Proposal for a Combined Master's Program

from the

Departments of Economics and Political Science

MA in Analytical Political Economy (MAPE)

The Departments of Economics and Political Science propose a combined Master's program. It has already been finalized and approved at by both departments. The proposal is now being submitted to the Graduate School for consideration in Fall 2014 for evaluation in AY 2014-15 and implementation in AY 2015-16, with the first entering class arriving in August 2016 (unless the process can be accelerated to allow August 2015 entry).

1. Rationale for the program

The Departments of Economics and Political Science propose a combined Master's Degree in Analytical Political Economy (MAPE). This proposal is being submitted to the Graduate School for consideration for implementation in AY 2015-16, with the first entering class arriving in August 2016 or, if approval is accelerated, August 2015.

We believe there are two underlying reasons for the growing interest in Political Economy and Political Science among young economists. The first is that the fields have converged, and much exciting contemporary work in microeconomic theory and applied microeconomics spills over into Political Science to such a degree that the disciplines cannot easily be distinguished. A second reason is that policy economics — especially macroeconomic and international trade policy — has come to have a strong political component, and many applied macro and trade "economists" are in fact now working in Political Science departments. Students recognize this, and seek programs that offer both mathematically formal theory and substantial amounts of applied theory and policy economics. Such programs today are found in top Political Science Departments and Public Policy Schools, but almost none of these (Caltech and Rochester being the obvious exceptions) provides the opportunity to gain economic and mathematical modeling along with deep skills in political science.

In short, there is a natural market; the students attracted to the program will further add to the diversity of the Economics graduate student body; and the proposed MAPE program provides a further step in product differentiation from other Economics MA programs. Duke's Econ MA program is already positioned as the most quantitative in the United States and the new combined Masters with Statistical Science (MSEM: http://econ.duke.edu/msem) and Computer Science (MSEC: http://econ.duke.edu/msec) will further strengthen this reputation – making it attractive to a broader group of students, especially those preparing for PhDs, even if they do not pursue the combined

program. The Economics Department does not view this combined Masters as a means to expand its

(already large) regular MA program. However, the existence of a large regular MA program (in 2014, the combined spring/fall applicant pool was about 600, with an entering class of about 65 in the regular program; the MSEM applicant pool was 290, with an expected entering class of 8; the new MSEC program announced December 2013 received 43 applicants by early February for a class of 7) does mean that Economics has the experience and infrastructure to conduct another combined program.

Since both the Economics and Political Science Departments already have master's programs, one might ask why one or both do not simply create an Analytical Political Economy track. There are two answers to this question. First, the combined program has marketing advantages: it is difficult for a political science student to credibly claim a strong economics background without a degree that is co-signed by Economics, even if she takes identical courses. Conversely, while several Economics master's students have applied to Political Science PhD programs in recent years, they have been met with suspicion and resistance because of the perception that they are "changing fields" – when in fact their interests have remained consistent, and they simply do not fit into pre-assigned discipline silos. The second reason is that a student entering one or the other department's master's program will not benefit, at least initially, from academic advising in both departments. Consequently, the student is unlikely to take an optimal curriculum that balances and integrates courses from both departments. Since MA programs are brief, this absence of initial advising inherently will lead to an inferior program of study – unless the departments collaborate, in which case the MAPE program results.

To these may be added a third, longer term reason, Duke University distinguishes itself from peer institutions in its commitment to interdisciplinarity. This commitment also provides a strategic long run advantage: it is not clear how disciplines will evolve, but it seems likely that the optimal academic structure of 2040 will differ from that of 1940 or earlier, to which the existing department structure dates. Consequently, combined programs that enhance collaboration position Duke to evolve nimbly rather than becoming ossified. The combined programs between Economics and Statistical Science and now with Computer Science have led first to the sharing of graduate students and courses, but also appear to be enhancing faculty collaboration. In past centuries, kingdoms would forge alliances by marrying their children to one another; today's departments can achieve this objective by sharing graduate students.

2. Relationship to existing programs at Duke

The <u>Economics Department</u> has an interest in a combined program because it has observed a growing political economy interest among students in its current MA program. At present, only about one student per year goes on to a doctoral program in Political Science, but several others take graduate courses in Political Science. We believe that these numbers would be greater if there were a recognized Political Economy program. Further evidence of a potential market is indicated by the small but steady stream of Political Science PhD students who take a MA in Economics. While there are few if any Economics PhD students who reciprocate, it is possible that some would elect to take a MA in Political

Economy, and there has been a gradual increase in the numbers of our graduate students who take graduate Political Science courses.

A possible concern is whether the new MAPE program might cause a decline in the existing Economics masters' programs. Clearly, even if the applicant pool were not to expand (though we anticipate that it will), the overall pool is large enough to support a new program. This is particularly true in that anticipated MAPE enrollments are, from the perspective of the overall Economics masters' programs, very small, and indeed smaller than annual enrollment fluctuations due to variation in yields. Consequently, MAPE will not have an impact in the immediate future on Economics MA, MSEM, or MSEC admissions numbers.

Over time, if MAPE is successful and produces a steady stream of excellent master's students, then Economics may compensate by reducing the size of its regular MA program. In this case, total enrollment in Economics masters' programs will be driven by the department's capacity and not enrollment in MAPE or any one specific program. However, once the Economics department's capacity (which will fluctuate according to student quality and faculty resources) is determined, then an increase in the number of MAPE students will imply fewer students in other programs. In short, MAPE is not viewed as a mechanism to expand enrollment in Economics masters' programs. As long as it remains small, it will not affect other admissions. If it gets large, that will be because the program is attracting a stream of outstanding students, and the Economics department either will cut back elsewhere or will increase capacity.

The <u>Department of Political Science</u> has an interest in a combined program because of (a) the evident interest in terminal Master's in political economy linked to economics, statistics and related areas; (b) the potential, as mentioned above, to provide a subset of its students with the opportunity to gain economic and mathematical modeling along with deep skills in statistics; (c) the potential to increase teaching and research collaborations across departments; (d) the potential to broaden the flow of students to PhD in Political science (at Duke and elsewhere); (e) the potential to tap into the existing recruiting strengths of the economics MA program; and (f) the opportunity to use this initial dual program to transition our Master's activity to incorporate additional dual degrees and potentially a 5-year Master's for emerging majors (a separate initiative). With the existing, established administrative structure of the Economics MA, this new program will not impose a substantial administrative burden on Political Science.

The program will be jointly managed and overseen by the Master's program Director in Economics and the Director of Graduate Studies in Political Science, who will establish recruitment policies and practices and recommend all Master's committees.

Duke PhD students in other departments seeking a concurrent master's degree in another discipline may apply to take the MAPE program but acceptance is not automatic.

3. Statement of resources needed for the program

a. business plan indicating the program expenses and how they will be covered

There will be administrative costs, consisting primarily of additional workload for the MA program directors in each department and the DGSA's, to administer the program and handle applications and admissions. In order to attract top students – especially given the anticipated minority student target group – a minimum *average* support level of 20% of tuition and fees is anticipated to be necessary, though we somewhat conservatively and to attract top students are budgeting an initial average of 33%.

This program will require the faculty to assume advisory roles on Master's committees, or in supervising the creation of satisfactory portfolios. Anticipated target size is an entering class of 5 to 7 students/year.

We propose a revenue sharing plan of 1/2 Graduate School, 1/4 Economics, and 1/4 Political Sciences *after* accounting for financial aid.

	Fall 2015		Spring	Spring 2016		AY 2015-16 cumulative	
Costs							
Promotional effort	\$	5,000	\$	2,500	\$	7,500	
Staff support	\$	3,000	\$	3,000	\$	6,000	
Visiting/nontenure faculty for MA paper/portfolio assessment/coordination of							
placement assistance	\$	35,000	\$	35,000	\$	70,000	
Total costs					\$	83,500	

Periodic Re-evaluation.

Every three years after the completion of the first year of study by the first class admitted under this study, each department will conduct a review of the program to establish whether is shall be continued for an additional three-year period.

b. Review of resources available (personnel, finances, space, library, et c.).

The Economics Center for Teaching (EcoTeach) is the instructional division of the Department of Economics, supporting the three economics degree programs: Undergraduate, M.A. and Ph.D. Established in 2001, the EcoTeach office provides student services and offers assistance with the many aspects of pursuing a degree in Economics, whether as an undergraduate, M.A. or Ph.D. student.

EcoTeach plays an integral role in actualizing the Economics Department's vision of a vibrant research community at the student level and is constantly creating key field courses at both the undergraduate and graduate level to deepen students' understanding of specialized topics beyond what is covered in economics core courses.

M.A.P.E. Program

Key Economics administrative faculty and staff:

Dr. Kent Kimbrough, Program Director

Dr. Charles Becker, Director of Development and PhD Placement

Ms. Addie Stagg, MA Staff Assistant

Ms. Jennifer Becker, Graduate Studies Program Coordinator

Ms. Amy Clayton, EcoTeach Senior Program Coordinator

Key Political Science administrative faculty and staff:

Dr. Pablo Beramendi, Director of Graduate Studies

Ms. Fonda Anthony, Graduate Program Coordinator

Master's students, including prospective, current, and alumni, visit EcoTeach for answers to all administrative and academic matters in support of successful completion of their degree requirements. EcoTeach staff helps with:

- Academic advising
- Degree progression tracking
- Research and academic assignments
- Career services
- Administrative issues such as: orientation, admissions, financial aid, course registration, graduation completion exercises and payroll.

A primary goal of the MA Program is to secure favorable placement for all our students. As a result the program focuses directly on rigorous training for PhD placement and administrative assistance for career placement.

c. statement of additional resources needed.

None

d. potential or actual outside funding.

None

e. five-year student, faculty and resources projections (spreadsheet)

4. Students (sources, characteristics, opportunities available to graduates).

Anticipated target source colleges and universities:

Based on recent and current MA students and enquiring MS students:

 Elite US Minority Serving Institutions (MSIs), in particular including elite MSI liberal arts institutions (Morehouse, Spelman, Hampton), and urban universities (CCNY, Houston, UC Riverside)

- Elite US liberal arts schools (Swarthmore, Davidson) and research universities (Chicago, Berkeley)
- Elite international institutions (e.g., Stockholm School of Economics, LSE, National University of Singapore, Peking University CCER)

Both departments regard this initiative as being targeted largely to students intending or likely to continue on to PhD studies, while recognizing that the professional market for terminal degree students is excellent (see discussion in Section 9 below). Recruitment will be run jointly with this in mind, as will placement.

Anticipated target size: entering class of 5 to 7 students/year

5. Degree requirements for the program (credits, courses, prerequisites, RCR training, examinations, papers, internships, experience).

Each student will have a Master's committee of three faculty members drawn from the two departments, with each department having faculty representation on each committee. The committee chair will serve as primary advisor in all cases. The final committee constitution will be based on the expected primary areas of focus for the student's Master's paper (see below). The student will take a course of study and define a topic for independent study leading to the Master's paper in consultation with the committee and subject to the approval of the Master's coordinator/DGS of each department.

- (1) Each student will take the Graduate School required minimum of 30 graduate credits, not including remedial courses.
- (2) At least 12 credits must be in core Political Science (POLSCI) courses, and at least 12 credits must be in core Economics (ECO) courses. "Core" courses are defined as those listed below. Students may complete the required 30 units with additional graded graduate courses in either Economics or Political Science, including approved independent study with POLSCI and/or ECO faculty advisors. Courses in other relevant disciplines may also be counted towards the total subject to approval by the program directors.
- (3) Each student will be required to take and pass the Political Science MA qualifying exam for PE students, which comprises the qualifying exam in this field for the Political Science PhD program. These include the core course in PE, and the required courses in Microeconomics and Macroeconomics. The latter two can be taken from and count towards the requirements of the Economics department. The exam is given every year at the end of the Spring semester. The Director of Graduate Studies in Political Science will monitor student's progress after the qualifying exam and, absent satisfactory progress, may recommend against the student's continuation in the program.
- (4) The Economics and Political Science Departments require that students write a final master paper (this could be a formal theory paper, an empirical paper, or a combination of both). In addition to passing the qualifying exam, students are expected to form a committee comprised of three members (with faculty from both departments) at the end of the first year, as well as have a well-defined topic for

the final Masters paper at the beginning of the Fall semester in their second year. The paper and the committee will be approved by the Economics Department Master's Coordinator and the Political Science DGS. One faculty member within the committee will act as main advisor (chair). The committee will review and, if appropriate, recommend the director/coordinator of both departments to grant credit towards the completion of the MA, after a defense to take place by the end of the Spring semester in the second year. This completion exercise is expected to constitute a mature project with research content.

Courses

- Political Science:
 - 12+ credits from PSC 522, PSC 632S, PSC644S, PSC645S, PSC705, PSC705, PSC715.
 PSC730, PSC745 (Core PE), PSC 762 or substitutes approved by the Director of Graduate Studies in Political Science. (see course names in Appendix)
- Economics: 12+ credits with no more than 6 from any one of the three sub-fields and at least 9 credits from the core courses that follow:
 - Microeconomics (ECON 601, Microeconomic Theory; 605 Advanced Microeconomic Theory; 701 PhD Microeconomics I; 705 PhD Game Theory)
 - Macroeconomics (ECON 602, Macroeconomic Theory I; 552, International Monetary Economics; 606, Macroeconomic Theory II; 702 PhD Macroeconomics I; 706, PhD Macroeconomics II)
 - Econometrics (ECON 608, Econometrics; 612, Time Series Econometrics; 613, Applied [Micro] Econometrics; 703, PhD Econometrics I; 707, PhD Econometrics II)
 or approved substitutes.
- Guided independent study/research project: 6+ credits with at least one faculty member from each department (either two 3-unit studies, one with a faculty mentor from each department, or 6 unit study jointly mentored). Alternatively, the thesis/research course, Econ 690S, can be taken as the Econ portion of this course, which in the future may be cross listed.
- Remedial/preparatory and additional technical courses as required, including:
 - o ESL courses as mandated
 - MATH 202 (Multivariate Calculus for Economists), 216 (Linear Algebra/Diff Eqns), 431 (Advanced Calculus)
 - STA 230 (Probability), 250 (Statistics), 611 (Probability and Statistics), 601 (Bayesian statistics)
 - o ECON 590 (Computer Modeling for Policy Analysis)
 - o COMPSCI 590 (Numerical Methods for Economists)

6. Descriptions of new courses to be offered in connection with the program and identification of teaching faculty.

The dual Master's program will not require the creation of new courses.

7. Curriculum vitae of faculty who will participate in the program.

Charles Becker, Research Professor of Economics Pablo Beramendi, Associate Professor of Political Science and Director of Graduate Studies Tim Buthe, Associate Professor of Political Science Scott de Marchi, Professor of Political Science Kent Kimbrough, Professor of Economics and MA Program Director Rachel Kranton, James B. Duke Professor of Economics Timur Kuran, Professor of Economics and Political Science Bahar Leventoglu, Associate Professor of Economics and Political Science Edmund Malesky, Associate Professor of Political Science Michael Munger, Professor of Political Science Karen Remmer, Professor of Political Science Curtis Taylor, Professor of Economics and Director of Graduate Studies Ed Tower, Professor of Economics Georg Vanberg, Professor of Political Science Michael Ward, Professor of Political Science Erik Wibbels, Professor of Political Science

8.- Plan for Promotion of Diversity among Students

Both Economics and Political Science have strong traditions of recruiting under-represented minority (URM) students. This certainly holds for the current master's programs: for example, the August 2014 entering master's programs in Economics, Statistical and Economic Modeling, and Economics and Computation included seven URM students (and 18 non-URM US citizens).

We anticipate recruiting heavily from leading liberal arts institutions, urban state universities, and flagship state universities within the United States. We further expect that half or more of the MAPE student body will come from the United States. Our recruiting strategy includes publicizing the program on listserves aimed at minority scholars and contacting faculty (and occasionally visiting) elite, minority-serving liberal arts colleges and research institutions (such as Howard, Morehouse, and Spelman) as well as at leading urban universities with large URM populations (such as Georgia State, Illinois-Chicago, and CUNY schools).

9.- Career Services Provided to Students

Both Economics and Political Science have made commitments to provide placement services for existing masters' students by hiring staff with placement expertise. Economics also has a part-time staff person who provides some professional editing support for students' materials (resumes, cover letters, papers). Economics is currently considering hiring a staff member dedicated to assisting with placement outside the financial sector; the presence of MAPE makes this more imminent.

Beyond this general support, the MAPE program expects to build a database of institutional contacts and, separately, alumni contacts at likely employers. We believe that the market for MAPE alumni will include a wide range of careers and types of institutions. These include the academic PhD market (we expect that one-third to half of MAPE graduates will enter doctoral programs in Political Science or Economics), consultancies, think tanks, international organizations, government bodies, and political or

legislative entities. The faculty in and alumni of our existing masters' programs already have strong ties to a range of employers in each of these areas; combining them will be helpful to both departments.

Our assessment of a strong market for MAPE alumni from these sources is based on their recruiting of the program's closest substitutes – students from our current masters' programs. Placement into non-financial industries has not been a problem for our students in recent years, and we believe that providing them interdisciplinary skills will make them even more competitive (for example, with bodies such as the Congressional Budget Office or Brookings) and open new doors (for example, in defense, security, and political risk consultancies and government agencies). Obviously, there is some risk that the market will soften if the economy worsens, but that is not a problem unique to MAPE.

Beyond our departments' other programs, there are a limited number of competing institutions. Columbia's QMSS program is well-established, attracts about 300 applicants annually for a class of 20-25 http://qmss.columbia.edu/. Their student body, while much larger, is similar to the one described above in terms of composition; placements are also similar to that described above. Other programs that are somewhat similar include the applied economics masters' degrees at Johns Hopkins and Georgetown. Not surprisingly, these programs are more oriented toward attracting candidates from and placing graduates in government positions than we envision for MAPE.

10. A statement of support from the dean of the sponsoring school and any additional clearances obtained or required (e.g., from a school's faculty/advisory board, from professional licensure organizations, et c.).

Attached

11. A student learning outcomes assessment process indicating how data on student learning outcomes is to be gathered and how it will be used to improve the program.

Our student learning outcomes assessment includes an evaluation of a student portfolio of work and PhD Program Placements, as well as professional career placements:

11(a) The Portfolio should contain:

- All student (final) papers and slides from oral or written presentations as applicable. Material created by the student as a research or teaching assistant also may be included.
- Updated resume / curriculum vitae
- A summary of performance on each of the required courses in the Economics and Political Science departments, and when applicable the research output coming out of those courses
- The final Master paper

11(b) Evaluation of Portfolio

In addition to the review of performance across the classes, the key element in the evaluation of the portfolio is the assessment by the students' committees. These will be formed in the first year and will

assess the quality of the Masters paper as a research output. As stated above, this is supposed to be a mature project with research content.

- (1) In assessing the quality of the product, we will follow the following rubric. The following criteria will be graded on a 3-point scale:
 - a. Clear statement of research goal and its relevance / value within the context of the existing literature
 - b. Sound research methods and analysis
 - c. Clear presentation of results (both written and oral) and their importance

The purpose of the Portfolio requirement is to ensure that all MA students engage in creative learning and the production of knowledge, rather than simply absorbing material. These also encourage students to reflect during their period of study on the appropriateness of their chosen courses, internships, and other activities. The material gathered will be of value as well in applying for jobs or doctoral programs; it also will assist Duke Economics and Political Science in evaluating the effectiveness of its program.

11(c) PhD Program and Career Placements

We will collect data through surveys of graduating students. This information will assist us in determining our student's success in securing admission to top PhD program in related disciplines. For those students not pursuing PhD Programs, we will collect data that will assist us is assessing the student's ability to secure employment that is challenging and respected within the profession. Results will be posted on the Economics and Political Science department websites. In collecting this information, we will differentiate between students pursuing an academic career and students following a more professional track.

For those pursuing an academic track, we will gather the following information:

- a) Portfolio evaluation: we will use the rubric above to assess the quality of the PhD track students' theses.
- Academics: Performance of MAPE students in PhD-level courses, both in terms of quantity and course grade (contemporary PhD students' performance in these same courses may be used as a benchmark)
- c) Surveys of MAPE program graduates:
 - d. Immediately post-graduation: admission to top PhD programs in Economics and related fields
 - e. 2 years post-graduation: assessment of their progress through PhD coursework)
 - f. 6 years post-graduation: assessment of their PhD completion and subsequent placement, whether academic or otherwise

For those pursuing a more professional track in turn, we will collect the following data:

- a) Internships and professional practices at International institutions and NGOs
- b) Academics: Performance in PhD courses as well as advanced quantitative courses in mathematics, computer science, and statistics (with a scale of "unsatisfactory" to "highly satisfactory").

- c) Surveys of MAPE program graduates:
 - a. Immediately post-graduation: job placement by company, field, job title, and geographic location
 - b. 2 years post-graduation: update on ongoing career path, including promotions if applicable
 - c. 6 years post-graduation: update on ongoing career, as well as potential employment opportunities for then-current MAPE candidates within their institution

All MAPE students are subject to the requirements of the Graduate School and, in particular, to RCR training.

APPENDIX

LIST OF COURSES FROM POLITICAL SCIENCE

522S Comparative Party Politics

632 Computational Political Economy

644S The Political Economy of Inequality

645S Political Economy of Growth, Stabilization and Distribution

646S The Politics of European Integration

705S Political Economy of Macroeconomics

715 Core in Political Institutions

730 Formal Modeling in Political Science (C-E)

745 Core in Political Economy

762 The Political Economy of Institutions