Admission to the doctoral program is reserved for students who demonstrate exceptional promise in economics. Students pursue the Ph.D. for various reasons, including a desire to make research contributions to the discipline and to teach economics at the college level.

The STEM designated program is nationally recognized for its dual focus on training research economists and college teachers. No other program provides more individualized mentoring to help students develop as research economists and college teachers. Students develop research skills early on through an integrative research experience. A cornerstone of this experience is the department’s weekly research seminar, in which students write critical reviews and referee reports on the papers presented, act as discussants, and present their own research.

The program begins with ECON 825 Mathematical Economics, which is taught in a concentrated manner over the first two weeks of the Fall semester.

UNH’s Ph.D. in Economics is a research degree that provides students with a deep understanding of economic theory, institutions, and empirical analysis. Graduates move into faculty positions at other institutions of higher learning. They also pursue careers as professional economists in industry and government.

Cognate in College Teaching

Students can also earn the Cognate in College Teaching, which is a separate certificate program that includes coursework and mentoring in teaching economics. The dual-focus Ph.D. has a superior record of student publications and placement into tenure-track assistant professor positions. Some of our graduates also pursue a non-academic career.

In conjunction with the Graduate School’s Teaching Excellence Program, the department has developed a nationally known program of formal training in pedagogy for students whose career goals include teaching at the college level. This program – the Cognate in College Teaching – is an option that Ph.D. students may select in addition to the requirements of the doctoral degree. The Cognate is awarded, upon satisfaction of all requirements, concurrently with the Ph.D. The Cognate can only be awarded in conjunction with the Ph.D. and none of the course requirements of the Cognate can be substituted for those of the Ph.D.

To enter the program, a student must formally apply to the Graduate Dean after at least one year of full-time graduate studies in economics. Admission to the Cognate is decided by the graduate dean, based upon recommendations of the Economics Graduate Program Coordinator and the Teaching Excellence Program Director. More information about the cognate and requirements is available from the Center for Excellence and Innovation in Teaching & Learning.

### Degree Requirements

Requirements include eleven core courses, two comprehensive theory exams, field courses, two fields of concentration (one major and the other minor), four semesters of seminar, research workshop, a major field capstone experience, doctoral dissertation proposal defense and final defense. Candidacy is reached following successful completion of:

1. comprehensive theory examinations in microeconomics and macroeconomics;
2. capstone experience in major field (health economics, environmental economics or international economics);
3. naming an advisor willing to chair the student’s dissertation committee and a viable dissertation topic.

### Comprehensive Examinations in Microeconomics and Macroeconomics

Written evidence of proficiency in economic theory is demonstrated by passing comprehensive examinations in Microeconomics and Macroeconomics. To sit for a theory examination, students must have passed (B- or higher) the first-year required theory courses. Students should take both theory examinations at the end of their first year of study. Per Graduate School and Departmental policy, the number of attempts at the comprehensive theory examinations is restricted to two per examination. These examinations are given each year in June and, if
a second attempt is necessary, in early August. A student who does not show up on a scheduled test date will have the examination counted as one of their attempts.

**Fields of Concentration**

Students must complete the requirements for one major field and one minor field. A student designates their major field no later than the beginning of the third year of study and must have departmental approval to change the major field thereafter.

**Environmental Economics**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 908</td>
<td>Environmental Economics: Theory and Policy</td>
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<tr>
<td>ECON 909</td>
<td>Environmental Valuation</td>
<td>4</td>
</tr>
<tr>
<td>RECO #911</td>
<td>Natural and Environmental Resource Management (or other approved course)</td>
<td>4</td>
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**Health Economics**

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<tr>
<td>ECON 941</td>
<td>Empirical Analysis in Health Economics</td>
<td>4</td>
</tr>
<tr>
<td>ECON 942</td>
<td>Theoretical Analysis in Health Economics</td>
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**International Economics**

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<tr>
<td>ECON 945</td>
<td>International Trade</td>
<td>4</td>
</tr>
<tr>
<td>ECON 946</td>
<td>Open Economy Macroeconomics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Capstone Experience in Major Field**

For Health and International fields, comprehensive field examinations are given twice a year, in January and June. Students should take their major field examination on the first date possible following completion of their field courses. To sit for the field examination, students must have passed both their theory comprehensive examinations. Students are permitted two attempts to pass the field examination. A student who does not show up on a scheduled test date will have the examination counted as one of their attempts.

For the Environmental field, the student must successfully complete RECO #911 Natural and Environmental Resource Management or another approved course and arrange with their advisor to complete the field research paper requirement within 9 months of completing their final field course.

**Graduate Economics Seminar**

Students are required to sign up for the Graduate Economics Seminar (ECON 988) in both semesters during each of their first two years of study.

**Research Skills**

In the ECON #979 Research Skills course, students pursue a significant research project under the guidance of a faculty member and the class instructor. Students are expected to complete a research paper and present it in class.

The course is normally taken in a student’s second year of study. Students also present their research in a conference-style format in their third year of study, typically in the department’s graduate seminar series. The presentation may involve either a significant extension of their second-year paper from ECON #979 Research Skills or a new research project. The third-year presentation requirement may satisfy the presentation requirement for ECON 996 Research Workshop.

**Research Workshop**

Beyond their second year of study, students continue to participate in the department’s weekly seminar by enrolling in one semester of Research Workshop (ECON 996). Research Workshop students present their own research in the research seminar series. Students should secure a dissertation adviser prior to signing up for their Research Workshop. The research workshop requirement should be completed by the end of the fifth year of study.

**Dissertation Proposal Defense**

Prior to defending their proposal, a student must find a dissertation chair and form a dissertation committee. The dissertation proposal may be defended as part of the Research Workshop or separately from the Workshop.

**Final Dissertation Defense**

**Cognate in College Teaching Requirements**

The Cognate in College Teaching offers a series of core and elective courses to prepare individuals to teach at institutions of higher education. The Cognate is available to doctoral students and students in selected master’s degree programs at UNH. Students must apply and be formally admitted to the program. The Cognate appears as a minor in selected master’s degree programs at UNH. Students must apply and be formally admitted to the program. The Cognate appears as a minor on the student’s transcript, and is awarded concurrently with the Ph.D. or Master’s degree. Students elect, with the permission of their graduate coordinator, to add the cognate to their graduate degree. The cognate will be awarded at the time of the award of the qualifying graduate degree. More information about the cognate and requirements is available from the Center for Excellence and Innovation in Teaching & Learning.

**Student Learning Outcomes**

- Students will demonstrate a deep understanding in the three core fields of Economics (Microeconomics, Macroeconomics, and Econometrics).
- Students will gain expertise in their major field of study (Environmental Economics, Health Economics, or International Economics).
- Students will produce original and independent research that makes theoretical and/or empirical contributions to one or more existing literatures.
- Students will be able to analyze relevant data sets using appropriate econometric methods.
- Students will produce research papers that meet a professional standard in terms of clarity of thought and effective organization.
• Students will demonstrate strong skills in presenting their research in professional settings.