

## DEPARTMENT OF ECONOMICS

## GRADUATE STUDENT HANDBOOK 2022/2023

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## PREFACE

Welcome to the graduate program in the Department of Economics at the University of Calgary. Our Department is a vibrant, research-focused environment for both faculty and students. Our graduate program draws an extremely diverse group of students from across Canada and around the world. In terms of its design and level of rigor, our graduate curriculum is consistent with leading economics graduate programs in North America. However, our smaller program size affords our students more attention from faculty and more opportunities to pursue their particular research interests. Our PhD program graduates have had high success rates in terms of obtaining tenure-track academic appointments – including at, among others, the University of Alberta, Queen's University, University of Wisconsin at Milwaukee, and Georgia Tech.

This Handbook describes the program in which you are enrolled, and explains many of the policies and procedures that have been developed to help you succeed in your program. Part 1 includes general policies for all graduate students. Part 2 highlights the policies pertinent to doctoral students. Parts 3 and 4 on policies related to the course-based master's students and thesis-based master's students, respectively. Part 5 outlines the role of the Economics Graduate Association. Part 6 includes policies on travel grants and Part 7 is a list of internet links you may find helpful.

In addition to this Handbook, doctoral students should be familiar with the Economics Doctoral Candidacy Requirements: https://econ.ucalgary.ca/sites/econ.ucalgary.ca/files/econ\_candidacy-

requirements oct 2019.pdf

Graduate students should also consult the Faculty of Graduate Studies Calendar on the web at <u>http://grad.ucalgary.ca/current/graduate-calendar</u>. The following sections of the Calendar are likely to be especially relevant to a student's progress through the program. This Handbook will not attempt to replicate all of this important information.

The <u>Supervision</u> section contains policies and procedures related to supervision of both master's and doctoral research. For information and procedures for candidacy and oral thesis examinations click <u>here</u>.

For information specific to the graduate program in Economics, please consult the Department of Economics section of the Faculty of Graduate Studies Calendar: <u>http://www.ucalgary.ca/pubs/calendar/grad/current/economics-econ.html</u>

For information related to Awards and Financial Assistance for graduate students, please see: <u>https://www.ucalgary.ca/pubs/calendar/grad/current/awards-and-financial-assistance-for-graduate-students.html</u>

## **1. GENERAL PROGRAM GUIDELINES**

#### 1.1 Program Office and Administrator

Arts Graduate Students' Centre: https://arts.ucalgary.ca/current-students/graduate/contacts

Program Information: https://arts.ucalgary.ca/economics/current-students/graduate

#### 1.2 Fees

Fees are assessed by the Faculty of Graduate Studies and administered by the Fees Office. The assessed fees and deadlines for payment are noted on the students' fee statement in their online <u>Student Centre</u>. Details on tuition and general fees are available from the Faculty of Graduate Studies website at <u>https://grad.ucalgary.ca/</u>

Fees can be paid in full each semester or, in some cases, in installment form through the Graduate Student Payment Plan, available at: <u>https://grad.ucalgary.ca/current-students/thesis-based-students/fees-and-funding/payment-plan</u>

#### 1.3 Funding and Teaching Assistantships

Many students in the Economics Department receive funding from several sources, including scholarships and from positions as teaching and research assistants. Funding depends largely on the program the student is in, the individual's academic standing, and to some extent entrepreneurship on the student's part in seeking out funding opportunities.

Please consult your individual Funding Details letter that was sent to you with your Admissions Offer Letter for details on your specific departmental funding.

Fees and Funding: <u>https://arts.ucalgary.ca/economics/future-students/graduate/fees-and-funding</u>

*PhD Funding Policy*: To be eligible for funding beyond the first year, a student must pass all field of study examinations by the beginning of classes of their second year. To be eligible for funding beyond the Fall semester of the third year, a student must pass their Thesis Proposal Oral Exam (candidacy exam) by the beginning of Winter semester in their third year. There is no guaranteed funding after year four.

*Teaching Assistantships*: These can be awarded in full, half or one-third units. As governed by the Graduate Students Association <u>collective</u> agreement a full-time position as a teaching assistant consists of 204 hours over a term (12 hours per week x 17 weeks), while a half unit consists of 102 hours. A one-third unit may be awarded for the Spring or Summer term and consists of 68 hours.

A teaching assistant's duties generally involve assisting professors with their classes, typically by grading exams and assignments, advising students and invigilating exams. A teaching assistant will also be required to teach tutorials. The teaching assistant and the professor to whom the teaching assistant is assigned will be required to fill out an Assignment of Assistantship Duties Form (AoAD) https://www.ucalgary.ca/hr/grad-students clarifying the teaching assistant's expected role and duties for the coming semester. 10 hours for Faculty Exam support (invigilation) and USRI duties as assigned by the Office of Economics. Teaching assistants are essential to providing an excellent undergraduate experience and to providing support for our department's instructors. The department expects all teaching assistants to perform their duties conscientiously and professionally. Students who do not take their teaching assistantship responsibilities seriously can be removed from their posts or denied future opportunities to work as a teaching assistant or teach within the department. Students are expected to be available to perform their duties during the term of the contract. For the Fall term, this is September 1 to December 31, and for the Winter term, January 1 to April 30.

Although every effort is made to match students to courses that complement their areas of interest, this is not always possible. Many graduate students are assigned as a teaching assistant as part of their funding package. Students may decline a teaching assistantship position, but the student's funding will be reduced.

#### 1.4 Scholarships

Students are required to apply for all <u>scholarships</u> for which they are eligible. Eligible students who do not apply will have their guaranteed funding level reduced the next year. It is the student's responsibility to search for external funding and determine eligibility. Please check the Faculty of Graduate Studies website regularly or contact Faculty of Graduate Studies awards officers directly if there are any questions at <u>gsaward@ucalgary.ca</u>.

Social Sciences and Humanities Research Council Doctoral Scholarships (<u>SSHRC</u>): All eligible doctoral students are required to apply for the Social Sciences and Humanities Council Doctoral Scholarship in October. For more information, please visit: <u>http://www.ucalgary.ca/research/researchers/apply-grants/grants-external/sshrc</u>.

#### 1.5 "Units" and "Full Courses"

The University of Calgary uses the "unit" as the primary measure of course weighting for describing degree requirements. A unit is a value or weighting assigned to a course. The term "credit" is also used. A six-unit course is equivalent to one full-year course. A three-unit course is equivalent to one half-course. A three-unit course commonly lasts for one term and generally includes three hours per week or 39 hours of lectures per term.

## 2. DOCTORAL PROGRAM IN ECONOMICS

#### 2.1 Course Requirements

*Courses:* The Department of Economics requires that PhD students successfully complete 36 units (12 courses at half course equivalents). Required courses include six units in Econometrics: ECON 705 and ECON 715; six units in Microeconomic Theory: ECON 707 and ECON 757; and six units in Macroeconomic Theory: ECON 709 and ECON 759. In addition to the required courses, students must take 18 units (6 courses at half-course equivalents) in (at least) two field areas prior to the Thesis Proposal Candidacy Oral Examination.

*Block Week Course*: Students are also required to take a non-credit, one-week course. Mathematical Economics (Math Camp) is offered in the Fall semester block week (the week prior to the start of classes in August) of the first year. *Courses in Other Departments:* In special cases, the Department may allow students to substitute up to 6 units (2 half-course equivalent) from a related discipline for the field graduate courses in Economics. Decisions concerning course substitutions are made on a case-by-case basis. Approval from the Graduate Program Director is required.

*Field Courses:* Doctoral students are required to take 18 units in (at least) two fields of focus. The Department regularly offers courses in a variety of fields.

*Continuation of Funding:* Students must maintain (on an annual basis) an average grade of at least <u>B in the program</u>. Failure to do this will result in a student being asked to leave the program.

Continued funding requires that students continue to make good progress through the program. Low grades (one or more grades of B- or lower), dropping courses, and delays in fulfilling program requirements may result in a loss or reduction of funding. If you are concerned about your standing in the Department, please speak to the Graduate Program Director.

#### 2.2 Field of Study Examinations

*Format*: PhD students in the Economics program must complete three written field of study examinations, one in microeconomics, one in macroeconomics and one in econometrics. Each examination will have a duration of three hours and will be a closed-book exam. The exams will be comprehensive, offering broad coverage of the topics in the core fields of microeconomics and macroeconomics.

*Sittings:* Each year, there will be two sittings of the field of study examinations: (1) one in May following the Winter Semester and (2) one in late August. Students are expected to write their field of study examinations in May. The second sitting in August is for those students who are not successful at the May sitting. Students are required to re-take only the exam(s) they were not successful at in the May sitting.

*Evaluation:* These examinations will be graded on a pass/fail basis. Students must pass all examinations. Students who do not pass their Field of Study Examinations by the second sitting will be withdrawn from the program for lack of satisfactory progress.

Appeals: In the case of a failed exam, students have the right to appeal. Please see the Doctoral Candidacy Requirements for the appeals process: https://econ.ucalgary.ca/sites/econ.ucalgary.ca/files/econ\_candidacyrequirements\_oct\_2019.pdf

#### 2.3 Supervisor and Thesis Committee

Supervisor: By the middle of the 21st month (May 15th of the second year of the program) the student must choose a <u>supervisor</u> (or interim supervisor) and develop a research topic resulting in a one-page or two-page research proposal. The supervisor will provide research guidance in the development of the Second-Year Research Paper over the next three months. Working together on a Second-Year Paper does not commit the student and supervisor to working together on the student's doctoral thesis.

*Thesis Proposal Oral Examination Committee:* Immediately after declaring a supervisor, the student should arrange their thesis committee (consisting of two other departmental faculty

members and, potentially, one non-departmental member). This should be done in consultation with their supervisor. The thesis committee will also serve as the thesis proposal oral examination committee.

#### 2.4 Second-Year Research Paper Requirement

*The Second-Year Research Paper:* Doctoral students are required to meet the Second-Year Paper requirement by the beginning of the third year. The purpose of the research paper requirement is to launch a doctoral student's research agenda by requiring the student to synthesize the concepts covered in field courses and begin the exploration of research questions in their areas of specialization which may lead to their dissertation work. To complete this research paper requirement, the student will write a research paper that contains, as a minimum, a literature review, an original research idea and a strategy for tackling it.

*Content:* The paper can build on previously written papers submitted in the student's field courses, but cannot be a replication of these documents. The Second-Year Paper is intended to be an independent document that contains a concise review of the literature related to one or more research questions in the field of specialization. However a literature review is not sufficient: the paper must propose an extension to the frontier of economic research. The paper can serve as a bridging document toward the thesis proposal. The paper should be presented in a scholarly format meeting the standards of the economics discipline. Papers should adhere to the following guidelines: approximately 20 pages in length (excluding references, tables and figures), double spaced, and formatted in accordance with an academic journal standard in economics.

*Deadlines and Evaluation:* No later than the middle of the 21st month of the program (May 15th of the second year of the program) the student must develop a research topic resulting in a one- or two-page research proposal.

By the middle of the 24th month of the program (September 1) in the second year of the program the Second-Year Research Paper must be submitted. A committee of three reviewers (including the supervisor) from the relevant fields reviews this paper with an emphasis on providing brief yet substantive feedback about the research direction and questions that the paper has highlighted. Each member of the committee writes a referee report on the paper in a manner consistent with the peer-review process at economics journals, and assigns a pass or fail grade. The reviewers will decide by majority rule if further revision of the paper is needed before the doctoral student passes the Second-Year Paper Requirement.

*Revisions to the paper:* Should a revision of the paper be required, the supervisor will set an appropriate deadline for the revised paper (perhaps the end of the 25th month of the program – end of September in the third year of the program). The committee either accepts the revised paper or returns the paper to the student for further revisions.

*Final Version of the Paper:* The student must submit and have the final version of the Second-Year Research Paper approved by the end of the 26th month (end of October in the third year of the program) at the very latest. The committee either accepts or rejects the paper. If the paper is rejected, the student must withdraw from the program.

Appeals: In the case of a failed Second-Year Paper requirement, students have the right to

appeal. Please see the Doctoral Candidacy Requirements for the appeals process. Contact graduate director.

*Continuation in the Program*: To be eligible to continue in the Doctoral program, a student must have completed their coursework and the Second-Year Research Paper requirement before continuing on to the Thesis Proposal Oral Examination, scheduled by end of December of the third year in program.

#### 2.5 Thesis Proposal and Thesis Proposal Oral Examination

*Thesis Proposal*: The thesis proposal is a single document with two or three separate chapters, each consisting of a proposal for a paper that will be presented as part of the students' PhD thesis. The first paper proposal is often a revised version of the Second-Year Paper in draft form. The second paper proposal should be in the form of a detailed paper proposal. A third paper proposal may be included in a tentative form, demonstrating what additional research the student is considering for their thesis. Each chapter must have a clear motivation, research question, suggested contribution, methodology, and literature review. The thesis proposal should be formatted in a scholarly format, double-spaced, and be approximately 25-35 pages long (not including references, figures, and tables).

*Thesis Proposal Oral Examination*: The Thesis Proposal Oral Examination should be scheduled before the end of the 28th month in the program. The purpose of the thesis proposal and its oral exam is to ensure that a student has sufficient preparation to be successful with thesis research.

The examination will be less than two hours in duration, not including requested breaks and deliberation time for the committee. In terms of format, the student makes a 15-minute presentation briefly introducing the motivation, research questions, and expected contribution for the proposed thesis chapters. This is followed by examiners asking questions, usually in rounds.

Questioning goes around the room a few times with examiners asking questions each round. The expectation is that the student will have a clearly defined and well-defended research plan.

In the case where the first attempt at the exam results in a failure, the student will be entitled to re-take the exam no earlier than two months and no later than six months from the date of the original exam. The student will be required to withdraw from the program upon a second failure of any candidacy component.

*Extensions*: Students who expect to be unable to complete their Thesis Proposal Oral Examination by the end of the 28th month should immediately consult the Graduate Program Administrator about applying for an extension.

*Appeals*: In the case of a failed oral examination, students have the right to appeal. Contact the graduate program director.

*Continuation of Funding*: To be eligible for funding beyond the Fall Semester of the third year, the student must pass their Second-Year Paper requirement and their Thesis Proposal Oral examination by the beginning of Winter Semester in their third year.

#### 2.6 Post-Candidacy

*Participation in Workshops and Seminars*: PhD students must register in the PhD research courses (ECON 791 (F) and ECON 793 (W) and to present their research regularly in the Department's internal seminars. A student will present in the PhD research Fall/Winter seminar series, and Spring/Summer seminar series beginning in their third year and continuing every year until graduation.

*Teaching Positions*: In past years, there have been a limited number of opportunities for postcandidacy doctoral students to teach an undergraduate course related to their areas of specialization in the spring or summer terms. Such teaching can be an important part of one's academic preparation and may be highly valued by potential employers. To be considered for such a teaching appointment, students should have successfully completed the Instructional Skills Workshop offered (without charge) by the Taylor Institute for Teaching and Learning (<u>http://ucalgary.ca/taylorinstitute/edu/programs/isw</u>). Opportunities for Spring/Summer teaching are typically advertised in the Fall semester. See the Department Manager for additional information.

#### 2.7 Doctoral Thesis

*Doctoral Thesis*: The doctoral thesis must reflect a significant contribution to knowledge, must contain evidence of a critical understanding of the relevant literature, and must employ appropriate research methodology. It is expected that the material embodied in the thesis must be of high quality and reflect the standards of the discipline.

The thesis should meet the Thesis Guidelines: http://grad.ucalgary.ca/current/thesis/guidelines.

*Format*: The thesis must be a cohesive document. Two formats of thesis are available to students: traditional thesis and manuscript-based thesis.

A manuscript-based thesis, by the Faculty of Graduate Studies' definition, is a collection of manuscripts that have been submitted to reputable peer-reviewed journals in the student's field of study, and may have already been published, or accepted for publication. The thesis needs to be more than a collection of manuscripts. There must be an introductory chapter that provides an overview of the separate chapters (papers) and integrates the general themes of the research and papers included. All components must be integrated into a cohesive unit with a logical progression from one chapter to the next. The thesis must have connecting texts to provide logical bridges relating chapters. Continuity and cohesiveness are key elements in the thesis.

Additional regulations: For additional Faculty of Graduate Studies regulations concerning the doctoral program please visit: <u>http://grad.ucalgary.ca/current/managing-my-program/examinations</u>.

#### 2.8 Doctoral Oral Thesis Examination

Doctoral Oral Thesis Examination: Doctoral students are required to defend their thesis in an oral thesis examination. The purpose of this examination is not only to defend independently the thesis, but also to serve as confirmation of the student's knowledge of the research topic within the context of his or her field of study. This examination is expected to take place within five years of beginning the program. If it has not occurred by the end of the sixth year, the student may be asked to withdraw from the program.

## **3** COURSE-BASED MASTER'S PROGRAM IN ECONOMICS

#### 3.1 Course Requirements

*Courses*: The course-based master's degree requirements include the completion of three core courses: Econometrics (ECON 615), Microeconomic Theory (ECON 657), and Macroeconomic Theory (9 units) and four field course options (12 units) plus Research Methods I (ECON 691), Research Methods II (ECON 693), Research Methods III (ECON 695), Research Methods IV (ECON 697) making a total of 30 units.

Students, with the approval of the Graduate Program Director, may replace ECON 657 and ECON 659 with ECON 707/757 and ECON 709/759, respectively.

Economics course descriptions: https://www.ucalgary.ca/pubs/calendar/grad/current/economics.html

*Research Methods*: Completion of the Research Methods sequence of courses requires the student to write and present one research paper in summer course ECON 697: Research Methods IV, as one of the key academic requirements of the program.

*Recommended Block Week Courses*: Students are required to take Mathematical Economics (Math Camp) in the Fall semester block week (the week prior to the start of classes in August).

*Courses in Other Departments*: A maximum of 9 units (1.5 full course equivalents) of graduate courses may be taken from a related discipline in place of field courses in economics. The Graduate Program Director must approve any courses taken outside the Department.

*Minimum Academic Requirement*: Students must maintain (on an annual basis) an average grade of at least B in the program. Failure to do this will result in a student being asked to leave the program. Continued funding requires that students continue to make good progress through the program. Low grades (one or more grades of C+ or lower), dropping courses, and delays in fulfilling program requirements may result in a loss or reduction of funding. If you are concerned about your standing in the department, please speak to the Graduate Program Director.

#### 3.2 Research Paper Requirement

*Purpose*: This paper is designed to give the student the opportunity to conduct research in a structured environment. The topic may be a limited empirical research project, a critical review of the literature in a particular area, or a critical analysis of a theoretical or important policy problem. The typical master's research paper is an empirical study of an economic question using appropriate theoretical and empirical methods. While a master's thesis is expected to be similar in quality to a refereed publication, the course-based research paper is not.

*Deadline*: The research paper and its presentation are to be completed prior to the end of the 12th month (August) of the program.

*Appeals*: In the case of a failed exit requirement, students have the right to appeal. Please consult the Graduate Calendar for more information:

#### http://www.ucalgary.ca/pubs/calendar/grad/current/gs-l.html

Additional Information: For additional information about the Course-Based Master's Program, please visit: <u>http://econ.ucalgary.ca/graduate/ma-program</u>

### 4 THESIS-BASED MASTER'S PROGRAM IN ECONOMICS

#### 4.1 Course Requirements

*Courses*: The thesis-based master's degree requirements include the completion of 18 units (3.0 full-course equivalents) in graduate-level economics courses. Of these, 9 units are required: Econometrics (ECON 615), Microeconomic Theory (ECON 657), and Macroeconomic Theory (ECON 659). Students are expected to take 9 units of course work in the Fall term and 9 units of course work in the Winter term. The field courses in economics shall not include any of the Research Methods courses (ECON 691, 693, 695 or 697). Students, with the approval of the Graduate Program Director, may replace ECON 657 and ECON 659 with ECON 707/757 and ECON 709/759, respectively.

*Recommended Block Week Courses*: Students are required to take Mathematical Economics (Math Camp) in the Fall semester block week (the week prior to the start of classes in August) of the first year.

*Courses in Other Departments*: A maximum of six units (1.0 full-course equivalent) of graduate courses may be taken from a related discipline in place of field courses in economics. The Graduate Program Director must approve any courses taken outside the Department.

*Continuation of Funding*: Students must maintain (on an annual basis) an average grade of at least B in the program. Failure to do this will result in a student being asked to leave the program.

Continued funding requires that students continue to make good progress through the program. Low grades (one or more grades of C+ or lower), dropping courses, and delays in fulfilling program requirements may result in a loss or reduction of funding. If you are concerned about your standing in the department, please speak to the Graduate Program Director.

*Declaration of Supervisor*: Fill in and return the Student Supervisor Declaration Form MA Thesis-Based Students:

<u>https://econ.ucalgary.ca/sites/econ.ucalgary.ca/files/ma\_student\_supervisor\_declaration\_for</u> <u>m.pdf</u> and return the form to the Graduate Administrator by **April 1** of your first year in the program.

#### 4.2 Thesis Requirement

*Purpose and Quality*: Students are required to complete and defend a thesis. The thesis requirement is the equivalent of four three-unit courses in economics. The thesis must demonstrate that the student is acquainted with the published literature in the subject of the thesis, that appropriate research methodology has been used, and that appropriate levels of

critical analysis have been applied. A master's thesis is expected to be similar in quality to a refereed publication.

*Deadline*: The thesis must be submitted at least four weeks prior to the Thesis Oral Examination date (i.e., by the nineteenth month, March, in the second year).

#### 4.3 Oral Thesis Examination

*The Oral Exam*: Students are required to defend their thesis within the first twenty months of the program; i.e., by the end of April in the second year. The purpose of the thesis oral examination is not only to defend independently the thesis, but also to serve as confirmation of the student's knowledge of the research topic within the context of his or her field of study. This examination, which takes anywhere from one to two hours to complete, tests the students' general knowledge of economics and of the specific research undertaken in his/her thesis. Examiners will make separate pass/fail recommendations on the thesis and on the candidate's oral defence of it.

Students who do not pass their oral thesis examination by the second sitting will be required to withdraw from the program.

*Program Completion Deadline and Extension*: Thesis-based master's students have a maximum of four years to complete their program. In extenuating circumstances, students may be able to apply for an extension of their studies. Please see <a href="http://grad.ucalgary.ca/current/managing-my-program/registration">http://grad.ucalgary.ca/current/managing-my-program/registration</a> for more information.

*Appeals*: In the case of a failed exit requirement, students have the right to appeal. Please consult the Graduate Calendar for more information <a href="http://www.ucalgary.ca/pubs/calendar/grad/current/gs-l.html">http://www.ucalgary.ca/pubs/calendar/grad/current/gs-l.html</a>

## 5 ECONOMICS GRADUATE ASSOCIATION

The Economics Graduate Association was created to support cultural, social and recreational activities as well as to create an environment to share ideas and thoughts of the graduate students in the Department. The Economics Graduate Association holds multiple social events and workshops throughout the year and all economics graduate students are encouraged to participate.

The Economics Graduate Association is a great leadership opportunity for graduate students. Elections for the Executive Committee are held in September and all economic graduate students are eligible to run. For more information, see: https://econ.ucalgary.ca/ega/

## **6 ECONOMICS GRADUATE TRAVEL GRANTS**

The Department encourages students to take advantage of opportunities to travel to conferences and workshops. For this purpose, the Department has available a limited amount of funds for travel grants.

# Economics Graduate Travel Award: <u>https://econ.ucalgary.ca/graduate/funding-opportunities-0</u>

*Eligibility*: Priority will be given to students presenting their own research and without other support (from the Faculty of Graduate Studies, the University Research Grants Committee, the Graduate Students' Association, or from the conference directly). Students are expected to apply for and seek any outside funding that is available. Students must have their supervisor's approval if applying for departmental funding.

Students receiving a departmental travel grant must be up to date in presenting their work in both the post-candidacy workshop and within the Department's internal seminars (Fall, Winter and Spring/Summer).

*Value*: Students can only receive one Economics Graduate Travel Award up to a maximum of \$500 during their studies.

*Application*: To apply, please send the Graduate Program Director information on the purpose of travel, work to be presented, and a budget for the requested amount. Please indicate in your application where else you have applied for travel funds.

## 7 HELPFUL LINKS

- Faculty of Graduate Studies: <u>http://grad.ucalgary.ca</u>
- Scholarships and bursaries: <u>http://grad.ucalgary.ca/awards</u>
- University of Calgary Calendars: https://www.ucalgary.ca/pubs/calendar/
- International Student Services: <u>https://www.ucalgary.ca/iss/</u>
- Graduate Students Association: <u>http://gsa.ucalgary.ca</u>