

**Finance and Economics PhD Guide
2012/2013**

Date: August 27, 2012

Introduction

The Columbia Business School PhD Program in Finance and Economics provides students rigorous training in various aspects of theoretical and applied research. The program aims to train scholars who go on to conduct original research as faculty members of leading global educational and research institutions.

At the Columbia Business School, faculty and doctoral students study a wide variety of subjects, including theoretical and empirical aspects of asset pricing, corporate finance, banking and financial intermediation, and the micro-structure of financial markets. We draw on microeconomics and macroeconomics, general equilibrium theory, econometric methods, and behavioral economics and finance.

The doctoral program in Finance and Economics comprises a two-year core sequence of courses to be taken by all students, which allows considerable flexibility to specialize in different areas of finance or economics. Required core courses include sequences of microeconomics and macroeconomics, statistics and econometrics, finance theory, theoretical and empirical asset pricing, and corporate finance. Students are encouraged to work closely with the Division's faculty members as early as their first year to develop significant research.

This Guide is designed to provide information on the PhD program. It details course requirements and recommended classes; field exam requirements; research-related PhD activities; and the annual evaluation process.

The information in this Finance and Economics PhD Guide supersedes any previous edition. It is subject to change at any time, and any new developments will be announced in advance of their implementation.

Important Things to Know for 2012/2013

This information may be updated at any time.

Faculty and Staff:

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PhD Finance and Economics Classes Taught in the Business School:

B8207 Economic Analysis I	Fall 2012	Paolo Siconolfi
B9302 Finance Theory I	Spring 2013	Max Ulrich
B9303 Finance Theory II	Fall 2012	Gur Huberman
B9311 Introduction to Econometrics	Fall 2012	Charles Jones
B9311 Financial Econometrics	Spring 2013	Bai
B9311 Empirical Asset Pricing I	Fall 2012	Tano Santos
B9311 Empirical Asset Pricing II	Spring 2013	Lars Lochstoer
B9311 International Finance	Spring 2013	TBA
B9311 Models & Methods of Continuous-time Finance	Spring 2013	Neng Wang
B9311 Seminar in Behavior Finance	Spring 2013	Kent Daniel

Job Market Deadline: Friday, October 1, 2012

Job market packets (job market paper(s), working papers, curriculum vitae, list of committee members, and main adviser) must be delivered to the PhD office by this date in order to receive Divisional support to go onto the academic market this coming year.

For those students on the academic job market, during October and November we will be running seminars before faculty; arranging for detailed feedback; running mock interviews and other training; putting together School lists; etc. This is to prepare students for the AFA/AEA interviews in January with School visits over January-March. While these activities are overseen by the Placement Director, the student's main adviser is the primary contact for advice on the academic job market.

PhD Seminar:

Student Coordinator: Jia Guo

All students in their third year and above who have passed their field exams are expected to present their research in the PhD Seminar at least once a year. All students will be assigned a slot, with the most senior students presenting in September and the third year students presenting in the spring. Students faring poorly in their initial presentations will have a chance to do a second make-up presentation later in the year. Students are also expected to regularly attend at least one of the regular seminar series (Finance, Micro, Macro, etc.).

Required and Recommended Courses

Prerequisites

Entry into the program is highly competitive. The program accepts applicants from all backgrounds. The minimum mathematical skill requirements are one year of calculus, and one course each in linear algebra and probability and statistics.

Computer programming skills are essential in research. If students do not have adequate computer programming skills, they may wish to take a computer programming course before arriving at Columbia or very early on in their program.

Minimum Grades

All classes must be passed with a grade of B (on the University's grading system) or P (on the Business School's grading system), or better. Interpretation of the LP grade will be determined by discretion on a case-by-case basis by the PhD Director.

A grade of "incomplete" that is not replaced with a satisfactory grade by the end of the semester following the one in which the incomplete was received is viewed as evidence that the student cannot handle the workload of the Columbia PhD program. Carrying incompletes for longer than one semester may adversely affect the student's status as a PhD student and may be grounds for removing a student from the program.

Residency Requirements

To maintain good standing as a PhD candidate, a student must be registered for two terms out of three during the trimester academic year, although once involved in research towards a thesis, students are generally expected to be in residence in all three terms. Satisfactory completion of twenty courses is required for the PhD degree. Up to ten courses of relevant graduate work completed at Columbia or at another university may be credited toward the course requirement for the degree. The granting of advanced standing depends on the assessment by the Doctoral Committee of the quality and relevance of the work. Credit for advanced standing is not conferred until the PhD student has successfully completed at least one term in the program.

The exact number and selection of courses is determined by the student in consultation with faculty members in the major field. Normal course loads during the autumn and spring terms are four to five courses per term; summer-term course loads are generally lighter with heavier emphasis on research work.

We expect all students to engage in all research-related activities of the PhD program, which includes regular seminar attendance and regular presentations of working papers.

Required Courses

The following courses are required unless special permission is obtained from the Finance and Economics Director of the PhD Program:

B8207_001	Microeconomic Analysis I
G6215_001	Macroeconomic Analysis I
G6410_001	Mathematical Methods for Economists
B9311_020	Introduction to Econometrics
B8208_001	Microeconomic Analysis II
G6216_001	Macroeconomic Analysis II
B9302_001	Finance Theory I
B9303_001	Finance Theory II
B9311_022	Financial Econometrics II
B9311_015	Empirical Asset Pricing I
B9311_016	Empirical Asset Pricing II
B9311_012	Corporate Finance Theory
B9311_008	Continuous-Time Finance
B9311_013	International Finance

If a course is not offered in each of the first three years a student is in residence, the requirement to take the course is waived for that student. Many of these courses serve as the foundation of knowledge on which the field exams are based.

Elective Courses

Students are encouraged to select their elective courses to provide sufficient skills to progress in their chosen area of research. It is also advised that students should have sufficient breadth in their courses that they understand and are conversant with all aspects of finance.

Typical Course Schedules

A typical course schedule would look like:

First Year

Semester 1:	B8207 Microeconomic Analysis I
	G6215 Macroeconomic Analysis I
	G6410 Mathematical Methods for Economists
	B9311 Introduction to Econometrics

Semester 2: B8207 Microeconomic Analysis II
 G6216 Macroeconomic Analysis II
 B9302 Finance Theory I
 B9311 Financial Econometrics

Second Year

Semester 1: B9311 Empirical Asset Pricing I
 B9302 Finance Theory II
 [elective]
 [elective]

Semester 2: B9311 Empirical Asset Pricing II
 B9311 Topics in Corporate Finance I
 B9311 Continuous-Time Finance
 [elective]

The course sequence is designed to prepare you for the field exams. The field exams are all required and may not be waived. There are no exceptions to this rule.

You should first choose elective courses that prepare you for future research. You may also want to take electives that would prepare you for classes you would teach as an Assistant Professor. For electives, you should consider the various PhD classes currently being offered by the Division. Students are encouraged to also select classes from the MBA curriculum, other PhD classes in the Business School, and appropriate PhD classes in other Departments and Schools. Note that while classes are useful for equipping a student with required skills and knowledge, courses by themselves cannot generate new research ideas or topics.

Field Exam Requirements:

1st Year: Micro, Macro, and Financial Econometrics

The Macro field exam will be conducted by the Economics Department. Financial Econometrics will be drawn largely from Introduction to Econometrics (Charles Jones) and Financial Econometrics (Bai). Micro (Siconolfi) field exam will be administered by the Business School.

2nd Year: Finance Field Exam

The finance field exam covers both asset pricing and corporate finance. For 2012/2013, the finance field exam will be drawn largely from Finance Theory II (Gur Huberman), Empirical Asset Pricing I and II (Tano Santos and Lars Lochstoer), and Corporate Finance (Neng Wang).

The finance field exam can theoretically test all areas of finance, including financial theory and empirical applications not explicitly covered in course work. We expect that most questions will be largely drawn from the 2nd year required courses offered in 2012/2013.

Useful Classes in the Business School

(This list is not complete)

MBA Classes:

B6302	Capital Markets
B8301	Advanced Corporate Finance
B8308	Debt Markets
B8312	Advanced Derivatives
B8399	Real Estate Capital Markets
B8399	Behavioral Finance
B8399	Advanced International Corporate Finance

PhD Classes

Accounting

B9111	Theoretical Models in Accounting
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Decisions, Risk, and Operations

B9801	Foundations in Stochastic Methods
B9801	Dynamic Programming
B9801	Computing for Business Research
B9824	Foundations of Optimization

Useful Classes outside the Business School

(This list is not complete)

Note that courses with numbers greater than 4000 are usually taken only by graduate students.

Statistics

W4437	Time Series Analysis
W4606	Elementary Stochastic Processes
W6501	Stochastic Processes – Applications I
G6101	Statistical Modeling and Data Analysis I
G6102	Statistical Modeling and Data Analysis II
G6105	Probability Theory I

G6106	Probability Theory II
G6107	Statistical Inference Theory I
G6108	Statistical Inference Theory II
G6503	Statistical Inference and Time-Series Modeling
G6505	Stochastic Methods in Finance
G8263	Stochastic Differential Equations
G8273	Topics in the Mathematics of Finance

Mathematics

G4151	Analysis and Probability I
G4152	Analysis II
G4153	Probability II
G6071	Numerical Methods in Finance
G6209	Partial Differential Equations

Industrial Engineering and Operations Research (IEOR)

E4007	Optimization Models and Methods for Financial Engineering
E4404	Simulation
E4703	Monte Carlo Simulation
E4707	Financial Engineering: Continuous-Time Asset Pricing
E4709	Data Analysis for Financial Engineering
E4710	Term Structure Models
E4718	Topics in Derivatives Pricing
E6613	Optimization I
E6703	Advanced Financial Engineering
E6710	Markovian Decision Processes
E6711	Stochastic Models I
E6801	Monte Carlo and Discrete Event Simulation
W6501	Stochastic Processes and Applications

Computer Science

W4231	Analysis of Algorithms I
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Economics

G6429	Econometrics of Monetary Policy
G6253	Industrial Organization I
G6254	Industrial Organization II
G6809	International Finance
G6901	Strategic Issues in Trade and Financial Policy
G6904	International Monetary Transactions
G6908	Global Economic Policy
G6222	Advanced Macroeconomic Analysis II

G6221	Macroeconomics and General Equilibrium Theory
G6218	Advanced Microeconomic Analysis I
G6219	Advanced Microeconomic Analysis II
G6232	Analyzing and Modeling Group Decisions
G6413	Advanced Mathematical Methods for Economists
G6414	Topics in Mathematical Economics
G6415	General Equilibrium Foundations of Finance and Money
G6416	Game Theory with Economic Applications

PhD Research Activities

Research is the key goal of the PhD program.

The best way of doing research is “learning by doing.” Try to find a Research Assistant (RA) position and a faculty mentor as soon as possible. Ideally, you should do this in your second year, or even your first, depending on your background knowledge. Taking on an RA position is the best way to get to the edge of the research frontier and to develop your own research ideas. While the PhD program will regularly hold events to help you search for an appropriate Professor, finding a faculty mentor and dissertation committee is ultimately the responsibility of the student and will require your own initiative. You should continually seek faculty advice, first with your faculty mentor and committee, and then from as wide a range of faculty as possible as your job market nears.

The summer is also when a great deal of research occurs because the teaching pressures and administrative duties of many faculty constrain the amount of faculty research that can be done during the academic year. You should take this into account when you plan your schedule over the whole calendar year.

Dissertation Research

Dissertation research represents a significant contribution to the field of knowledge in finance or economics. This research is overseen by Divisional faculty members with the assistance of faculty in the Business School outside the Finance and Economics Division, or faculty in other Departments in the University. It is advisable to choose a topic in which there is expertise within the Business School, as making headway on areas with no local expertise is much harder. To get a feel for different faculty members’ expertise (and the research interests of faculty do change over time), it is strongly advised that you become acquainted with faculty research. Reading their work will give you a feel of who is the most suitable faculty member to work with given your interests. Students who have passed the qualifying exam may attend the Thursday Faculty Free Lunch Seminar. The Program for Financial Studies also sponsors No Free Lunch Seminars with short presentations of faculty research. The latter seminars require an RSVP.

A typical dissertation consists of two to three working papers. Usually, but not always, these papers are in the same area. While some of the papers may be co-authored with faculty or other students, success on the academic job market almost always requires a sole-authored job market paper, which can serve as a chapter of the dissertation.

Ideally, research on the dissertation should begin in the summer of a student's second year. Don't be alarmed if finding a topic takes some time; there are many false starts in writing papers, and you need to chew on a topic for a while before you can be sure that it is a worthy one. To avoid wasting time, talk with your colleagues at the early stage of developing an idea. Few things help more in focusing arguments than trying to convince others of the importance and relevance of a particular question. Indeed, working together with members of your peer group is a good way to get started on research projects. You are also very much encouraged to discuss possible topics with faculty, but when you do, prepare your conversation well so you can maximize the feedback they can give you. It is useful to approach faculty with a written research proposal that clearly outlines the issues and model of your idea. Think carefully about the question and why is it interesting even though future work with data or developments with theory may take you to unexpected places. How does your idea fit with the rest of the literature, and what do we expect to learn from answering this question? The "Fishing Expedition Method" (such as "I am going to run this regression and see what happens") is not a useful one when writing a good dissertation. There is no substitute for thinking deeply about the question before tackling it theoretically and then empirically.

Having a good question, of course, is only one half of a good dissertation. The other is answering it well. Posing a good question, as you will learn, is a bit of an art: It takes a combination of intelligence, good knowledge of the field, a good sense of what interests people, and a touch of luck. In contrast, a good answer always takes good scholarship. Learn *everything* about the topic you are working on. When focusing on a particular answer to your problem, think about every single reasonable alternative that can account for your findings. You have to have complete command of the relevant literature. It is also good practice to think about every possible question that a reasonable audience may ask when thinking about your research. Nothing impresses an audience more than an answer to a question that starts with "I thought of that and to check it (a) I relaxed this or that assumption, or (b) I performed these additional tests."

It is important not to get discouraged on the path to doing research. There are many "ups and downs" when writing a dissertation. This is absolutely natural, and you should expect to encounter the difficulties that are the necessary ingredient in any learning process. It is here that the faculty input can be most valuable, and you should not be shy in approaching them and asking for advice. Try to avoid "creative thesis avoidance." There are lots of interesting papers to read and seminars to attend. You can convince yourself that you are being productive, but you must also manage to find them to prove theorems, do empirical work, and write up the findings.

Dissertation Proposal and Defense

After successful completion of the field exams, students must successfully pass two faculty reviews, a thesis proposal and a final dissertation defense, to graduate with a PhD. Only the candidate and the approved members of the dissertation defense committee may be present during the proposal and defense. Columbia University policy never allows spectators or other individuals to attend a proposal or defense. There are no exceptions to this rule.

Thesis Proposal

All students must submit a written statement formulated in sufficient detail and analytic specificity to define the research problem, pertinent data sources, and methodology that their dissertation will employ. The PhD thesis proposal must be approved in writing by a committee of four faculty. All of the faculty must be members of the Graduate School of Business or the College of Arts and Sciences; one of the four may be from outside the student's Division.

We encourage students to schedule their proposals as early in the program as possible. The process of forming a committee forces you to talk to more faculty than just your primary advisor. It is not necessary to have completed several working papers to pass the thesis proposal. In fact, the thesis proposal should be viewed as an opportunity to get more detailed feedback on your research agenda. What is necessary to pass the proposal is a coherent outline for a paper, or series of papers, that can form the basis of a job market paper. In this sense, the proposal is similar to a contract, and completing the work outlined in the proposal will lead to a dissertation. We expect that students complete their proposals no later than the end of their fourth year and before going on the job market. Students requesting additional stipends in their fifth year must complete their dissertation proposals by the end of their fourth year.

Dissertation Defense

All PhD dissertations undergo a formal examination in which the student has the opportunity to discuss and defend the dissertation with respect to its sources, findings, interpretations, and conclusions before a committee of faculty knowledgeable in the student's field of research. All faculty members of the defense committee are expected to be present at the defense. The committee comprises five members: a Chair, a Sponsor (the primary advisor), and another Inside faculty member, and two Outside members who must have PhDs and not be members of the Business School.

Only the candidate and the approved members of the dissertation defense committee may be present during the defense. Columbia University policy never allows spectators or other individuals to attend a defense. There are no exceptions to this rule. The examination

normally lasts one and one-half to two hours. The candidate is generally asked to begin by summarizing the pertinent background and findings. The Chair of the Committee is responsible for allotting time, normally allowing each faculty member 15 to 20 minutes in which to examine the candidate. Upon completion, the student is asked to leave the room; during the discussion period, the Committee makes its decision on the defense.

The four possible decisions of the dissertation defense are:

Pass With Distinction: Awarded to the top 10% of candidates.

Pass: The dissertation is deemed acceptable subject to minor revisions.

Incomplete: The dissertation is deemed acceptable subject to major revisions. Upon completion of the required revisions, the defense is considered to be successful. The Chair of the Defense Committee is required to form a revisions subcommittee made up of one to three members of the original committee, whose names must be entered as such on the Voting Sheet.

Fail: The dissertation is deemed unacceptable, and the candidate is not recommended for the degree.

Regular Seminar Attendance

Regular seminar attendance is expected and required of all PhD students. The Division runs many seminar series, and you should regularly attend at least one seminar series. Most students should attend the Finance seminar series as they work in the Finance area.

You should attend seminars even if the subject matter is not directly in your research area. In fact, it is even more important to attend seminars in fields where you are not working. This is because seminars are the best way to get first-rate exposure to areas of finance and economics not in your expertise. On the job market, you will be expected to interact and interview with a whole range of faculty working in many different fields. Being able to converse intelligently across many fields is an extremely important part of finding an academic job. People want to hire good colleagues. The seminars provide a good way to get exposure to many areas of finance and economics.

When you attend the seminars, you should pay special attention to what is the marginal contribution of the paper relative to past work. You should also note the questions asked in the seminar and how they are addressed by the speaker. Research topics grow out of attempts to correct and extend ongoing debates in the literature. The seminars also give you a chance to view the different presentation styles of successful members of the profession. If possible, you should read the paper in advance of the seminar and come prepared to ask a question. You will be terrified the first time you do this, but it gets easier with practice.

PhD Seminars

The PhD office sponsors a seminar series where students can present their preliminary work to an audience of PhD students and faculty members. We expect all students to present in the PhD seminar at least once a year beginning from their third year. We also encourage students in their second year to present their work, which would represent excellent research progress.

Effective student presentations should be structured to maximize the feedback from the audience. If you are presenting, you should get your faculty mentor to look over your presentation a week or two before your presentation date. We live in a Business School environment, and good presentation skills are now crucial for obtaining top academic appointments. Before your presentation, you might want to do “trial runs” or practice in front of your peers. If you are not a native English speaker, or you are not comfortable in public speaking, you should seriously consider taking English classes or working as a Teaching Assistant for an MBA course. The PhD office can help you here.

Here are a few guidelines for your presentations at this forum. Always have in mind questions like the following:

- Why is the question important?
- How can I test/assess the question?
- What data can I use?
- What does my preliminary analysis yield?

Your talk should have the following structure:

I Introduction

Clearly state your question.

Motivate why your question is interesting (“Why do we care?”).

Explain how you plan to answer the question (model, empirical strategy, etc).

The introduction is very important. It frames the whole talk and establishes a context. (“My objective is to...”)

II Literature Review

Often people waste far too much time here. This should be **very** brief.

You should frame the literature review in this way:

- How does the literature relate to your model/framework but yet doesn't answer it.
- How does your model extend, improve upon, or correct what has been done before. You can also do the literature review after III or IV.

III Model

Emphasize how the model's features address the question you are examining.

Put up selective equations that summarize the assumptions and implications/results.

IV Empirical Strategy + Data

If your model is theoretical, the objective here is to translate your model into empirically testable predictions.

Explain what evidence would support or contradict your hypotheses. Describe your empirical work and discuss why this methodology is sufficient to answer your question. Explain the advantages and disadvantages of the data relative to ideal data.

V Results

Present results in large, easy-to-read tables. (Do NOT put up direct copies of tables in tiny font that nobody can read.)

Link your results to the model and empirical strategy.

Relate your results to previous findings.

Most importantly, how do your results answer your motivating questions?

VI Conclusions

Provide a short summary of the question, what you did to answer it, and the results you obtained. Include a short discussion of what you plan to do in the future.

Stipends and Scholarships

Regular Funding

Funding is guaranteed for four years of the PhD program, provided that students maintain good standing by passing field exams and by making good progress on research. Support is guaranteed to the spring semester of a PhD student's 4th year. Summer support in a student's 4th year will normally be considered part of a student's 5th year funding package, which is not guaranteed.

We encourage students to seek external sources of funding. Any external awards or grants received will not reduce the regular funding from the Business School.

Fifth Year Funding

The Division selects a number of students to receive funding in their fifth year of the program. This funding is not guaranteed and is only awarded to students who have demonstrated excellent progress to date and who would most benefit from an extra year in the program before entering the job market. Funding is awarded to a student based on the annual evaluations of that student conducted by the Division and on the recommendations of the student's advisors. Regular attendance at seminars, good progress on a job market paper and other supporting papers, as well as high probability of success on the job market are necessary conditions to receive fifth year support. We emphasize that it is unlikely that all students in their 4th year will be guaranteed 5th year funding.

Students who wish to be considered for fifth year funding must

1. Present and pass their thesis proposals
2. Have a working paper approved by the PhD Director
3. Intend to go on the academic market

Students can get 5th year support pro-rated from when they meet the first two requirements. Final approval rests with the PhD Director.

Only in extremely rare circumstances is Divisional funding provided beyond the fifth year.

Teaching Assistantships

TA appointments generally involve grading plus the possibility of holding 1 or 2 review sessions. Compensation varies depending on course type (core or elective) and course enrollment.

Research Fellowships

RA appointments generally involve working with faculty on research projects. These are optional sources of additional income that usually start in the second year, and play a key role in the learning process..

We expect that under the research fellowship program, students will perform a variety of tasks to aid faculty in research that may include data collection and tabulation, data analysis, modeling, numerical computations, writing research reports. Students should not worry that they may be matched with faculty not directly in their line of research – much of the research skills they will learn under a faculty mentor are transferable to other areas of economics and finance. Students are not obliged to take on a research fellowship if they do not wish to receive the extra financial support.

Summer Funding

For eligible students to receive funding over the summer, students are required to complete a summer proposal form. In this form, students should state their research plans over the summer including research to be pursued; the model or data to be obtained or analyzed; and students should document any other research-related activities such as RAs or TAs. Students must obtain the signature of a faculty person who can act as your mentor. This faculty member should meet with you regularly over the summer to talk about your progress in research outlined in your proposal.

Proposals will be reviewed by the PhD Director in consultation with other faculty. If approved, summer support will be distributed in part early in the summer semester.

2013 Summer:

\$4,200 plus \$6,000 in supplemental research support with the Division's approval.

Evaluation of Progress

Field Exams

Note: All students may not waive any field exam even if they have been waived from the course. There are no exceptions to this rule.

There are two sets of field exams:

End First Year: Microeconomics, Macroeconomics, Financial Econometrics

End Second Year: Finance Field Exam

Field exams are not solely based on course material, particularly for the second year finance field exam. They also test the student's ability to apply technical skills and knowledge to broad problems in financial problems. Some of these problems will not have been previously encountered in course work.

Students must pass all field exams to fulfill their field exam requirement. Students who are unsuccessful at passing the field exam requirement must leave the PhD program. Students who have successfully passed their field exams work full-time on dissertation research.

Field exams are graded with either a "Pass" or a "Fail" grade. The Micro field exam is administered by the Business School and Macro field exam is conducted by the Economics Department according to their schedules. Students must obtain a grade of "Pass" or better from the Economics Department according to their grading scheme to obtain a "Pass" grade for the Macro exam. The Micro, Financial Econometrics and Finance Field exams are conducted by the Business School.

It is not an automatic right to re-take the field exams after a first failing attempt. Poor performance in coursework is viewed as evidence that the student cannot meet the rigor of the PhD program and these students will not be given an option to re-take the exam. Students are given at most two chances to pass each field exam.

The first year field exams are given at the beginning of the summer. For those students unsuccessful at passing the first year field exams and who are given the option to re-take the exams, the field exams are also given at the beginning of the first semester of the student's second year. The second year field exam is given only once per year at the beginning of the summer semester.

Annual Evaluations

Faculty in the Division, together with the PhD Director, continuously evaluate each student's progress in the program. These criteria include completion of research papers; publication of research papers; presentations of research papers; successful completion of field exams and course work; RA and TA work; and service to the PhD program.

At the end of the second semester each year, a formal evaluation process is conducted by faculty. Students complete an annual evaluation report detailing their progress over the past academic year to aid in this review. The annual review process evaluates each student on all academic dimensions to determine the student's standing in the program and to provide feedback for the student. Poor performance in coursework, the field exams, or research may warrant dismissal from the program.

In the annual evaluation, all students are graded on the scale:

- Excellent
- Very Good
- Good
- Satisfactory
- Unsatisfactory
- Recommended to be Removed from the Program

The evaluations are made available to all faculty and are also sent to the main advisers of the student.

The decision to terminate a student who has passed field exams but is not making any progress on research is not made lightly. The decision to terminate a student is made by faculty and must be passed with a two-thirds majority vote.

Naturally, students in the first two years of the program are evaluated mainly on coursework and on successful completion of the field exams. As students progress to higher years, more detailed feedback on the progress of research is provided.

Students who fail to maintain satisfactory progress will be alerted to their deficiencies, advised of the means to remedy them, and told the consequences of their failure to do so. Extension of the time allowed for completion of the field exam requirements, or the PhD degree may be granted on recommendation of the student's sponsor and the Department Chair to the PhD Director when specific, unusual, mitigating circumstances warrant. Students may initiate a request for extension by submitting to the PhD Director a statement of work in progress and a schedule for completion together with the recommendation of the student's sponsor/adviser.

Leave of Absence

The demands on a student in the PhD program are onerous and the workload is very high. You must be prepared to make a full-time commitment to coursework and to research. Students can request to take a short-term leave from the program for medical reasons. Please contact the PhD office or PhD Director for further details. Requests for non-medical leaves are not automatically granted.

If you have successfully passed your field exams, then in exceptional circumstances, an indefinite leave of absence may be granted. To be re-admitted to the PhD program, the student must present a proposal to the PhD Director describing the direction and scope of the research program the student plans to undertake upon resuming status as a PhD student. The proposal must consist of at least two complete working papers, preferably in the same area, to serve as a basis for a complete dissertation. The proposal will be evaluated by a committee whose members are chosen by the PhD Director. To ensure that the quality of the re-admitted student is of a sufficient standard to our current graduating PhD students, the proposal must be judged worthy by the committee to enable the re-admitted student to place at a peer group top tier academic institution. Proposals that are nothing less than outstanding will be extremely unlikely to pass.

Nine-Year Limit

The University imposes a nine year limit on obtaining a PhD. That is, if students do not graduate within nine years, they are automatically terminated from the program without a PhD. Students who enter a Ph.D. program in the Arts and Sciences beginning in Fall 2011 are allowed nine years of continuous registration to satisfy all requirements for the doctoral degree.

We expect most students to graduate within five years of entering the program.

Masters of Science (Business Research)

Students who leave the PhD program prior to obtaining their PhD may be eligible for a Masters of Science degree. To see if you qualify for this degree, please see the PhD office and the PhD Director.

Other Information

Web Pages

Many links to resources can be found on the web pages of the PhD program at <http://www2.gsb.columbia.edu/doctoral/>

Final Advice

Faculty wish to share three points to PhD students wishing to embark on a life-long career of research:

1. While passing the field exams and obtaining good grades in coursework is essential in the first two years of the program, excessively concentrating on coursework may be detrimental in research progress if students do not learn to develop their own ideas and proposals. Similarly, excessive time devoted to RA or TA appointments may not allow the student's own research to develop. However, the field exams are demanding, so while you are doing coursework and preparing for exams, do not underestimate the effort and preparation required.
2. Finding a research topic and an adviser is ultimately the task of the individual student. It is best to begin faculty contact and to start RA appointments during your second year. It is essential that you work under a faculty member whose expertise lies in field in which you will write your dissertation. Do not be afraid to change faculty advisers if your interests change fields.
3. Good presentation skills are crucial. Present your work regularly, and if you need additional help in improving your written and spoken English or presentation skills, get help early in the program. Trying to improve your spoken and written English in the summer before your job market is too late.