



# Research Graduation Projects Guidelines (RGPG)



## Table of Contents

<b>I. Introduction</b>	<b>3</b>
<b>II. Definition of Terms</b>	<b>3</b>
<b>III. Graduation Project Procedures</b>	<b>5</b>
<i>Student Responsibilities</i>	6
<i>Role of the Primary Instructor</i>	6
<i>The Role of the Chair of the Undergraduate Research Committee</i>	7
<i>The Role of the Student Advisory Committee</i>	7
<b>IV. Quality Assurance of Capstone Projects</b>	<b>8</b>
<i>The Role of Department Head</i>	8
<i>The Role of the Department Quality Assurance Committee</i>	9
<b>V. Reporting Requirement</b>	<b>12</b>
<b>VI. Quality Assurance Review and Monitoring at the College Level</b>	<b>12</b>
<b>VII. Appendix: Forms</b>	<b>13</b>
<i>Appendix I: Capstone Project TimeLine</i>	13
<i>Appendix II: Research Graduation Project Summary</i>	14
<i>Appendix III: Graduation Project Log Sheet</i>	15
<i>Appendix IV: Graduation Research Project Final Examination Form</i>	16
<i>Appendix V: Worksheet for Quality Assurance Review of Capstone Syllabus / Projects</i>	17

## I. Introduction

### Purpose

The graduation project in the College of Arts and Sciences (CAS) represents the culmination of a student's education, skills and experience in their major. The project will vary according to the major and sub-discipline, and will be determined by the student/s and the project supervisor. Projects can either be group projects or individual projects depending on the policies of each program.

Projects in humanities, for instance, might be an expanded version of a research seminar paper; projects in technical fields may be a website, a DVD, or other multi-media creation; projects in the sciences might be portfolios of student work and experiments. Regardless of the major, the goal CAS is to ensure that senior students experience academic rigor in their senior year, through undertaking an academically and intellectually challenging research project. These projects not only allow students to demonstrate their intellectual creativity, they also help students develop critical thinking skills that are transferrable to a post-university career. Capstone projects should demonstrate that the students can think critically and creatively; gather, recognize, and interpret data; solve problems; interpret and communicate findings; and attain understanding and proficiency in the modes of inquiry common to their discipline.

## II. Definition of Terms

**Capstone / Graduation Project** – this refers to the project that represents the culmination of students' education, skills, and experience in their major.

**Primary Instructor** – refers to the instructor assigned to teach capstone in the program. Primary instructors act as the supervisor of the students registered in the course. They are responsible for (1) approving the initial research proposal by the student, (2) providing feedback on drafts, (3) attending and participating in the oral presentation of the research project, (4) evaluating the final project along with the secondary or third reader (optional).

**Second Reader** – refers to a subject-matter specialist who has expertise in the field of research of the proposed project. Second reader should be a faculty member from within the department. Second readers are responsible for: (1) providing feedback on drafts, (2) attending and participating in the oral presentation of the research project, (3) evaluating the final project along with the primary instructor and third reader.

**Third Reader (Optional)** – This refers to a person external to the department. Third readers are responsible for (1) providing feedback on drafts, (2) attending and participating in the oral presentation of the research project, (3) evaluating the final project along with the primary instructor and second reader.

**Student Advisory Committee** – refers to the committee that advises and evaluates each project. It includes the primary instructor, in addition to the second and third readers (optional).

**Undergraduate Research Committee** - refers to the committee in the department responsible for overseeing all graduation projects of students for each program. The membership is comprised of all capstone primary instructor/s, with a chair nominated by the Head of Department, in addition to other members as deemed appropriate by the Head of Department. They are responsible for reviewing and approving the research proposals submitted by students.

**Graduation Poster** – All students are required to submit a poster of their Capstone Project which will be publically presented at the annual CAS Student Research day and be evaluated as part of the College Student Research Poster Competition. Students enrolled in Fall will have a presentation of their posters in the Department.

**Quality Assurance Committee** – refers to the department committee that ensures that the quality of the capstone projects is monitored and up to standards, and that all procedures have been followed. This is a standing committee that all departments are required to have in operation.

### **III. Graduation Project Procedures**

The graduation project must be completed in the following order:

1. An initial proposal must be submitted by the student and approved by the Primary Instructor ([see form attached as Appendix II](#));
2. Project timeline must be submitted by the student and approved by the primary instructor ([see form attached as Appendix I](#));
3. Log sheet including the project activities must be signed and approved by the primary instructor ([see form attached as Appendix III](#));
4. The final capstone project must be completed and approved by the primary instructor, in addition to the Undergraduate Research Committee;
5. Students must be recommended as eligible to be examined based on the completeness of the project by the primary instructor in addition to the first and second readers, before the student may proceed with the oral defense;
6. Oral presentation/examination must be completed and approved by committee members ([see form attached as Appendix IV](#)); and
7. Students are required to submit a poster of their completed project for inclusion in the CAS Student Research Day Poster Competition, using the College template and within the deadline set annually by CAS Office of Research and Graduate Studies.

## **Student Responsibilities**

Student responsibilities include the following:

1. Agree with primary instructor on the topic.
2. Agree with the primary instructor on the members of the Student Advisory Committee, whose composition includes the primary instructor and another member (second reader) depending on the topic chosen by student.
3. Develop a written proposal to be approved by the academic supervisor and the Advisory Committee after completion.
4. Keep a log sheet and maintain all documentations, tasks, lab books and papers, including all work and activities related to the project.
5. Finalize the graduation project, incorporating the comments and feedback by primary instructor/ committee members.
6. Conduct a presentation, and defend the project to the selected committee.
7. Submit a Graduation Poster of work undertaken for inclusion in the CAS Student Research Day Poster Competition.

## **Role of the Primary Instructor**

The primary instructor is an academic faculty member assigned to the Capstone course and acts as the main supervisor of the student. The main responsibilities of the primary instructor include, but are not limited to the following:

1. Review and approve research topic submitted by the student.
2. Presents a list of possible topics to students based on the research scope of the degree program when applicable.
3. Advise and assist the student in planning and developing the project.
4. Arrange with the external organizations and agencies for students who are conducting external research if needed and available.
5. Meet regularly and work with the student on his/her project to review drafts of the thesis and coordinate meetings with the second and third readers, discuss the proposal and

hence the project and the difficulties that the student might be facing during their research work.

6. Review drafts of the capstone project report and coordinate meetings with the second and third readers (optional).
7. Review and sign all required forms related to the project.
8. Evaluate the written capstone document after review, and submit to the second and third readers for feedback.
9. Provide updates to the Undergraduate Research Committee with any changes or difficulties encountered in the project.
10. Participate in the evaluation of the final projects with the second and third readers (optional).

## **The Role of the Chair of the Undergraduate Research Committee**

The Chair of the Undergraduate Research Committee is responsible for the administration of the graduation project activities. Duties include:

1. Inform other faculty members who are advising students on forms and procedures.
2. Ensure timelines/ deadlines based on an annual assessment, surveys and evaluation of the capstone/graduation project program are kept.
3. Arrange for departmental 'Research Day' as well as for poster presentation during which all the students present their work.
4. Prepare for the final presentation and project defense and announce the timetable of presentations, invitations and make arrangements for room reservation, etc.
5. Submit final report to the Departmental Quality Assurance Committee about the projects.

## **The Role of the Student Advisory Committee**

1. The Student Advisory Committee should include the primary instructor, in addition to the second and third readers.

2. The Student Advisory Committee members should be familiar with the examination/presentation process as well as the research topic.
3. A primary responsibility of the Student Advisory Committee is to assess the project, prepare evaluation reports related to student's work with clear indication if the project has been approved, and if not, what modification are needed. All committee members must sign all official forms associated with completing the research requirements including final examination/ presentation.
4. Altogether the Committee must meet at least three times: to approve the project, follow up on the progress made, and conduct the final examination.
5. Minutes should be taken at the Committee meetings.
6. The Committee must submit samples of the Capstone Projects from their assigned program to the CAS Quality Assurance Committee. The samples must be representative of the range of quality of reports submitted (e.g. Excellent, Medium, Weak).

## **IV. Quality Assurance of Capstone Projects**

Capstone Projects must be reviewed and assessed for continuous improvement of overall student output. Evaluation of student projects provide a valuable way to assess the program learning outcomes as to ensure that the project is meeting the desired learning outcomes and students are acquiring skills, and competencies of the program that they have enrolled in. As capstone is a partial fulfillment of a degree requirements, projects submitted by students must be reviewed accordingly. This is to provide an overall assurance of high level student engagement as observed in their submitted projects.

### **The Role of Department Head**

To meet this goal, the Head of the Department, through the Department Quality Assurance Committee should:

1. Ensure that all capstone projects follow the approved Research Graduation Projects Guidelines (RGPG);

2. Allow student to freely select their research topics;
3. Ensure that the primary instructor follows the prescribed common syllabus for capstone course;
4. Promote research ethics; and
5. Require students to submit quality reports.

### **The Role of the Department Quality Assurance Committee**

1. The Committee shall conduct a department audit of the graded final capstone projects of students based on the submitted report of the Capstone Advisory Committee using the Worksheet for Quality Assurance Review of Capstone Syllabus / Projects (*Appendix V*)
2. The Committee shall audit based on the agreed quality assurance guidelines established in the department and in accordance to the CAS capstone project requirement.
3. The Committee should review samples for each program within each grade level i.e. A, B, C, D, and F. The audit report must have utilized the template provided in this guideline. The summarized report must be submitted to the Office of the Associate Dean for Research and Graduate Studies, and the Associate Dean for Planning and Quality Assurance.
4. The committee must ensure that the following are met:

#### **4.1 Selection of Topics and Advisors/ Second Reader**

Student motivation is largely dependent on their excitement and interest in the chosen topic for Capstone research. A good match with the right faculty supervisor can also be a source of inspiration and motivation for an aspiring student researcher. Therefore, the Departments are asked to introduce clear mechanisms allowing students to freely choose their research topic and advisor/ or a second reader. To this effect, programs should consider:

- a. Requesting voluntary submission of student's initiated research topics for discussion with capstone committee as to determine appropriateness;
- b. Providing a list of research topics and advisors for each academic program at the end of each academic semester and share such a list with all students who are expected to start their capstone projects the following semester;
- c. Any student who does not find a fit in the list must submit a suggested research topic to the department head who can then circulate the topic among program faculty for a match to serve as a faculty advisor for the student; and
- d. Any student who fails to secure a topic and a faculty supervisor, should be assigned to an available faculty with whom they can jointly work on with the topic assigned.

#### **4.2 Research Experience**

In most cases, capstone research is the first opportunity for undergraduate students to engage in dedicated research and apply critical thinking in a holistic way. This first experience is also very critical as a hook to an aspiring researcher. Hence, capstone projects should:

- a. Encourage critical thinking through mentoring; and
- b. Expose students to the various components of research, research reporting, and research significance. To this effect, students should learn how to and be able to provide:
  - Clear statements of the problem to be addressed and research purpose or hypothesis (The WHAT).
  - A summary of pertinent background literature (The WHY).
  - Clear methodology (e.g., design, data collection, analysis) - (The HOW).
  - Results and conclusions/implications or significance (The synthesis).

#### **4.3 Quality of Final Report**

The quality of the final capstone project report reflects the care given to its preparation by the student and the thorough review by the primary instructor and second reader/s. Quality capstone projects are also indicators of the quality of the program and its students.

Graduates should be able to show their work to prospective employers and they should be comparable to the world of students in other universities, both locally and internationally. Therefore, it is important that all final projects meet minimum quality standards such as:

- a. Excellent style and presentation (organization, flow, figures and illustrations, etc.); and
- b. Correct use of language.

#### **4.4 Ethical Compliance**

Ethical compliance is a critical component of any research activity and should be taught to student researchers as early as possible to:

- a. Develop their research ethics;
- b. Protect them and others from harm; and
- c. Protect the university from liability. Therefore, departments should ensure that student research takes into account and complies with applicable ethical guidelines related to the use of human subject in research (IRB), animals (IACUC) and hazard agents (IBC), as appropriate. Where appropriate, students should be introduced to the concept and asked to adhere to ethical guidelines if their research involves human (including surveys) or animal subjects.

#### **4.5 Student Feedback**

Finally, anonymous student feedback is an important tool for ensuring quality by promoting what works and weeding out what does not work based on first-hand experience of students who just completed their capstone research. Feedback can allow adoption of good research practices across CAS departments. Therefore, CAS shall seek capstone students' feedback and use it in quality enhancement. Anonymous and aggregated data will be shared with departments for use in research/capstone quality enhancement.

## **V. Reporting Requirement**

To ensure alignment to the program learning outcomes and continuous improvement of capstone projects, an audit will be made through two levels of reporting expected in the department. These are: Capstone Advisory Committee Report and the Quality Assurance Committee Report.

### **A. Capstone Advisory Committee Report which includes:**

- Individual report on the capstone projects submitted by students.
- Marked Capstone projects representative of grades (A, B, C, and D).

### **B. Quality Assurance Committee Audit Report which includes:**

- Summary report of all program capstone projects audit report to be submitted to the Office of the Associate Dean for Research and Graduate Studies.
- Recommendation and improvement actions to address any concerns observed in the report submitted by the Capstone Advisory Committee.

In general, the capstone audit should be conducted in spring after the Mid-Semester break, in each academic year.

## **VI. Quality Assurance Review and Monitoring at the College Level**

Upon receipt of the audit report and samples of capstone projects from the Department Quality Assurance Committee, the Office of the Associate Dean for Research and Graduate Studies will set a meeting with the Quality Assurance Committee at the College level to review the results through the Office of the Associate Dean for Planning and Quality Assurance. The main function of the Quality Assurance Committee at the college level is to ensure that the projects were compliant to the requirements set by the College using appropriate template for the purpose. Recommendations and feedback will be forwarded to the department for appropriate action based on the review conducted. The committee will ensure that the recommendations were used to improve capstone project. The audit period shall commence upon receipt of the report from the department, two weeks after the mid-semester break.

## VII. Appendix: Forms

### Appendix I: Capstone Project TimeLine

Action	Suggested Time/ Month
Declaration of general topic area	
Select the topic/ literature review	
Students submit the “Research Graduation Project Proposal Form” to the academic supervisor with attached relevant Literature citations and proposed method of data analysis	
Department’s Undergraduate Research Committee reviews proposals.	
Student receives proposal approval and begins research project	
Submit first draft for supervisor review	
Submit second draft for supervisor review	
Submit third draft for supervisor review	
Submit final draft for supervisor review	
Final project due (submit final draft for evaluation)	
Oral presentation and examination defense	

Student's Signature	Date	Primary Instructors' Signature	Date
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## Appendix II: Research Graduation Project Summary

<b>Research Graduation Project Summary</b>	
Student's Name:	Student's ID:
Department:	Program:
Home Phone:	Cell Phone:
Email:	Total Hours Earned:
Primary Instructor:	Graduation Term:

### **Project Information (on separate sheets of paper)**

Project Title:

Brief Description

What is your experience on this topic?

What do you plan to use to present your resources knowledge?

List materials, resources, bibliography of that you will need?

**I have discussed this project with the student and it is:**

Approved

Disapproved

Comments, Suggestions or Concerns:

Student's Signature	Date	Chair of Advisory Committee's Signature	Date
Primary Instructor's Signature	Date	Department's Chair Signature	Date

**Appendix III: Graduation Project Log Sheet**

Student's Name:		Student's ID:	
Primary Instructor:		Topic:	

Below, you will keep record of your work on the project. When you meet with your supervisor, provide him/ her with this form. Have him/her sign and date the form returning one copy to you and retaining one copy for their records

Date/Time Spent	Description of what you did	Resources used	Next step in plan

Are you keeping up with the timeline that you established?	
What problems did you face?	

Student's Signature	Date	Primary Instructor's Signature	Date
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## Appendix IV: Graduation Research Project Final Examination Form

**Please print the following information:**

**STUDENT'S NAME:** \_\_\_\_\_

**STUDENT ID NUMBER:** \_\_\_\_\_

**MAJOR:** \_\_\_\_\_

**DEPARTMENT:** \_\_\_\_\_

**TITLE OF RESEARCH PROJECT:** \_\_\_\_\_

**DATE OF ORAL DEFENSE:** \_\_\_\_\_

### **COMMITTEE PARTICIPATING IN ORAL EXAM:**

**PRIMARY INSTRUCTOR:** \_\_\_\_\_

Signature of Approval \_\_\_\_\_ Date \_\_\_\_\_

**COMMITTEE MEMBER 2 (SECOND READER):** \_\_\_\_\_

Signature of Approval \_\_\_\_\_ Date \_\_\_\_\_

**COMMITTEE MEMBER 3 (THIRD READER):** \_\_\_\_\_

Signature of Approval \_\_\_\_\_ Date \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

<b>GRADES:</b>	_____	_____	_____	_____
<b>ORAL</b>	<b>WRITTEN</b>	<b>Primary Instructor's Signature</b>	<b>Date</b>	

## Appendix V: Worksheet for Quality Assurance Review of Capstone Syllabus / Projects

Evaluator Name: \_\_\_\_\_

Department/Program: \_\_\_\_\_ Instructor Name and Course Number: \_\_\_\_\_

Carefully review capstone syllabus for following components:			
		Yes/ No	Comments
1	Clear mechanism for selecting topic		
2	Capstone agreement		
3	Project Timeline		
4	Project Log sheet (if applicable)		
5	Clear guidelines regarding content (abstract, methodology, etc)		
6	Clear policy regarding plagiarism and use of SafeAssign		
7	Oral presentation rubric		
8	Final Capstone rubric		
9	Poster Presentation rubric (if applicable)		
10	Guidelines for assessing group work (if applicable)		
11	Ethical compliance (if applicable)		

Check individual capstone projects for following components			
		Yes/ No	Comments
1	Abstract		
2	Hypothesis/Thesis/Aim of work		
3	Literature review		
4	Methodology		
5	Results/Discussion/Analysis		
6	Conclusion/Recommendations		
7	References		

Overall Comments:
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