CERTIFICATE IN POLITICAL ECONOMY

In recent years, there has been a renaissance in the field of political economy. Within both political science and economics, scholars increasingly seek to bridge the two disciplines.

Graduate Students with concentrations in political economy find employment outside as well as within academia. Recent graduates from programs in the United States have taken jobs in the government, in departments of economics and political science; and schools of public policy.

The Graduate School of Duke University has approved a Certificate in Political Economy. The Certificate will be given to graduate students in the Department of Economics and Political Science who successfully complete a series of courses designed to provide interdisciplinary training. Completion of the Certificate should enable a student to teach and conduct research in the field of political economy. Work in this field should also be sufficiently compatible with the student's departmental training to enable the student to present him/her self on the market with strong disciplinary credentials.

Requirements

Overall Requirements

To secure a Certificate in Political Economy, all students must successfully complete a minimum of five courses. Of these, three are to be drawn from the core courses and two from a specialized area (see below).

The core requirements are designed to promote a genuine interdisciplinary training. Our goal for economics students is to make them as comfortable and confident in applying their technical skills to the study of politics as they are in applying them to the study of markets. If the Program is successful, economists completing it will no longer treat the government as a "black box" nor as a politically disinterested, social welfare maximizer. Our goal for the political science students is to develop skills in formal analysis, a mastery of basic economic reasoning, and an ability to contribute meaningfully to the understanding of political-economic phenomena.

Of necessity, the core requirements differ as between students form the Political Science and Economic Departments. By the nature of their training, economics students possess a higher level of technical skill. Their core requirements therefore focus less on the acquisition of skills and more on their application to political materials. Political science students, while often possessing a deeper understanding of substantive areas, often face a greater need to invest in technical training. Their core requirements are designed accordingly.

The specialized courses are designed to promote an in-depth knowledge of the politics and economics of a substantive area. Students can specialize in the field of individual and social choice; normative political theory and the history of economic thought; or in the analysis of governments and markets, as in international trade, domestic regulation, or policy analysis. For these courses, the requirements are the same for political science and economics students. They are described in greater detail below.

Requirements for Ph.D. Students in the Department of Economics:

Economics students are required to take five courses over all, three in political science at the graduate level.

They can choose their core courses within the following categories:

1. One course in which they can apply the tools of "economic reasoning" to topics in Political Science, such as:

PS 317 The New Institutionalism

or

PS 307 Formal Modeling in Political Science

2. Two graduate level courses in political science that pertain to a substantive area. Students of trade theory may, for example, want to take courses in International Political Economy, such as PS 390. Those studying regulation may want to take courses in the United States Congress. Those studying Macroeconomics might want to take courses on the political determinants of macro-economic behavior. The courses should be chosen in consultation with the Co-Directors of the Program for the Study in Democracy, Institutions, and Political Economy.

Economics students will chose two additional courses from a field of specialization. These fields are described below.

Requirements for Ph.D. Students in the Department of Political Science:

Political science students are required to take five courses overall. One of the core courses and three courses over all must be taken at the graduate level in economics.

The core requirements consist of:

1. A course in Micro-Political Economy: This requirement can be satisfied by taking The New Institutionalism [PS 317], Fundamentals of Political Economy [PS 270S], or an equivalent course. It should be noted that students taking these courses are expected first to acquire skills in mathematical social science, as by taking Positive Theory [PS 230], the Program's summer course in mathematics, or some equivalent.

2. A course in Macro-Political Economy: This requirement can be satisfied by taking Political Economy: Theory and Applications [PS 232] or an equivalent course. Examples would include but are not confined to: International Political Economy [PS 397], Seminar in Political Economy: Macro Level; or The Political Economy of Resource Economics [PS 205]. The student should check with the Co-Directors of the Program, should he or she wish to propose an alternative.

3. A graduate level course in either Micro- or Macro-economics.

In picking their courses, political science students might wish to consult the Memorandum entitled "Tips to Political Scientists on Taking Graduate Work in Economics" which is available from Doris C. Cross, Room 328 Perkins.

Fields of Specialization

In addition to completing their core requirements, all students seeking the Certificate in Political Economy are required successfully to complete at least two courses within one of the following fields of specialization:

The Field of Individual and Social Choice:

Courses can be selected among offerings in games and social choice theory in the Department of Economics and Political Science, Institute of Decision Sciences, or the Fuqua School of Business. Students are specifically encouraged to pursue the sequence in cooperative and non-cooperative game theory in and social choice theory taught by Professors Hervé Moulin and Emerson Niou.

The Field of Normative Political Theory and the History of Economic Thought:

Particular courses offerings may be discussed with either Professor Michael Gillespie in the Department of Political Science, Professors Craufurd Goodwin and Hervé Moulin in the Department of Economics, or the Directors of the Program.

The Field of Governments and Markets:

Courses in this field can be chosen from among offerings in industrial regulation, international trade and development, public finance, international and comparative political economy, labor, law and economics, or comparative economic systems. Specific courses should be discussed with the Directors of the Program.

For additional information, contact:

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The Examination in Political Economy

The examination will consist of two parts: theory and applications.

The <u>theory</u> section will consist of two kinds of questions. The <u>first</u> will test for the level of mastery of key concepts and theories in political economy, such as the implications of the non-existence of a Condorcet winner, the political implications of the existence of public goods, the contributions to the study of politics of one shot and iterated prisoners' dilemmas, the strengths and limitations of spatial models of political competition, and so on. Also important will be a sophisticated understanding of the concepts and terminology of the field, on the level, say, of being able to distinguish between a Stackelberg and Nash equilibrium. The <u>second</u> will test for an ability to use technique, as by working problems.

The <u>applications</u> section will consist of questions drawn from American, comparative, and international politics or modern political theory. The student will be expected to choose those questions that best articulate with his or her other major fields.

Students will answer three questions, two from one half and one from the other . This will permit less technically sophisticated students to pass the examination by focusing on applications relevant to their interests, but without forgoing examination in theory. And this arrangement will also enable us to examine permit more technically oriented students in the application of theoretical approaches to substantive areas of politics.

TIPS TO POLITICAL SCIENTISTS ON TAKING GRADUATE WORK IN ECONOMICS

Political Science students, particularly those interested in political economy, often seek advice about economic courses. This memorandum is designed to help them.

The best place to start is with the summer course in mathematics offered by the Program. One of the problems faced by political scientists interested in developing their knowledge of economics is that they face technical barriers to entry; they often lack the mathematical skills. The summer math course can help to surmount this problem; it is, after all, taught from a book entitled, <u>Mathematics for Economists</u>. As many of the examples and problem sets are drawn from the economics literature, it also provides some of the intuition necessary to master that field.

Students may also want to take Economics 149 [Intermediate Macroeconomics] and/or Economics 154 [Intermediate Macroeconomics]. These count for the 60 unit requirement for graduate students. Those taking these courses for credit toward the Political Economy Certificate would be encouraged to sit in on the lectures for the graduate field courses in economics: Econ 301 and 302 (Microeconomics I and II) and/or Economics 320 and 322 (Macroeconomics I and II).

Students who feel more confident about their skill levels should consider three different options:

Option I:

Take the master's level course in the economics department: Econ 269. It is designed for students from the Business and Law School and covers basic price theory and its applications to different fields of economics. It provides a good core understanding of macroeconomics. Knowledge of intermediate macroeconomics -- at the level of Econ 149 or its equivalent -- is assumed.

Option II:

Alternatively, consider taking the economics courses at the Business School. Business students (not you!) pay through the nose to attend the Business School; it is tuition driven. As a result, the teaching tends to be excellent.

A problem is their schedule. To accommodate their corporate clients, the Business School teaches on an accelerated schedule, finishing a full term in half the time taken by students in the Arts and Sciences. In considering this option, then, realize that you will be working at twice the pace in your economics courses as you will be in your other courses.

There may be problems with availability as well. Insofar as their are available "seats," you can take the course at no charge. The Business School will not create a new section for our students, however.

The Business School schedule is:

Basic Micro- (called Managerial Economics):

Offered Fall Term: 6 weeks in September and October followed by an exam period. Class sessions run for $2^{1}/4$ hours each and classes are held two times a week.

Basic Macro- (called the Economic Environment of the Firm)

Offered Fall Term II: 6 weeks, from October 26 to December 8 (followed by an exam period). Class sessions run for 2¹/₄ hours each and classes are held two times a week.

Option III:

Take the PhD. courses in the economics department.

If you can get the core technical material elsewhere, do so. Preferably, bring it with you. Alternatively, acquire it through the first two options. For the core courses -- Econ 301 and 302 (Microeconomics I and II) and/or Economics 320 and 322 (Macroeconomics I and II) -- are very difficult. And the economics students in them will be taking only two other courses; you will be taking three.

Whichever route you employ in mastering the technical core of Micro- and/or Micro-economics, try then to move into the substantive courses. The courses in game theory are first rate; Moulin is as much a philosopher and moral theorist as he is an economist. Political scientists find many uses for information economics -- the study of decisions made under conditions of risk and uncertainty; Graham's course in it is very highly regarded. Starting in the Spring 1997, there will be new offerings in mathematical economics by Lin Zhou. So too are the courses in regulation (see too Hamilton's in the Institute for Policy Sciences and Magat's in the Business School). Students of political theory have benefited from the courses and seminars in the history of economic thought taught by Goodwin, De Marchi, or Weintraub; these are first rate.

For further information about offerings in the economics graduate program (in particular, about one-time courses offered by visitors), contact Hervé Moulin, currently the Co-Director of the Program.

The Sub Field of Political Economy: A Statement for Graduate Students in Political Science

Students who so desire can be examined in the sub field of political economy.

The field contains both a technical core and areas of substantive application.

Students would be expected to gain an understanding of the core concepts and techniques of the field. While we do not require it, we also encourage them to develop proficiency in their use. In practice, this means that students taking the field examination would be expected to have taken Positive Political Theory [PS 230] or its equivalent. They would also be encouraged to take Political Applications of Game Theory [PS 243], The New Institutionalism [PS 317], or courses which are based upon micro-economic reasoning, such as The Political Economy of Environmental Resources [PS 205].

Students are also expected to gain a deep understanding of a substantive field. This could include the application of Rational Choice Theory to American Politics, The Study of the Political Economy of the Advanced Industrial Nations, Modern Political Theory, or International Political Economy.

Students can expect to be examined in the technical areas of the field and in areas of substantive application. The second would be related to their major sub fields: American, Politics, or Comparative Politics, Political Theory or International Relations.

Students who feel deficient in theoretical knowledge of economics are strongly encouraged to take the summer mathematics course offered by the Program. The mathematics taught in this course is central to modern economics and many of the problem sets and illustrations are drawn from that field. Students may find it helpful to take Economics 149 (Intermediate Micro-economics) or Economics 154 (Intermediate Macro-economics) and/or more specialized classes directly relevant to their substantive field. Those taking International Political Economy may, for example, find it useful to take courses introducing them to trade theory. Economics 269, which assumes a knowledge of the material in Economics 149, is pitched at the master's level and often taken by students from outside the Economics Department, as from the Law School.

Additional guidance is provided in a memorandum entitled "Tips to Political Scientists On Taking Graduate Work in Economics," which is available from Doris C. Cross in Room 328.