Proposal to allow students in other doctoral programs at Rutgers to earn their Ph.D. jointly in the Graduate School-Newark's **Ph.D. in Management Program**, which is staffed by the **Rutgers Business School-Newark and New Brunswick**^{*}

Approved by the Graduate School – Newark on April 29, 2009, and by the Graduate School – New Brunswick on April 30, 2009.

EXECUTIVE SUMMARY

The framework will be open to any doctoral program in Newark or New Brunswick in which a student can write a dissertation that is also acceptable as a doctoral thesis in Management. The student will complete the requirements of both programs with no more work, in the ideal case, than normally required for a single Ph.D.

The student will take the core courses for a major in the Ph.D. in Management Program as electives in their home program. In the ideal case, courses in the student's home program will be adequate preparation for the Management courses. Details will be worked out case by case. The student will become a joint student by passing qualifying examinations for both programs, which may be administered as a single examination.

A number of doctoral programs in Newark and New Brunswick have expressed interest. Two examples are described in this proposal: psychology in Newark paired with the Management major in organization management, and statistics in New Brunswick paired with the Management major in accounting.

The Ph.D. in Management Program will seek approval for the framework from the Graduate School-Newark and the Graduate School-New Brunswick during Spring 2009, in the hope that the program will be available to students beginning in Fall 2009.

Added February 27, 2009, at the request of the Area Committee of the Graduate School-New **Brunswick:** The framework will also be authorized to work in reverse: Students enrolled in the Ph.D. in Management Program may complete their degree jointly with another Rutgers doctoral program, under the same conditions and procedures. (See Section VII on page 9.)

^{*} The Ph.D. in Management Program has ten majors:

- 2. accounting information systems
- 3. finance
- 4. information systems
- 5. international business
- 6. management science
- 7. marketing
- 8. organization management
- 9. science, technology, and management
- 10. supply chain management

The program currently has 85 students, including about 75 in their first four years.

The Rutgers Business School-Newark and New Brunswick has five departments. It has a single doctoral director, but each department has a doctoral coordinator, and the governance of the program involves the doctoral coordinators, the department chairs, and doctoral committees for the departments. See <u>www.phd-business.rutgers.edu</u>. The program's faculty, all appointed to the faculty of the Graduate School-Newark, includes about 60 RBS faculty members with offices in Newark and about 20 with offices in New Brunswick. An additional 30, mostly less active, are in various other Rutgers and NJIT units.

^{1.} accounting

I. A NATIONAL PROBLEM

The production of new business doctorates in the United States has been declining for fifteen years, resulting in a nationwide shortage of qualified faculty for business schools. In a 2003 report entitled <u>Sustaining Scholarship in Business Schools</u>, the AACSB attributed this decline to how business schools are funded and build their reputations. To succeed, business school deans must invest in their MBA programs, not their Ph.D. programs. But unless decisive action is taken to reverse the decline in business doctoral education, the AACSB warned, we face erosion in the quality of business education and research.[†]

The report also documented the difficulties business schools face in recruiting the best possible doctoral students. Potential applicants significantly overestimate the financial burden of doctoral studies and underestimate the financial returns of an academic career in business. They are often unaware of the intellectual attractiveness of faculty careers in business. We prize applicants trained at the master's level in economics, psychology, sociology, statistics, or computer science, but many potential applicants mistakenly believe that MBA training is preferred or even required.

The AACSB recommended an expansion of doctoral programs in business schools and new efforts to attract top talent into these programs. They also proposed that business schools institute postdoctoral training programs for doctoral graduates from the social and mathematical sciences (sociology, psychology, economics, mathematics, physics, engineering, statistics, computer science, etc.). Business schools have always recruited faculty members from these sources, but they find it difficult to expand the practice, because doctoral graduates from non-business disciplines are often unfamiliar with the language of business and the state of teaching and research in specialties such as finance, accounting, marketing, and supply chain management. Because the academic market is so much better in business, post-doctoral programs in business could attract doctoral graduates from the social and mathematical sciences who are well trained in the scientific method and can enrich teaching and research in business once they have the knowledge needed to get started as business-school faculty members.

The 2003 AACSB report has had limited influence. Most doctoral programs in business have intensified their efforts to recruit domestic students with strong academic training. But the constraints and incentives that prevent the expansion of business-school doctoral programs persist, and they have also prevented universities from instituting postdoctoral programs that provide bridges from other disciplines.

Two of the wealthiest business schools, Harvard and Stanford, have undertaken to attract more students with strong academic interests outside business by instituting more interdisciplinary majors in cooperation with other schools. Harvard Business School now supplements its Doctor of Business Administration, which still offers five majors

[†] Formerly called the American Association of Collegiate Schools of Business, the AACSB International accredits business schools throughout the world. Its 2003 report documents the decrease in the total number of new business doctorates in the US from 1,327 in 1994-1995 to 1,071 in 1999-2000. The report is available at http://www.aacsb.edu/resource_centers/doctoraledu/SustainingScholarship.pdf.

(Accounting and Management; Management; Marketing; Strategy; and Technology and Operations Management) with four joint Ph.D. programs (Science, Technology and Management; Organization Behavior; Business and Economics; and Health Policy). Stanford Business School's Ph.D. program now offers eight fields of concentration, three of which (Political Economics, Organization Behavior, and Marketing) emphasize cooperation with departments in the arts and sciences. (The other five are Accounting; Economic Analysis and Policy; Finance; and Operations, Information, and Technology.)

Rutgers University is less able than Harvard or Stanford to marshal the resources needed to mount wholly new doctoral programs. But we can use Rutgers' strength in the mathematical and social sciences to help meet the national need for more researchoriented business teachers and our own need for academically stronger students in our business doctoral program.

II. PROPOSED FRAMEWORK

The framework proposed here will allow students in other doctoral programs on the Rutgers-Newark and Rutgers-New Brunswick campuses to earn their Ph.D. jointly in the Ph.D. in Management Program, the doctoral program staffed by the Rutgers Business School (RBS). The student will write only one dissertation and **earn only one Ph.D.**, but it will be recognized both as a Ph.D. in the home program (fulfilling the student's original goal) and as a full-fledged Ph.D. in management (giving the student full entry into the market for business-school faculty).

Each program will retain its existing rules and requirements but use existing flexibility in its doctoral curriculum to minimize the need for the student to do more coursework than usually expected for a single Ph.D. The student will pass the qualifying examination in both programs, but when the practices of both programs allow it, the two qualifying examinations can be administered as a single examination.

Most of the majors in the Ph.D. in Management Program teach their courses on a two-year cycle. So in order to complete the coursework for a joint degree as soon as possible, the student should work with faculty members from both programs to develop a plan at the very beginning of their career as a doctoral student. But this will not be required, because some students may become interested in a joint degree only later.

As soon as possible after a student expresses interest in a joint degree, and the home program gives its approval in principle, the director of the Ph.D. in Management Program will appoint a faculty member to help the student and the student's adviser in the home program plan the student's work. Taking into account the work the student is expected to do in the home program, the Ph.D. in Management Program will provide a list of additional doctoral courses in management required to prepare the student to take the qualifying examination in the major the student wants. (The list will be drawn up by the doctoral committee of the RBS department that supervises the major, ratified by the Executive Committee of the Ph.D. in Management Program, and communicated to the program director of the home program by the director of the Ph.D. in Management Program.) The list may consist of as few as three or four core courses for the management major, on the understanding that the student needs to be prepared for these courses by their work in the home program or elsewhere. The student will also write a three-credit early research paper in the management major, with a member of the management doctoral faculty as adviser or co-adviser.

For many pairings of home programs and management majors, all the needed management courses can be counted as electives in the home program, and no more work will be required for the two qualifying examinations than would normally be required for a single qualifying examination. The framework will be implemented most often in these cases. But the framework does not rule out more difficult pairings, where the student will take more courses than normally required for a doctoral degree. In any case, the home program will have complete authority to decide to what extent the required management doctoral courses can serve as electives in its own doctoral curriculum.

In order to keep lines of authority clear, **the student will remain under the exclusive jurisdiction of the home program until he or she has passed the two qualifying examinations.** The student will not be certified as passing the qualifying examination in management until after they are certified as passing the qualifying examination in the home program. Regardless of the extent to which the qualifying examination is administered as a single examination, each program will remain the sole arbiter of whether the student passes its examination.

At the dissertation stage, after passing the two qualifying examinations, the student will become a student in the Ph.D. in Management Program, while remaining a student in the home program. Both programs will retain responsibility for the student's standing in their program. If the student withdraws from one of the programs, or is dismissed for lack of academic progress, their status in the other program will not be affected.

As a candidate for the doctorate in management (the term "candidate" is used at Rutgers for doctoral students who have passed their qualifying examination), the student will need to fulfill the Ph.D. in Management Program's requirements for doctoral candidates. The main requirements are the following:

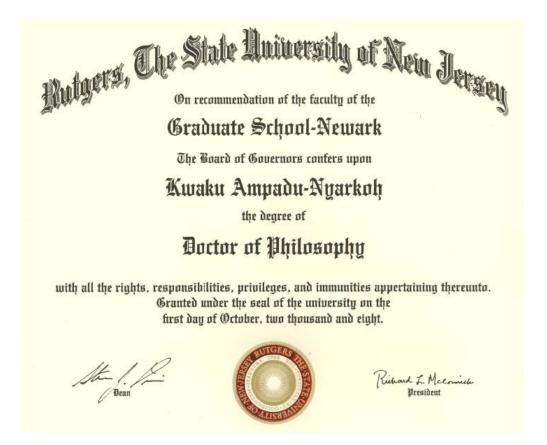
- 1. The candidate is expected to defend a proposal within one year of passing the management qualifying examination and will be placed on academic probation if they fail to do so within three semesters.
- 2. Every semester after passing the qualifying examination, the candidate must file an updated study plan, reporting on progress on the dissertation, the plan of work for the coming semester, and expected completion dates.
- 3. During the period between passing the qualifying examination and defending a proposal, the candidate must attend their RBS department's faculty seminar.
- 4. The candidate must teach at least one undergraduate RBS course.

In some management majors, students are also expected to take one or two courses at the dissertation stage.

The candidate's dissertation committee will be appointed by the two program directors acting jointly. Its composition will have to satisfy the rules of both programs. The rules of the management program, for example, require that the committee include at least one member of the Graduate School-Newark who is a tenure-track faculty member in RBS and one external member whose recent publication record matches that required for RBS faculty members to qualify for Graduate School-Newark membership.

Graduates will be fully recognized as graduates of the Ph.D. in Management Program. In letters supporting them as candidates for faculty positions in other business schools, the RBS faculty will identify them as new Ph.D.s in their management major whose doctorate has also been recognized as a doctorate in another Rutgers program.

Rutgers doctoral diplomas do not specify the program in which the student earns the degree. So if the home program is in Newark, the graduate's diploma will look just like any other diploma awarded by Rutgers on the recommendation of the faculty of the Graduate School-Newark:



If the home program is in New Brunswick, the diploma will state that it is awarded on the recommendation of the faculties of the two graduate schools.

III. SUMMARY OF THE PROPOSAL

- 1. The Graduate School-Newark and the Graduate School-New Brunswick will grant doctoral degrees that are joint between the Ph.D. in Management Program and any other Rutgers doctoral program to students whose work satisfies the requirements of both programs.
- 2. Before passing both qualifying examinations, the student will be enrolled in the non-management program only. After passing both qualifying examinations, the student will be enrolled in both programs simultaneously.
- 3. The student's dissertation committee will be appointed by the two program directors acting jointly. Any disagreement will be resolved by the dean of the graduate school responsible for the non-management program.
- 4. In order to remain a joint candidate after the qualifying examination, the student must satisfy the requirements of both programs. Withdrawal or dismissal from one of the programs will not change their status in the other.

IV. EXAMPLES

Here are two ideal examples, in which a student can take the core courses in the management major as electives in their home program and thus prepare for the qualifying examinations of both programs with two years of coursework.

Example 1. Psychology-Newark and the organization management major. Rutgers has psychology departments in both Newark and New Brunswick, and a student in either program could combine their work with an management major in accounting, marketing, or organization management. This example combines the Newark psychology curriculum with organization management.

A student entering in Fall 2009 can fulfill the requirements of the Psychology-Newark and organization management programs by taking four core courses in organization management as electives in psychology:

- 26:620:558 Seminar in Strategic Management (Fall 09)
- 26:620:555 Seminar in Organizational Behavior (Spring 2010)
- 26:620:556 Seminar in Organization Theory (Fall 2010)
- 26:620:677 Culture and Organizations (Spring 2011)

The student will also write an early research paper with a faculty member in organization management during their first summer.

Psychology-Newark requires 4 foundational courses, 3 area courses within psychology, and 6 electives that may be in other programs, for a total of 39 credits. They also require 33 credits of research, 24 of which must be dissertation research. The 4 organization courses would count towards the 6 electives, and the early research paper would count as 3 credits towards the 33 credits of research.

Organization management requires 4 foundational courses, 5 major courses, and 3 electives, for a total of 36 credits. The foundational courses in psychology could substitute for the foundational courses. One of the courses in social psychology could substitute for the fifth major course.

For additional details, see the requirements of the two programs at http://www-psych.rutgers.edu/grad/handbook.html#formal

and

http://www.business.rutgers.edu/default.aspx?id=138

respectively.

Example 2. Statistics-New Brunswick and the accounting major. The framework fits statistics well, because there is little market, in academia or industry, for doctoral graduates in statistics who do not already have an applied specialty. The management majors where a statistics student would fit the best are accounting and marketing. This example is for accounting.

A student entering in Fall 2009 can fulfill the requirements of both statistics and accounting by taking four core courses in accounting as electives in statistics:

- 26:010:652 Advanced Topics in Managerial Accounting (Fall 09)
- 26:010:651 Advanced Topics in Financial Accounting (Spring 2010)
- 26:010:653 Current Topics in Auditing (Fall 2010)
- 26:010:680 Current Topics in Accounting Research (Spring 2011)

The student will also write an early research paper with a faculty member in accounting during their first summer.

Statistics has 8 required courses and 5 electives, for a total of 39 of the 72 credits required for a Rutgers Ph.D. The 4 accounting courses and the early research paper would count as the 5 electives.

Accounting requires 4 foundational courses, 5 major courses (4 required courses and an additional course approved by the student's adviser), and 3 electives, for a total of 36 credits. The 8 required courses in statistics would count as the foundational courses, the electives, and the fifth major course.

For additional details, see the requirements of the two programs at

http://stat.rutgers.edu/~kolassa/Graduate/phdinfo.html

and

http://www.business.rutgers.edu/default.aspx?id=127

respectively.

V. REALISTIC EXPECTATIONS

Some students will follow a less straightforward path than in the ideal examples just described. A student who decides to pursue a joint degree only after a semester or two in the other program may still be taking courses to prepare for the management qualifying examination after having passed the other qualifying examination. Students in programs where foundational courses are less relevant to the management core courses may be delayed by the need to take prerequisites in management.

Only a small number of students will be involved. On average, the Ph.D. in Management Program enrolls fewer than 20 new doctoral students each year, spread across 8 majors.[‡] The total number of joint students will also be small.

The following table shows the numbers of students in their first four years in the different majors and their sources of financial support. This is a snapshot at the beginning of the Spring 2009. All the numbers vary constantly, including the distribution of TAships across departments and majors.

		Source of financial support				
RBS Dept	Management Major	TA	External fellow	Family funds	Faculty grant	Totals
Accounting	Acct	5	1	5		11
	Acct Info Sys	2	2	1		5
MGB	Organization	7		6	2	15
	International	5	1		1	7
SCMMS	Supply chain	5	1	2		8
	Marketing	1				1
Finance	Finance	9		13		22
MSIS	Info Tech	4			2	6
Totals		38	5	27	5	75

Some students remain in the program past four years. Currently, we have 6 students in their fifth year and 4 students who have been in the program more than five years. Of the 6 fifth-year students, 4 have Rutgers dissertation fellowships, and 1 is an instructor.

[‡] Two other majors, Management Science in the MSIS Department and Science, Technology, and Management in the MGB Department, do not currently have students.

VI. PUBLICIZING THE FRAMEWORK

This initiative is directed towards outstanding students who aspire to an academic career and have not yet realized that they can develop their intellectual interests as a professor in a business school.

The Ph.D. in Management Program will advertise the possibility of a joint Ph.D. with other Rutgers doctoral programs on its website, <u>www.phd-business.rutgers.edu</u>. But only those already interested in a career in business education will see this website, and they are likely to apply to business doctoral programs directly. The most important and effective advertising for the joint Ph.D. program will be undertaken by the other programs that choose to participate. The director of the Ph.D. in Management Program will support this advertising by helping develop examples of possible curricula.

The joint Ph.D. framework, including a list of participating programs at Rutgers, will be publicized as part of the effort to brand RBS as a business school that emphasizes science and technology, alongside the proposed masters in science and business and other initiatives.

VII. MAKING THE FRAMEWORK RECIPROCAL (Added February 27, 2009)

The Area Committee of the Graduate School-New Brunswick enthusiastically approved the proposal at their meeting on February 26, 2009, but asked that the faculties of the two graduate schools authorize that it also be reciprocal: **Students enrolled in the Ph.D. in Management Program may complete their degree jointly with another Rutgers doctoral program, under the same conditions and procedures.**

The intention is that the procedures spelled out in Sections II and III of this document also be authorized in reverse. If a student in the Ph.D. in Management Program wants to earn their degree jointly in another doctoral program at Rutgers, and this is approved by the Ph.D. in Management Program, the other program would be asked what additional work the student would need to do in order to take their qualifying examination, and so on.