

*This document describes the degree requirements in effect for students who entered the program before August 2009. The section on PhD requirements starts on page 3.*

## **REQUIREMENTS FOR THE M.A. DEGREE**, for students entering before August 2009

### **The MA program offers 3 options:**

- Under the **Thesis Option**, a student completes 30 credits including up to 6 credits for thesis research. The option therefore involves completion of 8 courses (24 credits) plus the major research project that constitutes the thesis. The Thesis Option is known as Plan A.
- Under the **Technical Paper Option**, a student completes 33 credits including up to 3 credits for research. This option therefore involves completion of 10 courses (30 credits) plus the more modest research project that constitutes the Technical Paper. This option is known as Plan B - Technical Paper.
- The **Exam Option** is intended for students wishing to proceed quickly through the Master's degree and proceed to the PhD program. Under this option the student completes 33 credits of course work (11 courses) without a separate research project, but must successfully pass the PhD Qualifying Exam covering macroeconomic and microeconomic theory. This option is called Plan B - Exam Option.

At normal pace, the Master's program requires 3 or 4 semesters of work. The detailed description of requirements follows.

**Credit Requirements.** Plan A and Plan B are available to students pursuing the MA degree. Plan A (thesis) requires 30 semester credits including no more than 6 thesis (Econ 699) credits. Two Plan B (non-thesis) options are available. The Plan B/Technical Paper Option requires 33 credits including a technical paper and no more than 3 credits of Econ 699. The student presents and defends the Technical Paper before his/her advisory committee and this fulfills the Master's degree final examination requirement. The Plan B/Exam Option requires passing the PhD Qualifying Examination covering macroeconomics and microeconomics. This fulfills the university requirement for the master's degree final examination. Under this option, no Econ 699 credits are counted toward the 33 required credits. See below for a discussion of a thesis versus a technical paper and for information on the PhD examination in macroeconomic and microeconomic theory.

Students pursuing the MA degree under any of the three options must complete at least 21 of the semester credits required beyond the bachelor's degree in regular Economics graduate courses numbered 500 and above. Regular economics graduate courses are those other than independent studies and research. An MA student may include a limited number of 400- level economics courses in his/her formal program of study (GS Form 6), but no 300-level courses may be included.

**Core Courses.** All students are required to complete Econ 504 (Macroeconomic Analysis I), Econ 505 (Political Economy I), Econ 506 (Microeconomic Analysis I), and Econ 535 (Applied Econometrics). Econ 501 (Quantitative Economics) is a prerequisite for the theory courses, and some students may already have its equivalent in their background.

**Supervised College Teaching.** Graduate Teaching Assistants are required to enroll in 3 credits of Econ 784 during their first semester. The credits of Econ 784 can be applied to the GS Form 6 credit requirements for the M.A. or the Ph.D., but not toward both degrees. Non-GTAs can enroll in Econ 784 by arrangement with a faculty member. An agreement should be made with the faculty member prior

to registration for that semester.

**Electives.** Beyond the core courses (and Econ 784 if applicable) and credits for Thesis or Technical Paper research, the student fills out the remaining credits with elective courses of interest. For Exam Option students, these include the PhD core courses.

**Thesis or Technical Paper.** The master's thesis is a scholarly inquiry into an economic problem where the student performs independent, original research which contributes to knowledge and generally represents the application of existing theory to an empirical problem. The technical paper is a theoretical, applied, or descriptive scholarly inquiry into an economic problem. The technical paper is generally shorter than a thesis and involves less emphasis on original research than the thesis. A hard-bound copy of the thesis or a bound copy of the technical paper **must** be submitted to the department chair. It is customary that a copy of the thesis or technical paper is presented to the student's committee chairperson. The thesis or technical paper format must comply with the standard specified in the Graduate School's Thesis Manual and be approved by the department prior to binding.

**Final M.A. Examination.** For thesis and technical paper students, the final M.A. exam is their oral defense of the thesis or technical paper. When the student and his/her adviser and committee believe a satisfactory written draft of an M.A. thesis or technical paper has been completed, they will schedule a final oral examination. The Graduate Secretary must be notified at least one week before the desired date. The Graduate Secretary will arrange for a room and announce the date, time, and topic of the thesis/technical paper to all faculty and graduate students in the department. All committee members must be present at and participate in the examination. All graduate students and faculty are invited to attend the oral examination, however, the adviser chairs the exam and controls the extent to which those in attendance who are not on the student's committee may participate in the examination. The results of the oral examination are reported to the Graduate School on form GS Form 24. Only members of the committee may vote on the success or failure of the candidate. This vote will be indicated on the GS Form 24 by the signature of committee members. All committee members must sign the examination form.

For Plan B / Exam Option students, the PhD Qualifying Examination serves as a common written Final MA Examination. When the exam committee has determined the results, the Coordinator of Graduate Studies will sign the GS Form 24 as chair of the examining committee.

**Time Limits.** Graduate School regulations require that courses to be applied toward fulfilling the requirements for a master's degree must have been completed within the ten years immediately preceding the date of completion of requirements for the master's degree. Of course, as indicated above, the Department has its own standards for satisfactory academic progress.

## **REQUIREMENTS FOR THE PH.D. DEGREE**, for students entering before August 2009

In Economics at Colorado State, a student enters the PhD program after completing a Master's degree. The student may earn the MA at Colorado State on the way to the PhD, or may begin at Colorado State with a Master's in hand from another institution. The MA Exam Option at Colorado State provides an expeditious "fast track" to the PhD for students without a previous Master's.

**Course Credit Requirements.** Colorado State University's minimum credit requirement for the Ph.D. degree is 72 semester credits beyond the Bachelor's degree, including a minimum of 42 credits earned at Colorado State University after admission to the doctoral program. Most students should expect to take more than these minimum credits in order to prepare for theory and field examinations and dissertation research. A PhD student may include a limited number of 400-level economic courses, but no 300-level courses, in his or her formal program of study (GS Form 6).

Credits for Master's degree work are applied toward the required Ph.D. credits. A maximum of 30 credits may be transferred from master's course work completed at another institution or from master's course work completed at CSU under the Plan A (thesis) or Plan B (technical paper) options. At least 24 of the 42 minimum semester credits required beyond the master's degree must be in courses numbered 500 and above. Of these, a minimum of 21 credits must be from regular economics graduate courses as distinct from independent studies and research. Dissertation research (Econ 799) credits may be applied toward total credit requirements up to a maximum of 12 credits.

For students completing a Plan B Exam Option MA at Colorado State as part of a continuous MA-PhD degree program, all credit hours taken during the Master's program may be applied to the doctoral degree. These courses must be specified on the PhD program of study (GS Form 6). At least 21 credits beyond the master's degree must be earned in courses numbered 500 or above. At least 36 credits in the combined MA-PhD degree program must be from regular economics graduate courses (as distinct from independent studies and research) numbered 500 or above.

### **COURSE WORK**

**Core Requirements.** All students must complete minimum requirements in macroeconomics theory, microeconomic theory, political economy, and econometrics. Requirements include the Master's level courses in these areas — Econ 504, Econ 506, Econ 505, and Econ 535, respectively — which may have been accomplished as part of a previous Master's degree — plus additional courses in each area at the doctoral level. The doctoral level courses required of all students are Econ 704 (Macroeconomic Analysis II), Econ 705 (Political Economy II), Econ 706 (Microeconomic Analysis II), and Econ 635 (Econometric Theory I). Econ 501 (Quantitative Methods for Economists), or its equivalent, is a quantitative prerequisite for the theory courses; while not part of the core itself, as a prerequisite it is usually a standard part of the program of study.

**Supervised College Teaching.** Graduate Teaching Assistants are required to enroll in 3

credits of Econ 784 during their first semester. Econ 784 credits can be applied to the GS Form 6 credit requirements for the PhD, if such credits were not counted toward the M.A. credits. Non-GTAs can enroll in Econ 784 by arrangement with a faculty member. An agreement should be made with the faculty member prior to registration for that semester.

**Field Courses and Elective Courses.** The student fills out the balance of required credits beyond core courses (and Econ 784 for Graduate Teaching Assistants) by choosing appropriate courses to complete two doctoral fields (see Field Examinations below), plus additional field courses or electives as may fit the student's interests, and up to 12 credits of dissertation research (Econ 799).

## EXAMINATIONS

**Ph.D. Qualifying Examination in Macroeconomics and Microeconomics.** To qualify to continue in the program, Ph.D. students must pass the written Qualifying Examination. The Qualifying Exam includes two halves, macroeconomic theory and microeconomic theory, and requires the student to demonstrate achievement of an acceptable level of professional competence in these fundamental areas of modern economics. Specific information about this exam includes:

- To attempt the Qualifying Exam, an individual must be a registered economics graduate student who is in good academic standing according to the graduate school's 3.0 GPA requirement, and who has completed the Macro and Micro theory course sequences. To meet Satisfactory Progress standards, students must attempt the Qualifying Exam in the summer after the first year (after completion of Econ 704 and 706).
- The Qualifying Exam is administered in August and in January. Normally, the macro half will be given on Monday and the micro half on Friday, of the week before classes start. Each half will be approximately five hours in duration.
- The two halves are equally weighted in the determination of the overall result. A solid pass in both parts, a solid pass in one part and a marginal pass in the other, a marginal pass in both parts, or a solid pass in one part and a marginal fail in the other constitute an overall pass in the combined exam. Other cases imply failure, and the student must retake the full exam at the next available opportunity. A student is allowed two attempts.

**Field Examinations.** After successfully passing the PhD theory examination, each student must pass written examinations in two fields. The field exams are for the purpose of testing student understanding of a comprehensive body of knowledge in the chosen fields. Each individual field exam committee has discretion to decide the format that best suits the field material: the exam could be in the format of (1) a closed-book, multi-hour, written exam; (2) an open-book, multi-day, take-home exam that could involve either an assigned complex applied problem; or (3) a comprehensive critical review of the literature. Each field exam committee also determines what background course work qualifies a student to attempt the exam in that field. See "PhD Core and Fields" for required course information.

The Department offers the following fields: Economic Development, Environmental Economics, International Economics, Public Finance, Regional Economics, Political Economy, and Applied Econometrics. A student who intends to take a field exam in a given academic year should notify the Coordinator of Graduate Studies by October 1 of that year. Normally there will be two

offerings of a given field exam in a given year.

A student failing a field exam is allowed a second attempt. If a student chooses to retake a failed field exam, it may be retaken no earlier than two months nor later than one year following the first attempt. Students are responsible for catching up with the satisfactory progress standard or petitioning to reschedule their progress timetable. See “Satisfactory Progress Standards.”

**Preliminary Oral Comprehensive Examination.** After the theory and field examinations have been passed, and at least two semesters before the final oral examination (dissertation defense), the student must pass an oral comprehensive exam administered by his/her advisory committee. The content of this exam will be determined by the committee in each case but will ordinarily include presentation of a prospectus on the student’s proposed dissertation research. In addition, material covering economic theory or the student’s fields may be included where the committee determines that such coverage is warranted. This fulfills the University requirement for a PhD preliminary examination. Results of this exam must be reported to the Graduate School on GS Form 16 within two working days after the results are known.

**Final Oral Examination (Dissertation Defense).** The final examination is an oral dissertation defense in which the student is examined on the contents and methods of his/her dissertation research as well as related areas of economics. The results of the Final Oral Exam must be reported to the Graduate School on GS Form 24 within two working days after the exam is held.

## **THE DISSERTATION**

Each candidate for the PhD degree must submit an acceptable dissertation, embodying publishable original research on a topic approved in advance by the student’s committee. A PhD dissertation is the scholar’s own contribution to knowledge and reflects the ability to conduct and communicate independent research of such caliber and expertise that it adds significantly to the field of knowledge. The dissertation format must comply with the standards specified in the Graduate School’s Thesis Manual (available at the CSU Bookstore) and be approved by the Department prior to binding. A hardbound copy of the dissertation must be submitted to the Department Chair. It is customary that a hard-bound copy of the dissertation be presented to the student’s dissertation director.

## **TIME LIMITS**

The Graduate School requires that courses to be applied toward fulfilling the requirements for a doctoral degree must have been completed within the ten years immediately preceding the date of completion of requirements for the doctoral degree. This requirement does not apply to courses transferred from the Master’s degree. In addition to this general requirement, the Department has its own standards for timely progress; see “Satisfactory Progress.”