

Department of Chemical and Materials Engineering

Procedures for the

Selection of Supervisory Committees

And for

Conducting M. Sc. And Ph. D. Final Oral  
Examinations and Ph. D. Candidacy Examinations

**Summary:** This document summarizes the procedures to be followed when forming supervisory and examination committees and conducting oral final and candidacy examinations. It is important that the procedures set out in this document are followed to ensure compliance with program and FGSR requirements.

## 1. Selection of Supervisor

As per current practice, no student is admitted to the graduate program in Chemical and Materials Engineering (CME) without a supervisor being assigned.

## 2. Selection of a Ph.D. Supervisory committee

A supervisory committee shall be appointed before the end of the first year of a student's first registration as a PhD student. The supervisory committee shall meet with the student at least once per year to review the student's progress. A doctoral supervisory committee must have at least three members, and must include all the supervisors. The supervisory committee meetings will be chaired by one of the supervisors. The committee will arrange for the necessary examinations and for adjudication of the thesis.

## 3. Composition of examining committees

It is the duty of the supervisor to form the appropriate examining and supervisory committees. The rules laid down by FGSR regarding the composition of the committees must be followed. Each examining committee is chaired by an impartial chair. The role of the chair is to ensure fairness and adherence to the rules. The chair is not considered as an examiner and does not count towards the required numbers in the rules given below. The impartial chair DOES NOT ask questions nor offer an opinion as to the performance of the candidate. The chair must be perceived as being completely unbiased. The chair must be from the Department of Chemical and Materials Engineering.

**Arm's length examiner:** FGSR states that arm's length examiners must not be members of the supervisory committee (in the case of PhD exams), have not been connected with thesis research in a significant way, are not associated with the student (outside of normal course or other non-thesis activities), and are not close collaborators of the supervisor(s). The arm's length examiner may be from the same department as the student and the supervisor. In the CME department, the following guideline is used to decide whether someone is a close collaborator of the supervisor: In the past two years, if the person has co-supervised students or was a co-investigator on a funded project or has co-authored refereed publications with the supervisor, they would be regarded as a close collaborator and not be eligible to act as an arm's length examiner.

### 3.1 *M.Sc. final oral examination:*

The committee must consist of the supervisor and at least two additional full-time faculty members, at least one of whom is at arm's length. The committee should contain at least two University of Alberta examiners.

### **3.2 *Ph.D. candidacy examination:***

The committee must consist of the supervisory committee plus at least two additional members at arm's length, in addition to the impartial Chair. Note that the complete supervisory committee must be present at the exam.

### **3.3 *Ph.D. final oral examination:***

#### **3.3.1 Composition of the committee**

The examining committee must consist of at least five members in addition to the impartial chair. Of the five members, at least 3 must be University of Alberta examiners and there should be at least two arm's length examiners, of which exactly one is from outside the university (the external examiner). The external examiner is always counted as a member of the committee; it does not matter if they act as a reader or attend in person or by teleconference.

#### **3.3.2 Inviting the External Examiner or Reader**

It is the responsibility of the department chair (or delegate) to nominate an external examiner or reader and to submit the name to the FGSR for approval. This should be done on form to 'Approve External Reader or Examiner for Final Doctoral Oral Examination', which should be prepared by the department normally at least two months in advance of the examination date (FGSR Council, 1989/06/19). The form is available on the FGSR website at <https://uofa.ualberta.ca/graduate-studies/about/resources-for-faculty-and-staff/forms-cabinet>.

The submission must include a brief CV of the external examiner and a short statement regarding the external's qualifications. Of particular interest are the external examiner's current scholarly publications and research activities and experience with graduate student education, including supervision and serving on committees for Ph.D. final oral examinations.

The external shall be a recognized authority in the special field of research of the candidate's thesis, and will be experienced in supervising evaluating doctoral area work. The proposed external examiner must be in a position to review the thesis objectively and to provide a critical analysis of the work and the presentation. It is therefore essential that the external examiner not have a current or previous association with the student, the supervisor, or the department that would hinder this type of objective analysis. For example, a proposed external examiner who has within the last six years been associated with the student as a research collaborator or co-author would not be eligible. Also, a proposed external examiner must not have had an association within the last six years with the doctoral student's supervisor (as a former student, supervisor, or close collaborator, for instance). Supervisors who are in doubt about the eligibility of a potential external examiner should contact the Associate Chair for graduate studies to review the case before approaching the external.

Under normal circumstances, the same person will not be used as an external examiner at the University of Alberta if that examiner has served in the same capacity at this University within the preceding two years. (FGSR Council, 1989/06/19). The FGSR interprets this to mean the same

external examiner cannot be used in the same department within two years; this does not preclude an examiner serving in another department (2004/11/01).

Once the external has been approved, the Associate Chair will officially invite the external examiner, with a copy of the letter of invitation to the department.

The external shall receive the thesis at least four weeks before the final oral examination. The external should not be contacting the supervisor directly regarding the thesis or making arrangements related to the examination.

Ideally, the approval of the external examiner should be forwarded to FGSR **at least** two months prior to the date of the examination (use the form titled “Approve external reader or examiner for final doctoral oral exam”).

#### **4. Attendance at Exams**

In the absence of unforeseen circumstances, it is essential that all examiners attend the entire examination. Attendance means participation in the examination either in person or via teleconferencing. The only exception allowed is the External Reader for a doctoral final examination, who participates by providing a detailed report and a list of questions.

It is recommended that no more than two participants use teleconferencing. Students must attend their candidacy examinations in person. In exceptional circumstances, for the final examinations, students may participate by teleconferencing. It is recommended that if the student is the remote participant, no remote committee members be used.

If any member of the examining committee cannot attend the examination for any reason, the committee chair should contact the Graduate Assistant and Associate Chair immediately, and they will contact the Dean, FGSR for advice. FGSR deals with these situations on a case-by-case basis, but it may be necessary that the examination be postponed and re-scheduled, or the examiner be replaced.

Except for the Dean, FGSR, the Dean of the department’s Faculty, or a Pro Dean (the representative of the Dean, FGSR), who may participate fully in the examination, persons other than the examiners (i.e., guests and visitors) may attend only with the approval of the Dean, FGSR, the Dean of the department’s Faculty, or the chair of the committee. Visitors may not participate in the committee's discussion concerning its decision on the student's performance and must withdraw before such discussion commences.

*Attendance and Responsibilities of a Pro Dean at Examinations:* A Pro Dean is a full voting member when attending an examination. The Pro Dean’s presence is in addition to the regular membership. Attendance of the Pro Dean may be at the request of a committee member, student, chair, graduate coordinator, the Dean of the department’s Faculty, or the Dean, FGSR. The Pro

Dean's role is to ensure the proper conduct of the examination and will intercede actively to correct procedural problems. The Pro Dean has the power to adjourn an examination. If problems are encountered, the Pro Dean is asked to submit a brief report to the Dean, FGSR.

## 5. Duties of the Supervisor for all oral exams

It is the duty of the supervisor, and not the student, to make all arrangements for oral examinations. Please see a Graduate Assistant to have all necessary forms completed.

The supervisor should carry out the following tasks:

Ensure that a supervisory committee (Ph.D.) has been approved for the student. If a member of a supervisory committee cannot attend an examination (either in person or by teleconference), then it is necessary to revise the membership of the supervisory committee using the “Appointment of Supervisor(s) and Supervisory Committee” form because **the complete supervisory committee must be present at candidacy and final oral examinations.**

If a final oral examination is to be scheduled, examine the student’s file to ensure that the student is eligible to convocate. Check that the following requirements have been met:

- Course requirements (available in the CME graduate program handbook)
- Performance standards (refer to the CME graduate program handbook for guidance)
- FGSR residency requirement (available in sections 8.6 and 8.7 of the graduate program manual)
- Presentation of an acceptable seminar (refer to the CME graduate program handbook for guidance)
- Ethics requirement (successful completion of ENG 600)
- Professional development requirement (refer to the CME graduate program handbook for guidance)

Prepare a written summary of the student’s record which will be distributed to the examining committee on the day of the examination. This summary should include information on the previous degrees received, date of initial registration, the date(s) of any change(s) of status, the dates of full-time residence at the University of Alberta, the date on which the departmental seminar was given (if already given), a listing of the student’s courses and the grades obtained, plus anything else which the supervisor believes is relevant. If a requirement, such as the seminar requirement, has not yet been satisfied, indicate the date (if known) when the requirement will be satisfied.

If a Ph.D. candidacy examination is to be held, ask the student to prepare a written summary of the research completed on the thesis topic, and of the research proposed. The summary should be printed in 12 point font and not exceed 20 pages in length (excluding table of contents and list of references). Best practices are to include sections on motivation, background/literature review, hypothesis/objectives, methods, results, results and proposed work. Note that this summary must be submitted to the Associate Chair for Graduate Studies or a Graduate Assistant within 13

months of the start of the program, and the candidacy examination should be held within 16 months of the start of the program.

Form the examining committee according to the rules given in Section 3.

Arrange for a faculty member in Chemical and Materials Engineering to serve as the impartial Chair of the examining committee. As mentioned earlier, the impartial Chair is not counted when determining if the examining committee has the correct membership. Give a copy of the summary of the student's record to the impartial Chair.

Select a date for the examination. For a final exam, have the student distribute copies of the thesis to all members of the examining committee and the impartial Chair. This distribution must occur **at least** three weeks prior to the examination. For a PhD Candidacy exam, the candidacy report will be distributed to the committee by the Graduate Assistant. Note that prior to a Ph.D. oral examination, a copy of the thesis should not be sent to the external examiner until each member of the Ph.D. supervisory committee has agreed in writing that the thesis is of adequate substance to warrant that the student proceed to the final examination (the form "Preliminary Acceptance of Thesis" is used for this purpose). The external examiner must receive the thesis **at least** four weeks prior to the oral examination.

Reserve a conference room for the examination.

Instruct the student to prepare a short presentation which will be given prior to the start of the question period portion of the examination. This presentation should be a summary of the research and could provide a context of the student's work. The presentation should be approximately 20 minutes in length, and cannot exceed 25 minutes under any circumstance.

**At least three weeks before the examination,** submit a completed "Notice of Examining Committee and Examination Date" form to FGSR through a Graduate Assistant. Copies of this form will be given to each member of the examining committee (and for the student's file) prior to submitting the form to FGSR.

Take the student's file to the examination and, when requested by the Chair, distribute the summary of the student's record to the committee and describe the contents therein.

## 6. Duties of the Examining Committee Chair: Prior to the Exam

On receiving your copy of the “Notice of Examining Committee and Examination Date” form, check the date you received it and the date of the examination. **If the period between the two dates is shorter than three weeks tell the supervisor to reschedule the examination.**

Check that the composition of the examining committee is correct. Refer to Section 3 for details.

If the copy of the thesis has not yet been received, ask the supervisor if the thesis will be available **at least** three weeks prior to the examination. In the case of a Ph.D. final oral examination, ask if the external examiner will receive the thesis **at least** four weeks prior to the examination. If these time frames are not going to be met, tell the supervisor to reschedule the examination. **Note:** For a PhD Candidacy exam, check with the Graduate Assistant that the research summary was distributed to the examining committee.

Inspect the summary of the student’s record which has been received from the supervisor. If all FGSR and departmental requirements have not been met and will not be met by the time of the exam, tell the supervisor to reschedule the examination. **It is the responsibility of the committee chair to be familiar with all FGSR and departmental requirements. Graduate Assistants and the Associate Chair can provide guidance on these requirements.**

Check that the room has been reserved for the examination.

**About one week before the examination**, arrange to see the student and explain the procedures which will be followed. Stress that the talk should be approximately 20 minutes in length, and under no circumstances should it be longer than 25 minutes in length.

## 7. Duties of the Examining Committee Chair: MSc final exam

Introduce everyone including the student and any guests and visitors who may be in attendance.

State the purpose of the meeting by reading the following statement aloud:

*It is the purpose of this committee to conduct an oral examination designed to test the student's knowledge of the thesis subject. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it.*

Summarize the procedures which will be followed as outlined in this document for the benefit of the student and the examining committee.

Ask the student to leave and then ask the supervisor to distribute and describe the written summary of the student's record. Ask the supervisor to highlight any aspects that might have bearing on the conduct of the examination (personality traits, medical problems, etc.). **It is the committee's responsibility to verify that all faculty and departmental degree requirements have been met.**

Re-admit the student and ask the student to give a presentation on the thesis work. Emphasize that this presentation is supposed to be a summary because the committee members have read the thesis. Tell the student that you will give a 5 minute warning after 20 minutes, if necessary. Allow simple questions only, for clarity, during the presentation. If necessary, tell the student to stop at 25 minutes.

Following the presentation start the questioning, which should be about 1-1.5 hours in duration. The Chair of the committee is responsible for moderating the discussion and directing questions but **will not** participate in the questioning. Except for the Dean, FGSR, the Dean of the department's Faculty, or a Pro Dean (the representative of the Dean, FGSR), who may participate fully in the examination, persons other than the examiners (i.e., guests and visitors) may attend only with the approval of the Dean, FGSR, the Dean of the department's Faculty, or the chair of the committee. Visitors may not participate in the committee's discussion concerning its decision on the student's performance and must withdraw before such discussion commences. The FGSR representative, if any, may participate fully in any questioning. There should be two rounds of questions. Each round should follow the same order of questioners, typically starting with the arm's length examiners and ending with the supervisor(s).

Explain to the members of the committee that they must await their turn. The student and questioner should not be disturbed by interruptions. In particular, the student's supervisor(s) should be encouraged to be quiet. Allow approximately 10-15 minutes for each questioner for each round.

**Final comments:** Ask the committee members for any final statements and/or questions. Ask if the student wishes to make a final statement, emphasizing that this is optional.

Ask all guests and visitors to leave. The FGSR representative may remain and participate fully. Ask the student to leave.

**Read the following statement to the committee:**

*The decision of the examining committee should be based both on the content of the thesis and on the candidate's ability to defend it. The committee can make one of four recommendations: (1) student passes, (2) student passes with thesis revision, (3) examination adjourned, or (4) student fails.*

The circumstances in which these four possible outcomes should be used, and the actions to follow are outlined below. Explain these options to the committee.

**Pass:** All or all but one of the examiners must agree to an outcome of Pass. If the student passes the examination, the department should submit a completed Thesis approval/Program Completion form to the FGSR. If one of the examiners fails the student, that examiner does not have to sign this form. **NOTE:** A pass without revisions will be extremely rare. Even if there are only minor editorial changes, the following category **MUST** be selected.

**Pass subject to revisions:** All or all but one of the examiners must agree to an outcome of Pass subject to revisions. The student has satisfactorily defended the thesis but the revisions to the thesis are sufficiently minor that it will not require a reconvening of the examining committee.

The student must make the changes within six months of the date of the final examination. These changes should be checked and approved by the examining committee chair or supervisor, who does not sign until the required changes are satisfactorily completed. Other committee members may also wish to withhold their signature until they can verify that their required revisions have been made to their satisfaction.

Once the required revisions have been made and approved, the department shall submit a completed Thesis Approval/Program Completion form to the FGSR indicating “pass subject to revisions”. If one of the examiners fails the student that examiner does not have to sign the form.

**Adjournment:** A majority of the examiners must agree to the outcome of Adjourned. The final oral examination should be adjourned in the following situations:

The revisions are more substantial than editorial or minor reworking; for example, further research or major reworking of the thesis are required.

The committee is dissatisfied with the candidate's oral presentation and defence of the thesis, even if the thesis itself is acceptable with or without revisions.

Extraordinary circumstances such as sudden medical emergency during the examination.

A date for reconvening does not need to be set at this moment, but it should be decided which committee member will set the date to reconvene. **ADJOURNED EXAMS MUST BE RECONVENED.** The final date for reconvening should be no later than six months from the date of the examination. Advise the FGSR in writing of the adjournment and the conditions that must be met before reconvening.

**Fail: All or all but one of the examiners must agree to an outcome of Fail.** If the examination result is a Fail, no member of the examining committee signs the Thesis Approval / Program Completion form.

When the outcome is a Fail, the committee chair will provide the reasons for this decision to the department. The department will then provide this report, together with its recommendation for the student's program, to the Dean, FGSR, and to the student.

An Associate Dean, FGSR will normally arrange to meet with the student, the graduate coordinator, and others if needed, before acting upon any departmental recommendation that affects the student's academic standing.

**Any voting pattern that is not covered in the cases above must be referred to FGSR; please consult the Associate Chair for Graduate Studies about this.**

**Ask each member of the committee if:**

- (1) the student should pass the examination?
- (2) the student should pass subject to revisions?
- (3) the examination should be adjourned?
- (4) the student should fail the examination?

**Note:** When making the preceding decision, the Chair of the committee is responsible for moderating the discussion, but does not participate in any votes which are held and does not offer an opinion on the candidate's performance. Many verdicts will recommend modifications to the thesis which are of a typographical nature. Lists of revisions should be given to the student for incorporation into the thesis.

After the decision is reached, re-admit the student and explain the decision of the committee.

If the examination was passed (category 1) the entire committee should sign the Thesis Approval / Program Completion form for acceptance. No changes should be made to the thesis after this point, and it must be submitted to FGSR in its existing form.

If the examination was passed subject to revisions to the thesis, ask the committee members if they wish to sign the Thesis Approval / Program Completion form at this time or, if appropriate, if they wish to see the thesis after the modifications have been completed. The supervisor's signature is withheld pending completion of all corrections. The impartial Chair of the committee does not normally sign the form. If any examiner did not attend the oral examination in person, then the impartial Chair of the examining committee is to sign for them (with their permission).

Thank everyone and close the examination.

### **Following the exam:**

If the verdict is pass have a Graduate Assistant complete the Thesis Approval / Program Completion form.

If it is pass with revisions, the Chair must, within 5 working days, outline in writing to the student, the Associate Chair for Graduate Studies, and the Dean of FGSR, the:

- reasons for this outcome;
- details of the required revisions;
- approval mechanism for meeting the requirement for revisions; and
- supervision and assistance the student can expect to receive from committee members.

If the examination is adjourned, the Chair sends a memo of explanation to the FGSR, the Associate Chair for Graduate Studies and to the student, outlining:

- a) the nature of the deficiencies,
- b) the approval mechanism for meeting the conditions, i.e. approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee,
- c) the timeline for meeting the conditions, and
- d) the supervision and assistance the student may expect from the committee members in meeting the necessary revisions.

If the date of the reconvened examination depends upon the completion of a research task or a series of discussions, it should be made clear which committee members will decide on the appropriate date to reconvene. This new examination must be held within six months of the initial examination.

If the examination is failed, advise the student, the Associate Chair for Graduate Studies and the FGSR of the reasons of this recommendation and the committee's recommendation for the student's program.

## **8. Duties of the Examining Committee Chair: PhD Candidacy exam**

Introduce everyone including the student and any guests and visitors who may be in attendance.

State the purpose of the meeting by reading the following statement aloud:

*Students in doctoral programs are required to pass a candidacy examination in subjects relevant to their general field of research. Students must demonstrate to the satisfaction of the examining committee that they possess: (a) an adequate knowledge of the discipline and of the subject matter relevant to the thesis; and (b) the ability to pursue and complete original research at an advanced level. **During the candidacy examination only minor attention should be given to the work done on the thesis.***

Summarize the procedures which will be followed as outlined in this document for the benefit of the student and the examining committee.

Ask the student to leave and then ask the supervisor to distribute and describe the written summary of the student's record. Ask the supervisor to highlight any aspects that might have bearing on the conduct of the examination (personality traits, medical problems, etc.). **It is the committee's responsibility to verify that all faculty and departmental degree requirements have been met.**

Re-admit the student and ask the student to give a presentation on the thesis project. **Emphasize that this presentation is supposed to be a summary because the committee members have read the research summary.** Tell the student that you will give a 5 minute warning after 20 minutes, if necessary. Allow simple questions only, for clarity, during the presentation. If necessary, tell the student to stop at 25 minutes.

Following the presentation start the questioning, which should be about 2 hours in duration. The Chair of the committee is responsible for moderating the discussion and directing questions but **will not** participate in the questioning. Except for the Dean, FGSR, the Dean of the department's Faculty, or a Pro Dean (the representative of the Dean, FGSR), who may participate fully in the examination, persons other than the examiners (i.e., guests and visitors) may attend only with the approval of the Dean, FGSR, the Dean of the department's Faculty, or the chair of the committee. Visitors may not participate in the committee's discussion concerning its decision on the student's performance and must withdraw before such discussion commences. The FGSR representative, if any, may participate fully in any questioning. There should be two rounds of questions. Each

round should follow the same order of questioners, typically starting with the arm's length examiners, then the members of the supervisory committee and ending with the supervisor(s).

Explain to the member of the committee that they must await their turn. The student and questioner should not be disturbed by interruptions. In particular, the student's supervisor should be encouraged to be quiet. Allow approximately 10-15 minutes for each questioner for each round. Start with the external examiner; then go to the arm's length examiner, then the FGSR representative, if present; the guests and visitors (if permitted by the Chair); then the supervisory committee and supervisor last.

**Final comments:** Ask the committee members for any final statements and/or questions. Ask if the student wishes to make a final statement, emphasizing that this is optional.

Ask all guests and visitors to leave. The FGSR representative may remain and participate fully. Ask the student to leave.

**Read the following statement to the committee:**

*Is the student's general knowledge of the discipline and of the subject matter relevant to the thesis sufficient to pass the candidacy? Four decisions are possible: (1) the student passes the candidacy examination, (2) the student passes conditionally, (3) the student fails the candidacy examination, or (4) adjournment.*

The circumstances in which these possible outcomes should be used, as well as actions to follow are outlined below. Explain these options to the committee.

**Adjourned:** *A majority of examiners must agree to an outcome of Adjourned.* The candidacy examination should be adjourned in the event of compelling, extraordinary circumstances such as a sudden medical emergency taking place during the examination or possible offences under the Code of Student Behaviour after the examination has started.

**Pass:** *All or all but one of the examiners must agree to an outcome of Pass.* If the student passes the examination, the department should submit a completed Report of Completion of Candidacy Examination form and submit it to the FGSR. This form is also available in the Forms Cabinet on the FGSR website under "Records".

**Conditional Pass:** *A majority of examiners must agree to an outcome of Conditional Pass.* If the candidacy examining committee agrees to a conditional pass for the student, the chair of the examining committee will provide in writing within five working days to the Dean, FGSR, the graduate coordinator and the student:

- the reasons for the recommendation,

- the details of the conditions,
- the timeframe for the student to meet the conditions,
- the approval mechanism for meeting the conditions (e.g. approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee) and
- the supervision and assistance the student can be expected to receive from the committee members.

Conditions are subject to final approval by the Dean, FGSR.

At the deadline specified for meeting the conditions, two outcomes are possible:

- All the conditions have been met. In this case, the department will complete the Report of Completion of Candidacy Examination form and submit to the FGSR; or
- Some of the conditions have not been met. In this case, the outcome of the candidacy examination is a Fail, and the options below are available to the examining committee. Note that the options are different after a failed second candidacy examination.

**Fail:** If the candidacy examining committee agrees that the student has failed, the committee chair will provide the reasons for this recommendation to the department. The graduate coordinator will then provide this report, together with the department's recommendation for the student's program, to the Dean, FGSR, and to the student.

For failed candidacy examinations, an Associate Dean, FGSR, normally arranges to meet with the student and others as required before acting upon any departmental recommendations.

The options available to the examining committee when the outcome of a student's candidacy exam is "Fail" are:

- ***Repeat the Candidacy Examination: A majority of examiners must agree to an outcome of Fail and Repeat the Candidacy.*** If the student's candidacy exam performance was inadequate but the student's performance and work completed to date indicate that the student has the potential to perform at the doctoral level, the Examining Committee should consider the possibility of recommending that the student be given an opportunity to repeat the candidacy exam. Normally, the composition of the examining committee does not change for the repeat candidacy exam.

If the recommendation of a repeat candidacy is formulated by the examining committee and approved by the FGSR, the student and graduate coordinator are to be notified in writing of his/her exam deficiencies by the Chair of the examining committee. The second candidacy exam is to be scheduled within six months of the date of the first candidacy.

In the event that the student fails the second candidacy, the examining committee shall recommend one of the options below.

***Change of Category to a Master's Program: All or all but one of the examiners must agree to an outcome of Fail and Change of Category to a Master's Program.*** This outcome should be considered if the student's candidacy examination performance was inadequate and the student's performance and work completed to date indicates that the student has the potential to complete a master's, but not a doctoral, program; or

***Termination of the Doctoral Program: All or all but one of the examiners must agree to an outcome of Fail and Terminate the Doctoral program.*** If the student's performance was inadequate, and the work completed during the program is considered inadequate, then the examining committee should recommend termination of the student's program.

**Any voting pattern that is not covered in the cases above must be referred to FGSR; please consult the Associate Chair for Graduate studies about this.**

**Ask each member of the committee if:**

- (1) the student should pass the examination?
- (2) the student should pass subject to conditions?
- (3) the student should fail the examination?

**Note:** When making the preceding decision, the Chair of the committee is responsible for moderating the discussion, but does not participate in any votes which are held, and does **not** offer opinions on the candidate's performance.

After the decision is reached, re-admit the student and explain the decision of the committee.

Hold a free-form discussion with the student present. The student is very much a part of the discussion process about the outcome of the research work. Discuss possible avenues of research to pursue. Outline deficiencies and arrive at a consensus as to the work expected for the thesis. The Chair should make notes of all decisions and may be asked by the committee to write to the student summarizing the decisions of the committee.

Thank everyone and close the examination.

**Following the exam:**

If it is agreed that the student has **passed** the candidacy examination then the Chair of the committee should report this outcome to the Graduate Assistant so that a report of completion of candidacy exam can be completed.

For a conditional pass, send a memo of explanation within five working days to the FGSR, the graduate coordinator and to the student, outlining:

- a) the reason for this recommendation
- b) details of the conditions
- c) the timeframe for the student to meet the conditions
- d) the approval mechanism for meeting the conditions, i.e., approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee
- e) the supervision and assistance the student can expect to receive from committee members, and

The department holds the report of completion of candidacy exam form until the conditions have been met. Note that conditions are subject to final approval by the Dean, FGSR. At the deadline specified for meeting the conditions, two outcomes are possible:

- All the conditions have been met. In this case, the department will complete the report of completion of candidacy examination form and submit it to the FGSR; or
- Some of the conditions have not been met. In this case, the outcome of the candidacy examination is a Fail.

If it is decided that the student has failed the candidacy examination, the committee chair will provide the reasons for this recommendation to the Associate Chair for Graduate Studies who will then provide this report, together with the department's recommendation for the student's program, to the Dean, FGSR and to the student.

For failed candidacy examinations, an Associate Dean, FGSR, normally arranges to meet with the student and others as required before acting upon any department recommendation.

## 9. Duties of the Examining Committee Chair: PhD final exam

Introduce everyone including the student and any guests and visitors who may be in attendance.

State the purpose of the meeting by reading the following statement aloud:

*It is the purpose of this committee to conduct an oral examination based largely on the thesis. The decision of the examining committee will be based both on the content of the thesis and on the candidate's ability to defend it.*

Summarize the procedures which will be followed as outlined in this document.

Ask the student to leave and then ask the supervisor to distribute and describe the written summary of the student's record. Ask the supervisor to highlight any aspects that might have bearing on the conduct of the examination (personality traits, medical problems, etc.). **It is the committee's responsibility to verify that all faculty and departmental degree requirements have been met.**

Re-admit the student and ask the student to give a presentation on the thesis work. Emphasize that this presentation is supposed to be a summary because the committee members have read the thesis. Tell the student that you will give a 5 minute warning after 20 minutes, if necessary. Allow simple questions only, for clarity, during the presentation. If necessary, tell the student to stop after 25 minutes.

Following the presentation start the questioning, which should be about 1.5-2.5 hours in duration. The Chair of the committee is responsible for moderating the discussion and directing questions but **will not** participate in the questioning (except if the external examiner is a reader, in which case the chair reads out the external examiner's report and asks questions on his behalf). Except for the Dean, FGSR, the Dean of the department's Faculty, or a Pro Dean (the representative of the Dean, FGSR), who may participate fully in the examination, persons other than the examiners (i.e., guests and visitors) may attend only with the approval of the Dean, FGSR, the Dean of the department's Faculty, or the chair of the committee. Visitors may not participate in the committee's discussion concerning its decision on the student's performance and must withdraw before such discussion commences. The FGSR representative, if any, may participate fully in any questioning. There should be two rounds of questions. Each round should follow the same order of questioners.

Explain to the member of the committee that they must await their turn. The student and questioner should not be disturbed by interruptions. In particular, the student's supervisor should be encouraged to be quiet. Allow approximately 10-20 minutes for each questioner. Start with the external examiners; then go to the arm's length examiner; then the FGSR representative, if present; the guests and visitors (if permitted by the Chair); then the supervisory committee and the supervisor last.

**Final comments:** Ask the committee members for any final statements and/or questions. Ask if the student wishes to make a final statement.

Ask all guests and visitors to leave. The FGSR representative may remain and participate fully. Ask the student to leave.

**Read the following statement to the committee:**

*The decision of the examining committee should be based both on the content of the thesis and on the candidate's ability to defend it. The committee can make one of four recommendations: (1) student passes, (2) student passes with thesis revision, (3) examination adjourned, or (4) student fails.*

The circumstances in which these four possible outcomes should be used, as well as actions to follow are outlined below. Explain these options to the committee.

**Pass:** All or all but one of the examiners must agree to an outcome of Pass. If the student passes the examination, the department should submit a completed Thesis Approval/Program Completion form to the FGSR. If one of the examiners fails the student, that examiner does not have to sign the form. The form is available on the FGSR website (see Forms Cabinet). **NOTE:** A pass without revisions will be extremely rare. Even if there are only minor editorial changes, the following category **MUST** be selected.

**Pass subject to revisions:** All or all but one of the examiners must agree to an outcome of Pass Subject to Revisions. The student has satisfactorily defended the thesis but the revisions to the thesis are sufficiently minor that it will not require a reconvening of the examining committee.

The student must make the changes within six months of the date of the final examination. These changes should be checked and approved by the examining committee chair or supervisor, who does not sign until the required changes are satisfactorily completed. Other committee members may also wish to withhold their signature until they can verify that their required revisions have been made to their satisfaction.

**Adjournment:** An adjourned examination is one that has been abandoned officially. A majority of examiners must agree to an outcome of Adjourned. The final examination should be adjourned in the following situations:

- The revisions to the thesis are sufficiently substantial that it will require further research or experimentation or major reworking of sections, or if the committee is so dissatisfied with the general presentation of the thesis that it will require a reconvening of the examining committee. In such circumstances the committee cannot pass the student, and must adjourn the examination.
- The committee is dissatisfied with the candidate's oral presentation and defence of the thesis, even if the thesis itself is acceptable with or without minor revisions.

- Compelling, extraordinary circumstances such as sudden medical emergency taking place during the examination.
- Discovery of possible offences under the Code of Student Behaviour after the examination has started.

If the examination is adjourned, the committee should:

- Specify in writing to the student, with as much precision as possible, the nature of the deficiencies and, in the case of revisions to the thesis, the extent of the revisions required. Where the oral defence is unsatisfactory, it may be necessary to arrange some discussion periods with the student prior to reconvening the examination.
- Decide upon a date to reconvene. If the date of the reconvened examination depends upon the completion of a research task or a series of discussions, it should be made clear which committee members will decide on the appropriate date to reconvene. This new examination must be held within six months of the initial examination.
- Make it clear to the student what will be required by way of approval before the examination is reconvened (e.g. approval of the committee chair or supervisor, approval of the entire committee, or of select members of the committee).
- Specify the supervision and assistance the student may expect from the committee members in meeting the necessary revisions.
- Advise the Dean of the department's Faculty following the procedures established for this purpose.
- Advise the FGSR in writing of the adjournment and the conditions.
- When the date is set for the adjourned final examination, the department will notify the Dean of the department's Faculty and the FGSR. Normally, a Pro Dean attends the examination.

**Fail: All or all but one of the examiners must agree to an outcome of Fail.** If the examination result is a Fail, no member of the examining committee signs the Thesis Approval /Program Completion form.

When the outcome is a Fail, the committee chair will provide the reasons for this decision to the graduate coordinator. The department will then provide this report, together with its recommendation for the student's program, to the Dean of the department's Faculty, the FGSR, and to the student.

An Associate Dean, FGSR will normally arrange to meet with the student and with the graduate coordinator before acting upon any department recommendation that affects the student's academic standing.

**Any voting pattern that is not covered in the cases above must be referred to FGSR; please consult the Associate Chair for Graduate studies about this.**

**Ask each member of the committee if:**

- (1) the student should pass the examination?
- (2) the student should pass subject to revisions?
- (3) the examination should be adjourned?
- (4) the student should fail the examination?

**Note:** When making the preceding decision, the Chair of the committee is responsible for moderating the discussion, and does not participate in any votes which are held. The Chair does not comment on the performance of the candidate. Many verdicts will recommend modifications to the thesis which are of a typographical nature. Lists of minor revisions should be given to the student for incorporation into the thesis.

After the decision is reached, re-admit the student and explain the decision of the committee.

If the examination was passed (category 1) the entire committee should sign the Thesis Approval / Program Completion forms. No changes should be made to the thesis after this point, and it must be submitted to FGSR in its existing form.

If the examination was passed subject to revisions to the thesis, ask the committee members if they wish to sign the Thesis Approval/Completion form at this time or if they wish to see the thesis after the modifications have been completed. The supervisor's signature is withheld pending completion of all corrections. The impartial Chair of the committee does not normally sign the thesis. If any examiner did not attend the oral examination in person then the examiner's name and institution are to be typed on the signatory page and the impartial Chair of the examining committee is to sign for them, with their permission.

Thank everyone and close the examination.

**Following the exam:**

If the verdict is pass, have the Graduate Assistant complete the Thesis Approval / Program Completion form.

If it is pass with revisions, the Chair must, within 5 working days, outline in writing to the student, the Associate Chair for Graduate Studies, and the Dean of FGSR, the:

- reasons for this outcome;
- details of the required revisions;
- approval mechanism for meeting the requirement for revisions; and
- supervision and assistance the student can expect to receive from committee members.

If the examination is adjourned, the Chair sends a memo of explanation to the FGSR, the Associate Chair for Graduate Studies and to the student, outlining:

- (a) the nature of the deficiencies,
- (b) the approval mechanism for meeting the conditions, i.e. approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee, and
- (c) the supervision and assistance the student may expect from the committee members in meeting the necessary revisions.

If the examination is failed, advise the student, the Associate Chair for Graduate Studies and the FGSR of the reasons of this recommendation and the committee's recommendation for the student's program.