



### DATE OF APPROVAL

Guidelines for Conducting Oral Examination for Dissertation/Thesis was approved in the 406th Senate Meeting on 17 December 2014

### **Amendments**

- i. Appointment of Associate Professor as Chairperson of Oral Examination/Dissertation (Item 3.2.2), was approved in the 422nd Senate Meeting on 25 May 2016.
- ii. Improvement of Certain Terms in the Appointment of Examiners and Improvement of the Assessment Process, was approved in the 430th Senate Meeting on 15 February 2017.
- iii. Defining the Criteria for Outstanding Thesis (Item 4.2.4c), was approved in the 436th Senate Meeting on 21 August 2017
- iv. Details of work procedures after completion of Oral Examination.
- v. Updated guidelines from the review of the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) which were approved by the 474th Senate Meeting on 30 March 2021.

#### SECTION I

### INTRODUCTION

# 1.1 Purpose

These guidelines are known as **Guidelines for Conducting Oral Examination for Dissertation/Thesis**. They are intended to provide clear guidelines for handling the oral examination of dissertation/thesis to the administrator of graduate study programs at Universiti Kebangsaan Malaysia.

These guidelines shall apply to every student who enrolls in a program conferring a Master's or Doctoral Degree on or after the effective date of these guidelines.

# 1.2 Interpretation

The interpretation of the words used in these guidelines refers to the interpretation set out in the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) 2021.

### 1.3 Dissertation/Thesis Oral Examination Process

The oral examination of the dissertation/thesis is a form of evaluation which requires a student to defend the results of the research reported in his/her dissertation/thesis before the Oral Examination Committee. This examination is one of the most important parts of the study process of a graduate student, especially if the student enrolls in mixed mode of study (coursework and research) and research mode.

The oral examination process for a student's dissertation/thesis must be handled well, in an orderly manner and within the prescribed period. The administration of the dissertation/thesis oral examination includes several work processes starting from the appointment of External and Internal Examiners until the announcement of examination result to the student.

The flow chart of this work process is briefly illustrated in Figure 1.1

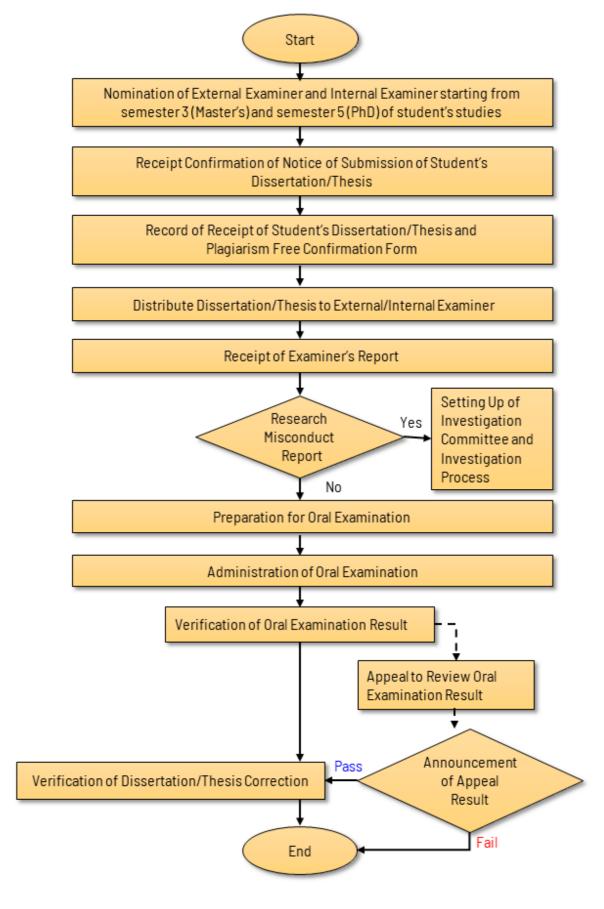


Figure 1.1 Flowchart of the dissertation/thesis oral examination work process

### **SECTION II**

### NOMINATION OF EXTERNAL AND INTERNAL EXAMINERS

### 2.1 Introduction

An External Examiner is an academic staff or subject matter expert from outside the University appointed by the Senate to evaluate the achievements of a student's research results. The Internal Examiner, meanwhile, is an academic staff of the University appointed by the Faculty/Institute to evaluate the achievements of a student's research results.

### 2.2 Nomination of External and Internal Examiners

The nomination of External Examiners can be done starting from the third semester of study for Master's students or the fifth semester for Doctoral students [1].

The Faculty/Institute is required to nominate at least one (1) External Examiner and one (1) Internal Examiner. However, the panel of examiners for students who are UKM lecturers/trainee lecturers and recipients of Bumiputera Academic Training Scheme (SLAB) Scholarships / IPTA Academic Training Scheme Scholarships (SLAI) from UKM who continue their studies at UKM, requires a minimum of two (2) External Examiners and one (1) Internal Examiner.

The Faculty/Institute is required to obtain from the student a Dissertation/Thesis abstract that has been certified by the supervisor for the purpose of identifying areas of research that are appropriate for the External Examiner and Internal Examiner to be appointed. The Faculty/Institute is also required to comply with the Terms of Appointment of External Examiners and Internal Examiners set by the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) 2021 (Appendix A) and has no conflicts of interest with supervisors and students. Conflicts of interest can arise involving family relationships, immediate family members, romantic relationships, friends, personal issues, status/position or financial interests.

In this matter, any UKM staff members are not allowed to inform or reveal the name of the External and Internal Examiners to the student.

The flowchart of the External and Internal Examiner nomination process is shown in Figure 2.1.

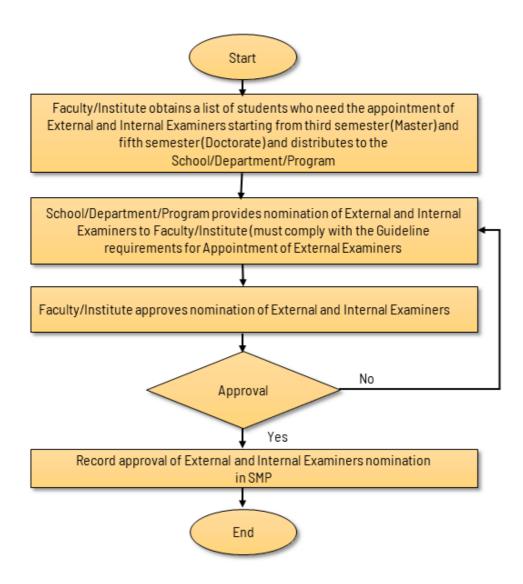


Figure 2.1 Flowchart of External and Internal Examiners nomination process

### **SECTION III**

#### PREPARATION FOR DISSERTATION/THESIS ORAL EXAMINATION

### 3.1 Introduction

The process of preparation for the dissertation/thesis oral examination starts from the receipt of the student's 'Dissertation/Thesis Submission Notice' until the preparation of the basic requirements for the oral examination. This work process must be done within the required period to achieve the Quality Objectives of SPK MS ISO 9001: 2008 PPPS.

# 3.2 Preparation for Dissertation/Thesis Oral Examination

### 3.2.1 Thesis Examination by External/Internal Examiners

Students who wish to sit for a dissertation/thesis oral examination are required to give a 'Thesis Submission Notice' at least three (3) months before submitting the dissertation/thesis for examination purposes. The Faculty/Institute must record the date the student sends the notice in the Student Information System (SMP) on the same day the notice is sent. After that, the Faculty/Institute will review the Thesis Examiner's nomination status, prerequisite courses, publication requirements\*, Malay Language course requirements (for international students), and other matters related to the student's course of study. If there are matters that have not been acted upon, the Faculty/Institute will inform the supervisor/student to take immediate action.

\*Students are given the flexibility to take the Oral Examination without meeting the requirements of the publication, provided that the publication meets the criteria that have been set, and has been submitted for evaluation. Students are subject to Rule 14A (5)-(7) and must complete the publication requirements before being eligible to be awarded a degree.

After three (3) months, students will submit a dissertation/thesis and Plagiarism Free Verification Form certified by the Supervisor for examination purposes to the Faculty/Institute. Checks on plagiarism level of students' dissertation/thesis using plagiarism checking software is only accepted if they are done and endorsed by the Faculty/Institute. The Faculty/Institute will record the date the dissertation/thesis is submitted and activate the student's dissertation/thesis examination fee charge in SMP on the same day the student submits the dissertation/thesis.

The Faculty/Institute will then distribute the dissertation/thesis to the External and Internal Examiners, not later than seven (7) working days from the date the student submits the dissertation/thesis. In the letter, it is necessary to state the maximum period, which is six (6) weeks, given to the Examiner to evaluate the dissertation/thesis and submit the examination report. The Faculty/Institute must also inform the External Examiner, the Internal Examiner and the Supervisor of the proposed dates of the student's oral examination, preferably within two (2) weeks before the deadline of the dissertation/thesis examination report to be submitted by the Examiners.

After the dissertation/thesis is submitted to the External and Internal Examiners to be examined, the Faculty/Institute is required to constantly monitor to ensure that the

dissertation/thesis examination report is received within the stipulated period. The Faculty/Institute is advised to send a reminder one week before the deadline given to the External Examiner and Internal Examiner as stated in the thesis review submission letter. If the External/Internal Examiner still does not submit the dissertation/thesis examination report within the prescribed period, the Faculty/Institute is required to provide a written reminder so that the report is sent immediately.

The flowchart of the work process of preparation for the dissertation/thesis oral examination for graduate students is shown in Figure 3.1.

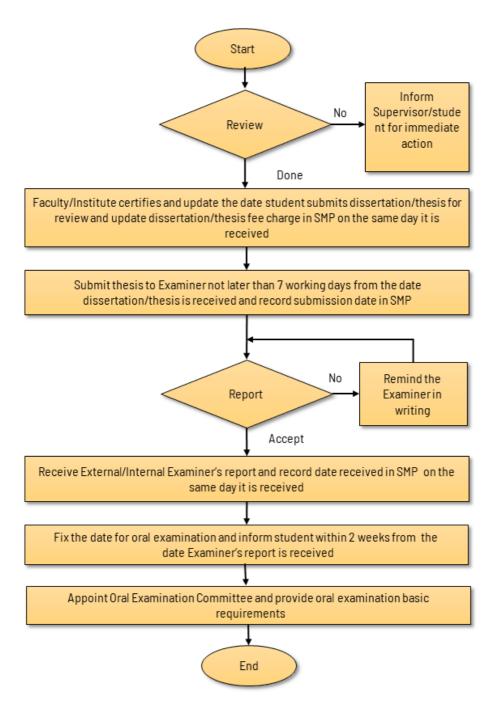


Figure 3.1 Flowchart of work process of preparation for dissertation/thesis oral examination

# 3.2.2 Setting up of Dissertation/Thesis Oral Examination Committee

Oral Examination Committee means a committee which is set up to evaluate, deliberate and endorse the results of a student's dissertation/thesis and oral examination. This Committee shall consist of:

- a) A Chairperson who is;
  - (i) A Professor; or
  - (ii) A University Associate Professor;
- b) the Dean/Director or his/her representative (if necessary);
- c) the Internal Examiner:
- d) the External Examiner; (if applicable)

Associate Professors who are appointed as the Chairperson of the Oral Examination/Dissertation must meet the following conditions [2]:

- a) have successfully supervised at least two (2) doctoral students; and
- b) has been appointed as an External Examiner by other universities, apart from UKM.

The Dean/Director or his/her representative shall be a member of the Oral Examination Committee if the status of the student's thesis examination report is "Poor" or if one of the examiners is absent.

The Faculty/Institute may appoint an assistant chairperson who is responsible for recording the results of discussion and amendments that need to be made by students. The assistant Chairperson, however, is not part of the committee and can only be present as a note taker. The assistant chairperson should be appointed from among the young lecturers of the Faculty/Institute.

The Faculty/Institute is responsible for ensuring that all members of the Committee are aware of their specific roles without any conflicts of interest. The roles/duties of each member of the Dissertation/Thesis Oral Examination Committee are as follows:

a) The Chairperson - As a moderator to ensure the best and most accurate decision can be reached in the event of conflicting decisions/opinions without influencing the decision of the panel of examiners. If the Assistant Chairperson is not appointed, then the Chairperson must record the results of discussion and amendments that need to be made by the student. The Chairperson is a voting member.

- b) The Dean/Director or his/her representative As a representative of the Faculty/Institute who will verify the decision of the External Examiner and Internal Examiner. He/She needs to be fair, transparent and act with integrity while at the same time not interfere with the smooth process of the student's oral examination. The Dean/Director or his/her representative is a voting member.
- c) The Internal Examiner Evaluates, examines and tests the student on his/her thesis and oral presentation related to his/her research project.
- d) The External Examiner (if applicable) Evaluates, examines and assesses the student on his/her thesis and oral presentation related to his/her research project.

A student's Supervisor is not part of the committee and can only be present as an observer in his/her student's oral examination session. Supervisors are encouraged to attend the oral examination of their students' dissertation/thesis. Among the role of the Supervisor is to take note of the comments of the External/Internal Examiner and to ensure that the student under his/her Supervision makes corrections/improvements as agreed by the Committee. Supervisors are not allowed to speak or give opinions unless requested to do so by the Committee.

### 3.2.3 Scheduling of Dissertation/Thesis Oral Examination

Once the dissertation/thesis examination report has been received, the Faculty/Institute is required to schedule the student's dissertation/thesis oral examination immediately. The oral examination has to be held within one month after the dissertation/thesis examination report is received [3]. The Faculty/Institute must ensure that the maximum period for dissertation/thesis examination of three (3) months for graduate students is always adhered to [4].

After the scheduling of the dissertation/thesis oral examination is done, the Faculty/Institute must provide a written notification to the Committee members and the student no later than one (1) week from the date of the examination that has been set. As an important reminder, the External/Internal Examiner report cannot be distributed together with the letter calling for the Oral Examination Committee meeting.

The results and reports from the External/Internal Examiner are PRIVATE documents with CONFIDENTIAL status. Therefore, it cannot be disclosed to students or Supervisors before the oral examination is conducted. This is because there are several items that the External/Internal Examiner may ask the student during the oral examination question and answer session. The student is also not allowed to discuss the specific content of the oral examination with any member of the Committee before the oral examination is conducted.

If the scheduled oral examination of the dissertation/thesis has to be postponed at the last minute due to unforeseen circumstances, the Faculty/Institute must notify the student immediately by telephone and is followed by correspondence with details of the new date of the oral examination.

### 3.2.4 Preparation of Basic Requirements for Dissertation/Thesis Oral Examination

Finally, the Faculty/Institute needs to provide the basic requirements for the oral examination such as meeting room, ICT equipment and refreshments. The Faculty/Institute must also contact the Committee members to confirm their attendance, including booking of flight tickets and accommodation for the External Examiner (if applicable). The Oral Examination can also be held by teleconferencing if agreed by the External Examiner and in the event of circumstances that prevent the oral examination from being conducted face-to-face. The Committee needs to ensure that teleconferencing requirements are provided for the Oral Examination to run smoothly.

# 3.3 Preparation for Repeat Dissertation/Thesis Oral Examination

Students who are given the decision to defer for repeat oral examination must complete the Thesis Examination Review Form to be submitted to the UKM Bursar and a copy submitted to the Faculty/Institute for record purposes. Students who are required to take the Repeat Oral Examination must register and pay the Repeat Oral Examination fee as prescribed by the University. The Faculty/Institute Graduate Secretariat must ensure that the student completes the UKM/PPPS/C/P05/AK06/05 Thesis Examination Review Fee Payment Form before forwarding it to the University Bursar.

The Faculty/Institute must set the date for re-submission of the student's dissertation/thesis correction on the 9th month of the correction period but not more than 12 months. However, if the student wishes to submit his dissertation/thesis correction earlier or before the period of 9 months, the student must submit the application to the Faculty/Institute. The application must be supported by the supervisor with clear justification since students undergoing re-examination will have to make major corrections as requested by the Oral Fxamination Committee.

Students who need additional time after the correction period of 12 months must submit an application as specified in Regulation 37 (6) Results of Oral Examination, Graduate Studies Regulations 2021.

The corrected dissertation/thesis received must be resubmitted to the External Examiner and Internal Examiner before the repeat presentation is arranged. The Faculty/Institute Secretariat then repeats the oral examination preparation process as outlined in subsection 3.2.

# 3.4 Postponement of Dissertation/Thesis Oral Examination

The postponement of the Dissertation/Thesis Oral Examination can be done for the following circumstances:

- 1. Students are unable to attend the Dissertation/Thesis Oral Examination due to illness.
- 2. The Oral Examination Committee found that the dissertation/thesis submitted by the student has plagiarism issues.
- 3. Any situation deemed reasonable by the Faculty/Institute Secretariat.

For situations where students are unable to attend the Dissertation/Thesis Oral Examination due to illness, the student or the student's next of kin must inform in writing to the Faculty/Institute Secretariat along with a letter from a doctor as evidence. For confirmed cases, the Faculty/Institute Secretariat needs to reschedule the date of the Dissertation/Thesis Oral Examination according to the doctor's recommendation.

For situations where a student's dissertation/thesis is found to have plagiarism issues as outlined in Part VI, the postponement of the Dissertation/Thesis Oral Examination is decided by the Deputy Dean/Deputy Director. The student must be notified in writing with evidence of plagiarism. The rescheduling of the Dissertation/Thesis Oral Examination date is dependent on the deliberation and decision of the Disciplinary and Plagiarism Handling Committee.

For the situation in item 3, the Faculty/Institute Secretariat must notify in writing the postponement to the Dissertation/Thesis Oral Examination Committee that has been appointed. The Faculty/Institute Secretariat must reschedule the date of the Dissertation/Thesis Oral Examination as agreed by the Dissertation/Thesis Oral Examination Committee.

The student must submit an application for Deferment of the Dissertation/Thesis Oral Examination at least one day before the date of the Dissertation/Thesis Oral Examination which has been set.

### **SECTION IV**

### CONDUCTING THE DISSERTATION/THESIS ORAL EXAMINATION

### 4.1 General Guidelines to Students

These guidelines apply to the oral examination of dissertation/thesis conducted either in person or by teleconference.

The oral examination of the dissertation/thesis is divided into two (2) parts:

The first part - students are required to provide a summary of the research conducted, the results obtained, conclusions, and contributions to the field of research.

<u>The second part</u> - question and answer session by the External Examiner and the Internal Examiner.

Students' oral presentation should not exceed 20 minutes. Students are advised to plan and practice their oral presentation so that it is clear and delivered within the prescribed period. Priority of presentation should be given to the results of research obtained and contributions to the related fields of knowledge. Therefore, the presentation on library and historical research to explain why the study was conducted should be minimized.

In the question-and-answer session, the questions and comments from the External Examiner and Internal Examiner are based on the dissertation/thesis and presentation given. However, students still need to understand other things related to the field of research which will also be tested by the examiners. Questions posed by the examiners should be answered concisely and clearly, unless there is a request to elaborate on the answers given.

In line with Regulation 55 (3) of the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) 2021, students are prohibited from contacting, harassing or threatening the External/Internal Examiner relating to the evaluation of their dissertation/thesis. Students who are caught doing so, may be subject to disciplinary action by the University, which in turn may result in them being terminated from their studies. Students will only receive the Examiners' report after the oral examination has been completed.

# 4.2 Roles and Responsibilities of Chairperson of Dissertation/Thesis Oral Examination

The Chairperson is elected from among the Professors or Associate Professors of the University as specified in Regulation 41 (1) of the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) 2021.

The main responsibility of the Chairperson is as a moderator to conduct the oral examination of the graduate student's dissertation/thesis without influencing the decision of the panel of examiners to ensure that the best result is achieved. The Chairperson needs to ensure that the question-and-answer session, discussion and exchanges of views are conducted in a productive, harmonious and mutually respectful atmosphere.

Serving as the Chairperson of the Oral Examination Committee is an academic task that provides a very meaningful experience. Therefore, an appointed Professor or Associate Professor must cooperate well with the request of the Faculty/Institute to chair the dissertation/thesis oral examination.

The oral examination conducted by the Chairperson is divided into four (4) stages, which are:

- a) Closed Discussion Session
- b) Open Presentation Session or Open Presentation Session with external parties;
- c) Decision Making Session, and
- d) Result Announcement Session

### 4.3 Oral Examination Session

#### 4.3.1 Closed Discussion Session

The Closed Discussion Session is a session that must be done before the oral examination of the student's dissertation/thesis begins. First, the Chairperson, with the assistance of the secretariat will ask the Internal Examiner and/or External Examiner, the Dean/Director or his/her representative, to enter the oral examination room. At this point, the student is required to wait outside the oral examination room until called upon for the Open Presentation Session. However, the Supervisor is allowed to come in to provide some background information on the student and research carried out by the student under his or her supervision.

The Chairperson will begin the session by introducing himself and the members of the Oral Examination Committee. Next the Chairperson will ask the Supervisor to provide some background information and research conducted by the student under his or her supervision. Next, the Chairperson with the assistance of the secretariat will ask the Supervisor to leave the oral examination room to give way to the members of the Oral Examination Committee to carry out preliminary discussions.

The Chairperson will ask the External Examiner and Internal Examiner to provide a summary of the student's dissertation/thesis as well as the preliminary results given based on the dissertation/thesis that has been read and examined before the oral examination begins. The Chairperson will also inform the External/Internal Examiner to pose questions to the student during the open presentation session. If one of the External/Internal Examiners is not present, the Chairperson will ask the Dean/Director or his/her representative to ask questions on behalf of the External/Internal Examiner who is not present (based on the dissertation/thesis examination report that has been submitted).

The work process flowchart of the Closed Discussion Session is shown in Figure 4.1.

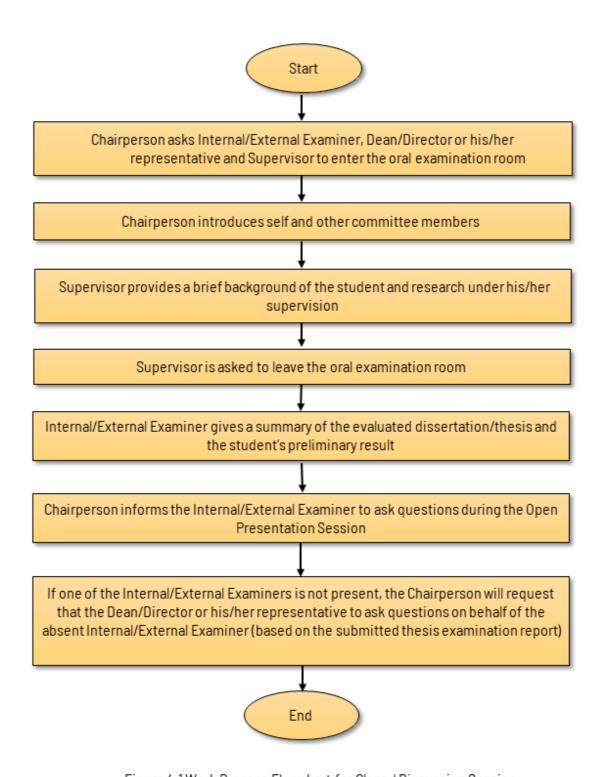


Figure 4.1 Work Process Flowchart for Closed Discussion Session

### 4.3.2 Open Presentation Session

The Chairperson with the assistance of the secretariat will ask the Supervisor and the student to enter the oral examination room. After the Supervisor and the student take their places, the Chairperson will introduce the members of the Oral Examination Committee, and then state the purpose of the meeting. The student is also given the opportunity to give a few words about his/her course of study and research before the oral examination begins.

The Chairperson will explain the course and duration of the oral examination to the student and members of the Committee. The duration of time given to the student for oral presentation is 20 minutes while the time given to Committee members for question-and-answer session is between 60 to 90 minutes. Supervisors are reminded not to assist the student, either by answering questions, making comments or even asking questions, unless requested by the Committee.

The Chairperson shall ensure that the oral examination process runs smoothly in a harmonious atmosphere. The Chairperson should also ensure that each member of the Committee has the opportunity to pose questions to the student, and that only relevant questions are allowed.

After the open presentation session is over, the Chairperson with the assistance of the secretariat will ask the Supervisor and the student to leave the oral examination room to allow for the Committee Members to deliberate and make decisions. The Supervisor and the student will be called back by the secretariat to inform them of the result.

The work process flowchart of the Open Presentation Session is shown in Figure 4.2.

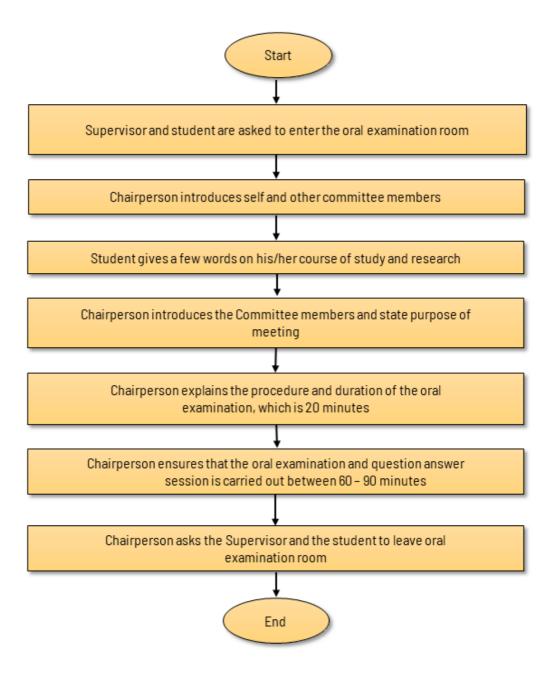


Figure 4.2 Work process flowchart for Open Presentation Session

### 4.3.3 Open Presentation Session with External Parties

The Open Presentation Session with External Parties is a session that is also attended by external parties who have been identified and invited by the Faculty/Institute, other than the members of the Committee as specified in item 3.2.2. External parties can be defined as individuals from the industry, research partners, funders and any entity that is related to the student's field of research.

The Chairperson will introduce the members of the Oral Examination Committee, and then state the purpose of the meeting. Similarly, students are also given the opportunity to give a few words about his/her course of study and research before the oral examination begins. The Chairperson will also explain the procedure and duration of the Oral Examination to the students, Committee members and invited external parties.

The session begins with the oral presentation by the student. Upon completion of the presentation by the student, a question-and-answer session begins. The Chairperson may ask outsiders to ask questions, if there are any. Questions submitted by external parties will not affect the decision to be made by the Oral Examination Committee. The time period given to the Committee members for the question-and-answer session is between 60 to 90 minutes. The Supervisor is reminded not to assist the student, either by answering questions, making comments or even asking questions, unless requested by the Committee.

Upon completion of the question-and-answer session with the examiners, the Chairperson with the assistance of the secretariat will ask the Supervisor, the student, and external parties, if necessary, to leave the oral examination room to allow the Committee members to deliberate and make decisions. The Supervisor and the student, and external parties, if necessary, will be called back by the secretariat to be informed of the result.

The flowchart of the work process of the Open Presentation Session with external parties is shown in Figure 4.3. The Faculty/Institute, however, may choose a suitable method of implementing the Open Presentation Session with external parties.

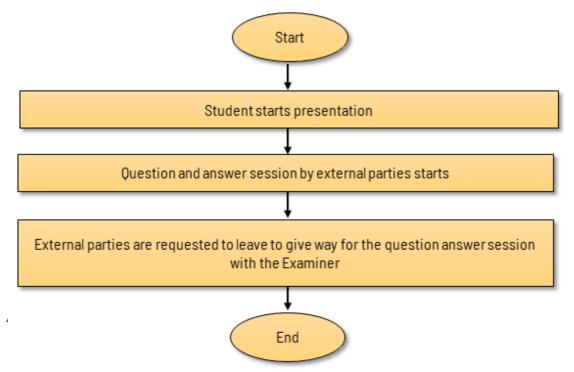


Figure 4.3 Flowchart of Open Presentation Session work process with external parties

Upon completion of the Open Presentation Session, the Chairperson will discuss the final result of the student's dissertation/thesis oral examination with the Committee members without the presence of the Supervisor and the student. The Committee is required to make a decision based on the following three (3) criteria:

- (a) Student's dissertation/thesis oral examination result;
- (b) Achievements of student learning outcomes according to the level of qualification based on the Malaysian Qualifications Framework;
- (c) Student's dissertation/thesis level.

# (a) Student's dissertation/thesis oral examination result

Firstly, the External/Internal Examiner has to decide whether the student passes or not. To determine this, the External/Internal Examiner must take into consideration the dissertation/thesis, the dissertation/thesis examination report, and the student's performance during the oral examination of the dissertation/thesis. The External/Internal Examiner may either stick to the initial decision given or make other decisions. If the External/Internal Examiner wishes to change the student's final result to a lower result, this must be approved by the Oral Examination Committee.

It is essential for the External/Internal Examiner to reach a consensus on the student's oral examination result, regardless of whether the student's result is a pass or fail. If a final decision cannot be reached, the Chairperson and other members of the Committee will take a vote to reach a final decision.

Students can be given a pass status even if there are changes or corrections that need to be made to the dissertation/thesis. When the Committee decides that a student has passed but is subject to correction, the Chairperson and the Committee shall designate the individual who will be responsible for ensuring that the student makes the correction as proposed and the period of time given for the student to make the correction. The verification guidelines, the correction period, and the party responsible for reviewing and verifying the corrections made by the student are shown in Table 4.1 for the first oral examination, and Table 4.2 for the repeat oral examination.

Table 4.1 Verification guidelines, correction period, and parties responsible for reviewing and verifying corrections made by the student (**first oral examination**)

Verification	Verification Guidelines	Correction Period (TP)	Review/Verification
Passed and qualified to be awarded a degree	<ul> <li>No corrections/ problems and only requires minor text editing, table/diagram formatting, grammar and spelling</li> </ul>	TP ≤1 Month	Review and verification by Supervisor only
Passed and qualified to be awarded a degree subject to minor corrections (category 1)	<ul> <li>Requires some text editing, table/diagram formatting, grammar and spelling</li> <li>Requires some additional information</li> <li>Requires explanation on several minor parts in texts</li> <li>Does not require additional experiments, new data collection, or a great deal of rewriting</li> </ul>	1 Month < TP ≤ 3 Months	Review by Supervisor and verification by Internal Examiner
Passed and qualified to be awarded a degree subject to minor corrections (category 2)	<ul> <li>Requires rephrasing of texts, table/diagram, grammar and editorial work</li> <li>Requires additional information and rewriting on most parts of the dissertation/thesis</li> <li>Does not require additional experiments, new data collection but needs to reanalyze existing data</li> </ul>	3 Months < TP ≤ 6 Months	Review by Supervisor and verification by Internal Examiner
Passed and eligible for degree conferment subject to major corrections	<ul> <li>Requires additional experiments, new data collection, and major rewriting</li> <li>Requires major corrections and editorial review</li> <li>Change in writing does not bring many major changes in meaning of conclusion</li> </ul>	6 Months < TP ≤ 11 Months	Review by Supervisor and verification by Internal Examiner and/or External Examiner

Postponement of result due to examination review	<ul> <li>Has major weaknesses and affects the conclusion of the thesis</li> <li>Has weaknesses that can only be rectified if additional work is done to improve thesis for examination review</li> <li>Requires additional experimental work, additional statistical analysis, rewriting on most parts in the thesis and development of literature review.</li> </ul>	12 Months	Examination review and verification by the Committee
Failed and ineligible for degree conferment	<ul> <li>Has significant weaknesses that additional work or corrections would not raise the thesis level to the required standards.</li> <li>Has irreparable weaknesses such as incorrect research methodology; or</li> <li>Has insufficient study data; or</li> <li>Contains incorrect facts; or</li> <li>Fabricating data or research misconduct; or</li> <li>Contains plagiarized work or texts.</li> </ul>	_	-

Table 4.2 Verification guideline, correction period, and the party responsible for review and verifying the corrections made by the student (**repeat oral examination**)

Verification Status	Verification Guideline	Correction Period (TP)	Review/ Verification
Passed and eligible for degree conferment	<ul> <li>No corrections/ problems and only requires some text editing, table/diagram formatting, grammar and spelling</li> </ul>	TP ≤ 1 Month	Review and verification by Supervisor only
Passed and eligible for degree conferment subject to minor corrections	<ul> <li>Requires some text editing, table/diagram formatting, grammar and spelling.</li> <li>Requires some additional information.</li> <li>Requires explanation on a few minor parts in texts</li> <li>Does not require additional experiments, new data collection, or major rewriting</li> </ul>	1 Month < TP ≤3 Month	Review by Supervisor and verification by Internal Examiner
Failed and ineligible for degree conferment	<ul> <li>Requires additional experiments, new data collection, or major rewriting.</li> </ul>	-	-

Students who sit for the Repeat Oral Examination are given a maximum period for correction of three (3) months ONLY and are required to submit a dissertation/thesis that has been improved for the purpose of verification as determined by the Oral Examination Committee.

### b) Achievements of student learning outcomes

After the student's dissertation/thesis oral examination result has been decided, the Committee is required to evaluate the student's learning outcomes according to the level of qualification based on the Graduate Studies (Research) Program Standards, MQA. Students must achieve at least "Satisfactory" level for each learning outcome criterion to be eligible to be awarded a Master's/Doctoral degree. Examples of learning outcomes for the Master's level are as shown in Table 4.3, while examples for the Doctoral level are as shown in Table 4.4. However, the Faculty/Institute can adjust these learning outcomes according to the needs of the Faculty/Institute.

Table 4.3 Examples of learning outcomes for Master's level

			Achievement ( <u>Tick √</u> )		
	Learning Outcomes	Satisfactory	Good	Excellent	
At t	he end of the program, students should be able to:				
1.	Display the mastery of knowledge in the				
2.	related field.  Apply the practical knowledge in the related field.				
3.	Relate ideas to societal issues in the related fields.				
4.	Conduct research with minimal supervision and adhere				
г	to a valid, ethical and professional code of practice.				
5.	Demonstrate quality in leadership through more effective ways of communicating and working with colleagues and stakeholders.				
6.	Provide solutions to problems using scientific and critical thinking skills.				
7.	Manage information for lifelong learning purposes.				

Table 4.4 Sample of learning outcomes for doctoral level

			Achievement (Tick √)		
	Learning Outcomes	Satisfactory	Good	Excellent	
At th	e end of the program, students should be able to:				
1.	Synthesize knowledge and contribute to original research and is able to expand the boundaries of				
2.	knowledge in the related fields.  Adapt existing practical skills by generating innovative ideas in the related fields.				
3.	Provide 'expert advice' to the community in the related fields.				
4.	Conduct research independently in compliance with professional rules, ethics and codes of practice.				
5.	Demonstrate leadership qualities through more effective ways of communicating and working with colleagues and stakeholders.				
6.	Evaluate problems in related fields critically using scientific skills.				
7.	Manage information for lifelong learning purposes.				

### c) Level of Student's Dissertation/Thesis

Finally, the Committee needs to evaluate the level of the student's dissertation/thesis, whether it is of Excellent status or not. The decision to grant Excellent status is the decision of the Oral Examination Committee, after the oral examination is conducted. Dissertation/Thesis with Excellent status is only eligible to be considered for students who meet all the following criteria [5]:

- (i) Reports obtained from both the External Examiner and the Internal Examiner verifying that the student's dissertation/thesis has achieved Excellent level;
- (ii) The student meets the minimum publication requirements set by the relevant program;
- (iii) The student has to complete and submit the dissertation/thesis within the following period:
  - Doctoral 8 semesters for full-time students, 10 semesters for part-time students;
  - Master's (research mode) 6 semesters for full-time students, 8 semesters for part-time students;
- (iv) The student is able to present the results of the study well during the oral examination.

### 4.35 Result Announcement Session

Before announcing the result of the dissertation/thesis oral examination, the Chairperson must record the student's result on the Graduate Examination and Oral Examination Committee Meeting Verification form (UKM/PPPS/C/P05/AK08/08). Next, the Chairperson has to sign the form together with other members of the Committee.

The Chairperson with the assistance of the secretariat will then call back the Supervisor and the student to enter the dissertation/thesis oral examination room for the purpose of announcing the result. After the Supervisor and the student take their place, the Chairperson will inform the result of the oral examination of the dissertation/thesis to the student including the period of correction given (if applicable) and the individual responsible for reviewing the corrections made (if applicable).

Comments/questions submitted during the oral examination session by the Oral Examination Committee recorded by the Chairperson and the representative of the Dean/Director, if applicable, are included together on the correction list. The list of corrections must be agreed by the Oral Examination Committee before it is given to the student.

The student will be reminded to submit the dissertation/thesis that has been corrected within the prescribed period to avoid from being given the fail status if the corrected dissertation/thesis is not submitted within the prescribed period. Next, the Chairperson will ask the secretariat of the Dissertation/Thesis Oral Examination (Assistant Registrar) to submit the

report from the External Examiner and Internal Examiner to the student as reference for dissertation/thesis correction. The secretariat of the Oral Examination shall prepare the minutes of the Oral Examination Committee which also include remarks from the Chairperson. The Chairperson is also required to complete the External Examiner Assessment Form and inform the Examiner of the maximum period for correction. He/She also has to remind the Internal and External Examiners to submit the corrected thesis simultaneously, if required.

The work processes of the Decision Making Session described in item 4.2.4 and the Result Announcement Session described in item 4.2.5 are summarized as shown in Figure 4.4.

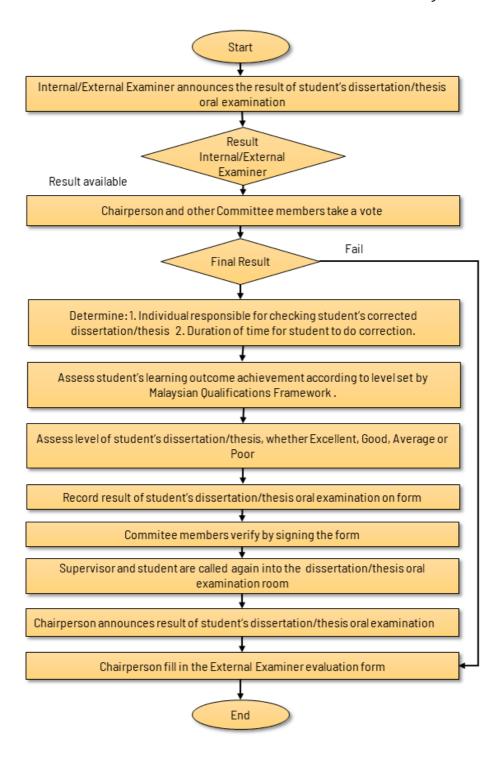


Figure 4.4 Flowchart of work progress of dissertation/thesis oral examination Decision Making Session and Result Announcement Session

# 4.4 Correction and verification of Dissertation/Thesis correction by External/Internal Examiner

Students must make corrections within the prescribed period and obtain verification from the Supervisor and Examiner (either External/Internal or both) based on the decision of the Oral Assessment/Examination Committee.

The Supervisor shall be responsible for supervising, evaluating and verifying that the corrections made by the student are in accordance with the list of corrections specified by the External Examiner, Internal Examiner and as agreed by the Oral Examination Committee. Dissertation/thesis that has been corrected must be verified by the Main Supervisor/Chairperson of the Supervisory Committee before submitting it to the External/Internal Examiner. The Supervisor is encouraged to make an action schedule with the student to ensure that corrections made are in accordance with the comments and recommendations stated in the dissertation/thesis examination report and oral assessment.

If the Main Supervisor is unable to verify the thesis correction due to certain reasons, the Co-Supervisor/Supervisory Committee is given the responsibility to view and verify the student's correction. In cases where the students do not have a co-supervisor or the supervisor has constraints or the supervisor has a work attachment outside the University, the Department where the student is enrolled is responsible for verifying the corrections of the dissertation/thesis.

During the correction period, the student is allowed to meet with the External/Internal Examiner subject to the discretion of the Examiner. However, the student is reminded not to harass the Examiner in any form whatsoever including via email, telephone, message or meeting in order to expedite the assessment of corrections, dropping correction items and other matters irrelevant to the correction of the student's thesis. The External/Internal Examiner reserves the right to make a complaint and submit evidence to the Faculty/Institute secretariat if there are activities done by the student that are deemed as emotional or physical disturbance to the Examiner and threaten the transparency and integrity of the correction assessment process.

If during the correction period, the Examiner does not want to cooperate with the student in correcting the dissertation/thesis, the student has the right to file a complaint and submit evidence to the Faculty/Institute secretariat.

Students must list down the details of comments from the External Examiner and Internal Examiner. The corrections made must be checked and verified by the Supervisor and submitted to the External/Internal Examiner, designated by the Oral Examination Committee, as the person who verifies the student's corrections.

The student then submits the corrected dissertation/thesis to the Internal/External Examiner either through hard or soft copy and sends a copy to the Faculty/Institute secretariat for record purposes. The External/Internal Examiner appointed by the Oral Examination Committee is to evaluate, verify and prepare a report on the student's dissertation/thesis corrections within a given time, according to Table 4.3, starting from the date of thesis submission. The Faculty/Institute Graduate secretariat can issue a soft reminder a week before the expiration date, and a stern reminder if the correction verification is not done within the stipulated time.

The External/Internal Examiner is not allowed to add items of correction that are not agreed by the Oral Examination Committee or items which are deemed unreasonable and not relevant to the student's dissertation/thesis.

Table 4.3 Guideline on the maximum period for checking of corrections by examiners and those responsible for reviewing and verifying corrections made by students based on the correction period given during the announcement of the oral examination

Verification	Correction Period (TP)	Maximum period for Examiner's correction review	Review/Verification
Passed and eligible for degree conferment	TP ≤ 1 Month	1 week	Review and verification by Supervisor only
Passed and eligible for degree conferment subject to minor corrections (category 1)	1 Month < TP ≤ 3 Months	≤ 2 weeks	Review by Supervisor and verification by Internal Examiner
Passed and eligible for degree conferment subject to minor corrections (category 2)	3 Months < TP ≤ 6 Months	≤ 3 weeks	Review by Supervisor and verified by Internal Examiner
Passed and eligible for degree conferment subject to major corrections	6 Months < TP ≤ 11 Months	1 Month	Review by Supervisor and verified by Internal Examiner or External Examiner

Students shall be reminded that the correction period, correction verification by the Supervisor and correction review of dissertation/thesis by the External/Internal Examiner are within the Correction Period set and announced by the Oral Examination Committee. Students are responsible for managing time to make corrections. If the dissertation/thesis submitted for verification by the External/Internal Examiner has less days remaining from the Review Period as

per Table 4.3 before the last date of the Correction Period, students are encouraged to apply for extension of time.

If the Examiner still does not provide verification of corrections after the correction period has expired, whereas the student has sent the corrections within the stipulated period, and a stern reminder to the Examiner has been issued by the Faculty/Institute secretariat, the Oral Examination Committee will reconvene and verifies the corrections within at least two weeks from the expiration date.

# 4.5 Extension of correction period

Rule 37 (6) gives consideration to the student to apply for additional time of the correction period from the original period given by the Oral Examination Committee subject to an additional 3 months.

Students must make an application in writing with the supervisor's verification to the Dean/Director of the Faculty/Institute before the original maximum period of correction expires. Students must provide reasons along with evidence, and complete details of the student's level of correction with the Supervisor's verification that the student has made the correction and needs additional time due to unforeseen constraints.

The Faculty/Institute may give approval to the student's application for additional time according to the period applied for, not exceeding a maximum of 3 months from the date of receipt of the application letter from the student to the Faculty/Institute.

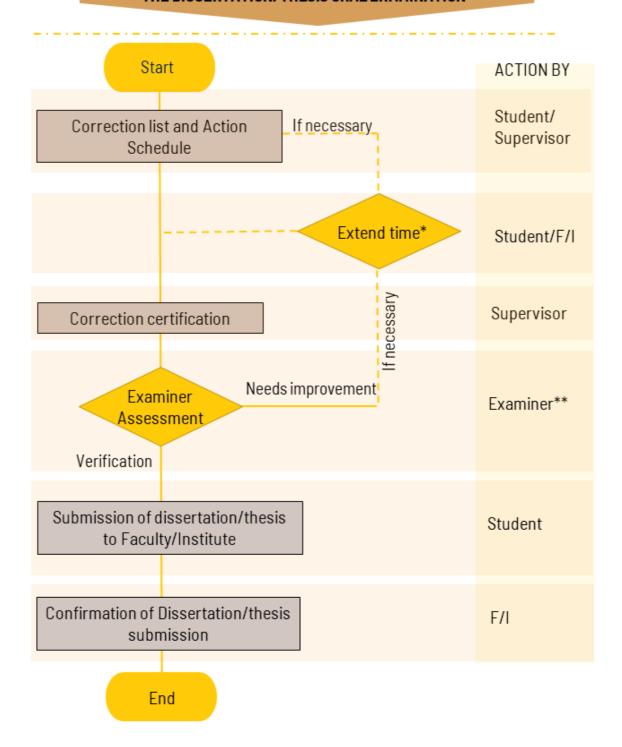
Students who fail to submit the dissertation/thesis within the maximum period including the additional period, are considered "Failed and Not Eligible to be Awarded a Degree". The Faculty/Institute is required to make a chronology of events (along with evidence) from the date of the oral examination to be verified by the Oral Examination Committee before it is submitted to the Senate.

### 4.6 Submission of Dissertation/Thesis

After the student's corrected dissertation/thesis is received by the External/Internal Examiner, the student can then submit the improved dissertation/thesis to the Faculty/Institute. The Corrected Thesis Submission Checklist form UKM/PPPS/C/P05/AK09/05 is verified by the Supervisor and the External/Internal Examiner before it is endorsed by the Faculty/Institute secretariat.

Students must submit the corrected dissertation/thesis to the Faculty/Institute within the period determined by the Oral Examination Committee. However, students may submit their dissertation/thesis earlier than the stipulated time after it has been verified as determined by the Oral Examination Committee. The Faculty/Institute is responsible for submitting one (1) copy of the dissertation/thesis to the Tun Seri Lanang Library.

# FLOWCHART OF WORK PROCESS AFTER COMPLETING THE DISSERTATION/THESIS ORAL EXAMINATION



<sup>\*</sup>Extension of correction period given by the Oral Examination Committee

Figure 4.5 Flowchart of work process after completing the Dissertation/Thesis Oral Examination

<sup>\*\*</sup>The Examiner decided by the Dissertation/Thesis Oral Examination Committee

### **SECTION V**

### APPEAL FOR REVIEW OF ORAL EXAMINATION RESULT

### 5.1 Introduction

A student pursuing a course study under the research mode and mixed mode (coursework and research mode) may appeal against the result of the oral examination assessment. The appeal application must be submitted in writing to the Dean/Director within four (4) weeks after the official examination result letter is issued.

The appeal must provide reasonable grounds for a review along with the prescribed processing fee, which is not refundable. In this case, the appeal can only be made for failing the oral examination only.

Every decision made by the Dissertation/Thesis Oral Examination Result Appeal Review Committee is final and any further appeal will not be entertained.

# 5.2 Appointment Of Dissertation/Thesis Oral Examination Result Appeal Review Committee

5.2.1 Setting Up of Dissertation/Thesis Oral Examination Result Appeal Review Committee

The Dissertation/Thesis Oral Examination Result Appeal Review Committee shall be independent and appointed by the Dean/Director of the Faculty/Institute. Pursuant to sub regulation 49 (5) of the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) 2021, this Committee consists of:

- a) One (1) Professor as Chairperson;
- b) Two (2) Professors or Associate Professors in the related field;
- c) Two (2) other Professors or Associate Professors; and
- d) Assistant Registrar of Faculty/Institute as secretariat.
- Note The Committee may invite the Chairperson of the Dissertation/Thesis Oral Examination Committee or his/her representative to be present to obtain some background information on the student's oral examination result.

# 5.2.2 Decision Making Session

The Dissertation/Thesis Oral Examination Result Appeal Review Committee needs to discuss and decide whether:

- a) to reject the appeal; or
- b) to accept the appeal and propose the establishment of a new Oral Examination Special Committee for the re-evaluation of the student's Dissertation/Thesis.

The decision of this Committee must be verified at the Faculty/Institute level before being brought to the Senate. After the Senate's approval is obtained, the Faculty/Institute must inform the student of the decision of the appeal. Every decision made by the Senate is final and any further appeal will not be entertained.

The flowchart of the appeal process to review the result of the oral examination is as shown in Figure 5.1.

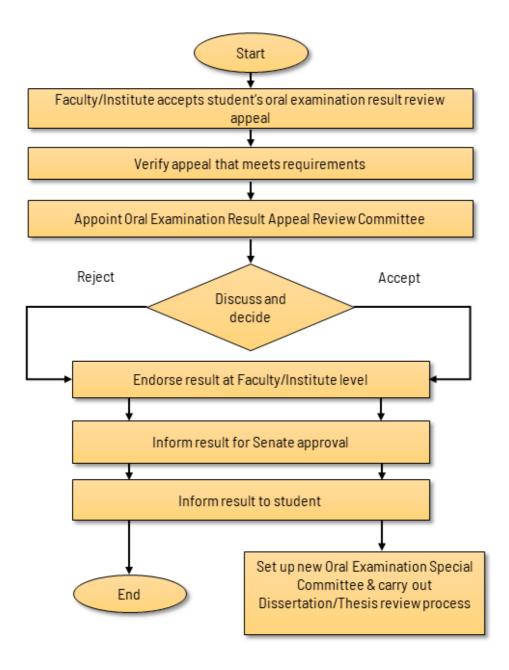


Figure 5.1 Flowchart of Oral Examination review appeal process

### **SECTION VI**

#### HANDLING CASES OF PLAGIARISM

### 6.1 Introduction

The University stipulates that plagiarism is a serious disciplinary offense and a violation of academic ethics as it undermines the integrity of the University. This is clearly stated in the Universities and University Colleges Act (Amendment) 2009 - Universiti Kebangsaan Malaysia Regulations (Students' Discipline) 1999 and the UKM Publication and Writing Ethics and Integrity Policy which was approved by the University Board Meeting No. 5/2011 on 2 June 2011. In general, the definition of plagiarism is as clearly stated in the Universities and University Colleges (Amendment) Act 2009 - Universiti Kebangsaan Malaysia Regulations (Students' Discipline) 1999 and the UKM Publication and Writing Ethics and Integrity Policy. Specifically, a ban on plagiarism has been outlined for UKM students which is mentioned in the Universities and University Colleges Act (Amendment) 2009 - Universiti Kebangsaan Malaysia Regulations (Students' Discipline) 1999.

# 6.2 Procedure for Dealing with Cases of Plagiarism

In cases where the student's thesis is suspected to have elements of plagiarism or is detected to contain elements of plagiarism, then the following actions are required:

- (a) The examiner or the person who suspects it must include evidence that the student has plagiarized, or is suspected of plagiarism.
- (b) A written report detailing the evidence must be submitted to the Dean/Director using the Plagiarism Complaint Form for Graduates (Appendix B).
- (c) The Oral Examination of the student is postponed until the result of the case is officially obtained.

### 6.2.1 Setting Up of Investigation Committee

The Investigation Committee shall be independent and appointed by the Dean/Director of the Faculty/Institute. The membership of the Investigation Committee is as follows:

- a) a Professor or Associate Professor as Chairperson;
- b) the Dean/Director or his/her representative;
- c) the Head of Department/Chair of the School or his/her representative;
- d) a Lecturer at the Faculty/Institute in the related field; and
- e) the Assistant Registrar of the Faculty/Institute as secretariat.

### 6.2.2 Degree/Level of Plagiarism

a) The Investigation Committee shall examine the complaint and prepare a report on the level of plagiarism in case there is plagiarism misconduct.

- b) The degrees of plagiarism are as follows:
  - (i) Almost all/all work is copied/rephrased from other sources (including from the student's own work) or the work is the result of another party (with or without payment/permission).
  - (ii) **Some/Half of the work is copied from other sources** (including from the student's own work) or produced by another party (with or without payment/permission). Some of the work was copied/summarized/edited from other sources without giving proper reference.
  - (iii) **Minor parts** (e.g. some sentences) are copied/rephrased, references are inaccurate and not clearly stated.
- c) The Investigation Committee may determine its own meeting procedures and plagiarism determination mechanisms including with the help of any relevant software.
- d) The Investigation Committee may invite the student who is being complained of to attend and provide clarification and evidence. The Committee shall explain to the student the implications of the evidence, including being brought to the Student Disciplinary Committee if it is found that there is plagiarism misconduct.
- 6.2.3 Decision Making Session and Student Disciplinary Committee
  - a) If the Investigation Committee finds that the student complained of has committed plagiarism misconduct as an item 6.2.2. b(iii), then the student shall be given a warning, his/her oral examination will be postponed and the student complained of shall resubmit his/her thesis/dissertation after appropriate amendment has been done:
  - b) If the Investigation Committee finds that the student complained of has committed more serious plagiarism misconduct as in item 6.2.2. b (i) and b (ii), then the following actions need to be taken:
    - (i) The Faculty/Institute shall initiate disciplinary proceedings against the student in accordance with the Universiti Kebangsaan Malaysia Regulations (Students' Discipline).
    - (ii) The membership of the Student Disciplinary Committee is as follows:
      - (a) the Deputy Vice Chancellor (Academic and International) as Chairperson; and
      - (b) two members representing the Senate.
    - (iii) The Chairperson of the Investigation Committee may be called as a witness to testify.

- (iv) The accused student shall reserve his/her rights under Section 16B of the Universities and University Colleges Act 1971 and the Universiti Kebangsaan Malaysia Regulations (Students' Discipline).
- (v) If the student is found guilty:
  - (a) The Disciplinary Committee may impose punishment under the Universiti Kebangsaan Malaysia (Students' Discipline) Regulations; and
  - (b) Subject to Senate approval, the student may be required to resubmit the dissertation/thesis after a thorough improvement has been made, except for cases where the dissertation/thesis has been recorded as failed and expelled from the University.
- (vi) If the Disciplinary Committee finds that the student has not committed plagiarism:
  - (a) The oral examination process will be conducted as usual; and
  - (b) If the complaint is made by the External Examiner or Internal Examiner, then the Faculty/Institute shall determine whether a new External Examiner or Internal Examiner should be appointed to review the student's thesis.
- (vii) A student who is under item 6.2.3 (v) above, may submit an appeal to the University Student Disciplinary Appeal Committee within the prescribed time and following a certain procedure.

# 6.2.4 Material Evidence and Written Notes on Proceedings

The secretariat of the Disciplinary Committee shall keep evidence and written notes of disciplinary proceedings in accordance with the Universiti Kebangsaan Malaysia Regulations (Students' Discipline).

The flowchart for dealing with cases of plagiarism is as shown in Figure 6.1.

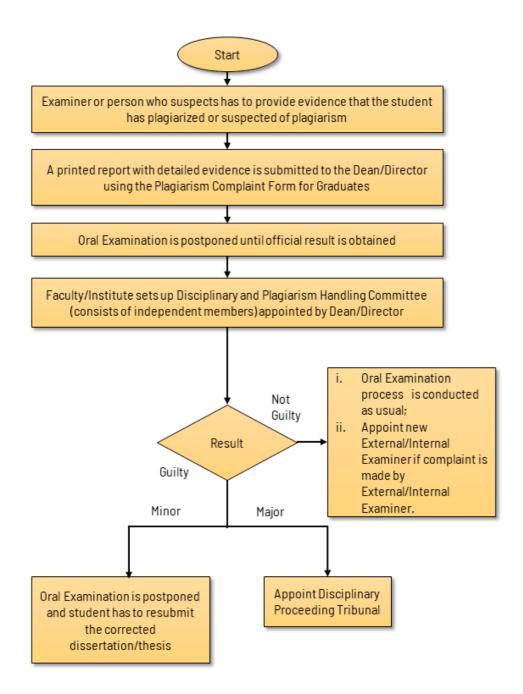


Figure 6.1 Flowchart on dealing with cases of plagiarism

### APPENDIX A

# Requirements for the Appointment of External and Internal Examiners based on the Universiti Kebangsaan Malaysia Regulations (Graduate Studies) 2021

### **External Examiner**

- 38. (1) The External Examiners for Master's program students with mode of study under sub-regulations 6 (a) and 6 (c) shall consist of academic staff appointed by the Senate to assess the students' achievements. The Examiner shall have at least the following qualifications:
  - (a) has a doctoral degree; and
  - (b) has produced Master's graduates; and
  - (c) has three (3) years of experience in the related field of research commencing from the date of receipt of the Doctoral Degree; and
  - (d) has demonstrated academic excellence
  - (2) The External Examiners for doctoral program students with mode of study under subregulations 6 (a) and 6 (c) shall consist of academic staff appointed by the Senate to assess the student's achievements. The Examiner shall have at least the following qualifications:
    - (a) an Associate Professor; and
    - (b) has a Doctoral Degree; and
    - (c) has produced Doctor of Philosophy graduates; and
    - (d) has five (5) years' experience in the related field of research commencing from the date of receipt of the Doctoral Degree; and
    - (e) has demonstrated academic excellence.
  - (3) The External Examiners for students of clinical master's or clinical doctorate programs are appointed by the Faculty/Institute and have been recognized as 'specialists' in the related fields. The Examiners shall consist of academic staff or field experts appointed by the Senate from other universities or institutions and verified by the Senate.
  - (4) Specialists from other industries/institutions to be appointed as External Examiners must have experience in the relevant fields of at least five (5) years for the Master's Degree level, or eight (8) years for the Doctoral Degree level.

- (5) Nomination of External Examiners can be done starting from semester three (3) for the master's programs or semester five (5) for the doctoral programs.
- (6) The appointed External Examiner shall not have any relationship and/or interest in the student.

### **Internal Examiner**

- 39. (1) The Internal Examiners for students of masters and doctoral programs, under subregulations 6(a) and 6(c) shall consist of academic staff from the University and appointed by the Dean/Director to assess the students' achievements as follows:
  - (a) For master's program students, the Internal Examiner must have at least a Master's Degree or other qualifications recognized by the Senate and experience in the related field.
  - (b) For doctoral program students, the Internal Examiner must have at least a Doctoral Degree or other qualifications recognized by the Senate and experience in the related field.
  - (2) Internal Examiners for students of master's and doctoral programs under subregulation 6(d) shall be appointed according to their areas of expertise and recognized as 'specialists' in the relevant fields by the Dean/Director.
  - (3) Nomination for the Internal Examiner can be done starting from semester three (3) for the master's programs, or semester five (5) for the doctoral programs.
  - (4) The appointed Internal Examiner shall not have any relationship and/or interest in the student.

# **APPENDIX B**



# **PLAGIARISME COMPLAINT FORM**

# **SECTION A:**

(Details on the accused individua	ai anu compiaint)
NAME	
MATRIC NO.	
PROGRAM	MASTER'S / DOCTOR OF PHILOSOPHY
SCHOOL/DEPARTMENT	
FACULTY/INSTITUTE	
TELEPHONE/EMAIL	
COMPLAINT CATEGORY	
Details of Complaint:	
Content of Offense:	

Chapter/Page	Source of Plagiarism	Form of Plagiarism (e.g. whole sentence/paragraph)

SECTION B:	
(Details of Complainant)	
NAME	
IC NO./PASSPORT	
TELEPHONE NO./EMAIL	
Declaration:	
Do you want to be covered unde	er the Whistleblower Act?
YES	NO
All the information that I have s	ubmitted is based on the stated evidence/sources.
Signature	
	DATE:
	FOR OFFICE USE ONLY
Complaint was received on	by
	mplaint received) (Name of Complaint Recipient)
Signature:	Faculty/Institute Rubber Stamp:

### References

- [1] Circular from Deputy Vice Chancellor (Academic and International Affairs), Universiti Kebangsaan Malaysia, Reference UKM3.2/12/266/2 dated 30 May 2011
- [2] 422th Senate Meeting dated 25 May 2016
- [3] Quality Objectives SPK MS ISO 9001:2008 PPPS, no 13.
- [4] Steering Committee Meeting SPK MS ISO 9001:2008 PPPS No.6/2012 dated 14 September 2012
- [5] 436th Senate Meeting, dated 21 August 2017.

# Guidelines for Conducting Oral Examination for Dissertation/Thesis 2021 Review Committee

# Chairperson

Prof. Dr. Sarani Zakaria

### **Committee Members**

Prof. Dr. Aisyah Abdul Rahman Prof. Ir. Dr. Jaharah A. Ghani Prof. Dr. Zarina Abdul Latiff Prof. Ir. Dr. Mardina Abdullah Prof. Madya Dr. Abdul Munir Abd. Murad Prof. Madya Dr. Wan Hanna Melini Wan Mohtar Prof. Madya Dr. Ermy Azziaty Rozali Prof. Madya Dr. Mohd Hizam Hanafiah Prof. Madya Dr. Kartini Aboo Talib Prof. Madya Dr. Mohd Aladib Samuri Prof. Madya Dr. Rozainee Khairudin Prof. Madya Dr. Saiful Arif Abdullah Dr. Hanim Kamruddin Puan Rohana Tan Cik Suhaida Abd Rahman Puan Latifah Kasmuri Puan Norazlin Hassim Puan Siti Salwa Ahmad Zur

# Graduate Quality and Governance Unit, Graduate Center

Puan Rafidah Hassan