

**PhD in Applied Science
Doctoral Research Proposal (APSC 7602)**

Information for Students & Faculty

- The Evaluation Form for the Doctoral Research Proposal is included at the end of this document.
- The student should complete Part I of this form, print it, and bring it with them to the Proposal Defense.

Overview

- PhD students should complete the Research Proposal by the end of their fourth semester in the program.
- Students should enroll in APSC 7602 for the semester that they plan to defend their research proposal in.
- The Research Proposal consists of three elements:
 1. a written research proposal,and a Proposal Defense, consisting of:
 2. a public presentation, and
 3. an *in camera* oral examination.
- All three elements of the Research Proposal are assessed by the Examination Committee. The Examination Committee consists of:
 1. the Supervisory Committee, and
 2. an External Examiner, who is not part of the student's Supervisory Committee, and is not from the same department as the Supervisor.
- The Proposal Defense is to be presided over by a Proposal Chair. The Chair should be a faculty member who has not previously been involved in the student's research. It is the responsibility of the Supervisor to find a faculty member who is willing to chair the student's Proposal Defense.

Written Research Proposal

- Approximately 2 weeks before the Proposal Defense, the student should submit a written research proposal to the Examination Committee.
- The written proposal should be 5-10 pages long (single-spaced & excluding references).
- The written proposal should include:
 - a brief survey of the relevant literature
 - existing knowledge gaps and associated research questions that the proposed work plans to address
 - research objectives and/or hypotheses
 - summary of the main methods to be used
 - anticipated significance of the results
 - a proposed timeline for completion of major research and degree components
- Detailed methods can be placed in appendices, which are not counted toward the document length guideline given above.

Public Presentation

- The student's public presentation should be approximately 20 minutes long.
- This is followed by a brief (approximately 5 minute) question and answer session between the public and student.
- The public is then asked to leave the room for the *in camera* oral examination of the student by the Examination Committee.

Oral Examination

- The objectives of the Examination Committee are to:
 - assess the merit of the proposed research,
 - assess the feasibility of the proposed research,
 - assess the appropriateness of the proposed research for a doctoral dissertation,
 - assess the student's background knowledge of the key concepts and methods related to their proposal, and
 - to identify any areas of weakness that should be addressed before the Qualifying Examination (APSC 7603).

- Although part of the Examination Committee, the student's Supervisor does not participate in questioning during the Oral Examination.
- Starting with the External Examiner, the Chair will give each examiner 15 minutes to ask the student questions. A second, shorter round of questioning may then be conducted.
- The Chair will then ask the student to leave the room while the Examination Committee (including the Supervisor) deliberates.
- In relation to the objectives stated above, the Examination Committee must provide an evaluation of the student's Research Proposal using Part II of the attached Evaluation Form. The Committee must reach an agreement on the overall outcome of the proposal: pass, conditional pass, repeat, or fail:

Pass

Assigned if the research proposal and its defense are acceptable, and a passing grade is recommended for APSC 7602. Note that when assigning an outcome of Pass, the Examination Committee can still recommend that additional background study, including coursework, be completed prior to the Qualifying Exam.

Conditional Pass

Assigned if the research proposal is largely acceptable, but some immediate remedial action should be taken. For example, the proposal may contain conceptual or methodologic flaws that should be addressed before the student begins their research. The Committee must outline the actions to be taken and a timeline for their completion, and document these in Part II of the attached Evaluation Form. Once these actions have been completed to the satisfaction of the Examination Committee, the Supervisor should send a memo to the Program Coordinator outlining the remedial actions that were undertaken, and requesting a change of grade to Pass for ASPC 7602.

Repeat

May be assigned if the proposal needs substantial revision, the research project is not viable in its current form, the student is not able to adequately defend the proposal, or the student is not ready to begin their research. The Examination Committee can require the student to repeat any of the Research Proposal components: written proposal, public presentation, and/or oral examination. Actions to be taken, and associated deadlines must be clearly documented in Part II of the attached Evaluation Form, which must be submitted to the Program Coordinator. Assessment of the student's second attempt should be made using a new copy of the Evaluation Form.

Fail

Should only be assigned if the student's second attempt to pass the Research Proposal remains inadequate.

**PhD in Applied Science
 Doctoral Research Proposal (APSC 7602) Evaluation Form**

Part I: To be completed by Student

Student Name:		A#:	
Program Start Date:			
Thesis Title:			

Date of this Meeting:	
Date of last Committee Meeting:	

Planned & Completed Courses/Degree Components		
Course	Semester	Grade (if complete)
APSC 7600: Graduate Seminar		
APSC 7610: Research App. & Knowledge Trans.		
APSC 7602: Doctoral Research Proposal		
APSC 7603: Qualifying Examination		
APSC 7620: Research Internship		
APSC 7604: Doctoral Dissertation		

Evaluation of Presentation				
Poor	Unsatisfactory	Satisfactory	Very Good	Excellent
Comments on Presentation:				

Demonstration of Background Knowledge during Questioning				
Poor	Unsatisfactory	Satisfactory	Very Good	Excellent
Comments on Background Knowledge:				

Examination Committee's Overall Evaluation of Research Proposal			
Pass	Conditional Pass	Repeat	Fail
For Pass: recommended actions prior to Qualifying Exam. For Conditional Pass: actions to be taken prior to award of Pass. For Repeat: actions to be taken prior to re-submission and/or re-defense.			

Part III: Signatures

Examination Committee Approval			
	Name	Affiliation	Signature
External Examiner			
Supervisor			
Committee Member			
Committee Member			
Proposal Chair			

Student Signature:	Date:
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Program Coordinator Signature:	Date:
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Attach copy of Research Proposal
Submit to the Applied Science Program, c/o Dean of Science Office