Declaration
	Acknowledgement
	Table of contents
	List of tables
	List of figures
	List of abbreviations

	List of symbols
	Appendices
2.0 spacing	Chapter 1 - 6

#### 3.1.7 Pagination

- Every sheet of paper in the manuscript except the title page and student declaration must be numbered. Begin numbering with acknowledgments, table of contents, list of tables, list of figures, list of abbreviations and list of symbols (optional) and abstract using lower case Roman numeral (ii,iii, iv...).
- The main text pages are to be numbered in Arabic numerals (1, 2, 3 ...).
- The page number must be centred from the bottom of the page. Page numbers must be in TNR 12 point font size. They should NOT be in italic or bold font.
- They must also appear by themselves and are not to be enclosed in parentheses, hyphens or any other decorative fonts. Special characters should not be included with the page number.
- Page number must be printed 1.25 cm from the bottom of the page (in the footer section).
- The following pagination should be followed for the report document:

PAGINATION	PART
None	Title page
Starting with 'i' at the bottom centre	Declaration
	Acknowledgement
	Abstract
	Abstrak
	Table of contents
	List of tables
	List of figures
	List of abbreviations
	List of symbols
	Chapter 1 - 6
Starting with '1' at the bottom centre	References
	Appendices

#### 3.1.8 Equations

Equation can be inserted in Microsoft Word using Equation tool. The equation must be numbered in Arabic numerals (TNR 12 point) enclosed in parentheses on the right hand margin. The setting should be Chapter followed by number (Chapter, number). They should be cited in the text, for example, Eq. (3.1) - (3.2). Equations start from the left.

Double spacing is used between equation and paragraphs. Punctuate equations with commas or periods when they are part of the sentence. For example,

$$A = \pi r^2 \tag{3.1}$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{3.2}$$

#### 3.1.9 **Tables**

- Tables must be centred and top of the page within the prescribed margins. Each table must have a reference number (in Arabic numeral) and a caption. The captions should be in sentence case (for e.g., Proximate analysis for bottom portion). It may be useful to group tables in each chapter together and to number them in sequence. For example, tables found in Chapter 1 should be numbered Table 1.1, Table 1.2, Table 1.3, and so on. Refer to Appendix M.
- Bold the word Table and its number. The caption (TNR 10 point) must appear above
  the table. If any table continues to the following or subsequent pages, the top line of
  the page reads. For example: **Table 1.1** (Continued). The caption is not repeated. If a
  table is taken from another source, the reference must be cited at the bottom of the
  table (TNR 10 point). Double spacing is used between table titles and paragraphs.

## **3.1.10** Figures

Figures may be illustrations, graphs, maps, charts, and diagrams and anything that is neither script nor table. Bold the word Figure and its number (in Arabic numeral). The caption (TNR 10 point) should be placed below the figure. The figure label should not extend beyond one page. However, if it does, the same guidelines for tables should be followed. Figures should be grouped and numbered in sequence. For example, Figure 3.1 should be located in Chapter 3. If a figure is taken from another source, the reference must be cited at the bottom of the figure (TNR 10 point). Refer to Appendix N.

#### **3.1.11** Binding

The first submission of the final year project report manuscript for evaluation and examination purposes should be in comb binding. The final submission of the FYP report must be in hardbound. Information printed on the cover and the spine must be with gold-colored .The colour of the cover should follow the official faculty colour. The material for the cover is the Buckram.

#### 3.1.12 CD ROMs

Students have to submit CD ROM that contains the final year report in PDF format. The item must be labelled and must bear the name of the author, title of the final year project report, name of the degree and the year.

#### 3.2 ARRANGEMENT AND CONTENTS

# 3.2.1 Research Proposal

- The contents should be arranged in the following order:
  - i. TITLE
  - ii. INTRODUCTION
    - Background of Study
    - Problem Statement
    - Expected Outcomes
    - Justification
    - Objectives
    - Scope of Study
    - Significant of Study
    - Study Area (if applicable)
  - iii. LITERATURE REVIEW
  - iv. MATERIALS AND METHODS
    - Materials
    - Methods
  - v. RESEARCH FLOW CHART
  - vi. GANTT CHART
  - vii. MILESTONE
  - viii. REFERENCES

#### a) Report Title

- Report title should be short and precise.
- The length of the title that allowed is within 10 20 words.
- Species name should be written according to international code of nomenclature (ICZN, ICBN).

#### b) Introduction

- The main intention here is to get the readers interest. The introduction often contains general statements about the need for the research study. It sets the stage to proceed and elaborate on the subject.
  - i. Background Of Study
    - Background of the study is the part of any research where in the particular topic is placed. This may contain the general description, and may include the broader description of the topic. Other includes a brief preview of the topic to discuss.
  - ii. Problem Statement
    - A problem statement is a clear description of the issue(s), it includes a vision, issue statement, and method used to solve the problem.
    - The 5 'W's can be used to spark the discussion about the problem.

• A problem statement expresses the words that will be used to keep the effort focused and it should represent a solvable problem.

#### iii. Expected Outcomes

 Expected outcomes conclude the research proposal by addressing predicted outcomes. The outcomes must indicate what you are hoping to prove/disprove, how the research make an original contribution to knowledge and how it might fill gaps in existing work.

#### iv. Justification

• It is often useful from the very beginning of formulating your work to write this section to focus your reasoning as you build the rest of the proposal.

#### v. Objectives

- The objective of the study is what researcher intends to accomplish in their study. Researcher need to tell the audience their goal to achieve in solving the problem.
- Research objectives should be expressed in measurable words and reflect expected results
- Research objectives should be started with high impact, result oriented verbs.
- Example: To investigate, To recognize, To ascertain, To develop, To determine

#### vi. Scope of Study

- Scope of study is a statement that describes the specific area of study, method or tools to be used in the research.
- Scope of study is actually limiting the amount of work that you intend to do to achieve your work.
- Clearly state parameters will help the reader/examiner not to be left in any doubts as to what you are covering in terms of the scale of research.
- It sets the limits to the areas of interest, time and materials involved.

#### vii. Significant of Study

- Significant of study discusses the methodological, substantive, and/or theoretical contribution.
- The practical and/or theoretical importance of the problem and/or objectives of your study should be stated here.
- Significant of study explains the usefulness or benefits of the study to both the outside world and the research community.

#### viii. Study Area (if applicable)

- A study area is geography for which data is analyzed in a report and/or map.
   There are two ways to define study areas; site based study area and geographical unit based study area
- Study area should clearly describe the geographic location(s), cultural resources, site numbers, etc. Maps and/or geographic coordinates should be provided as appropriate. If the project crosses into lands managed by other agencies, information on all applicable federal or state permits are required.

<sup>\*</sup>Note: Number of objectives require for: B. Sc: 2-3

#### c) Literature Review

Research background should comprise a literature review which can show clearly the following information:

- i. The history of the subject and its latest development.
- ii. The rationales of conducting the research.
- iii. The uniqueness of the research as compared to previous studies on almost similar titles or field of study
- iv. Main and prominent publications on the subject, which cannot be neglected or omitted, for whatever reasons.
- v. A list of references quoted.

#### d) Materials and Methods

This section should make clear to the reader the way that you intend to approach the research question, techniques and logic that you will use to address it.

Study Area (if any)

- A brief explanation of study area;
- The location of your study area
- A complete base map (containing longitude, latitude, road, drainage, contour, village, etc.)
- A general account about topography and geomorphology

#### i. Data Collection

This might include the field site description, a description of the instruments used, and the data collected. You may need to comment on site and resource accessibility, time frame and budget availability. You should emphasis in this section specifically what data you will be using in your study. It is to detect flaws in the plan before they become problems in the research.

#### ii. Data Analysis

This should be explained in some detail how you will manipulate the data that you assembled to get at the information that you will use to answer your question. It will include the statistical or other techniques and tools that you will use in processing data. It probably should also include an indication of the range of outcomes that you could reasonably expect from your observations.

#### e) Expected Outcomes

This section should give a good indication of what you expect to get out of the research. It should join the possible outcomes to the theory and questions that you have raised. It will be a good place to summarize the significance of the work.

#### f) Research Flow Chart

It can be constructed at many levels and for variety of reasons. At the simplest level, it
is about retrieving already existing knowledge and at a more complex level, it is about

- discovering new knowledge which can move away from a simple 'common sense' of understanding or uninformed expression of opinion.
- Your proposal needs to show detailed planning of the process you intend to follow to complete your project.
- Please refer Appendix O as an example.

#### g) Gantt Chart

- A Gantt chart is one of the most popular and useful ways of showing activities (tasks or events) displayed against time. On the left of the chart is a list of the activities and along the top is a suitable time scale.
- Each activity is represented by a bar/arrow; the position and length of the bar reflects the start date, duration and end date of the activity. This allows you to see at a glance:
  - i. What the various activities are?
  - ii. When each activity begins and ends?
  - iii. How long each activity is scheduled to last?
  - iv. Where activities overlap with other activities, and by how much?
  - v. The start and end date of the whole project?
- Please refer to Appendix P as an example.

#### h) Milestones

- A research milestone is the measure that tells you, as a researcher, that your work is progressing.
- Each milestone should be constructed to include the goals and timeline for completion (usually at the end of each semester).
- Note that not all of your activities generate milestones.
- Milestones are NOT a list of tasks to be completed; they are goals to be achieved.
- Please refer to Appendix Q as an example.

#### i) References

All used references **should** be cited and all cited references should be listed in the references list. Please refer **Chapter 4** of this book for detail references format.

#### 3.2.2 Chapter 1, 2 & 3 / Chapter 1, 2, 3 & 4

- The contents should be arranged in the following order:
  - i. TITLE PAGE
  - ii. TABLE OF CONTENTS
  - iii. LIST OF TABLES
  - iv. LIST OF FIGURES
  - v. LIST OF ABBREVIATIONS (optional)
  - vi. LIST OF SYMBOLS (optional)
  - vii. MAIN TEXT ( CHAPTER 1 3/4)
  - viii. REFERENCES
  - ix. APPENDICES (optional)

#### 3.2.3 Final Year Report

- The contents should be arranged in the following order:
  - i. TITLE PAGE
  - ii. DECLARATION
  - iii. ACKNOWLEDGEMENT
  - iv. ABSTRACT
  - v. ABSTRAK
  - vi. TABLE OF CONTENTS
  - vii. LIST OF TABLES
  - viii. LIST OF FIGURES
  - ix. LIST OF ABBREVIATIONS (optional)
  - x. LIST OF SYMBOLS (optional)
  - xi. MAIN TEXT (CHAPTER 1-5 or 6)
  - xii. REFERENCES
  - xiii. APPENDICES (optional)

### 3.2.4 Cover and Spine (hardbound)

#### a) Cover

- The information printed on the cover page should include in the given order (refer to Appendix R)
  - i. FULL TITLE
  - ii. FULL NAME (as in identity card or passport for international student)
  - iii. FACULTY OF EARTH SCIENCE and UNIVERSITI MALAYSIA KELANTAN
  - iv. Year (Publication year)

#### b) Spine

- Information printed on the spine must be gold-coloured letters, TNR, and must be in the following order (refer to Appendix S):
  - i. NAME
  - ii. FULL NAME OF THE BACHELOR DEGREE PROGRAM
  - iii. Year (publication year)

#### 3.2.5 Title Page

- The information printed on the title page should include the following information exactly in the given order (refer to Appendix T):
  - i. UMK logo
  - ii. FULL TITLE
  - iii. FULL NAME (as in identity card or passport for international student)
  - iv. Statement of award for the thesis
  - v. FACULTY OF EARTH SCIENCE and UNIVERSITI MALAYSIA KELANTAN
  - vi. Year (publication year)

#### 3.2.6 Student Declaration

- Declaration should be placed after the first page of the title page of the report.
- The word DECLARATION is stated in the centre at the top of body text.
- 6 line spacing should be used between the word DECLARATION and text (Appendix U).

#### 3.2.7 Acknowledgement

- Acknowledgement should include a brief statement of thanks in recognition of special assistance and guidance given by individuals, institutions or government bodies.
- It should only be one page length.
- The word ACKNOWLEDGEMENT is stated in the centre at the top of body text.
- 4.5 line spacing should be used between the word DECLARATION and text (Appendix V).

#### 3.2.8 Abstract/ Abstrak

- a) Abstract
- An abstract in English version.
- The abstract is a summary of the entire report. It should briefly cover introduction, problems statement (justification) or significance of the study, objectives, materials and methods and the findings in the context of the field of study.
- The word ABSTRACT is stated in the centre at top of the body text.
- Body text is in one paragraph only (not more than 300 words).
- 2 line spacing should be used between the title and the word ABSTRACT and 1 line spacing between the word ABSTRACT and the text (Appendix W).

#### b) Abstrak

- Abstrak is an abstract in Bahasa Melayu version translated from English version.
- The word ABSTRAK is stated in the centre at top of the body text (Appendix X).

#### 3.2.9 Table of Contents

- The title of chapters, headings and subheadings along with the page numbers on which they appear must be listed in the table of contents.
- The word TABLE OF CONTENTS should be written centred at the top of the page.
- The title of chapters, headings and subheadings should be exactly the same as in the body text.
- Report with many subheadings must use a hierarchical numbering system for headings and sub-headings (Appendix Y).

#### 3.2.10 List of Tables

• This list of tables contains all the titles of the tables in the report, along with the page numbers on which it appears.

- All tables must be numbered consecutively throughout the text according to the chapters.
- The word LIST OF TABLES is stated in the centre at the top of body text.
- Tables appearing on the list should be precise and concise (Appendix Z).

#### 3.2.11 List of Figures

- The list of figures includes all the title of charts, graphs, illustrations, diagrams, maps, pictures, photographs and other similar non-text items in the report.
- The word LIST OF FIGURES is stated in the centre at the top of body text.
- Figures must include numbering and the pages on which they appear.
- Figures should be numbered consecutively throughout the text according to the chapters.
- Figures appearing on the list should be precise and concise (Appendix AA).

#### 3.2.12 List of Abbreviations

- This page defines all abbreviations used in the report.
- This list is optional depending on the subject of the report.
- Actual word represented by the abbreviation should be accurate.
- The word LIST OF ABBREVIATIONS is stated in the centre at the top of body text (Appendix AB).

# 3.2.13 List of Symbols

- This page defines all symbols used in the report.
- This list is optional depending on the subject of the report.
- All scientific symbols must be presented with units that follow the standard SI system.
- The word LIST OF SYMBOLS is stated in the centre at the top of body text (Appendix AC).

# 3.2.14 Main Text (Final year report)

- The main body of the report is usually arranged into consecutively numbered chapters
  or sections. The internal organization of the report is the responsibility of the
  candidates in consultation with their supervisor(s). The organization will partly depend
  on the field of study, but the responsibility is on the candidate to provide a systematic
  and well-organized report.
- A report will often include the following chapters:
  - a. Chapter 1: Introduction

    This chapter shall highlight the background of the study, problem statement, justification, objectives, scope of study and significance of the study.
  - b. Chapter 2 : Literature Review
    Reviews from the previous study literature related to the research are discussed and gaps identified as the basis of the research.
  - c. Chapter 3: Materials and Methods

All relevant experimental, descriptive, theoretical and analytical techniques used in the research should be outlined, such that another researcher could repeat the study. Reference of methods to other research should be made where appropriate.

- d. Chapter 4 : Results and Discussions /General Geology (if related)
  - Results and Discussions

This chapter includes the analysis and presentation of data. The results should be interpreted and summarized. If necessary this chapter can be divided into two (2) separated chapters

- General Geology (if related)
  - \*\*Refer to supporting materials
- e. Chapter 5 : Conclusion and Recommendations/Specification (if related)

  Conclusion and Recommendations

Provides the context in which to interpret the results of the study, stressing the significance, implications and limitations of the findings. This chapter should relate to the initially set out objectives spelled out at the beginning of the report *Specification (if related)* 

This chapter includes the analysis and presentation of data of your main specification (e.g. slope stability analysis, facies analysis, geoheritage, etc.). The results should be interpreted and summarized.

f. Chapter 6 : Conclusion and Recommendations (if related)

#### 3.2.15 References

 References are detailed description of items from which information were obtained in preparing the thesis. All references must be listed at the end of the text. They should be arranged using one of the methods discussed in Chapter 4 of this book.

#### 3.2.16 Appendices

- This section is optional and will depend on the individual report content. It contains supplementary illustrative material, original data and quotations, too long for inclusion and not immediately essential to the understanding of the subject.
- Appendices allow author to include all the materials or illustrations without influence the reader concentration. These include tables, charts and etc.
- Appendices are identified separately using capital letters (A, B, C, etc.) and written as, for example APPENDIX A.
  - All pages in the appendices including those with diagrams, tables, images, etc. must have a page number. The pagination of the page must be continuing after references.
  - Attention should be paid on the issues as a write-up does not necessary to have appendix. If applicable, research data, tables, sample of questionnaire, maps, photos and others material which are too lengthy to be included in the main text, can be attached as APPENDIX. Supplementary materials can also be included in this section.

# CHAPTER 4

#### REFERENCE

#### 4.1 INTRODUCTION

A list of references should be provided when the thesis contains information from other sources, either in direct quotation or by reference. All references that appear in the text of the thesis must be listed on the **REFERENCES** page in alphabetically order, and any item appearing on the **REFERENCES** list should be cited in the thesis. The details of the references cited in the text and on the **REFERENCES** page should be presented according to the American Psychological Association's (APA) Referencing and Citing Manual standard.

#### 4.2 LIST OF REFERENCES

All references cited should be listed in the **REFERENCES** at the end of the last chapter. List the references alphabetically. If more than one published materials by the same author are cited, these materials should be listed chronologically as stated in section 4.3.3 (c).

#### 4.2.1 Title

The title **REFERENCES** should be located at the top centre of pages and its using capital letters.

#### 4.2.2 Font

The references must be written in **12 pt Times New Roman** font. Candidates should take note that **APA style** requires certain fields within a reference to be *italic*.

#### 4.2.3 APA (American Psychology Association) Reference Format

Bibliography using APA style should include this following information:

- a. Authors or writers full name and a full stop (.)
- b. Year published in bracket and a full stop (.)
- c. Article; title of article and end with a full stop (.) There is no need for quotation sign "or "".
- d. Book or periodical publication; the title is in italic and ends with a full stop (.)
- e. Number of edition/printing and a full stop (.)
- f. Name of translator, if the material is translated, and a full stop (.)
- g. Place of Publication and a full stop (.)
- h. Publisher name and a full stop (.)

#### 4.2.4 List of references style

- a. Entries must be in alphabetical order (A Z). The first line of a reference should be flushed with the left margin.
- b. Each additional line must be indented once (usually accomplished by using the TAB key).
- c. Only one space after any form of punctuation is required.
- d. Each reference and the space between references shall be single spaced (1.0 spacing).

#### 4.3 WRITING STYLE FOR AUTHORS' NAMES IN THE TEXTS

#### 4.3.1 Text: Author / Authors and Year

APA utilizes a system of brief referencing in the text of a paper, whether one is paraphrasing or providing a direct quotation from another author's work. Citations in the text usually consist of the name of the author(s) and the year of publication.

#### 4.3.2 Quotation with Parenthetical Citation

a. Single Author: Bracket the name of the author / authors, put comma (,) and the year of publication.

#### Example (single author):

(Name of the Author, Year)

Example: (Ballantyne, 1986)

Most documented landslides in Scotland belong to one of four categories: non rock slope failures, rotational rock slope failures, shallow debris flows and debris slides developed in superficial deposits (Ballantyne, 1986).

b. Two Authors: Name both authors in the signal phrase or in the parentheses each time you cite the work. Use the word "and" between the authors' names within the text and use "&" in the parentheses.

#### Example (two authors):

(Name of the First Author & Name of the Second Author, Year)

Example: (Cruden & Varnes, 1996).

Debris slides have typical length-to-width ratios of between 5:1 and 10:1 or more (Cruden & Varnes, 1996).

According to Cruden and Varnes (1996), debris slides have typical length-to-width ratios of between 5:1 and 10:1 or more.

c. Three to Five Authors: For the first citation in the text, state the entire author's name and use either word "and" in the text or symbol "&" in the parentheses before the name of last author.

#### Example (five authors):

(First Author, Second Author, Third Author, Fourth Author, & Fifth Author, Year)

Example: (Muhammad Iqbal Ahmad, Zainal, Mazlan, Mustafa Al Bakri, & Salim, 2013)

For the subsequent citations in the text, state the first author's name followed by et al.

(Name of the First Author et al., Year)

Example: (Muhammad Iqbal Ahmad et al., 2013)

d. Six or more Authors: Use the first author's name followed by et al. in the signal phrase or in parentheses.

Example (more than 6 authors):

(Name of the First Author et al., Year)

Example: (Merckx et al., 2015)

### 4.3.3 Citing in the text

The references cited in the text should be indicated using the name of the author and the date of publication. Examples are as follow:

a. If the name of an author is written as part of a sentence, the year published should be written in parentheses.

Example: "Works by Yao (1993) have shown that in order to maintain the behavioural link between the off springs and their parents, the use of cross over operator should be avoided."

b. If the name of an author is not written as part of a sentence, both the name and year published should be written in parentheses.

Example: "ANN offers useful properties and capabilities such as non-linearity, input and output mapping, adaptability and fault tolerance among others (Haykin, 1999)."

c. If more than one reference materials by the same author in a same year are cited, use small letter alphabets (a, b, c, and so on) to distinguish them.

Example: "Some of the basic principles widely used by many researchers are Lagrange-Euler (LE) equations (Uicker, 1965; Bejczy and Paul, 1981), Newton-Euler (NE) equations (Luhet al., 1980a) and d'Alembert (GD) equations (Lee et al., 1983)."

"Luh et al. (1980b) presented an example of an acceleration control of robot arm/manipulator."

d. Cross referencing in not allowed in a thesis. Only primary sources should be used.

# 4.4 WRITING STYLE FOR AUTHORS' NAMES IN THE LIST OF REFERENCES

Frequently, different types of publication materials are cited in a thesis. The style of writing details on cited publication in the list of **REFERENCES** should be as stated in section 4.4.1 to 4.4.4.

Generally authors' names are listed using surname followed by their initials. The followings are examples of writing format according to the name of the author:

a. Western Name – write the family name first and followed by other name.

Example:

Name : Barack Obama Is written as : Obama, B.

b. Malay Name - follow the author name

Example:

Name : Wani Sofia Udin Is written as : Wani Sofia Udin

c. Sabahan or Sarawakian Name - follow the author name

Example 1:

Name : Elvaene James Is written as : Elvaene James

Example 2:

Name : Eli Anak James

Is written as : Eli James

d. Arab Name – either use his family name (Example 1) or use the author name if his family name is not available (Example 2).

Example 1:

Name : Syed Muhammad Hamzah Al-Ibn Is written as : Al-Ibn, Muhammad Hamzah, Syed

Example 2:

Name : Malik Ibn Anas Is written as : Malik Ibn Anas

e. Chinese Name – Author name is the family name. The family name or surname is placed first.

Example:

Full Name : Lim Juk Eng Is written as : Lim, J. E.

f. Indian Name - use the author's name (Example 1 and Example 2) or reverse the order if there is abbreviation in the name (Example 3).

Example 1:

Name : Rajeevan a/l Balakumar Is written as : Rajeevan Balakumar

Example 2:

Name : Nivaarani Arumugam

Is written as : Nivaarani, A.

Example 3:

Name : B. Rathinee Is written as : Rathinee, B.

g. Punjabi Name – use the author name

Example:

Name : Viki Singh Is written as : Viki Singh

#### 4.4.1 Articles in Periodicals

#### a. Basic Form

APA style dictates that authors are named with last name followed by initials; publication year goes between parentheses, followed by a period. The title of the article is in sentence-case, meaning only the first word and proper nouns in the title are capitalized. The periodical title is run in title case, and is followed by the volume number which, with the title, is also italicized.

Author, A. A., Author, B. B., & Author, C. C. (Year). *Title of the article. Title of Periodical*, volume number (issue number), pages.

If the work has more than six authors, list the first six authors and then use ellipses after the sixth author's name to indicate the rest of the authors. Then, state the final author's name.

Example: Merckx, V. S. F. T., Hendriks, K. P., Beentjes, K. K., Mennes, C. B., Becking, L. E., Peijnenburg, K. T. C. A. . . . Schilthuizen, M. (2015). Evolution of endemism on a young tropical mountain. *Nature*, *524*, 347-350.

#### b. Article in Journal Paginated by Volume

Journals that are paginated by volume begin with page one in issue one, and continue numbering issue two where issue one ended, etc.

#### Example:

Harlow, H. F. (1983). Fundamentals for Preparing Psychology Journal Articles. *Journal of Comparative and Physiological Psychology*, 55, 893-896.

#### c. <u>Article in Journal Paginated by Issue</u>

Journals paginated by issue begin with page one every issue; therefore, the issue number gets indicated in parentheses after the volume. The parentheses and issue number are not italicized or underlined.

#### Example:

Scruton, R. (1996). The Eclipse of Listening. The New Criterion, 15(30), 5-13.

#### d. Article in Magazine

#### Example:

Henry, W. A., III. (1990, April 9). Making the Grade in Today's Schools. *Time*, 135, 28-31.

#### e. Article in a Newspaper

Unlike other periodicals, p. or pp. precedes page numbers for a newspaper reference in APA style. Single pages take p., e.g., p. B2; multiple pages take pp., e.g., pp. B2, B4 or pp. C1, C3-C4.

#### Example:

Schultz, S. (2005, December 28). Calls Made To Strengthen State Energy Policies. *The Country Today,* pp. 1A, 2A.

#### f. Letter to the Editor

#### Example:

Moller, G. (2002, August). Ripples Versus Rumbles [Letter to the editor]. *Scientific American*, 287(2), 12.

#### 4.4.2 Books

#### Basic Format for Books

Author, A. A. (Year of publication). *Title of work*: Capital letter also for subtitle. Location: Publisher.

\*Note: For "Location," you should always list the city, but you should also include the state if the city is unfamiliar or if the city could be confused with one in another state.

#### Example:

Calfee, R. C., & Valencia, R. R. (1991). APA guide to preparing manuscripts for journal publication. Washington, DC: American Psychological Association.

Shotton, M. A. (1989). *Computer Addiction? A Study of Computer Dependency*. London, England: Taylor and Francis.

#### b. <u>Edited Book, Without Author</u>

#### Example:

Duncan, G.J., & Brooks-Gunn, J. (Eds.). (1997). *Consequences Of Growing Up Poor*. New York: Russell Sage Foundation.

#### c. <u>Edited Book with an Author or Authors</u>

#### Example:

Plath, S. (2000). The Unabridged Journals(K.V. Kukil, Ed.). New York: Anchor.

#### d. <u>A Translation</u>

#### Example:

Laplace, P. S. (1951). *A Philosophical Essay on Probabilities*(F. W. Truscott & F. L. Emory, Trans.). New York: Dover. (Original work published 1814)

\*Note: When you cite a republished work, like the one above, work in your text, it should appear with both dates: Laplace (1814/1951).

#### e. Edition Other Than the First

#### Example:

Helfer, M.E., Keme, R.S., &Drugman, R.D. (1997). *The battered child* (5th ed.). Chicago: University of Chicago Press.

#### f. Article or Chapter in an Edited Book

Author, A. A., & Author, B. B. (Year of publication). Title of Chapter. In A.A. Editor & B.B.Editor (Eds.), *Title of Book*(pages of chapter). Location: Publisher.

\*Note: When you list the pages of the chapter or essay in parentheses after the book title, use "pp." before the numbers: (pp. 1-21). This abbreviation, however, does not appear before the page numbers in periodical references, except for newspapers.

#### Example:

O'Neil, J. M., & Egan, J. (1992). Men's and women's gender role journeys: Metaphor for healing, transition, and transformation. In B. R. Wainrib (Ed.), *Gender issues across the life cycle* (pp. 107-123). New York: Springer.

#### g. Multivolume Work

#### Example:

Wiener, P. (Ed.). (1973). *Dictionary of the History of Ideas* (Vols. 1-4). New York: Scribner's.

#### 4.4.3 Print Sources

#### a. An Entry in an Encyclopedia

#### Example:

Bergmann, P. G. (1993). *Relativity. In The New Encyclopedia Britannica* (Vol. 26, pp. 501-508). Chicago: Encyclopedia Britannica.

#### b. Work Discussed in a Secondary Source

List the source the work was discussed in:

#### Example:

Coltheart, M., Curtis, B., Atkins, P., & Haller, M. (1993). Models of reading aloud: Dual-route and parallel-distributed-processing approaches. *Psychological Review*, 100, 589-608.

\*Note: Give the secondary source in the references list; in the text, name the original work, and give a citation for the secondary source.

For example, if Seidenberg and McClelland's work is cited in Coltheart et al. and you did not read the original work, list the Coltheart et al. reference in the References. In the text, use the following citation:

In Seidenberg and McClelland's study (as cited in Coltheart, Curtis, Atkins, &Haller,1993),......

#### c. <u>Dissertation Abstract</u>

#### Example:

Yoshida, Y. (2001). Essays In Urban Transportation (Doctoral dissertation, Boston College, 2001). Dissertation Abstracts International, 62, 7741A.

#### d. Government Document

#### Example:

National Institute of Mental Health. (1990). *Clinical Training in Serious Mental Illness (DHHS Publication No. ADM 90-1679)*. Washington, DC: U.S. Government Printing Office.

#### e. Report from a Private Organization

#### Example:

American Psychiatric Association. (2000). *Practice Guidelines For The Treatment Of Patients With Eating Disorders* (2nd ed.). Washington, D.C.: Author.

#### f. Conference Proceedings

#### Example:

Schnase, J.L., & Cunnius, E.L. (Eds.). (1995). *Proceedings from CSCL '95: The First International Conference on Computer Support for Collaborative Learning.* Mahwah, NJ: Erlbaum.

#### 4.4.4 Electronic Sources

#### a. <u>Article from an Online Periodical</u>

Online articles follow the same guidelines for printed articles. Include all information the online host makes available, including an issue number in parentheses.

Author, A. A., & Author, B. B. (Date of publication). Title of article. Title of online periodical, volume number (issue number if available). Retrieved month day, year, from http://www.someaddress.com/full/url/

#### Example:

Bernstein, M. (2002). 10 tips on writing the living Web. A List Apart: For People Who Make Websites, 149. Retrieved May 2, 2006 from http://www.alistapart.com/articles/writeliving

#### b. <u>Online Scholarly Journal Article</u>

Author, A. A., & Author, B. B. (Date of publication). Title of article. *Title of journal, volume number.* Retrieved month day, year, from http://www.someaddress.com/full/url/

#### Example:

Kenneth, I. A. (2000). A Buddhist response to the nature of human rights. *Journal of Buddhist Ethics*, 8.Retrieved February 20, 2001, from http://www.cac.psu.edu/jbe/twocont.html

If the article appears as a printed version as well, the URL is not required. Use "Electronic version" in brackets after the articles title.

#### Example:

Whitmeyer, J.M. (2000). Power Through Appointment [Electronic version]. *Social Science Research*, 29, 535-555.

#### c. Article from a Database

When referencing material obtained from an online database (such as a database in the library), provide appropriate print citation information (formatted just like a "normal" print citation would be for that type of work). Then add information that gives the date of retrieval and the proper name of the database. This will allow people to retrieve the print version if they do not have access to the database from which you retrieved the article. You can also include the item number or accession number in parentheses at the end, but the APA manual says that this is not required.

#### Example:

Smyth, A. M., Parker, A. L., & Pease, D. L. (2002). A Study of Enjoyment Of Peas. *Journal of Abnormal Eating, 8(3).* Retrieved February 20, 2003, from PsycARTICLES database.

#### d. Nonperiodical Web Document, Web Page, or Report

List as much of the following information as possible (you sometimes have to hunt around to find the information; don't be lazy.

- If there is a page like <a href="http://www.somesite.com/somepage.htm">http://www.somesite.com/somepage.htm</a>, and somepage.htm doesn't have the information you're looking for, move up the URL to <a href="http://www.somesite.com/">http://www.somesite.com/</a>):
- Author, A. A., & Author, B. B. (Date of publication). Title of document. Retrieved month, date, year, from http://Web address.

\*Note: When an Internet document is more than one Web page, provide a URL that links to the home page or entry page for the document. Also, if there isn't a date available for the document use (n.d.) for no date.

#### e. <u>Chapter or Section of a Web Document</u>

Author, A. A., & Author, B. B. (Date of publication). Title of article. In Title of book or larger document (chapter or section number). Retrieved month day, year from http://www.someaddress.com/full/url/.

#### Example:

Engelshcall, R. S. (1997). Module mod\_rewrite: URL Rewriting Engine. In Apache HTTP Server Version 1.3 Documentation (Apache modules.) Retrieved March 10, 2006 from http://httpd.apache.org/docs/1.3/mod/mod\_rewrite.html

\*Note: Use a chapter or section identifier and provide a URL that links directly to the chapter section, not the home page of the Web site.

#### f. Personal Communication

E-mails, interviews, letters and all person-to-person communications are not included in the list of references, though you parenthetically cite them in your main text:

#### Example:

E. Robbins, personal communication, January 4, 2001

#### g. Online Forum or Discussion Board Posting

Message posted to an online newsgroup, forum, or discussion group. Include the title of the messsage, and the URL of the newsgroup or discussion board.

#### Example:

Frook, B. D. (1999, July 23). New Inventions In The Cyberworld Of Toylandia[Msg 25]. Message posted to http://groups.earthlink.com/forum/messages/00025.html

\*Note: If only the screen name is available for the author, then use the screen name; however, if the author provides a real name, use their real name instead. Be sure to provide the exact date of the posting. Follow the date with the subject line, the thread of the message (not in italics). Provide any identifiers in brackets after the title, as in other types of references.

# **A**PPENDICES

APPENDIX A: UMK/FSB/FYP-R-B1-SV

Rubric form of Final Year Project Report Chapter 1, 2 & 3 (Supervisor)

APPENDIX B: UMK/FSB/FYP-R-C1-SV

Rubric form of Final Report of Final Year Project (Supervisor)

APPENDIX C: UMK/FSB/FYP-R-C2-SV

Rubric form of Final Report of Final Year Project (Supervisor)

APPENDIX D: UMK/FSB/FYP-R-A-EX

Rubric form of Proposal and Presentation of Final Year Project (Examiner)

**APPENDIX E**: UMK/FSB/FYP-R-B1-EX

Rubric form of Final Year Project Report Chapter 1, 2 &3 (Examiner)

**APPENDIX F**: UMK/FSB/FYP-R-C1-EX

Rubric form of Final Report of Final Year Project (Examiner)

**APPENDIX G**: UMK/FSB/FYP-R-C2-EX

Rubric form of Final Report of Final Year Project (Examiner)

**APPENDIX H**: UMK/FSB/FYP-F1 Form of Titles of Final Year Project **APPENDIX I**: UMK/FSB/FYP-F2

Final Year Project Changes Application Form

**APPENDIX J**: UMK/FSB/FYP-F3

Submission form of Proposal / Report of Final Year Project for Evaluation / Re-Evaluation

APPENDIX K: UMK/FSB/FYP-F4

Checklist of Submission of Final Year Project

**APPENDIX L** 

Sample of numbering a chapter and sub-heading in a chapter

**APPENDIX M** 

Sample of a table in the text

**APPENDIX N** 

Sample of an illustration or a figure

**APPENDIX O** 

Sample of research flow

**APPENDIX P** 

Sample of Gantt Chart

APPENDIX Q

Sample of Milestone

**APPENDIX R** 

Sample of a thesis front cover

**APPENDIX S** 

Sample of a thesis spine

**APPENDIX T** 

Example of a title page

#### **APPENDIX U**

Sample of a statement of awards for thesis

#### **APPENDIX V**

Sample of a declaration page

#### **APPENDIX W**

Example of acknowledgement page

#### **APPENDIX X**

Example of an Abstract in English

#### **APPENDIX Y**

Example of Abstrak in Bahasa Melayu

#### **APPENDIX Z**

Sample of a Table of Contents page

#### **APPENDIX AA**

Example of a List of Tables

#### **APPENDIX AB**

Example of a List of Figures

#### **APPENDIX AC**

Example of List of Abbreviations

#### **APPENDIX AD**

Example of a List of Symbols

#### **APPENDIX A**

Rubric form for Final Year Project Report Chapter 1, 2 & 3 (Supervisor)

#### UMK/FSB/FYP-R-B1-SV



# LAPORAN PROJEK PENYELIDIKAN TAHUN AKHIR BAB 1,2&3 (PENYELIA) FINAL YEAR PROJECT REPORT CHAPTER 1,2&3 (SUPERVISOR)

Nama Penuh (mengikut kad pengenalan/passport) Full Name (as identity card/ passport)	:
No. Matrik Pelajar : Student's Matric No	Fakulti/ Institut : Faculty/ Institute
Program ljazah: Degree Programme	_

# a) INTRODUCTION (10%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Well-written and interesting, sets up the body of the text well, and makes the reader eager to continue reading	Excellent (5)		
Generally well written, setting up the body of the text, but does not completely hold the reader's interest	Good (4)		
Adequately written, sets up the body of the text sufficiently, but does not hold the reader's interest	Moderate (3)	2.0	
Is weakly written, sets up the body of the text insufficiently, and does not hold the reader's interest	Weak (2)		
Is poorly written, poorly introduces the body of the text, and does not entice the reader to continue	Very Weak (1)		
No introduction	Poor (0)		

#### b) LITERATURE REVIEW (10%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Good review of relevant and empirical sources. Good synthesis and organization of literature that is clearly linked to thesis question	Excellent (5)		
Adequate review of the literature and empirical sources. Good synthesis and organization of the literature, which is clearly linked to the thesis question	Good (4)	2.0	
Minimal review of the literature and little mention of empirical sources. Poor synthesis and organization of the literature, which	Moderate (3)		

minimally links it to the thesis question	
Very little of the literature and empirical sources.	Weak
Poor synthesis and organization of the literature.	(2)
Fails to provide empirical research supporting topic. Synthesis and organization is based on limited information. There is very poor link to the thesis question.	Very Weak (1)
No literature review	Poor (0)

# c) MATERIALS AND METHODS (10%) (CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Provides clear and descriptive statement of research design, sample, instruments, analysis, procedures	Excellent (5)		
Provides adequate statement of research design, sample, instruments, analysis, and procedures with some degree of vagueness	Good (4)		
Provides very little statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Moderate (3)	2.0	
Provides poor statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Weak (2)		
Fails to provide statement of research design, sample, instruments, and/or procedures	Very Weak (1)		
No research design, sample, instruments, and/or procedures.	Poor (0)		

# d) REFERENCE (5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which	Excellent		
follows the style guide.	(5)		
Most references cited are in the bibliography, which	Good		
follows the style guide.	(4)		
Some references are missing from the bibliography	Moderate		
and/or most do not follow the style guide.	(3)	1.0	
Many references are missing from the bibliography	Weak	1.0	
and did not follow style guide	(2)		
Most of the references are missing from the	Very Weak		
bibliography and did not follow style guide	(1)		
No references	Poor		
No references	(0)		

# e) FORMAT AND STRUCTURE (5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
All paragraphs within a section flow well from one to the next.  Consistently applied UMK-FSB guidelines.	Excellent (5)	1.0	
Paragraphs within a section generally flow well from one to the next.  Manuscript conformed to most UMK-FSB guidelines	Good (4)	1.0	

Paragraphs within a section flow somewhat from one to the next. Inconsistently applied UMK-FSB guidelines	Moderate (3)
Paragraph within a section do not flow.  Most of the manuscript does not conform to the UMK-FSB guidelines.	Weak (2)
Paragraphs within a section do not clear.	Very Weak
Fails to apply UMK-FSB guidelines.	(1)
No paragraphs.	Poor
Fails to apply UMK-FSB guidelines	(0)

# f) MECHANICS (5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
No grammatical, spelling or punctuation errors	Excellent (5)		
Very little grammatical, spelling or punctuation errors	Good (4)		
Few grammatical, spelling or punctuation errors	Moderate (3)	1.0	
Many grammatical, spelling, or punctuation errors	Weak (2)	1.0	
Too many grammatical, spelling, or punctuation errors	Very Weak (1)		
All grammatical, spelling, or punctuation errors	Poor (0)		

# g) EFFORT / INITIATIVE (10%) (CLO2)

CRITERIA	RATING	WEIGHTAGE	SCORE
Completes work on time and is punctual. When asking for help, states what already has been tried.	Excellent (5)		
Regularly work on time and is punctual.	Good		
Regularly asks for help when needed.	(4)		
Does not always assume responsibility for his or her actions, which can lead to negative results. Regularly takes actions, always uses his or her time wisely Sometimes knows when help is needed and asks.	Moderate (3)	2.0	
Displays lack of interest or pride in their work. Does	Weak		
not always manage time wisely.	(2)		
Do not know when help is needed and do not ask.	\/ \\\ \/ 1		
Rarely manages time wisely.	Very Weak		
Does not ask for or accept help.	(1)		
Fails to manage time wisely.	Poor		
Never ask for or accept help.	(0)		

# h) ACADEMIC DISCUSSION WITH SUPERVISOR (5%) (CLO2)

CRITERIA	RATING	WEIGHTAGE	SCORE
Student meets more than <b>10 times</b> with their supervisor to discuss progress. Student shows <b>improvement</b> of research every time meeting with supervisor.	Excellent (5)	1.0	

	1
Chapter 1, 2 & 3 draft had been discussed few	
times with supervisor and supervisor still manages	
to correct the draft.	
Student meets at least 10 times with their	
supervisor to discuss progress Student shows	
<b>improvement</b> of research every time meeting with	Good
supervisor.	(4)
Chapter 1, 2 & 3 draft had been discuss few times	
with supervisor and supervisor don't have enough	
time to correct the draft	
Student meets at least <b>7 times</b> with their supervisor	
to discuss progress.	
Student shows <b>not much of improvement</b> of	Moderate
research every time meeting with supervisor.	(3)
Chapter 1, 2 & 3 draft had been discuss few times	(-)
with supervisor and supervisor don't have enough	
time to correct the draft	
Student meets at least <b>5 times</b> with their supervisor	
to discuss progress. Student <b>never shows any</b>	
improvement of research every time meeting with	Weak
Supervisor	(2)
Chapter 1, 2 & 3 draft had been discuss few times with supervisor but supervisor <b>never manage to</b>	
correct draft thesis because of late submission to	
supervisor	
Student meet less than 5 times with supervisor	
Student never do anything as constructed by	Very Weak
supervisor	(1)
Chapter 1, 2 & 3 draft <b>never shown</b> to supervisor	
Student <b>never</b> meet supervisor	
Student <b>never do anything</b> as constructed by	Poor
supervisor	(0)
Chapter 1, 2 & 3 draft <b>never shown</b> to supervisor	
	l .

Comments	Comments and Recommendations:						
Signature	:						
Name	:						
Date	:						

TOTAL MARKS:	
	60

#### **APPENDIX B**

Rubric form for Final Report of Final Year Project (Supervisor)

#### UMK/FSB/FYP-R-C1-SV



# LAPORAN AKHIR PROJEK PENYELIDIKAN TAHUN AKHIR (PENYELIA) FINAL REPORT OF FINAL YEAR PROJECT (SUPERVISOR)

Nama Penuh (mengikut kad pengena Full Name (as identity card/ passport)		
No. Matrik Pelajar : Student's Matric No	Fakulti/ Institut : Faculty/ Institute	
Program ljazah: Degree Programme		

#### PART A (Final Report): (45%)

# (a) ABSTRACT (5.0%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
The abstract includes very accurate, well-explained and eloquent summary of the information and uses specific data/evidence to back up summary of result	Excellent (5)		
The abstract includes an moderately accurate, good explanation and eloquent summary of the information and uses specific data/evidence to back up summary of result	Good (4)		
The abstract includes an accurate summary of the of the information and uses specific data/evidence to back up summary of results	Moderate (3)	1.0	
The abstract includes a summary of the information gathered, but only quote several specific data/evidence to back up summary of results	Weak (2)		
The abstract includes a summary of the information gathered, but does not quote specific data/evidence to back up summary of results	Very Weak (1)		
No abstract	Poor (0)		

#### (b) INTRODUCTION (5.0%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Well-written and interesting, sets up the body of the text well, and makes the reader eager to continue reading	Excellent (5)	1.0	

Generally well written, setting up the body of the text, but does not completely hold the reader's interest	Good (4)
Adequately written, sets up the body of the text sufficiently, but does not hold the reader's interest	Moderate (3)
Is weakly written, sets up the body of the text insufficiently, and does not hold the reader's interest	Weak (2)
Is poorly written, poorly introduces the body of the text, and does not entice the reader to continue	Very Weak (1)
No introduction	Poor (0)

# (c) LITERATURE REVIEW (5.0%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Good review of relevant and empirical sources. Good synthesis and organization of literature that is clearly linked to thesis question	Excellent (5)		
Adequate review of the literature and empirical sources. Good synthesis and organization of the literature, which is clearly linked to the thesis question	Good (4)		
Minimal review of the literature and little mention of empirical sources. Poor synthesis and organization of the literature, which minimally links it to the thesis question	Moderate (3)	1.0	
Very little of the literature and empirical sources. Poor synthesis and organization of the literature.	Weak (2)		
Fails to provide empirical research supporting topic. Synthesis and organization is based on limited information. There is very poor link to the thesis question.	Very Weak (1)		
No literature review	Poor (0)		

# (d) MATERIALS AND METHODS (5.0%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Provides clear and descriptive statement of research design, sample, instruments, analysis, procedures	Excellent (5)		
Provides adequate statement of research design, sample, instruments, analysis, and procedures with some degree of vagueness	Good (4)	1.0	
Provides very little statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Moderate (3)		
Provides poor statement of research design, sample, instruments, analysis and procedures with	Weak (2)		

large degree of vagueness		
Fails to provide statement of research design,	Very Weak	
sample, instruments, and/or procedures	(1)	
No materials and methods	Poor	
	(0)	

# (e) RESULTS AND DISCUSSIONS (10%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Results and discussion are presented and explained clearly. Statistical analyses are synthesized and interpreted well.	Excellent (5)		
Results and discussion are adequately presented and explained. Statistical analyses are adequately synthesized and interpreted.	Good (4)		
Results and discussion are presented and explained minimally. Statistical analyses are minimally synthesized and interpreted.	Moderate (3)	2.0	
Results and discussion are presented and explained poorly. Statistical analyses are poorly synthesized and interpreted.	Weak (2)		
Results and discussion are not presented and explained. Statistical analyses are poorly synthesized and interpreted.	Very Weak (1)		
No results and discussion	Poor (0)		

# (f) CONCLUSIONS (5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Conclusions substantiated by results, are	Excellent		
formulated exact and concise, and are	(5)		
grouped/ordered in a logical way.	(3)		
All conclusions substantiated by results and are	Good		
formulated exact.	(4)		
Conclusions mostly formulated clearly but some	Moderate		
vagueness in wording	(3)	1.0	
Some conclusions are not substantiated by results	Weak		
or merely repeat results	(2)		
Conclusions marely repeat result	Very Weak		
Conclusions merely repeat result	(1)		
No conclusion	Poor		
No conclusion	(0)		

# (g) RECOMMENDATION (5.0%) (CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Recommendations are to the-point, well-linked to			
the conclusions, original and are extensive enough	Excellent	1.0	
to serve as project description for a new thesis	(5)	1.0	
project			

Recommendations are to-the point, well-linked to	Good
the conclusions and original	(4)
Recommendations are well-linked to the	Moderate
conclusions	(3)
Some recommendations are given, but the link of	Weak
those to the conclusions is not always clear	(2)
Recommendations are absent or trivial	Very Weak
Recommendations are absent or trivial	(1)
No Recommendations	Poor
No Recommendations	(0)

# (h) REFERENCES (5.0%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which	Excellent		
follows the style guide.	(5)		
Most references cited are in the bibliography, which	Good		
follows the style guide.	(4)		
Some references are missing from the bibliography	Moderate		
and/or most do not follow the style guide.	(3)	1.0	
Many references are missing from the bibliography	Weak	1.0	
and did not follow style guide.	(2)		
Most of the references are missing from the	Very Weak		
bibliography and did not follow style guide.	(1)		
No list of references	Poor		
INO list of references	(0)		

# PART B (Technical Format): (5.0%)

# (a) Format, structure and grammar (5%)(CLO 2)

CRITERIA	RATING	WEIGHTAGE	SCORE
All paragraphs within a section flow well from one to			
the next.	Excellent		
Consistently applied UMK-FSB guidelines.	(5)		
No grammatical, spelling or punctuation errors			
Paragraphs within a section generally flow well from			
one to the next.			
Manuscript conformed to most UMK-FSB	Good		
guidelines.	(4)		
Very little grammatical, spelling or punctuation			
errors.		1	
Paragraphs within a section flow somewhat from			
one to the next.	Moderate		
Inconsistently applied UMK-FSB guidelines.	(3)		
Few grammatical, spelling or punctuation errors.			
Paragraph within a section do not flow.			
Most of the manuscript does not conform to the	Weak		
UMK-FSB guidelines.	(2)		
Many grammatical, spelling, or punctuation errors.			
Paragraphs within a section do not clear.	Very Weak		

Fails to apply UMK-FSB guidelines.	(1)	
Too many grammatical, spelling, or punctuation		
errors		
No paragraphs within a section.	Poor	
Fails to apply UMK-FSB guidelines.	1	
All grammatical, spelling, or punctuation errors	(0)	

# PART C (Supervision): (10%)

# (a) Effort/Initiative (5%)(CLO 2)

CRITERIA	RATING	WEIGHTAGE	SCORE
Completes work on time and is punctual. When asking for help, states what already has been tried.	Excellent (5)		
Regularly work on time and is punctual.	Good		
Regularly asks for help when needed.	(4)		
Does not always assume responsibility for his or her actions, which can lead to negative results.  Regularly takes actions, always uses his or her time wisely  Sometimes knows when help is needed and asks.	Moderate (3)	1	
Displays lack of interest or pride in their work. Does not always manage time wisely. Do not know when help is needed and do not ask.	Weak (2)		
Rarely manages time wisely.	Very Weak		
Does not ask for or accept help.	(1)		
Fails to manage time wisely.	Poor		
Never ask for or accept help.	(0)		

# (b) Academic discussion with supervisor (5%)(CLO2)

CRITERIA	RATING	WEIGHTAGE	SCORE
Student meets more than 10 times with their supervisor to discuss progress.  Student shows improvement of research every time meeting with supervisor. Dissertation draft had been discussed few times with supervisor and supervisor still manages to correct the draft.	Excellent (5)		
Student meets at least 10 times with their supervisor to discuss progress Student shows improvement of research every time meeting with supervisor.  Dissertation draft had been discuss few times with supervisor and supervisor don't have enough time to correct the draft	Good (4)	1	
Student meets at least <b>7 times</b> with their supervisor to discuss progress.  Student shows <b>not much of improvement</b> of research every time meeting with supervisor.  Dissertation draft had been discuss few times with	Moderate (3)		

supervisor and supervisor don't have enough time	
to correct the draft	
Student meets at least <b>5 times</b> with their supervisor	
to discuss progress. Student never shows any	
improvement of research every time meeting with	Weak
supervisor	
Report draft had been discuss few times with	(2)
supervisor but supervisor never manage to	
correct draft because of late submission to	
supervisor	
Student meet less than 5 times with supervisor	Vory Wook
Student never do anything as constructed by	Very Weak
supervisor	(1)
Report draft <b>never shown</b> to supervisor	
Student never meets supervisor	
Student never do anything as constructed by	Poor
supervisor	(0)
Report draft <b>never shown</b> to supervisor	

Comments a	and Reco	ommendation	ns :	 	
Signature	:				
Name	:			 	
Date	:			 	
				TOTAL MARKS	60

#### **APPENDIX C**

Rubric form of Final Report of Final Year Project (Supervisor)

#### UMK/FSB/FYP-R-C2-SV



# LAPORAN AKHIR PROJEK PENYELIDIKAN TAHUN AKHIR (PENYELIA) FINAL REPORT OF FINAL YEAR PROJECT (SUPERVISOR)

Nama Penuh (mengikut kad pengenalan/passport) Full Name (as identity card/ passport)	:
No. Matrik Pelajar : Student's Matric No	Fakulti/ Institut : Faculty/ Institute
Program ljazah: Degree Programme	_

#### PART A (Final Report): (45%)

(a) ABSTRACT (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
The abstract includes very accurate, well-explained and eloquent summary of the information and uses specific data/evidence to back up summary of result	Excellent (5)		
The abstract includes an moderately accurate, good explanation and eloquent summary of the information and uses specific data/evidence to back up summary of result	Good (4)		
The abstract includes an accurate summary of the of the information and uses specific data/evidence to back up summary of results	Moderate (3)	0.5	
The abstract includes a summary of the information gathered, but only quote several specific data/evidence to back up summary of results	Weak (2)		
The abstract includes a summary of the information gathered, but does not quote specific data/evidence to back up summary of results	Very Weak (1)		
No abstract	Poor (0)		

#### (b) INTRODUCTION (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Well-written and interesting, sets up the body of the text well, and makes the reader eager to continue reading	Excellent (5)	0.5	
Generally well written, setting up the body of the	Good		

text, but does not completely hold the reader's interest	(4)
Adequately written, sets up the body of the text sufficiently, but does not hold the reader's interest	Moderate (3)
Is weakly written, sets up the body of the text insufficiently, and does not hold the reader's interest	Weak (2)
Is poorly written, poorly introduces the body of the text, and does not entice the reader to continue	Very Weak (1)
No introduction	Poor (0)

# (c) LITERATURE REVIEW (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Good review of relevant and empirical sources. Good synthesis and organization of literature that is clearly linked to thesis question	Excellent (5)		
Adequate review of the literature and empirical sources. Good synthesis and organization of the literature, which is clearly linked to the thesis question	Good (4)		
Minimal review of the literature and little mention of empirical sources. Poor synthesis and organization of the literature, which minimally links it to the thesis question	Moderate (3)	0.5	
Very little of the literature and empirical sources. Poor synthesis and organization of the literature.	Weak (2)		
Fails to provide empirical research supporting topic. Synthesis and organization is based on limited information. There is very poor link to the thesis question.	Very Weak (1)		
No literature review	Poor (0)		

# (d) MATERIALS AND METHODS (5.0%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Provides clear and descriptive statement of research design, sample, instruments, analysis, procedures	Excellent (5)		
Provides adequate statement of research design, sample, instruments, analysis, and procedures with some degree of vagueness	Good (4)	1.0	
Provides very little statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Moderate (3)	1.0	
Provides poor statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Weak (2)		

Fails to provide statement of research design,	Very Weak
sample, instruments, and/or procedures	(1)
No motorials and mathods	Poor
No materials and methods	(0)

# (e) RESULTS & DISCUSSION; MAPPING (15%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
All part of geology in the study area are well explain			
and the research was done according to the given			
tasks (general geology, structural geology and			
petrography, etc.)	Excellent		
Able to produce excellent geological map of the	(5)		
study area. Able to provide correct symbols and for			
interpretation of structural features, contacts, cross			
section/s, legend, coordinates, etc.			
Most part of geology in the study area are well		1	
explain and the research was done according to the			
given tasks (general geology, structural geology			
and petrography, etc.)	Good		
Able to produce very good geological map of the	(4)		
study area. Able to provide correct symbols and			
markings for interpretation of structural features,			
contacts, cross section/s, legend, coordinates, etc.			
Some parts of geology in the study area are well		1	
explained and the research was partially done			
according to the given tasks (general geology,			
structural geology and petrography, etc.)	Moderate		
Able to produce good geological map of the study	(3)		
area. Able to provide several symbols and markings		3.0	
are used for interpretation of structural features,			
contacts, cross section/s, legend, coordinates, etc.			
Many part of geology in the study area are not well		1	
explained and some part of the research was not			
done properly according to the given tasks (general			
geology, structural geology and petrography, etc.)	Weak		
Able to produce poor geological map of the study	(2)		
area. Only able to provide very few symbols and			
markings for interpretation of structural features,			
contacts, cross section/s, legend, coordinates, etc.			
Fail to provide the explanation of the geology in the			
study area and research was not done properly			
according to the given tasks (general geology,			
structural geology and petrography, etc)	Very Weak		
Able to produce very poor geological map of the	(1)		
study area. No symbols and markings for			
interpretation of structural features, contacts, cross			
section/s, legend, coordinates, etc.			
No explanation of the geology in the study area	Poor	]	
according to the given tasks (general geology,	(0)		
structural geology and petrography, etc)	(0)		

Unable to produce geological map of the study		
area. No symbols and markings for interpretation of		
structural features, contacts, cross section/s,		
legend, coordinates, etc.		

# (f) RESULTS & DISCUSSION; SPECIFICATION (10%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
<ul> <li>Explains and evaluates the results well.</li> <li>Have a very good quality data and the data can be trusted.</li> <li>Data are presented in a very suitable techniques</li> <li>Findings were discussed and interpreted very adequately based on the objectives</li> </ul>	Excellent (5)		
<ul> <li>Explains and evaluates the results adequately.</li> <li>Have good quality data and almost all the data can be trusted.</li> <li>Data are presented in a suitable techniques</li> <li>Findings were discussed and interpreted adequately based on the objectives</li> </ul>	Good (4)		
<ul> <li>Explains and evaluates the results minimally.</li> <li>Insufficiencies data and not all the data can be trusted.</li> <li>Data are presented in a less suitable techniques</li> <li>Findings were discussed and interpreted good based on the objectives</li> </ul>	Moderate (3)	2.0	
<ul> <li>Explains and evaluates the results poorly.</li> <li>Insufficiencies data and most all the data cannot be trusted.</li> <li>Data are presented in a poor techniques</li> <li>Findings were discussed and interpreted poor based on the objectives</li> </ul>	Weak (2)		
<ul> <li>Does not explain or evaluate the importance of results.</li> <li>Insufficiencies data and almost all the data cannot be trusted.</li> <li>Fail to present techniques in a suitable manner</li> <li>Findings were discussed and interpreted very poorly based on the objectives</li> </ul>	Very Weak (1)		
<ul> <li>No explanation or evaluation of the results.</li> <li>No data and all the data cannot be trusted.</li> <li>Fail to present techniques in a suitable manner</li> <li>No discussion on findings and very poor interpretation based on the objectives</li> </ul>	Poor (0)		

# (g) CONCLUSIONS (2.5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Conclusions substantiated by results, are formulated exact and concise, and are grouped/ordered in a logical way.	Excellent (5)	0.5	

All conclusions substantiated by results and are	Good
formulated exact.	(4)
Conclusions mostly formulated clearly but some	Moderate
vagueness in wording	(3)
Some conclusions are not substantiated by results or	Weak
merely repeat results	(2)
Conclusions merely repeat result	Very Weak
Conclusions merely repeat result	(1)
No conclusion	Poor
INO COLICIOSION	(0)

# (h) RECOMMENDATION (2.5%) (CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Recommendations are to the-point, well-linked to the	Excellent		
conclusions, original and are extensive enough to	(5)		
serve as project description for a new thesis project	(3)		
Recommendations are to-the point, well-linked to the	Good		
conclusions and original	(4)		
Recommendations are well-linked to the conclusions	Moderate		
Recommendations are well-linked to the conclusions	(3)	0.5	
Some recommendations are given, but the link of	Weak		
those to the conclusions is not always clear	(2)		
Recommendations are absent or trivial	Very Weak		
Recommendations are absent of trivial	(1)		
No Docommondations	Poor	1	
No Recommendations	(0)		

# (i) REFERENCES (2.5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which	Excellent		
follows the style guide.	(5)		
Most references cited are in the bibliography, which	Good		
follows the style guide.	(4)		
Some references are missing from the bibliography	Moderate		
and/or most do not follow the style guide.	(3)	0.5	
Many references are missing from the bibliography	Weak	0.5	
and did not follow style guide.	(2)		
Most of the references are missing from the	Very Weak		
bibliography and did not follow style guide.	(1)		
No list of references	Poor		
No list of references	(0)		

# PART B (Technical Format): (5.0%)

# (b) FORMAT, STRUCTURE AND GRAMMAR (5%) (CLO 2)

CRITERIA	RATING	WEIGHTAGE	SCORE
All paragraphs within a section flow well from one to	Excellent	1	
the next.	(5)	•	

Consistently applied UMK-FSB guidelines.	
No grammatical, spelling or punctuation errors	
Paragraphs within a section generally flow well from	
one to the next.	
Manuscript conformed to most UMK-FSB	Good
guidelines.	(4)
Very little grammatical, spelling or punctuation	
errors.	
Paragraphs within a section flow somewhat from	
one to the next.	Moderate
Inconsistently applied UMK-FSB guidelines.	(3)
Few grammatical, spelling or punctuation errors.	
Paragraph within a section do not flow.	
Most of the manuscript does not conform to the	Weak
UMK-FSB guidelines.	(2)
Many grammatical, spelling, or punctuation errors.	
Paragraphs within a section do not clear.	
Fails to apply UMK-FSB guidelines.	Very Weak
Too many grammatical, spelling, or punctuation	(1)
errors	
No paragraphs within a section.	Poor
Fails to apply UMK-FSB guidelines.	(0)
All grammatical, spelling, or punctuation errors	(0)

# PART C (Supervision): (10%)

# (c) EFFORT/INITIATIVE (5%) (CLO 2)

CRITERIA	RATING	WEIGHTAGE	SCORE
Completes work on time and is punctual. When asking for help, states what already has been tried.	Excellent (5)		
Regularly work on time and is punctual.	Good		
Regularly asks for help when needed.	(4)		
Does not always assume responsibility for his or her actions, which can lead to negative results.  Regularly takes actions, always uses his or her time wisely  Sometimes knows when help is needed and asks.	Moderate (3)	1	
Displays lack of interest or pride in their work. Does not always manage time wisely. Do not know when help is needed and do not ask.	Weak (2)		
Rarely manages time wisely.	Very Weak		
Does not ask for or accept help.	(1)		
Fails to manage time wisely.	Poor		
Never ask for or accept help.	(0)		

# (d) ACADEMIC DISCUSSION WITH SUPERVISOR (5%) (CLO2)

CRITERIA	RATING	WEIGHTAGE	SCORE
Student meets more than 10 times with their	Excellent	1	

Student shows improvement of research every time meeting with supervisor. Dissertation draft had been discussed few times with supervisor and supervisor still manages to correct the draft.  Student meets at least 10 times with their supervisor to discuss progress Student shows improvement of research every time meeting with supervisor.  Dissertation draft had been discuss few times with supervisor and supervisor don't have enough time to correct the draft  Student meets at least 7 times with their supervisor to discuss progress.  Student shows not much of improvement of research every time meeting with supervisor.  Dissertation draft had been discuss few times with supervisor and supervisor don't have enough time to correct the draft  Student meets at least 5 times with their supervisor to discuss progress. Student never shows any improvement of research every time meeting with supervisor  Report draft had been discuss few times with supervisor but supervisor never manage to correct draft because of late submission to supervisor  Student never do anything as constructed by  Very Weak  (1)
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Student meet less than 5 times with supervisor Student never do anything as constructed by
Student never do anything as constructed by very weak
supervisor
Report draft <b>never shown</b> to supervisor
Student never meets supervisor
Student never do anything as constructed by Poor
supervisor (0)
Report draft <b>never shown</b> to supervisor

# Comments and Recommendations: Signature: Name: Date:

TOTAL MARKS:	
	60

#### **APPENDIX D**

Rubric form of Proposal and Presentation of Final Year Project (Examiner)

#### UMK/FSB/FYP-R-A-EX



# CADANGAN DAN PEMBENTANGAN PROJEK PENYELIDIKAN TAHUN AKHIR (PENILAI) PROPOSAL AND PRESENTATION OF FINAL YEAR PROJECT (EXAMINER)

Nama Penuh (mengikut kad pengenalan/passport) Full Name (as identity card/ passport)	:
No. Matrik Pelajar : Student's Matric No	Fakulti/ Institut : Faculty/ Institute
Program Ijazah: Degree Programme	_

#### PART A: EVALUATION OF PROPOSAL (15%)

#### a) INTRODUCTION (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Presents a significant research problem related to technology education or career and technical education. Articulates clear, reasonable research questions given the purpose, design, and methods of the proposed study. All constructs and variables have been appropriately defined. Propositions are clearly supported from the research and theoretical literature. All elements are mutually supportive.	Excellent (5)		
Identifies a relevant research issue. Research questions are succinctly stated, connected to the research issue, and supported by the literature. Constructs and variables have been identified and described. Connections are established with the literature.	Good (4)	0.5	
Although a research issue is identified, the statement is too broad or the description fails to establish the importance of the problem area. The research purpose, questions, hypotheses, or definitions of constructs and variables are poorly formed, ambiguous, or not logically connected to the description of the problem.  Connections to the literature are unclear or	Moderate (3)		

debatable.	
Statement of the problem, significance, purpose, questions/hypotheses, or definitions of constructs and variables were inappropriate.	Weak (2)
Background of the study, problem statement, objectives and significance of the study are omitted	Very Weak (1)
No background of the study, problem statement, objectives and significance of the study	Poor (0)

# b) LITERATURE REVIEW (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Narrative integrates critical and logical details from the peer-reviewed theoretical and research literature. Each key construct and variable is grounded to the literature. Attention is given to different perspectives, conditionality, threats to validity, and opinion vs. evidence.	Excellent (5)		
Key constructs and variables were connected to relevant, reliable theoretical and research literature	Good (4)		
A key construct or variable was not connected to the research literature. Selected literature was from unreliable sources. Literary supports were vague or ambiguous.	Moderate (3)	0.5	
The review of literature was missing or consisted of non-research based articles. Propositions were irrelevant, inaccurate, or inappropriate.	Weak (2)		
Literature review are irrelevant to support hypothesis/chosen methodology/analysis technique Literature review is gathered from non-research based articles. Structure of literature review is incomprehensible or confusing.	Very Weak (1)		
No literature review	Poor (0)		

# c) MATERIALS AND METHODS (2.5%) (CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Description of the data (collection, treatment) or models as well as the analysis methods is complete and clear so that exact reproduction of the	Excellent (5)	0.5	

research is possible	
Description of the data (collection,	
treatment) or models as well as the	
analysis methods used is mostly	Good
complete, but exact reproduction of the	(4)
research is not possible due to lack of	
some details	
Description of the data (collection,	
treatment) or models as well as the	
analysis methods used is lacking in a	Moderate
number of places so that at most a more	(3)
or less similar research could be	
performed	
Some aspects of the research regarding	
data collection, data-treatment, models	Weak
or the analysis methods are described	
insufficiently so that the particular aspect	(2)
of the research is not reproducible	
Research objectives seem not	
reproducible due to insufficient	Very Weak
information on data (collection and/or	(1)
treatment) and analysis methods	
No description of the data (collection,	Poor
treatment) or models as well as the	(0)
analysis methods	(0)

# d) FLOWCHART (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Display clear visual or graphic illustration of a process or system used to solve a problem or produce a product. Display high level thinking and articulation abilities when numerous factors are involved in a good way.	Excellent (5)		
Display most complete visual or graphic illustration of a process or system used to solve a problem or produce a product, but difficult to grade level of thinking and articulation abilities when numerous factors are involved.	Good (4)	0.5	
Display lacking visual or graphic illustration of a process or system used to solve a problem or produce a product, and high level thinking and articulation abilities when numerous factors are involved is not possible.	Moderate (3)		
Insufficient information in flowcharts to communicate the logic involved in a system; does not allow writing proficiency assessment.	Weak (2)		

Flow charts seem not reproducible due to students fail to displays original synthetic thinking	Very Weak (1)
No flowchart	Poor (0)

# e) GANTT CHART & MILESTONE (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Gantt chart & milestone are very clear, realistic and reflect the timeline. Gantt chart & milestone are well designed according to final year project deadlines.	Excellent (5)		
Gantt chart & milestone are realistic and reflect the timeline. Gantt chart & milestone are mostly well designed according to final year project deadlines.	Good (4)		
Gantt chart & milestone are too closely tied to the timeline. Gantt chart & milestone are quite good designed according to final year project deadlines.	Moderate (3)	0.5	
Gantt chart & milestone are unrealistic, inflated, or inaccurate. Gantt chart & milestone are occasionally designed according to final year project deadlines.	Weak (2)		
Gantt chart & milestone are unclear, unrealistic, inflated, or inaccurate.  Not considered the Gantt chart & milestone to complete the final year project.	Very Weak (1)		
No Gantt chart & milestone	Poor (0)		

# f) REFERENCE (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which follows the style guide.	Excellent (5)		
Most references cited are in the bibliography, which follows the style guide.	Good (4)	0.5	
Some references are missing from the bibliography and/or most do not follow the style guide.	Moderate (3)		
Many references are missing from the bibliography and did not follow style	Weak (2)		

guide		
Most of the references are missing from the bibliography and did not follow style guide	Very Weak (1)	
No references	Poor (0)	

# PART B: PRESENTATION EVALUATION (10%)

# a) ORGANIZATION (5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Clearly, concisely written. Logical intuitive progression of ideas and supporting information. Clear and direct cues to all information.	Excellent (5)		
Logical progression of ideas and supporting information. Most cues to information are clear and direct.	Good (4)		
Vague in conveying viewpoint and purpose. Some logical progression ideas and supporting information, but cues are confusing and flawed.	Moderate (3)	1.0	
Lack of clear point of view and logical sequence of information. Cues to information are not evident.	Weak (2)		
Not clear point of view and logical	Very Weak		
sequence of information	(1)		
No presentation	Poor (0)		

# b) DELIVERY (5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Excellent eye contact, no distracting gestures, appropriate volume, clear and consistent pronunciations.  Answers are uniformly good, and show knowledge beyond presentation.	Excellent (5)		
Good eye contact, no distracting gestures, appropriate volume, overall clear pronunciations.  Answers are uniformly good, both in substance and delivery.	Good (4)	1.0	
Inconsistent eye contact, volume and pronunciations. Answers are inconsistent in quality, either in substance or delivery.	Moderate (3)		
Poor eye contact, volume and pronunciations. Answers are low in quality, either in	Weak (2)		

substance or delivery.		
Poor eye contact, volume and pronunciations.  Not answer the question.	Very Weak (1)	
No presentation	Poor (0)	

Comments a	and Recomm	nendations	:			
Signature Name Date	:					
				ТОТА	L MARKS:	

#### **APPENDIX E**

Rubric form of Final Year Project Report Chapter 1, 2 &3 (Examiner)

#### UMK/FSB/FYP-R-B1-EX



# LAPORAN PROJEK PENYELIDIKAN TAHUN AKHIR BAB 1,2&3 (PENILAI) FINAL YEAR PROJECT REPORT CHAPTER 1,2&3 (EXAMINER)

Nama Penuh (mengikut kad pengenalan/passport): Full Name (as identity card/ passport)	
No. Matrik Pelajar : Student's Matric No	Fakulti/ Institut :Faculty/ Institute
Program ljazah: Degree Programme	-

# a) INTRODUCTION (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Well-written and interesting, sets up the body of the text well, and makes the reader eager to continue reading	Excellent (5)		
Generally well written, setting up the body of the text, but does not completely hold the reader's interest	Good (4)		
Adequately written, sets up the body of the text sufficiently, but does not hold the reader's interest	Moderate (3)	0.5	
Is weakly written, sets up the body of the text insufficiently, and does not hold the reader's interest	Weak (2)		
Is poorly written, poorly introduces the body of the text, and does not entice the reader to continue	Very Weak (1)		
No introduction	Poor (0)		

# b) LITERATURE REVIEW (5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Good review of relevant and empirical sources. Good synthesis and organization of literature that is clearly linked to thesis question	Excellent (5)	1.0	
Adequate review of the literature and empirical sources. Good synthesis and	Good (4)		

organization of the literature, which is	
clearly linked to the thesis question  Minimal review of the literature and little	
mention of empirical sources. Poor synthesis and organization of the literature, which minimally links it to the thesis question	Moderate (3)
Very little of the literature and empirical sources. Poor synthesis and organization of the literature.	Weak (2)
Fails to provide empirical research supporting topic. Synthesis and organization is based on limited information. There is very poor link to the thesis question.	Very Weak (1)
No literature review	Poor (0)

## c) MATERIALS AND METHODS (5%) (CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Provides clear and descriptive statement of research design, sample, instruments, analysis, procedures	Excellent (5)		
Provides adequate statement of research design, sample, instruments, analysis, and procedures with some degree of vagueness	Good (4)		
Provides very little statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Moderate (3)	1.0	
Provides poor statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Weak (2)		
Fails to provide statement of research design, sample, instruments, and/or procedures	Very Weak (1)		
No research design, sample, instruments, and/or procedures	Poor (0)		

# d) REFERENCE (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which follows the style guide.	Excellent (5)	0.5	
Most references cited are in the bibliography, which follows the style guide.	Good (4)	0.0	

Some references are missing from the bibliography and/or most do not follow the style guide.	Moderate (3)
Many references are missing from the bibliography and did not follow style guide	Weak (2)
Most of the references are missing from the bibliography and did not follow style guide	Very Weak (1)
No references	Poor (0)

Comments a	and Rec	ommendations	s:			
Signature	:					
Name	:					
Date	:			 		
				TOTAL MAR	RKS:	_
					15	

#### **APPENDIX F**

Rubric form of Final Report of Final Year Project (Examiner)

#### UMK/FSB/FYP-R-C1-EX



## LAPORAN AKHIR PROJEK PENYELIDIKAN TAHUN AKHIR (PENYELIA) FINAL REPORT OF FINAL YEAR PROJECT (EXAMINER)

Nama Penuh (mengikut kad pengenalan/passport) Full Name (as identity card/ passport)	i
No. Matrik Pelajar : Student's Matric No	Fakulti/ Institut : Faculty/ Institute
Program Ijazah: Degree Programme	_

#### PART A (Final Report): (32.5%)

#### (a) ABSTRACT (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
The abstract includes very accurate, well-explained and eloquent summary of the information and uses specific data/evidence to back up summary of result	Excellent (5)		
The abstract includes an moderately accurate, good explanation and eloquent summary of the information and uses specific data/evidence to back up summary of result	Good (4)		
The abstract includes an accurate summary of the of the information and uses specific data/evidence to back up summary of results	Moderate (3)	0.5	
The abstract includes a summary of the information gathered, but only quote several specific data/evidence to back up summary of results	Weak (2)		
The abstract includes a summary of the information gathered, but does not quote specific data/evidence to back up summary of results	Very Weak (1)		
No abstract	Poor (0)		

#### (b) INTRODUCTION (2.5%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Well-written and interesting, sets up the body of the text well, and makes the reader eager to continue reading	Excellent (5)	0.5	

Generally well written, setting up the body of the text, but does not completely hold the reader's interest	Good (4)
Adequately written, sets up the body of the text sufficiently, but does not hold the reader's interest	Moderate (3)
Is weakly written, sets up the body of the text insufficiently, and does not hold the reader's interest	Weak (2)
Is poorly written, poorly introduces the body of the text, and does not entice the reader to continue	Very Weak (1)
No introduction	Poor (0)

# (c) LITERATURE REVIEW (5.0%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Good review of relevant and empirical sources. Good synthesis and organization of literature that is clearly linked to thesis question	Excellent (5)		
Adequate review of the literature and empirical sources. Good synthesis and organization of the literature, which is clearly linked to the thesis question	Good (4)		
Minimal review of the literature and little mention of empirical sources. Poor synthesis and organization of the literature, which minimally links it to the thesis question	Moderate (3)	1.0	
Very little of the literature and empirical sources. Poor synthesis and organization of the literature.	Weak (2)		
Fails to provide empirical research supporting topic. Synthesis and organization is based on limited information. There is very poor link to the thesis question.	Very Weak (1)		
No literature review	Poor (0)		

# (d) MATERIALS AND METHODS (5.0%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Provides clear and descriptive statement of research design, sample, instruments, analysis, procedures	Excellent (5)		
Provides adequate statement of research design, sample, instruments, analysis, and procedures with some degree of vagueness	Good (4)	1.0	
Provides very little statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Moderate (3)		
Provides poor statement of research design, sample, instruments, analysis and procedures with	Weak (2)		

large degree of vagueness	
Fails to provide statement of research design,	Very Weak
sample, instruments, and/or procedures	(1)
No materials and methods	Poor
INO Materials and methods	(0)

## (e) RESULTS AND DISCUSSIONS (10%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Results and discussion are presented and explained clearly. Statistical analyses are synthesized and interpreted well.	Excellent (5)		
Results and discussion are adequately presented and explained. Statistical analyses are adequately synthesized and interpreted.	Good (4)		
Results and discussion are presented and explained minimally. Statistical analyses are minimally synthesized and interpreted.	Moderate (3)	2.0	
Results and discussion are presented and explained poorly. Statistical analyses are poorly synthesized and interpreted.	Weak (2)		
Results and discussion are not presented and explained. Statistical analyses are poorly synthesized and interpreted.	Very Weak (1)		
No results and discussion	Poor (0)		

## (f) CONCLUSIONS (2.5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Conclusions substantiated by results, are	Excellent		
formulated exact and concise, and are	(5)		
grouped/ordered in a logical way.	(3)		
All conclusions substantiated by results and are	Good		
formulated exact.	(4)		
Conclusions mostly formulated clearly but some	Moderate		
vagueness in wording	(3)	0.5	
Some conclusions are not substantiated by results	Weak		
or merely repeat results	(2)		
Canalysians marely repeat result	Very Weak		
Conclusions merely repeat result	(1)		
No conclusion	Poor		
No conclusion	(0)		

## (g) RECOMMENDATION (2.5%)(CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Recommendations are to the-point, well-linked to the conclusions, original and are extensive enough to serve as project description for a new thesis project	Excellent (5)	0.5	

Recommendations are to-the point, well-linked to	Good
the conclusions and original	(4)
Recommendations are well-linked to the	Moderate
conclusions	(3)
Some recommendations are given, but the link of	Weak
those to the conclusions is not always clear	(2)
Recommendations are absent or trivial	Very Weak
	(1)
No Recommendations	Poor
No Recommendations	(0)

# (h) REFERENCES (2.5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which	Excellent		
follows the style guide.	(5)		
Most references cited are in the bibliography, which	Good		
follows the style guide.	(4)		
Some references are missing from the bibliography	Moderate		
and/or most do not follow the style guide.	(3)	0.5	
Many references are missing from the bibliography	Weak	0.5	
and did not follow style guide.	(2)		
Most of the references are missing from the	Very Weak		
bibliography and did not follow style guide.	(1)		
No list of references	Poor		
INO list of references	(0)		

# PART B (Presentation Evaluation): (7.5%)

## (a) Organization (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Clearly, concisely written. Logical intuitive progression of ideas and supporting information. Clear and direct cues to all information.	Excellent (5)		
Logical progression of ideas and supporting information. Most cues to information are clear and direct.	Good (4)		
Vague in conveying viewpoint and purpose. Some logical progression ideas and supporting information, but cues are confusing and flawed.	Moderate (3)	0.5	
Lack of clear point of view and logical sequence of information. Cues to information are not evident.	Weak (2)		
Not clear point of view and logical sequence of information	Very Weak (1)		
No presentation	Poor (0)		

# (b) Delivery (5.0%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Excellent eye contact, no distracting gestures, appropriate volume, clear and consistent pronunciations. Answers are uniformly good, and show knowledge beyond presentation.	Excellent (5)		
Good eye contact, no distracting gestures, appropriate volume, overall clear pronunciations.  Answers are uniformly good, both in substance and delivery.	Good (4)		
Inconsistent eye contact, volume and pronunciations. Answers are inconsistent in quality, either in substance or delivery.	Moderate (3)	1.0	
Poor eye contact, volume and pronunciations.  Answers are low in quality, either in substance or delivery.	Weak (2)		
Poor eye contact, volume and pronunciations. Not answer the question.	Very Weak (1)		
No presentation	Poor (0)		

Comments a	and Reco	ommendations	· :			 _
						 _
Signature	:					
Name	:					
Date	:					
						_
				ТОТА	AL MARKS:	

#### **APPENDIX G**

Rubric form of Final Report of Final Year Project (Examiner)

#### UMK/FSB/FYP-R-C2-EX



## LAPORAN AKHIR PROJEK PENYELIDIKAN TAHUN AKHIR (PENYELIA) FINAL REPORT OF FINAL YEAR PROJECT (EXAMINER)

Nama Penuh (mengikut kad pengenalan/passport) Full Name (as identity card/ passport)	:
No. Matrik Pelajar : Student's Matric No	_ Fakulti/ Institut : Faculty/ Institute
Program Ijazah: Degree Programme	_

#### PART A (Final Report): (32.5%)

## (a) ABSTRACT (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
The abstract includes very accurate, well-explained and eloquent summary of the information and uses specific data/evidence to back up summary of result	Excellent (5)		
The abstract includes an moderately accurate, good explanation and eloquent summary of the information and uses specific data/evidence to back up summary of result	Good (4)		
The abstract includes an accurate summary of the of the information and uses specific data/evidence to back up summary of results	Moderate (3)	0.5	
The abstract includes a summary of the information gathered, but only quote several specific data/evidence to back up summary of results	Weak (2)		
The abstract includes a summary of the information gathered, but does not quote specific data/evidence to back up summary of results	Very Weak (1)		
No abstract	Poor (0)		

#### (b) INTRODUCTION (2.5%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Well-written and interesting, sets up the body of the text well, and makes the reader eager to continue reading	Excellent (5)	0.5	

Generally well written, setting up the body of the text, but does not completely hold the reader's interest	Good (4)
Adequately written, sets up the body of the text sufficiently, but does not hold the reader's interest	Moderate (3)
Is weakly written, sets up the body of the text insufficiently, and does not hold the reader's interest	Weak (2)
Is poorly written, poorly introduces the body of the text, and does not entice the reader to continue	Very Weak (1)
No introduction	Poor (0)

# (c) LITERATURE REVIEW (2.5%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Good review of relevant and empirical sources. Good synthesis and organization of literature that is clearly linked to thesis question	Excellent (5)		
Adequate review of the literature and empirical sources. Good synthesis and organization of the literature, which is clearly linked to the thesis question	Good (4)		
Minimal review of the literature and little mention of empirical sources. Poor synthesis and organization of the literature, which minimally links it to the thesis question	Moderate (3)	0.5	
Very little of the literature and empirical sources. Poor synthesis and organization of the literature.	Weak (2)		
Fails to provide empirical research supporting topic. Synthesis and organization is based on limited information. There is very poor link to the thesis question.	Very Weak (1)		
No literature review	Poor (0)		

# (d) MATERIALS AND METHODS (2.5%)(CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Provides clear and descriptive statement of research design, sample, instruments, analysis, procedures	Excellent (5)		
Provides adequate statement of research design, sample, instruments, analysis, and procedures with some degree of vagueness	Good (4)	0.5	
Provides very little statement of research design, sample, instruments, analysis and procedures with large degree of vagueness	Moderate (3)		
Provides poor statement of research design, sample, instruments, analysis and procedures with	Weak (2)		

large degree of vagueness	
Fails to provide statement of research design,	Very Weak
sample, instruments, and/or procedures	(1)
No materials and methods	Poor
No materials and methods	(0)

## (e) RESULTS & DISCUSSION; MAPPING (10%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
All part of geology in the study area are well explain and the research was done according to the given tasks (general geology, structural geology and petrography, etc.) Able to produce excellent geological map of the study area. Able to provide correct symbols and for interpretation of structural features, contacts, cross section/s, legend, coordinates, etc.	Excellent (5)		
Most part of geology in the study area are well explain and the research was done according to the given tasks (general geology, structural geology and petrography, etc.) Able to produce very good geological map of the study area. Able to provide correct symbols and markings for interpretation of structural features, contacts, cross section/s, legend, coordinates, etc.	Good (4)		
Some part of geology in the study area are well explain and the research was partially done according to the given tasks (general geology, structural geology and petrography, etc.) Able to produce good geological map of the study area. Able to provide several symbols and markings are used for interpretation of structural features, contacts, cross section/s, legend, coordinates, etc.	Moderate (3)	2.0	
Many part of geology in the study area are not well explain and some part of the research was not done properly according to the given tasks (general geology, structural geology and petrography, etc.)  Able to produce poor geological map of the study area. Only able to provide very few symbols and markings for interpretation of structural features, contacts, cross section/s, legend, coordinates, etc.	Weak (2)		
Fail to provide the explanation of the geology in the study area and research was not done properly according to the given tasks (general geology, structural geology and petrography, etc)	Very Weak (1)		

Able to produce very geological map of the study area. No symbols and markings for interpretation of structural features, contacts, cross section/s, legend, coordinates, etc.		
No explanation of the geology in the study area according to the given tasks (general geology, structural geology and petrography, etc) Unable to produce geological map of the study area. No symbols and markings for interpretation of structural features, contacts, cross section/s, legend, coordinates, etc.	Poor (0)	

# (f) RESULTS & DISCUSSION; SPECIFICATION (5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Explains and evaluates the results well. Have a very good quality data and the data can be trusted. Data are presented in a very suitable techniques Findings were discussed and interpreted very adequately based on the objectives	Excellent (5)		
Explains and evaluates the results adequately. Have good quality data and almost all the data can be trusted. Data are presented in a suitable techniques Findings were discussed and interpreted adequately based on the objectives	Good (4)		
Explains and evaluates the results minimally. Insufficiencies data and not all the data can be trusted. Data are presented in a less suitable techniques Findings were discussed and interpreted good based on the objectives	Moderate (3)	1.0	
Explains and evaluates the results poorly. Insufficiencies data and most all the data cannot be trusted. Data are presented in a poor techniques Findings were discussed and interpreted poor based on the objectives	Weak (2)		
Does not explain or evaluate the importance of results. Insufficiencies data and almost all the data cannot be trusted. Fail to present techniques in a suitable manner Findings were discussed and interpreted very poorly based on the objectives	Very Weak (1)		
<ul> <li>No explanation or evaluation of the results.</li> <li>No data and all the data cannot be trusted.</li> <li>Fail to present techniques in a suitable</li> </ul>	Poor (0)		

	manner		
•	No discussion on findings and very poor		
	interpretation based on the objectives		

## (g) CONCLUSIONS (2.5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
Conclusions substantiated by results, are	Excellent		
formulated exact and concise, and are			
grouped/ordered in a logical way.	(5)		
All conclusions substantiated by results and are	Good		
formulated exact.	(4)		
Conclusions mostly formulated clearly but some	Moderate		
vagueness in wording	(3)	0.5	
Some conclusions are not substantiated by results	Weak		
or merely repeat results	(2)		
Conclusions morely repeat result	Very Weak		
Conclusions merely repeat result	(1)		
No conclusion	Poor		
INO CONCIUSION	(0)		

# (h) RECOMMENDATION (2.5%)(CLO4)

CRITERIA	RATING	WEIGHTAGE	SCORE
Recommendations are to the-point, well-linked to the conclusions, original and are extensive enough to serve as project description for a new thesis project	Excellent (5)		
Recommendations are to-the point, well-linked to the conclusions and original	Good (4)		
Recommendations are well-linked to the conclusions	Moderate (3)	0.5	
Some recommendations are given, but the link of those to the conclusions is not always clear	Weak (2)		
Recommendations are absent or trivial	Very Weak (1)		
No Recommendations	Poor (0)		

## (i) REFERENCES (2.5%) (CLO3)

CRITERIA	RATING	WEIGHTAGE	SCORE
All references cited are in the bibliography, which	Excellent		
follows the style guide.	(5)		
Most references cited are in the bibliography, which	Good		
follows the style guide.	(4)		
Some references are missing from the bibliography	Moderate	0.5	
and/or most do not follow the style guide.	(3)		
Many references are missing from the bibliography	Weak		
and did not follow style guide.	(2)		
Most of the references are missing from the	Very Weak		

bibliography and did not follow style guide.	(1)		
No list of references	Poor		
No list of references	(0)		

# PART B (Presentation Evaluation): (7.5%)

# (b) Organization (2.5%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Clearly, concisely written. Logical intuitive progression of ideas and supporting information.  Clear and direct cues to all information.	Excellent (5)		
Logical progression of ideas and supporting information. Most cues to information are clear and direct.	Good (4)		
Vague in conveying viewpoint and purpose. Some logical progression ideas and supporting information, but cues are confusing and flawed.	Moderate (3)	0.5	
Lack of clear point of view and logical sequence of	Weak	1	
information. Cues to information are not evident.	(2)		
Not clear point of view and logical sequence of	Very Weak		
information	(1)		
No presentation	Poor (0)		

# (c) Delivery (5.0%) (CLO1)

CRITERIA	RATING	WEIGHTAGE	SCORE
Excellent eye contact, no distracting gestures, appropriate volume, clear and consistent pronunciations. Answers are uniformly good, and show knowledge beyond presentation.	Excellent (5)		
Good eye contact, no distracting gestures, appropriate volume, overall clear pronunciations.  Answers are uniformly good, both in substance and delivery.	Good (4)		
Inconsistent eye contact, volume and pronunciations. Answers are inconsistent in quality, either in substance or delivery.	Moderate (3)	1.0	
Poor eye contact, volume and pronunciations.  Answers are low in quality, either in substance or delivery.	Weak (2)		
Poor eye contact, volume and pronunciations. Not answer the question.	Very Weak (1)		
No presentation	Poor (0)		

Comments a	and Reco	mmendatio	ns :		
Signature	:				
Name	:			 	
Date	:			 	
				TOTAL MARKS	:40

#### **APPENDIX H**

## Form of Titles of Final Year Project

## UMK/FSB/FYP-F1



# TAJUK PROJEK PENYELIDIKAN TAHUN AKHIR TITLES OF FINAL YEAR PROJECT

	T		1
aras Projek Tahun Ak nator of Final Year Pro			
Program : of Programme		Fakulti/ Ins Faculty/ In	
ama Kursus: Course Name		Sesi/Sess Semester	sion: / Semester

No.	Supervisor	Title of Research	Student	Matrix No.
1.				
2.				

#### **APPENDIX I**

## Final Year Project Changes Application Form

#### UMK/FSB/FYP-F2



## BORANG PERMOHONAN/ PERTAMBAHAN/ PERTUKARAN PROJEK PENYELIDIKAN TAHUN AKHIR FINAL YEAR PROJECT CHANGES APPLICATION FORM

1.	Nama Penuh (mengikut kad pengenalan/passport):
2.	No. Matrik Pelajar : 3. No.Telefon Pelajar : Student's Matric No. Student's Telephone No.
4.	Fakulti/ Institut:Faculty/ Institute
5.	Program Ijazah: Degree Programme
6.	*Permohonan/ Pertambahan/ Pertukaran  *Apply/ Add/ Change  Penyelia Utama/ Main Supervisor Daripada program/ From Programme  Penyelia Utama/Main Supervisor Tukar kepada/Change to  Penyelia Bersama/Co-Supervisor Tambah/ Tukar kepada/Add/ Change to  Tajuk Penyelidikan/Research Title Tukar kepada/Add/ Change to  Lain-lain
7.	Sebab *permohonan/ pertambahan/ pertukaran penyelia / pertukaran tajuk penyelidikan Reasons for applying/ adding/ changing supervisor / change of title
	Tandatangan Pelajar: Tarikh / Date:Student's Signature

7.	Declaration of	enyelia / Penyelia Bersama of* Supervisor / Co-supervisor  Bersetuju dengan permohonan calon Agree with candidate's application  Tidak Bersetuju dengan permohonan calo Not agree with candidate's application ber	cause
	Name of Sup	pervisor	
	Tandatangar Signature/ S	n/ Cop Rasmi: tamp	Tarikh: Date
9.		etua Program of Head of Programme Bersetuju dengan perakuan Penyelia Agree with the declaration of Supervisor Tidak Bersetuju dengan perakuan Penyel Not agree with the declaration of Supervis	
	Tandatangar Signature/ S	n/ Cop Rasmi: tamp	Tarikh: Date
10		enyelaras Projek Tahun Akhir of Coordinator of Final Year Project Permohonan diluluskan Application is approved Permohonan tidak diluluskan kerana Application is not approved because	
	Tandatangar Signature/ S	n/ Cop Rasmi:tamp	Tarikh: Date
Nota:	0,	ng tidak berkenaan dan Tandakan X pada ruang be lidapati memalsukan keterangan di atas, permohon gas.	
Note:	If the candid	opropiate field and Mark X in appropriate box dates found to be providing false information above, will be panalized	the application will be expired and the

#### **APPENDIX J**

Submission form of Proposal / Report of Final Year Project for Evaluation / Re-Evaluation

#### UMK/FSB/FYP-F3



PENYERAHAN CADANGAN / BAB 1, 2 &3 / LAPORAN AKHIR
PROJEK PENYELIDIKAN TAHUN AKHIR UNTUK
PEMERIKSAAN/PEMERIKSAAN SEMULA
SUBMISSION OF PROPOSAL / CHAPTER 1, 2 & 3 /
FINAL REPORT OF FINAL YEAR PROJECT FOR
EVALUATION / RE-EVALUATION

1.	Nama Penuh (mengikut kad pengenalan/passport):Full Name (as identity card/ passport)
2.	No. Matrik Pelajar:
3.	Fakulti/ Institut: Faculty/ Institute
4.	Program ljazah:
5.	Saya dengan ini mengesahkan bahawa kelulusan yang dinyatakan adalah untuk penyerahan (Sila tandakan $\sqrt{\ }$ ):  I hereby certify that the approval for submission (Please tick $\sqrt{\ }$ ):
	a) Cadangan Projek Penyelidikan Tahun Akhir Proposal of Final Year Project
	b) Bab 1,2 & 3 @ Bab 1, 2, 3 & 4 sahaja Chapter 1, 2 & 3 / Chapter 1, 2, 3 & 4 only
	c) Laporan Akhir Projek Penyelidikan Tahun Akhir Bab 1, 2, 3, 4 & 5 / Bab 1, 2, 3, 4, 5 & 6  Final report of Final Year Project of Chapter 1, 2 3, 4 & 5 / Chapter 1, 2, 3, 4, 5 & 6
6.	Perakuan Penyelia Declaration of Supervisor
	Saya telah menyemak/tidak menyemak *cadangan / Bab 1, 2 & 3 @ Bab 1, 2, 3 & 4 sahaja / laporan akhir bagi projek penyelidikan tahun akhir calon ini dan mengesahkan bahawa ia boleh diserahkan untuk pemeriksaan.  I have reviewed / not reviewed the *proposal / chapter 1, 2 & 3 @ Chapter 1, 2, 3 & 4 only / final report of final year project for this candidate and confirm that it can be submitted for evaluation.
	a) Ya / Yes
	b) Tidak / No

Nama Peny Name of Su	elia Ipervisor		
Tandatanga Signature/S	n/ Cop Rasmi Stamp:	Tarikh Date:	
7. Perakuan Declaratio	n Pemeriksa on of Examiner		
	akhir bagi projek p	*cadangan / Bab 1, 2 & 3 @ Bab 1, 2, 3 & 4 sahaja / lap enyelidikan tahun akhir calon ini. sal / chapter 1, 2 & 3 @ Chapter 1, 2, 3 & 4 only / final rep or this candidate.	
	laporan akhir bagi Not agree with *p	engan *cadangan / Bab 1, 2 & 3 @ Bab 1, 2, 3 & 4 sah projek penyelidikan tahun akhir calon ini kerana proposal / chapter 1, 2 & 3 @ Chapter 1, 2, 3 & 4 only / project for this candidate because	-
Nama Peme Name of Ex			
Tandatanga Signature/S	n/ Cop Rasmi Stamp:	Tarikh <i>Date:</i>	
	ı Penyelaras Projek on of Coordinator F		
Tandatanga Signature/ S	n/ Cop Rasmi Stamp:	Tarikh Date:	

#### **PLEASE NOTE:**

- a) \*Delete inappropiate field
- b) Supervisor must approve the Proposal before submit to the coordinator programme of final year project.
- c) Supervisor must approve the Final year project report / Thesis Chapter 1,2&3 / Chapter 1,2,3 &4 before submit to the coordinator programme of final year project.
- d) Examiner (normally the internal examiner) is appointed to ensure all requested corrections have been made and be ready for hardbound.

The student should ensure that 3 / 4 copies of the final final year project report for hardbound must also be submitted to Faculty of Earth Sciences, Universiti Malaysia Kelantan, Jeli Campus, 17600, Jeli, Kelantan.

The program coordinator is not permitted to certify that the candidate has completed the corrections.

#### **APPENDIX K**

## Checklist of Submission of Final Year Project

UMK/FSB/FYP-F4



## SENARAI SEMAK PENGHANTARAN PROJEK PENYELIDIKAN TAHUN AKHIR CHECKLIST OF SUBMISSION OF FINAL YEAR PROJECT

١.	Full Name (as identity card/ passport)	•	
2.	No. Matrik Pelajar: Student's Matric No.		
3.	Fakulti/ Institut:Faculty/ Institute		
4.	Program Ijazah:		
5.	Saya dengan ini mengesahkan bahawa kelulusan penyerahan (Sila tandakan $$ ):  I hereby certify that the above mentioned approval		
		Students	Secretariat FYP
	<ol> <li>Borang Penghantaran UMK/FSB/FYP-F3 Submission Form UMK/FSB/FYP-F3</li> </ol>		
	<ol> <li>Dua (2) salinan untuk kulit keras Two (2) copies for hardbound</li> </ol>		
	3. Tiga (3) salinan dalam bentuk CD Three (1) copy of CD		
	4. Peta kajian (jika berkenaan)  Map of the study area (If any)		
	5. Resit pembayaran untuk kulit keras Hardbound fees with receipt		
	datangan Pelajar :lent's Signature	Tarikh / <i>Date:</i> _	
⊃roje	datangan AJK ek Penyelidikan Tahun Akhir: retariate's Signature	Tarikh / <i>Date:</i> _	

#### **APPENDIX L**

Sample of numbering a chapter and sub-heading in a chapter

#### **CHAPTER 2**

#### TITLE OF THE CHAPTER

## 2.1 Sub-Heading

Text should begin at this position and continue to the end of the left margin. Text must be typed using double (2.0) spacing

## 2.1.1 Sub – Sub Heading

Text should begin at this position and continue to the end of the left margin. Text must be typed using double (2.0) spacing

## **APPENDIX M**

# Sample of a table in the text

 Table 1.1: Raw data for bottom portion analysis

Portion	Ana	Analysis		Rep 2	Rep 3	Average
		Moisture content (%)	6.23	6.12	7.86	6.74
	Proximate Analysis	Volatile matter (%)	85.92	85.76	86.63	86.10
		Ash content (%)	0.26	0.29	0.32	0.29
	tom  Physical Analysis	Bulk density (g/cm <sup>3</sup> )	51.70	54.92	52.82	53.15
Bottom		Specific gravity (g/cm <sup>3</sup> )	0.98	0.98	0.85	0.94
		Durability (%)	33.66	33.50	13.37	26.84
		Length (mm)	11.06	12.37	11.06	11.50
		Diameter (mm)	5.74	5.80	5.87	5.80
	Energy Content Analysis	Calorific value (MJ/Kg)	22.13	21.59	21. 84	21.86

(Source: Tim, 2015)

## **APPENDIX N**

# Sample of an illustration or a figure

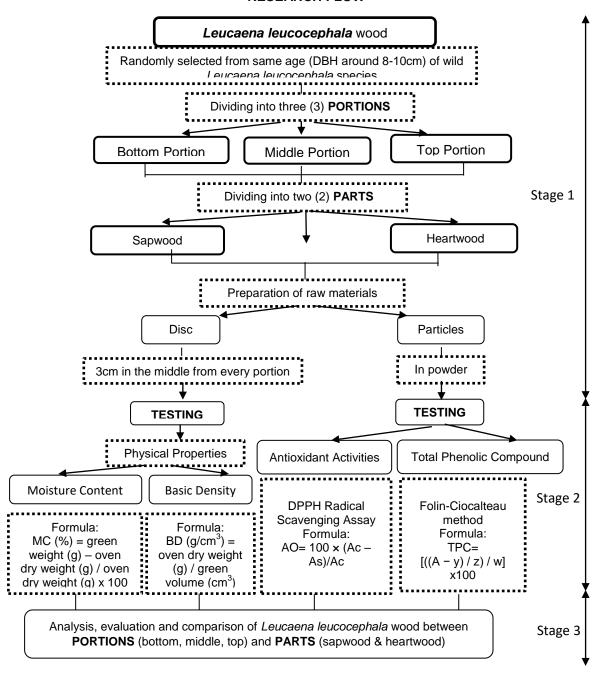


Figure 3.1: Wood pellet were produced from pelletizer.

#### **APPENDIX O**

#### Sample of research flow

#### **RESEARCH FLOW**



Stage 1: Material preparation (grouping specimen based on PORTIONS and PARTS)

Stage 2: Testing of the Leucaena leucocephala based on physical properties, AO and TPC

Stage 3: Analysis, evaluation and comparison of the obtained experimental data

## **APPENDIX P**

# Sample of Gantt Chart

GANTT CHART (by arrow)		2016					2017						
Year Project Activities	J	F	М	Α	М	J	J	0	S	0	N	D	J
Project Activities	J	Г	IVI	A	IVI	J	J	U	3	U	IN	U	J
Selection of Project Title  A) Discussion with supervisor B) Collect information			<b>→</b>										
A) Collect information from journal, books and past thesis.			<b>*</b>										
Writing Research Proposal  A) Literature review  B) Discuss with supervisor  C) Gathering data information  D) Submission proposal				<b>→</b>									
Research Proposal Presentation  A) Presentation to supervisor and examiner													
Final Draft Proposal Submission (Chapter 1,2,3)				<b>^</b>									
Conducting research work  A) Get the sample in FRIM  B) Sample preparation for lab  C) Lab – Moisture content, basic density, antioxidant and total phenolic compound										<b>→</b>			
Data analysis											<b>~</b>		
Final report writing  A) Discuss with supervisor  B) Analysis the data gathering  C) Compare data obtained  with previous study												<b>~</b>	
Final Presentation													$\longrightarrow$
Final report submission													$\longrightarrow$

Year		2016						2017					
Project Activities	J	F	М	Α	М	J	J	0	S	0	N	D	J
Selection of Project Title  A) Discussion with supervisor B) Collect information													
A) Collect information from journal, books and past thesis.													
Writing Research Proposal  A) Literature review B) Discuss with supervisor C) Gathering data information D) Submission proposal													
Research Proposal Presentation  A) Presentation to supervisor and examiner													
Final Draft Proposal Submission (Chapter 1,2,3)													
Conducting research work  A) Get the sample in FRIM  B) Sample preparation for lab  C) Lab – Moisture content, basic density, antioxidant and total phenolic compound													
Data analysis													
Final report writing  A) Discuss with supervisor B) Analysis the data gathering C) Compare data obtained with previous study													
Final Presentation													
Final report submission													

## **APPENDIX Q**

# Sample of Milestone

Project Activities	Date
Completion of Final Draft Proposal	May 2014
Completion of Sample Preparation	June 2014
Completion of Experiment	October 2014
Completion of Report and Documentation	December 2014

#### **APPENDIX R**

Sample of a thesis front cover

FULL TITLE (Times New Roman 18pt)

FULL NAME (Times New Roman 16pt)

FACULTY OF EARTH SCIENCE (Times New Roman 16pt)
UNIVERSITI MALAYSIA KELANTAN (Times New Roman 16pt)

Year (Times New Roman 14pt)

#### **APPENDIX S**

Sample of a thesis spine

(Border included only for illustration purposes)

B. App. Sc. (NAME OF PROGRAM) with Hons.

FONT – Norma centralized GOLD and TIMES NEW ROMAN. (Font size adjusted according to thickness of spine for clarity)

#### **APPENDIX T**

Sample of a title page



# FULL TITLE

(Times New Roman 18pt)

by (Times New Roman 14pt)

# **FULL NAME**

(Times New Roman 16pt)

A report submitted in fulfillment of the requirements for the degree of Bachelor of Applied Science (Name of Program) with Honours (Times New Roman 14pt)

# FACULTY OF EARTH SCIENCE UNIVERSITI MALAYSIA KELANTAN

(Times New Roman 16pt)

Year (Times New Roman 14pt)

## **APPENDIX U**

# Sample of a declaration page

## **DECLARATION**

I	de	clar	e tł	nat	thi	s thes	sis ent	titled	"title o	of the	thes	sis" is	the	result	of r	ny o	own 1	resea	arch	exc	ept
as	6 0	ited	in	th	e i	refere	nces.	The	thesis	has	not	been	acce	epted	for	any	deg	gree	and	is	not
cc	n	curr	ent	ly s	ub	mitte	d in c	andic	lature o	of an	y oth	er de	gree.								

Signature	:
Name	:
Date	:

## **APPENDIX V**

# Example of acknowledgement page

## ACKNOWLEDGEMENT

	It is	s a grea	it pleasure to	address	people w	vho help	ed me	through	out this	project to
enhanc	ee	my	knowledge	and	practica	l skil	lls e	specially	in	research
area	• • • • •									
	My	gratitu	de also been e	extended	to			• • • • • • • • • • • • • • • • • • • •		
	My	fellow	undergradua	ite stude	ents shoul	ld also	be rec	ognised	for the	ir support
Finally	·									

#### **APPENDIX W**

#### Example of an abstract in English

# Characteristics of *Leucaena leucocephala* Species as Wood Pellets for Biomass Energy Sources

#### **ABSTRACT**

In the current past few decades, the dependence of the people towards the nonrenewable energy such as fossil fuel and natural gas are rapidly rises in the urbanization of industrial, agriculture, domestic and pharmaceutical activities. Biomass energy is a green alternative energy to be arising up recently due to its attribute as environment friendly and promote sustainable development. Leucaena leucocephala is commonly known as 'Petai Belalang' in Malaysia. In this study, the stem portions of Leucaena leucocephala had been divided into three (3) portions which are bottom, middle and top; two (2) particle sizes in wood pellets manufacturing which are 0.5 and 1.5 mm. The six (6) pellets samples produced were determined by their proximate parameters (moisture content, volatile matter, ash content and fixed carbon), physical characteristics (specific gravity, bulk density, durability, length and diameter) and energy content. The results of proximate analysis of stem portions showed a significant outcome in ash content within the six (6) pellets samples whereas all of the parameters are remarkable different in the particle sizes within the pellets samples. For physical characteristics analysis, both of the factors were showed obviously different in specific gravity, bulk density and length. The highest calorific value is performed by pellets samples from middle portion of 0.5 mm with 20.58 MJ/Kg. Both of the calorific value in portions and particle sizes were proved significantly different. There were 35 pairs of variables in correlation showed either positively or negatively linear relationship to each other. Based on the overall results, the portions and particle sizes in wood pellets had caused the effects to the proximate and physical characteristics as well as calorific value, respectively.

#### **APPENDIX X**

Example of an abstract in Bahasa Melayu

# Ciri-ciri Pelet Kayu daripada Spesies *Leucaena leucocephala* sebagai Sumber Tenaga Biojisim

#### ABSTRAK

Dalam beberapa dekad yang lalu, kebergantungan manusia terhadap penggunaan sumber tenaga yang tidak boleh diperbaharui seperti bahan api fosil dan gas gali telah menunjukkan peningkatan mendadak dalam sektor pembangunan, perindustrian, pertanian, domestik dan juga aktiviti farmaseutikal. Tenaga biojisim merupakan salah satu pilihan alternatif untuk menangani masalah kekurangan dalam sumber tenaga asli. Ciri- ciri tenaga biojisim yang mesra alam dan menggalakkan pembangunan kelestarian menjadi pilihan dalam kalangan masyarakat. Leucaena leucocephala juga dikenali sebagai 'Petai Belalang' dalam kalangan rakyat Malaysia. Dalam kajian ini, batang pokok Leucaena leucocephala dibahagikan kepada tiga (3) bahagian iaitu pangkal, tengah dan atas; selain dua (2) saiz partikel yang digunakan bagi penghasilan sampel pelet tersebut iaitu 0.5 dan 1.5 mm. Enam (6) jenis sampel pelet dihasilkan dan telah diuji dengan ujian proksimat (kandungan lembapan, kandungan tidak stabil, kandungan abu dan kandungan karbon), ujian fizikal (graviti tentu, ketumpatan pukal, ketahanan, panjang dan diameter) dan nilai kalori. Keputusan ujian proksimat menunjukkan perbezaan ketara pada kandungan abu pada saiz partikel yang berlainan bagi pelet yang dihasilkan. Selain itu, keputusan lain bagi ujian proksimat pada saiz partikel telah menunjukkan perbezaan yang ketara. Dalam analisis fizikal, kedua-dua faktor telah menunjukkan perbezaan yang ketara dalam spesifik graviti, ketumpatan, diameter dan panjang. Nilai kalori yang tertinggi adalah daripada bahagian pangkal partikel bersaiz 0.5 mm dengan nilai 20.58MJ/Kg. Sebanyak 35 pasangan dalam ujian korelasi menunjukkan hubungan linear antara satu sama lain sama ada positif ataupun negatif. Secara keseluruhan, setiap bahagian batang pokok dan saiz partikel dalam pelet kayu yang dihasilkan telah menunjukkan kesan kepada ciri-ciri proksimat, fizikal dan juga nilai kalori secara keseluruhannya.

## **APPENDIX Y**

# Sample of a Table of Contents page

## TABLE OF CONTENTS

			PAGE
DEC	CLARAT	ΓΙΟΝ	i
ACF	KNOWL	EDGEMENT	ii
ABS	TRACT		iii
ABS	TRAK		iv
TAB	BLE OF	CONTENTS	v
LIST	Γ OF TA	ABLES	vi
LIST	Γ OF FI	GURES	vii
LIST	Γ OF AE	BBREVIATIONS	viii
LIST	Γ OF SY	MBOLS	ix
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1.2	Proble	em Statement	2
1.3	Objec	etives	3
1.4	Signif	Ficance of Study	4
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	2.1.1	Literature Review AA	6
	2.1.2	Literature Review AB	7
2.2	Litera	ture Review B	8
	2.2.1	Literature Review BB	9
		a) Literature Review RRB	10

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	3.1.1 Mat	rerials A	12
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	3.2.1 Met	hods A	14
CHA	APTER 4 RES	SULTS AND DISCUSSIONS	
4.1	Results and	Discussions A	15
4.2 Results and Discussions B		16	
CHA	APTER 5 CO	NCLUSION AND RECOMMENDATIONS	
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5.2	Recommen	dations	18
REF	ERENCES		19
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APP	ENDIX B	The appearance of the wood pellets	21
APP	ENDIX C	Specific gravity of wood pellets	22

(Font Times New Roman; Size 12; Spacing 1.5)

## **APPENDIX Z**

## Example of a List of Tables

## LIST OF TABLES

No.	TITLE	PAGE
2.1	Wood as percentage of total energy use in some Asian countries.	5
2.2	Swedish pellet standard SS 18 71 20: Classification of fuel pellets.	6
3.1	Result of proximate analysis.	12
4.1	Result of the physical characteristics analysis.	15
4.2	Correlation coefficient analysis.	16

## **APPENDIX AA**

# Example of a List of Figures

## LIST OF FIGURES

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2.1	Diagram of biomass conversion.	5
2.2	The appearance of the wood pellets.	6
3.1	The logs of Leucaena leucocephala has been split before chipping.	12
4.1	Specific gravity of wood pellets in different portions and particles sizes.	15
4.2	Calorific value of wood pellets in different portions and particle sizes.	16

#### **APPENDIX AB**

## Example of a List of Abbreviations

#### LIST OF ABBREVIATIONS

ANOVA Analysis of Variance

ASTM America Society for Testing and Materials

CO<sub>2</sub> Carbon Dioxide

Cal/Kg Calorie per Kilogram

EIA Energy Information Administration

FAO Food of Agriculture Organization

FRIM Forest Research Institution Malaysia

MC Moisture Content

MOE Modulus of Elasticity

## **APPENDIX AC**

# Example of a List of Symbols

# LIST OF SYMBOLS

%	Percentage
>	Greater than
<	Less than
$H_{u}$	Heating value
Ø	Diameter
X	Multiply
°C	Temperature (degree Celsius)
ρ	Density (g/cm <sup>3</sup> )

## **SUPPORTING MATERIALS**

# Guideline for Final Year Geoscience Project

CHAPTER	CONTENT	NOTE		
Chapter 1	1.1 General Background	Student must provide at least two		
(Introduction)	1.2 Problem Statements	(2) objectives. Maximum number		
	1.3 Research Objectives	of objective is three (3)		
	1.4 Study Area	For section 1.4, please include:		
	1.4.1 Location	Base map of the study area		
	1.4.2 Demography	with coordinates.		
	1.4.3 Rainfall	Population graph		
	1.4.4 Landuse	Rainfall graph ( a year before)		
	1.4.5 Social Economic	<ul> <li>Landuse map (recent map)</li> </ul>		
	1.4.6 Road Connection/	<ul> <li>Photos and coordinate of the</li> </ul>		
	Accessibility	economic activities		
	1.5 Scope of Study	<ul> <li>Photos and coordinate of the</li> </ul>		
	1.6 Research Importance	road photo, provide road		
		map.		
		Research Importance:		
		Eg: Benefits to the society,		
		nation, employment, science, etc.		
Chapter 2	2.1 Introduction	2.2. Please elaborate state for		
(Literature	2.2 Regional Geology and Tectonic	regional		
Reviews)	Setting	2.3 Research specification review		
	2.2.1 Stratigraphy	is based on your research title		
	2.2.2 Structural Geology	including geology from previous		
	2.2.3 Historical Geology	works		
	2.3 Research specification			
Chapter 3	3.1 Introduction	Please elaborate in details <i>each</i>		
(Materials and	3.2 Materials	of the method you used.		
Methodologies)	3.3 Methodology	Please provide Overall research		
	3.3.1 Preliminary studies	flow chart.		
	3.3.2 Field Studies			
	3.3.3 Laboratory work			
	3.3.4 Data processing			
	3.3.5 Data analysis and			
Chantar 1	interpretation 4.1 Introduction	This chapter source manning next		
Chapter 4 (General Geology)	4.1 Introduction 4.2 Geomorphology	This chapter covers <b>mapping part</b> of FYP. Several maps and figures		
(General Geology)	4.3 Stratigraphy	need to be attached including		
	(Specific area) ROCKS	4.2 Geomorphology		
	4.4 Structural Geology	Geomorphological map		
	4.5 Historical Geology	4.3 Stratigraphy		
		(Lithostratigraphy and		

		I
	4.1 Introduction	stratigraphic column)
	4.2 Geomorphology	4.4 Structural Geology (geological
	4.3 Alluvium Mapping	map and cross section)
	4.4 Soil analysis ALLUVIUM	4.5 Historical Geology
	4.5 Quaternary	
	Stratigraphy	Please provide geological map
		and cross section in A1 size
		(*It is suggested that Chp 4 and 5
		are related to each other)
Chapter 5	5.1 Results and Discussion	This chapter covers <b>specification</b>
(State your		part of FYP.
specification; e.g.		
Slope stability		Please arrange your subtopics
analysis, facies		accordingly
analysis, coastal		<b>3</b> ,
erosion analysis,		(*It is suggested that Chapter 4
etc.)		and 5 are related to each other)
,		
Chapter 6	6.1 Conclusion	
(Conclusion and	6.2 Suggestion	
suggestion)		

