

resource guide:

www.wharton.upenn.edu/mbaresource/

Explore Options;
Plan Your MBA
Academic Program



Wharton
UNIVERSITY *of* PENNSYLVANIA

The Wharton Academic Environment

THE MBA LEARNING ENVIRONMENT: CORE VALUES

Learning is an active experience at Wharton, emphasizing collective exploration of intellectually challenging ideas. While our courses employ a variety of pedagogical approaches, the following values lie at the core of the classroom learning experience:

Leadership

Leading our companies, our communities, and our countries.

Integrity

Showing integrity and perseverance in the face of adversity.

Humility

Individual humility and collective pride.

Initiative

Sharing an instinct for action.

Learning

From our professors, peers, and pursuits.

Diversity

Utilizing differences to foster innovation in business.

Community

Discovering a lifetime of unity and support.

LEARNING ENVIRONMENT AND CONCERT RULES

To engender a classroom experience most conducive for learning, the following norms are expected in the Wharton MBA classroom. We affectionately refer to these guidelines as “Concert Rules,” alluding to the environment one ordinarily finds at an orchestral performance. By labeling them as such, they become an intuitively understood set of expectations.

Concert Rules

- Class starts and ends exactly on time. Students and faculty are expected to be prompt.
- Students sit according to a seating chart.
- Students remain in attendance for the duration of class, except in an emergency.
- Students display name tents.
- All electronic devices are turned off.

To get the most out of your MBA experience, preparing for and attending classes are the most important steps you will take. Doing so allows you to engage your classmates and professors, advance your studies, and position yourself as a knowledgeable, thoughtful colleague. It is with these goals in mind that we invite you to participate actively in our “concert.”

THE WHARTON GRADUATE ETHICS CODE

The mission of the Wharton School Graduate Division Code of Ethics is:

- to promote the growth of ethically responsible business managers at the Graduate Division of the Wharton School through adherence to the highest standards of academic integrity and overall ethical conduct,
- to develop a sense of individual responsibility on the part of each member of the Wharton community to participate actively in maintaining such standards,
- to foster an environment of honor and trust within the Wharton community, and
- to engender respect for the ethical standards of the Wharton graduate.

Fulfilling this mission is a collective responsibility of the members of the Wharton community. Striving for adherence to high standards of ethics will enhance the quality of the Wharton experience, will enrich the image of Wharton and strengthen the equity associated with the Wharton degree, and will reinforce the societal norms of moral responsibility.

Extract from the Preamble of the Wharton Graduate Code of Ethics. The full text appears on page 5.

QUICK DIRECTORY

Have a question about...

Academic Advising	215.898.7604
Career Management	215.898.4383
Computer Consulting & Assistance	215.898.8600
Off-Campus Housing	215.898.8500
Escort Service	215.898.WALK
Penn Transit	215.898.RIDE
Financial Aid	215.898.8728
Student Loans	215.898.1988
Tuition Bills	215.898.1988
ID Cards	215.417.CARD

Emergency Numbers

On-campus emergencies	215.573.3333 or 511
Police, Fire, Ambulance	911
Victim Assistance	215.898.6600
Rape Assistance:	
Penn's Women Center	215.898.8611
Women Organized Against Rape	215.985.3333
Poison Information Center	800.222.1222
Suicide Hotline	215.686.4420
Student Health—night & emergency	215.746.3535
Between 5 p.m. and 9 a.m.	215.349.5490
Counseling & Psychological Services	215.898.7021
Weather-Emergency Closing	215.898.MELT

MBA Resource Guide 2014-2015

Welcome to Wharton and Penn! The Wharton School's MBA Resource Guide provides information to assist in planning your academic program at Wharton. It is also a guide to facilities and resources within the Wharton School and across the University of Pennsylvania.

Introduction to Wharton and Penn	2
Wharton Organizational Chart and Programs	3
MBA Code of Ethics	5
Academic Planning and Policies	7
Program Planning	8
Academic Policies	14
MBA Departments, Majors, and Courses	19
Financial Information	79
Wharton/Penn Resources and Policies	83
Index	93
Course Index	94
Academic Calendar	98

PLEASE NOTE: Policies and courses listed in this MBA Resource Guide are subject to change.

Introduction to Wharton and Penn

THE UNIVERSITY OF PENNSYLVANIA

History

The Wharton School is one of four undergraduate and twelve graduate and professional schools of the University of Pennsylvania. The University was founded by Benjamin Franklin and Philadelphia Quakers, and traces its origins to 1740. Although it carries the name of the Commonwealth of Pennsylvania, “Penn,” as it is commonly known, is not a state university. One of the eight universities that comprise the Ivy League, it is a private, coeducational, and nondenominational institution. As one of the country’s first institutions of higher learning, Penn has also consistently initiated advancements in teaching and research. Among its distinctions are: the first university school of medicine in North America; the first teaching hospital; the first business school; the first law school; and birthplace of the first electronic digital computer (ENIAC).

Undergraduate Schools

- Arts and Sciences
- Business (Wharton)
- Engineering and Applied Science (SEAS)
- Nursing

Graduate and Professional Schools

Arts and Sciences

- Business (Wharton)
- Communications (Annenberg)
- Dental Medicine
- Design
- Education
- Engineering and Applied Science (SEAS)
- Law
- Medicine
- Nursing
- Social Policy & Practice
- Veterinary Medicine

University Enrollment

Undergraduate: 10,300 (approximate)

Graduate and Professional: 11,000 (approximate)

THE WHARTON SCHOOL

Wharton Today

In 1881, American entrepreneur and industrialist Joseph Wharton had the most radical idea in the history of business: the establishment of the world’s first collegiate school of business at the University of Pennsylvania. And this was only the beginning of the Wharton School’s history of leadership. In addition to writing the first business textbooks and establishing the first research center at a business school, we have produced

Nobel Prize winners, founders and leaders of the world’s top companies, ambassadors, heads of state, and a U.S. Supreme Court Justice. Wharton is home to one of the most published and most cited business school faculties in the world. We have created groundbreaking theories and best practices that have driven business and economic growth the world over — as well as the people who put that knowledge to work.

Today, we serve the global business community as the most comprehensive source of business knowledge in the world. Our unique heritage and deep commitment to three foundational values continue to inspire the institutional mission of the School: to apply unparalleled intellectual resources to prepare business leaders who fuel the growth of industries and economies throughout the world.

A continued commitment to innovation:

Wharton’s innovative environment continues to generate the knowledge and ideas that are the building blocks of global business practice. Our faculty includes more than 225 of the world’s leading experts in 10 academic disciplines and countless subspecialties. The School’s research enterprise is supported by 20 research centers and initiatives. We bring innovation into the classroom with new programs including technology enhanced learning tools and specialized interdisciplinary programs in global business, the life sciences, technology management, retailing, and ethics, among others.

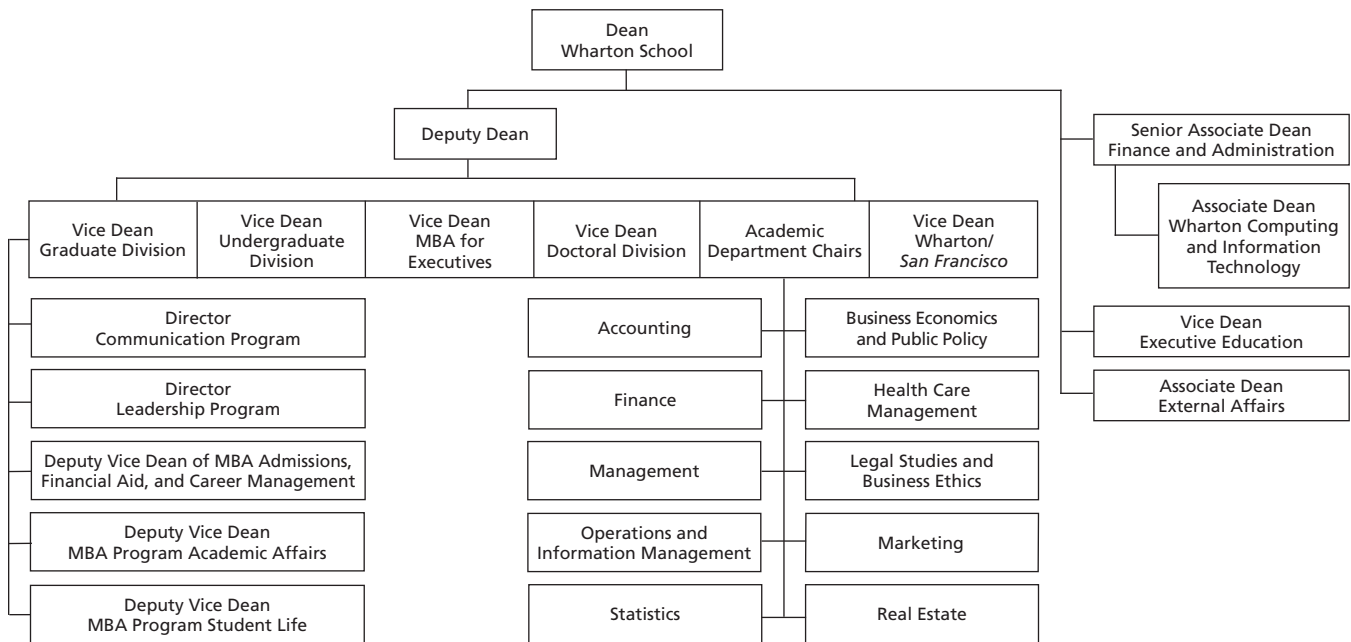
Breadth of expertise and global outreach:

The expertise of our faculty creates opportunities to gain in depth knowledge in virtually every major challenge facing global business today — in programs across the entire spectrum of business education. As part of the University of Pennsylvania, an Ivy League institution, we also share vast resources in business law, ethics, public policy, technology, and the life sciences — more than any other business school. As the largest global business school, Wharton reaches the broadest international audience with an ever-expanding range of programs and services. Wharton’s global reach includes 92,000 alumni, as well as 2.2 million readers through Knowledge@Wharton. And Wharton operates around the world with two campuses in Philadelphia and San Francisco, and bases in Europe and Asia.

Deep engagement with leading businesses and policy makers:

Wharton’s impact in the classroom and the world is fueled by our long-term relationships with leading companies and global policymakers. Every year, we work with more than 1,000 companies, including more than two-thirds of the Fortune 500 and leading global firms, as well as government agencies around the world. This engagement in research, academic programming and curricular design enables Wharton to bridge the gap between theory and practice. It makes Wharton a unique environment where new knowledge grows in a real-world, real-time context.

Wharton Organizational Chart



ACADEMIC DIVISIONS

Graduate Division

Vice Dean: Howard Kaufold
300 JMHH
215.898.1439

Wharton's MBA program is considered one of the finest in the world and is frequently cited as the most effective in preparing graduates to lead organizations in a global business environment.

Enrollment 2013:	1,737
Entering Fall 2013:	837 (35% international)
Alumni worldwide:	92,000

Wharton MBA for Executives (MBA Exec)

Vice Dean: Marguerite Bishop Lane
108 SCC
215.898.8601

The Wharton MBA Program for Executives is a regular MBA program designed for middle- and upper-level managers who wish to continue their careers while advancing their management knowledge through the MBA program. Participating executives come from all fields, including industry, the military, not-for-profit organizations, and the public sector, to attend the program, which is held Fridays and Saturdays on alternate weekends for two years. The program begins in May each year.

The MBA Exec program requires 19.25 credit units of core and elective courses. Also scheduled during the two-year period are four full weeks of classes, including a one-week seminar abroad. Participants are housed in the Steinberg Conference Center on campus or in our West Coast location

in San Francisco and must meet the same entrance and graduation requirements as the traditional MBA program.

Full time enrollment 2013	424
Entering Fall 2013	207
Total Alumni worldwide	92,000

Undergraduate Division

Vice Dean and Director: Lori Rosenkopf
G95 Jon M. Huntsman Hall
215.898.7607

Wharton's undergraduate program in business is considered the finest in the world and is the only one offered among Ivy League institutions. The National Education Standards, an academic rating service, consistently ranks the program first among undergraduate business programs. Students acquire a general education built on a comprehensive liberal arts base and a broad grounding in management education. Undergraduates can pursue a joint bachelor's degree in engineering and business through the Management and Technology Program, which is offered by Wharton and the School of Engineering and Applied Science. Joint-degrees are also available with the College of Arts and Sciences and the Nursing School. The University of Pennsylvania supports undergraduate exchange programs with universities in Austria, China, England, France, Germany, Italy, Japan, Nigeria, Scotland, and Spain. Study abroad programs are established for Wharton students in France, Italy, Japan, and Spain.

Full-time Enrollment 2013:	2,502
Entering Fall 2013:	536 (21% international)
Total Alumni worldwide:	92,000

Doctoral Programs

Vice Dean and Director: Eric T. Bradlow
400 Steinberg Hall - Dietrich Hall
215.898.4877

Wharton's doctoral programs seek candidates with the intellectual aptitude and curiosity to enter both academic and nonacademic careers that require sophisticated scholarly ability. Each student works closely with distinguished faculty members in programs designed to meet individual research interests and professional goals. The program also prepares doctoral candidates to be effective teachers through the Wharton Teacher Development Program.

Wharton offers doctoral degrees in: accounting, applied economics (business and public policy, insurance and risk management, real estate), ethics and legal studies, finance, health care management & economics, management, marketing, operations and information management & decision processes, and statistics.

Enrollment 2013	193
Entering Fall 2013	37
Alumni worldwide	1,500

Executive Education

Vice Dean: Monica McGrath
Aresty Institute of Executive Education
Steinberg Conference Center
215.898.4560

For more than 40 years, Wharton has been providing outstanding programs for executive development and training. In 1987, it increased its commitment to executive education with the founding of the Aresty Institute of Executive Education and the construction of the Steinberg Conference Center. Each year more than 4,000 executives participate in Wharton's programs, designed to meet the needs of executives at every stage of professional growth.

Executive Programs vary in length from two and a half days to two weeks and focus on specific issues in management, marketing, and finance. A two-week Executive Development Program is designed for executives making the transition from functional to general management. At the senior management level, Wharton offers two limited enrollment programs: a five week Advanced Management Program and the International Forum, which meets for three four-day seminars held in North America, Europe, and Asia. Wharton also offers Customized Programs tailored to the needs of a wide range of companies and organizations: recent and on-going clients include firms such as the American Bankers Association, IBM, KPMG Peat Marwick, Pfizer, and the Securities Industry Association (since 1951).

Total 2013 Participants	
Executives:	9,000 (approximately)
Companies:	1,500

Academic Departments

- Accounting
- Business Economics and Public Policy
- Finance
- Health Care Management
- Legal Studies & Business Ethics
- Management
- Marketing
- Operations and Information Management
- Real Estate
- Statistics

RESEARCH CENTERS AND INITIATIVES

- Jay H. Baker Retailing Center
- Bio Science Crossroads Initiative
- Boettner Center for Pensions and Retirement Research Pension Research Council
- Center for Human Resources
- Council on Employee Relations
- (Wharton) Center for Health Management and Economics
- (Wharton) Center for Leadership and Change Management
- (Wharton) Financial Institutions Center
- Jacobs Levy Equity Management Center for Quantitative Financial Research
- Fishman-Davidson Center for Service and Operations Management
- (Wharton) Global Family Alliance
- S.S. Huebner Foundation for Insurance Education
- Initiative for Global Environmental Leadership
- Leonard Davis Institute of Health Economics
- William and Phyllis Mack Center for Technological Innovation
- Public Policy Initiative
- Risk Management and Decision Processes Center
- SEI Center for Advanced Studies in Management
- Social Impact Initiative
- Sol C. Snider Entrepreneurial Research Center
- Wharton Customer Analytics Initiative (WCAI)
- (Wharton) Small Business Development Center
- Wharton Faculty Research Initiatives in China
- Wharton/Penn Risk and Insurance Program
- Wharton Sports Business Initiative
- Rodney L. White Center for Financial Research
- Samuel Zell and Robert Lurie Real Estate Center
- Carole and Lawrence Zicklin Center for Business Ethics Research

SPECIALIZED PROGRAMS

- Wharton Global Family Alliance
- Communication Program
- (Wharton) Environmental Management Program
- (Wharton) Ethics Program
- Jerome H. Fisher Program in Management & Technology
- Huntsman Program in International Studies & Business
- Joseph H. Lauder Institute of Management and International Studies (MBA/MA)
- (Wharton) Management Program

Wharton MBA Code of Ethics

Members of the Wharton community are expected to uphold the highest ethical standards. The MBA student body has articulated the following guidelines, approved by vote in the Spring of 1989, amended by vote in the Spring of 2005.

Preamble

The mission of the Wharton School Graduate Division Code of Ethics ("Code") is to promote the growth of ethically responsible business managers at the Graduate Division of the Wharton School ("Wharton") through adherence to the highest standards of academic integrity and overall ethical conduct, to develop a sense of individual responsibility on the part of each member of the Wharton community to participate actively in maintaining such standards, to foster an environment of honor and trust within the Wharton community, and to engender respect for the ethical standards of the Wharton graduate. Fulfilling this mission is a collective responsibility of the members of the Wharton community.

While representing himself or herself as a member of the Wharton community, the Wharton student will maintain the highest standards of honesty and integrity. The student will strive for these standards in his or her representations, academic pursuits, and respect for the property and individual rights of others; will uphold the specific principles described in the Code; and will actively support the Code. Standing in the Wharton community will be subject to adherence to these basic principles of ethics.

The Code will be administered and maintained by a Wharton Graduate Division Ethics Committee ("Ethics Committee"), comprised of students chosen to represent their colleagues. Administration of the Code is subject to review by the Graduate Division Administrators and the Wharton Faculty according to the procedures indicated below.

I. SPECIFIC STANDARDS

A. Representations

The Wharton student is expected to represent himself or herself honestly in all oral or written statements. The student will not misrepresent any material fact to other students, faculty, staff, prospective employer, or anyone else while representing himself or herself as a member of the Wharton community, especially through, but not limited to:

1. Lying to prospective employers, either directly through oral or written statements or indirectly through misrepresentation of background in resume;
2. Misrepresenting any material fact on a Wharton application, financial aid form, or other official document;
3. Lying to a fellow student, a faculty member, or an administrator in order to gain preferential treatment; or
4. Misrepresenting the originality of one's work, including failure to cite the contributions of another (plagiarism).

B. Academic Pursuits

The Wharton student is expected to represent his or her academic product honestly and fairly. The student will not use any dishonest method to gain an unfair advantage over other students in academic pursuits, especially through, but not limited to:

1. Giving or receiving any unauthorized aid on an assignment or exam, including working in groups on any assignment that has been designated as individual by the professor;
2. Failure to comply with the academic guidelines established by the instructor for assignments;
3. Continuing to write after time has been called on an exam; or
4. Submitting for credit substantially the same work done for another assignment either academic or professional, except with prior approval of the instructor. In the absence of clear guidelines regarding an assignment, presentation, examination, or other academic submission, the Wharton MBA student is expected to seek any and all necessary clarification from the instructor.

C. Property

The Wharton student is expected to respect the materials, data, and property of other members of the Wharton community and visitors to the Wharton School. The student will not misuse or misappropriate the materials, data, or other property of another, especially through, but not limited to:

1. Accessing, removing, or destroying any information, materials, or other property from another student's or student organization's premises, locker, computer files or mail folder without prior permission;
2. Accessing or removing without prior permission, or hiding or destroying any corporate records, files, job postings, or academic materials from the library, the Career Management Office, or any other administrative office;
3. Divulging or distributing proprietary or confidentially provided information obtained for class assignments; or
4. Utilizing for commercial gain any material provided to Wharton specifically and restrictively for educational purposes without prior permission of the provider.

D. Individual Rights

The Wharton community is committed to an environment free from discrimination and harassment of any kind. The Wharton student is expected to respect the individual rights of others. Specifically, Wharton students will observe the University of Pennsylvania policies against harassment and discrimination. Any complaint of a violation of these policies brought to the attention of the Ethics Committee will be referred to the appropriate body of original jurisdiction within the University.

II. STANDING IN THE COMMUNITY

A student who accepts and adheres to the standards discussed above will remain in good ethical standing within the Wharton community. If a student fails to adhere to the Code, the student may be sanctioned only with respect to his or her relationship with the Graduate Division of the Wharton School. Any sanction will be enacted upon the recommendation of the Ethics Committee at the discretion and action of the Vice Dean of the Wharton Graduate Division ("Vice Dean") or his/her designate ("designate").

Any sanction must bear a reasonable relationship to the severity of the breach involved. Appropriate sanctions include, but are not limited to the following: Letter of Reprimand, Probation, Suspension, and Expulsion; in addition, the Ethics Committee may also recommend grade modification or exclusion from specified extracurricular activities.

If the final determination in a hearing under the Code is in favor of the accused, no record of the complaint or of the related hearing will be made in the official file of the student as maintained by the Wharton Graduate Division. The Vice Dean or designate will render a written decision on the recommendations of the committee in a timely fashion.

III. ADMINISTRATION OF THE CODE**A. Composition of the Ethics Committee**

The Ethics Committee will comprise no fewer than nine and no more than eighteen Wharton MBA students elected by the Wharton MBA student body. Nominations for these positions will be accepted from MBA students in the form of a statement of intent submitted to the Ethics Committee. The sitting Ethics Committee will determine the rules for the election, and reserves the right to reject any statement of intent that fails to meet their established requirements. Candidates who receive the most votes in a vote open to all Wharton MBA students will constitute the new Ethics Committee. The Ethics Committee will select an appropriate number of Ethics Liaisons ("liaisons") from the matriculating first-year class during their first semester. These liaisons will assist the Ethics Committee in fulfilling its responsibilities including: fostering awareness of ethical issues in the marketplace, promoting education about the Code, the Ethics Committee, and the Ethics curriculum to the greater Wharton community, and performing other roles designated by the Ethics Committee as appropriate. The liaisons are not members of the committee and shall not sit for hearings under any circumstances.

The Ethics Committee shall also elect from among its members two co-Chairpersons, a minimum of one Code Advocate, and any other officers the Committee deems necessary to carry out its responsibilities. These officers of the Committee shall execute the responsibilities articulated by the Procedures of the MBA Code of Ethics ("Procedures"), and any other duties delegated to them by the Committee at large.

B. Responsibilities of the Ethics Committee

The Ethics Committee will be responsible for hearing

complaints under the Code. Five members of the Ethics Committee will sit for a hearing, with the Code Advocate serving to investigate the complaint and present any evidence. Hearings will be conducted according to procedures maintained by the Ethics Committee and available to all students upon request.

The Ethics Committee is also responsible for promulgating the standards specified in the Code, for encouraging responsible conduct by Wharton students, for acting as liaison to the Wharton Faculty and Administration on matters related to the Code, and for developing any necessary modifications of the Code. Any changes to the Code must be approved by a majority of those voting in a special referendum open to all Wharton MBA students.

Hearings are not intended to be juridical in nature. The committee will determine how and where intent and state-of-mind fit into the proceedings at its discretion.

C. Complaints

Any member of the Wharton community wishing to complain of a breach of the Code may submit their complaint in writing to:

1. Any member of the Ethics Committee, or
2. The Wharton School's Graduate Division.

Complaints may be filed anonymously. All contacts between the complainant(s) and the Ethics Committee will be held in confidence according to the procedures of the Ethics Committee.

D. Appeals

Any student sanctioned under the Code by the Vice Dean or designate at the recommendation of the Ethics Committee may appeal to the MBA Executive Committee. A request for the hearing of an appeal must be made to the Chairman of the MBA Executive Committee within seven days of the Vice Dean's decision; if the MBA Executive Committee refuses to hear the appeal, then the decision of the Vice Dean will stand. The MBA Executive Committee will conduct all hearings according to its own procedures.

All students matriculating in the Graduate Division must comply with the standards set forth in the MBA Code of Ethics and the Policies on Conduct of the University of Pennsylvania.

Cases involving issues related to academic integrity and educational pursuits of MBA students, where the incident relates to the activity of the Graduate Division, are to be resolved pursuant to the provisions of the MBA Code of Ethics.

Complaints involving the conduct of any MBA candidate from the Wharton School may be considered by the committee. Other cases involving issues related to conduct are to be resolved pursuant to the published University of Pennsylvania policies and procedures. If the MBA Ethics Committee feels a case is beyond its jurisdiction, it will refer the matter to the University Office of Student Conduct. Procedures used in cases related to conduct are set forth in the Charter of the University of Pennsylvania Student Disciplinary System.

Academic Planning and Policies

Program Planning	8
Program Requirements	8
Math for Business	8
Pre-Term Program	8
Clusters and Cohorts	8
MBA Curriculum Chart	9
The Core	9
Core Course Waivers	9
Electives	10
Language Study	11
Majors	11
Course Load	11
Registration	12
Materials	12
Academic Advising	12
Summer Sessions	13
International Programs	13
Dual Degree Programs	14
 Academic Policies	 14
Grading System	14
Wharton Grade Disclosure Policy	15
Course Attendance	15
Examination Policies	15
Academic Performance Standards	16
Academic Honors	17
Leaves of Absence	17
Transcripts	17
 MBA Departments, Majors, and Courses	 19

Program Planning

PROGRAM REQUIREMENTS

For MBA students entering in Fall 2014, the graduation requirements for the Master of Business Administration degree are:

	Graduate Credit Units*
Core Courses:	
Required Foundation Courses	9.5**
Electives:	
(5 cu usually needed for major; 1 cu of which typically comes from the core)	9.5**
Total Required	19

The Wharton MBA degree requires 19.0 credit units (cu) of graduate level courses, up to four of which may be taken with an approved academic program outside of Wharton. All 19 cu must be taken while registered in Wharton MBA program coursework, with the exception of coursework taken in approved dual degree programs after submitting the matriculation deposit for the Wharton MBA Program. Students may take up to 21 cu without incurring additional tuition charges. The only classes requiring additional fees are the Global Immersion Program and Global Modular Courses due the international travel component.

There are waiver opportunities for most, but not all, of the required core courses. (See information about waiver requirements later in this section or in the *Waiver Information Guide*.) If you do waive courses, you must replace the waived credits with electives. The minimum requirement for graduation remains 19 cu at the graduate level regardless of waivers.

The MBA program is designed for a full time residency consisting of four academic terms; fall and spring over two years. It is possible to graduate in less time by overloading on coursework and/or taking courses during the summer term, however summer course offerings are quite limited. Summer study may also preclude an internship opportunity which, for many students, is a valuable part of the MBA experience. It is also possible, with prior approval from the MBA Program Office of Academic Affairs, to delay graduation — continuing coursework required for graduation through a fifth semester.

* Coursework at the Wharton School is measured in credit units (cu). A full-semester course, meeting twice a week in one-and-a-half hour sessions over the entire semester, is counted as one credit unit (1 cu). A half-semester course, meeting twice a week in one-and-a-half-hour sessions over a six-week term, is counted as one half of a credit unit (.5 cu).

** Taking accelerated Financial Accounting (ACCT 612), accelerated Corporate Finance (FNCE 612), or accelerated Regression Analysis (STAT 621) will decrease the core course load by .5 cu per course and increase electives by the same amount. The minimum total credit units required is always 19 cu.

MATH FOR BUSINESS

Wharton's coursework includes rigorous analytical treatment of several quantitative subjects and presumes familiarity with college-level calculus. We are offering a refresher course Math for Business designed to review the key concepts needed to succeed in the MBA core courses at Wharton. The course covers topics such as modeling linear and non-linear relationships, differential calculus and its use in business analysis, as well as an introduction to probability and statistics. Math for Business is administered online through our Canvas platform. Since this online course serves as a refresher, it should not be viewed as a substitute for basic undergraduate analytical skills. Math for Business also prepares students for the diagnostic exam to be taken at the end of the course, prior to the beginning of the pre-term program. **It is mandatory for all entering MBA students to complete this diagnostic exam.**

PRE-TERM PROGRAM

The Wharton Pre-Term program is designed to allow you to begin the process of immersion into the Wharton community. Here you will meet your classmates and begin to develop the bonds that will form the cornerstone of your MBA experience. Special events and exercises will build the spirit and cohesion that marks the Wharton brand. *Let's Get Started* will introduce you to our Pre-Term program.

Between Wednesday, July 30 and Friday, August 1, 2014, you have the opportunity to take refresher classes in accounting, finance, and statistics to help prepare for waiver and placement exams. On Saturday and Sunday, August 2 and 3, 2014, we will administer waiver and placement exams to matriculating students able to prove sufficient mastery of selected core requirements.

Pre-Term is designed to introduce you to the Wharton community. During Pre-Term you will become familiar with the academic environment and requirements, engage your fellow classmates through events organized by Student Life, learn about the resources available through MBA Career Management and find out about the many opportunities offered by the Wharton Leadership Program.

A highlight of Pre-Term is the Learning Team Retreat, during which you will be introduced to your learning team. The Teamwork and Leadership course, MGMT 610, is offered through an intense simulation completed with your learning team. This course is taken for a grade.

CLUSTERS AND COHORTS

As an entering student, you will become part of a "cluster". These "clusters" become a strong social group, often spending significant time together outside the classroom. These clusters will be subdivided, for the purposes of some of the fall core courses, into "cohorts".

The MBA Program Office semi-randomly assigns matriculating students to clusters and cohorts before the beginning

MBA CURRICULUM

FIRST YEAR				
AUGUST	FALL		SPRING	
MGMT 610 ¹ Foundations of Teamwork and Leadership	Quarter 1	Quarter 2	Quarter 3	Quarter 4
	MKTG 611 Marketing Management	OPIM 611 Quality and Productivity	Elective or Core ²	Elective or Core ²
	MGEC 611 Microeconomics	MGEC 612 Microeconomics: Advance Applications	Elective or Core ²	Elective or Core ²
	STAT 613 ⁴ Regression Analysis for Business		Elective or Core ²	Elective or Core ²
	WHCP 611 + 620 ¹ Speaking and Writing	WHCP 611 + 620 ¹ Speaking and Writing	WHCP 612 or 615 ³ Speaking Elective (.25 cu)	WHCP 612 or 615 ³ Speaking Elective (.25 cu)
	Elective or Core ²		Elective or Core ²	
SECOND YEAR				
	Electives or Core ²		Electives	

1. Cannot be waived

2. Flexible Core:

ACCT: Financial Accounting (ACCT 611 or ACCT 612) or Financial and Managerial Accounting (ACCT 613)

FNCE: Corporate Finance (FNCE 611 or FNCE 612 or FNCE 614) and Macroeconomics and the Global Environment (FNCE 613 or FNCE 615)

LGST: Responsibility in Global Management (LGST 611) or Responsibility in Professional Services (LGST 612)³

MGMT: Managing the Established Enterprise (MGMT 611) or Managing the Emerging Enterprise (MGMT 612)³

MKTG: Dynamic Marketing Strategy (MKTG 612) or Strategic Marketing Simulation (MKTG 613)

OPIM: Managing the Productive Core of the Firm (OPIM 612, OPIM 613, OPIM 614, or OPIM 615)³

3. Cannot be waived; one of these flexible core options must be completed

4. Though STAT 613 is part of the fixed core, an accelerated .5 cu version of it (STAT 621) is offered in Q1 for students who place into it by exam.

of the first year. You will be notified of your cluster assignment shortly before you arrive.

THE CORE*

Wharton's academic departments have designed a rigorous, flexible Core Curriculum that will teach you the essential skills and concepts that alumni of the Wharton MBA program are expected to have mastered. These core concepts serve as the foundation for upper level study and will resonate throughout your career.

While the theories taught in the core are indispensable to your academic development, we recognize that you are an individual with a well-developed sense of what it is that you want from your experience. For you, the core curriculum allows for flexibility to accommodate your background, interests, and goals.

The core curriculum consists of:

- The Fixed Core
 - Taken with your cohort throughout the fall semester of the first year (see table above)
- The Flexible Core
 - Courses taken in the term (subject to availability) that best fit your individual needs, backgrounds, and goals.

*The Core Courses section (page 20) describes core courses.

We will register you for the Fixed Core based to your cohort assignment. You will then use the Course Match optimization process to register for the flexible core and for most electives. You will be introduced to Course Match during Pre-Term. Due to availability constraints, students who decide to wait to complete the flexible core in their final semester may find their choices less preferential.

The table above displays a typical format. The Fixed Core forms the backbone of the fall semester. However, there is still room to take either Flexible Core courses or electives. In spring of your first year you have the option to complete additional elements of the core while beginning to explore your specific interests and/or major requirements. A team of academic advisors is at your disposal, ready to help you chart the best course for you.

CORE COURSE WAIVERS

For those of you with academic or experiential background, the faculty offer waiver or placement opportunities in the following core courses:

- ACCT 611/ACCT 613 (Financial Accounting)
- FNCE 611/FNCE 612 (Corporate Finance)
- FNCE 613 (Macroeconomics and the Global Economic Environment)
- MGEC 611 (Microeconomics for Managers: Foundations)

- MGEC 612 (Microeconomics for Managers: Advanced Topics)
- MKTG 611 (Marketing Management: Program Design)
- MKTG 612 (Dynamic Marketing Strategy) or MKTG 613 (Strategic Marketing Simulation)
- OPIM 611 (Operations Management: Quality and Productivity)
- STAT 613/STAT 621 (Regression Analysis for Business)

We encourage you to seek waivers in the core courses in which you have substantial academic background as this will increase your flexibility in course planning. Waiver opportunities may come in the form of waiver by credentials, or waiver by examination. Details of the waiver process are described in the *Waiver Information Guide* (available on our website under the Pre-Term link). The main points are summarized below.

Waiver by Credentials

You may be able to waive some courses on the basis of prior coursework and/or experience in the subject area. Waiver requirements differ between courses so it is important to refer to the *Waiver Information Guide* to evaluate your credentials. In rare instances, you will be given permission to substitute advanced or related courses for the core course. These substitutions may be made at any time during the two years of the program, though we recommend that you complete them by the end of the third semester of the program. Since the substitute courses are electives, you are responsible for registering yourself in these courses, so you should verify when and how often these courses are offered. If your application for waiver by credentials is denied, you may take the waiver exam.

Waiver by Examination

In most courses, you will be able to take a written waiver examination if you have had sufficient prior exposure to the subject. These examinations test proficiency in the subject matter of the course. You should prepare by reviewing the guidelines in the *Waiver Information Guide* as well as material from your past courses. Many students also take advantage of the prep courses offered prior to Pre-Term. Waiver exams will be given before the start of Pre-Term, on August 2 and 3 (see the *Waiver Information Guide* or the MBA Program Office website for the full schedule).

Rules for the Waiver Process

The following rules govern the waiver process:

- If you attempt to waive by credential but are denied, you are still eligible to take the waiver exam;
- You cannot take a waiver exam more than once and only in the summer preceding your first year at Wharton;
- Waiver exams are given according to a set schedule. There are no make-up waiver exams for any reason;
- You must complete all waivers (either by credentials or by examination) prior to the fall semester of your first year;
- If you waive a fixed core course, you may not enroll in it as a second year student.

ELECTIVES

Wharton's curriculum offers a broad range of elective courses in each of its ten academic departments. Most electives build upon core courses and may not be taken unless the student has completed the prerequisites. You may also take electives in other programs at the University of Pennsylvania, with permission of that program. However, only graduate credits count toward the MBA degree and you may not count more than four graduate credit units taken outside Wharton toward the MBA. Elective courses that are completed with a passing grade may not be repeated. Wharton does not count coursework from other universities towards its MBA degree unless these are taken as part of an approved dual degree program or recognized exchange program. In addition, any coursework completed at the University of Pennsylvania prior to registering in the MBA program does not count towards the MBA degree, with the exception of approved dual degree programs. You will use the Course Match optimization process (see Registration, p. 12) to register for almost all Wharton electives.

Advanced Study/Independent Study Projects

Students, under the supervision of a faculty member, can register for an Independent Study Project (ISP) for course credit in order to pursue an area of special interest that may not be covered by a course in the curriculum. These courses may constitute up to a full credit unit, normally may be taken for elective credit only, and are charged according to the usual tuition policies. Permission to count an ISP towards a major must be approved in advance by the MBA advisor for the major. ISPs require instructor and departmental approval using forms available in the MBA Program Office and on the MBA Program website. Ordinarily, you may take only one independent study each semester. Permission to take more than one independent study must be received in advance from the MBA Program Office. Many academic departments maintain their own policies governing ISPs. Students are expected to be aware of and adhere to these policies.

Some instructors offer Advanced Study Projects (ASPs).

These are often experimental courses that may be on the forefront of current research. Individual departments and the MBA Program Office will advertise these seminars and their prerequisites. Registration for ASPs is usually through the Course Match application. Departments allow ASPs from their department to count toward their own major, though there are often limits to the number of ASPs that can be counted.

Registration for University Courses Outside of Wharton

The University Registrar publishes a complete listing of University courses and descriptions in the Course Register, which is available on-line at the Office of the University Registrar at <www.upenn.edu/registrar>. These courses are also searchable through PennInTouch. For detailed information on course offerings at other graduate programs of the University of Pennsylvania, you may contact the individual schools. The

department or school offering the course decides whether you are allowed to enroll and whether auditing or taking the course on a pass/fail basis are options. Grades earned in courses taken through other programs will not be factored into a student's Wharton GPA, the measure used to calculate academic honors. You can register for non-Wharton courses through the MBA Program Office. Course credit for classes outside Wharton (for example, the Law School) may not always transfer on a one-to-one basis. Students should verify credit transfer with advisors in the MBA Program Office.

LANGUAGE STUDY

You may earn credit toward the MBA degree by taking a language course at the University. Generally, degree credit is offered only for language course work completed at the advanced or business level (subject to the limit that no more than four courses may be taken outside the Wharton School). You are encouraged to learn a new language or to polish skills at any level, but introductory and intermediate classes cannot count toward the nineteen-credit unit requirement of the MBA degree. Language courses are offered by the University's School of Arts and Sciences and also through the Penn Language Center.

English Language Programs

If you are an international student you have already demonstrated proficiency in English. However, you may desire additional language training or exposure to the U.S. culture. For first-year students, the English Language Program offers the Summer Institute for International Business Students. This program immediately precedes the Wharton Pre-Term and is specifically designed to prepare you for the linguistic and academic demands of MBA study. In addition, you may enroll part-time or full-time in the Intensive Program, which is taught in eight-week sessions throughout the year. You can also take evening classes to improve your English in specific skill areas, such as report writing and oral communication. For more information contact the English Language Programs, <www.sas.upenn.edu/elp/>, 110 Fisher Bennett Hall, 3340 Walnut Street, telephone: 215.898.8681, email: elp@sas.upenn.edu.

MAJORS

All MBA students are required to fulfill the course requirements of at least one major. The program offers 18 MBA majors. Five credit units, specified by the academic department, are required for most majors. (See individual department listings for the requirements of various majors.) To have a course outside the approved list of requirements count toward your major, you need the approval of the faculty member designated as the major advisor in the relevant department. Your major(s) will be indicated on your official transcript. Upon entry to the MBA program, your major is what you have specified on your admissions application. Subsequent changes in a major should be submitted to the MBA Program Office in 300 Jon M.

Huntsman Hall. Since your interests may change, you should not be overly concerned with major requirements until the second year. Academic advisors in the MBA Program Office are available to help you plan your academic program.

Students whose interests do not conform to existing majors may petition for the approval of an individualized major. This option is available to students with specific, well-defined, interdisciplinary interests. Individualized majors require forethought and planning to complete. If you are interested in learning more about individualized majors, contact your academic advisor.

Multiple Majors

If you pursue more than one major, you must complete the requirements for each major. With permission of faculty from each department, you may count a single Advanced Study Project toward more than one major. In such cases, the ASP must contain sufficient material to satisfy the separate requirements of the respective departments. Generally, a course that is eligible for two majors may count for both majors. Additionally only two credit units may be counted from one major to another.

Joint Majors

Joint majors are designed to provide integration across multiple functional areas. These majors are supervised jointly by participating departments. The school currently offers one joint major in Marketing and Operations Management that requires 7 credit units.

COURSE LOAD

As mentioned above, the Wharton MBA degree requires 19 cu of graduate level courses, but allows up to 21 cu to be taken without incurring additional tuition charges. Thus, the typical course load in any semester is approximately 5 cu.* Note that because of the use of half-credit courses in the core curriculum and the program's policy of allowing waivers in core courses, you may need to carry unbalanced loads across semesters.

Advisors from the MBA Program Office will be a vital resource as you determine the best path for your Wharton career. They will be available during the summer months before you arrive, during Pre-Term, and during your two years to help you navigate and reach your academic and career goals.

*OVERLOAD POLICY: If you have a strong academic record, and wish to take more than 6 cu per semester, you may petition the MBA Program Office for permission. You must be in good academic standing and must demonstrate the ability to handle the extra workload. Course overloads may result in additional costs if you end up taking more than 21 cu in total. Course loads and limits differ for dual degree students; please see the section on dual degrees.

REGISTRATION

You must register for all courses through the method prescribed by the Wharton MBA Program Office. You will register for courses each semester (and simultaneously for the two quarters that constitute the semester). Assuming you do not waive, you will be registered for Fixed Core courses in your first semester. Section assignments in Teamwork and Leadership, Statistics, Microeconomics, and the first halves of the Marketing and Operations core requirements are based on your cohort and must be taken in the first semester. For the rest of the courses, both flexible core and elective, Wharton uses an optimization process for registration called Course Match. You report your preferences (or “utilities”) for course sections to the system and the system then spends a budget, refreshed each semester, to “buy” seats in the sections for which you have assigned utility. The registration process for each semester consists of a single “round” followed by an automated add/drop period. Seminars will be held during Pre-Term to explain the process and a full description of the process and tutorial videos are posted the MBA Program website.

Last Day to Drop Classes

After the close of Course Match, students have access to an online system to drop courses. Each term, the MBA Program Office will announce the last dates on which full or half semester courses may be dropped. Students may receive a “W” on the transcript and may incur other costs for certain courses dropped or added outside the Course Match process. Students who drop a course section that was “at capacity” (meaning all of the seats in that section were filled) after the final date to add a course during the term in which the section meets will be penalized for having kept another student from using that seat. A student who drop a course section after the published “final day to drop” will receive a “W” on his transcripts and the section’s credit units will be deducted from the 21 for which the student’s normal tuition will pay. Review the Academic Calendar published on the MBA Program’s SPIKE site for more details and specific dates. The last date to drop any non-Wharton courses is listed in the University timetable for that term (or available online through the Registrar’s website).

Auditing

Following the close of the automated add/drop period, you may register to audit Wharton electives if the instructor gives permission. Availability is on a first-come, first-served basis and is open to Wharton and non-Wharton students. Courses that were “at capacity” at the close of the Course Match process may not be audited. If you elect to audit a course, you may not later enroll in it for credit, either in that or any subsequent term; if you elect the course on a graded basis, you may not later enroll in it as an auditor in that or any subsequent term. Audited courses are noted on the transcript and count toward the 21 cu maximum course load but will not count towards the 19 cu graduation requirement. Audit permission forms

are available in the MBA Program Office and on the MBA Program website.

MATERIALS

Faculty outline required and optional materials for each course in the course syllabus. Some may require textbooks which are available at the Penn Bookstore (corner 36th and Walnut Streets). However, most courses also require online course packs which are available on Study.Net. Wharton Printing, 400 Steinberg Hall-Dietrich Hall, handles course pack and Study.Net distribution. Instructors also use Canvas, an online course delivery system, to provide required and optional reading assignments.

ACADEMIC ADVISING

The advising staff in the MBA Program Office will help you construct an individual program and make informed choices about majors and courses. The office also guides you through the registration process and curriculum requirements by means of periodic communications including the weekly email, information sessions, and individual advising sessions. You can make an appointment with an academic advisor using our online scheduler at <web.wharton.upenn.edu/scheduler/mbaprogramoffice>. The MBA Program Office is located at 300 Jon M. Huntsman Hall (tel: 215.898.7604; email: mbaprogram@wharton.upenn.edu).

Faculty Advisors

Academic advice is available through each of the academic departments. The departments have MBA faculty advisors who give advice about majors and course planning. The list of MBA faculty advisors for 2014-2015 appears on the following pages listing major requirements, on the inside back cover of this Guide, and on the MBA Program Office website. We also encourage you to seek academic advice from your faculty.

Tutoring

Faculty members and course teaching assistants are available for course-related assistance during their office hours. Many students also get a great deal of help in specific subjects from fellow classmates or doctoral students who have more background in these areas. Should you need more individualized assistance with a specific subject, the MBA Program Office administers a web-based service, Tutor@Wharton, to match students with peer tutors. Penn’s Weingarten Learning Resource Center <www.vpul.upenn.edu/lrc/> is also a tremendous resource for test- and note-taking strategies, time management advice, and more. Your academic advisors can help you best determine your needs and direct you to the optimal resources.

Course/Faculty Evaluations

At the end of each course, you will be asked complete an online form evaluating the course and its instructor. The results

of these evaluations are used for course planning, faculty compensation, promotion and tenure decisions, and future course assignments. Due to the importance of these evaluations for both faculty and students, we urge you to take this process very seriously each semester. Summary results for elective courses are posted on SPIKE (under the Courses tab), and are also and accessible through the Penn Course Review <penncoursereview.com>.

SUMMER SESSIONS

There are two six-week sessions offered each summer. The first session begins after spring final exams and runs through June. The second session begins in early July and runs through mid-August. You should be aware that Wharton offers relatively few courses in the summer sessions and financial aid is not available for summer studies. Summer study may also interfere with a summer internship, which is a valuable part of the MBA experience. In early April, the MBA Program Office will post the list of courses that will be offered. You may register for summer courses during the Advance Registration period in the spring semester (these dates are posted on the University Registrar and the MBA Program Office website). Summer sessions are not available to students who have graduated in the previous May, even if the credit units would fall within the 21 credit units allowed under tuition rules.

INTERNATIONAL PROGRAMS

Global Immersion Program

The Global Immersion Program (MGMT 656) exposes students to a region of the world via a one- to three-week immersion experience during winter or spring breaks or during the weeks immediately following spring final exams. Programs have recently been offered in India, China, the Middle East, and South America. The program offers students the opportunity to learn about a foreign business environment through academic lectures and visits with corporate leaders and government officials. Classroom sessions at Wharton prior to immersion prepare you for the immersion experience. A research paper is due following the travel portion of the immersion. An additional fee is required over and above the normal tuition fee. A more detailed course description is available on the MBA Program Office website under the International Opportunities link. See the Management Department section (p. 46) and the Global Immersion Program website <<http://gip.wharton.upenn.edu/index.cfm>> for an in-depth discussion of the class.

Global Consulting Practicum

The Global Consulting Practicum (MKTG 890, 1.5 cu) is a consulting organization embedded in Wharton. It is designed to bridge the academic curriculum and international business worlds as teams execute marketing and strategy engagements for fee-paying clients. Each team is comprised of five Wharton MBA students and five students from other leading interna-

tional business schools in in Africa, Australia, Chile, China, Colombia, India, Israel, Peru, Spain, Taiwan and the United Arab Emirates. GCP offers a cross-functional learning experience in Quarters 2, 3, and 4 to first year students or can serve as a capstone course for second year students. GCP is open to fulltime MBA students and Executive MBA students alike. The teams are supported by faculty and teaching assistants from management consulting and broader industries. The teams also tap into Wharton alumni and GCP friends at major consulting firms and brand-leading companies. Together, they consult for senior managers of international companies who want to enter or improve their position in the North American market. Throughout the course, students research, analyze and develop detailed strategic and tactical plans to meet their clients' goals. Each student travels to their client's home country, at no cost to the student, for one week over Winter Break to work with the client and partner team. Students collaborate with senior managers to determine the scope of the work to be done. GCP does not use Course Match for registration; students apply to get into the course. To learn more visit: <www.whartongcp.org>.

International Exchange Programs

Students enrolled in the MBA Program have the option of applying to spend a semester or, in some cases, a half-semester at an exchange school in one of 16 countries. Exchange schools are located in Australia, Brazil, Chile, China, England, France, India, Israel, Italy, Japan, the Netherlands, the Philippines, Singapore, Spain, Sweden and Thailand. During the exchange periods, which may be the summer, fall, or spring terms, students earn elective credits. These credits may not count toward core requirements. Those students wishing to count exchange credits towards a major must obtain written departmental approval before the exchange program begins. Information sessions about the international exchange program are held each Pre-Term, fall semester, and spring semester. Applications for the limited number of slots are submitted in late-October for spring and summer exchanges, and mid-February for summer exchanges (round two). Selection and designation of exchange participants is completed approximately two weeks after the application deadline and will be based on an essay submission, academic performance, and conduct becoming a representative of Wharton. Further information is available on the MBA Program Office website under the International Opportunities link.

Global Modular Courses

Global Modular Courses are intensive courses offered at a location around the world deemed relevant to the topic of the course. Students learn about the subject in a global context involving classmates, faculty and business experts from that region. Examples of GMCs from last year include "Conflict, Leadership and Change: Lessons from Rwanda," "Marketing to the Indian Consumer," and "Managing in Emerging Economies: Energy & Infrastructure in Brazil." These courses are offered during the winter and spring break and after classes end in May.

DUAL-DEGREE PROGRAMS

The University of Pennsylvania has excellent graduate programs outside of business and makes it possible for students with interdisciplinary interests to work toward two degrees simultaneously. Students enrolled in an approved dual-degree program can count up to four credit units of courses from the other program towards the MBA degree (an arrangement usually reciprocated by the other program). This arrangement applies to approved dual-degree programs only.

For each of the designated dual-degree programs, students must satisfy independent admission requirements of both the Wharton School and the other school involved. This means that the appropriate standardized tests, such as the LSAT or GRE, a completed application form, transcript, and recommendations, must be sent to the other school. Exception: MBA/MA (Lauder) is a joint program and thus MBA/MA (Lauder) students apply using the joint application and are admitted to the joint program. The approved joint and dual degree programs available include the MBA/MA programs with the Lauder Institute of Management and International Studies, and with Johns Hopkins University's Nitze School of Advanced International Studies, and the John F. Kennedy School of Government at Harvard University as well as dual-degree programs with the University's schools of Engineering [MBA/MSE (Engineering), MBA/MB (Biotechnology)], Law (MBA/JD), Medical Sciences (MBA/MD, MBA/DMD, MBA/VMD), Nursing (MBA/MSN, MBA/PhD), Design [MBA/MArch (Architecture), MBA/MLA (Landscape Architecture), MBA/MCP (City Planning), and MBA/MHP (Historic Preservation)], Arts and Sciences [MBA/MES (Environmental Studies)], and Social Policy and Practice (MBA/MSW, MBA/DSW).

Generally, candidates should apply simultaneously to both components of the dual-degree program, since credits earned in the first degree prior to matriculation do not count toward the second degree. Students should contact the appropriate admissions offices and Wharton's MBA Program Office for more information.

All dual degree students are expected to schedule a meeting with the dual degree advisor in the MBA Program Office annually to review their course plan, including any core course waiver possibilities, credit limits, and financial implications. Questions about any impact the dual degree program may have on one's financial aid package can be directed to the MBA Admissions and Financial Aid Office. Additionally, be certain to read the dual-degree information in the Financial Information section (see "Tuition Billing, Rebates, and Surcharges").

Academic Policies

The Graduate Division recognizes superior academic achievement and requires that students meet certain minimum performance standards in order to continue in the program. All students should also be aware of the *MBA Code of Ethics* that sets norms of acceptable behavior in satisfying course requirements (see page 5).

GRADING SYSTEM

1. Wharton's MBA courses are graded on a traditional letter grade system of A through F, with + and – distinctions. The letter grades carry the usual point values A=4, B=3, C=2, D=1, F=0. The +'s and –'s trisect the interval between full letter grades; i.e., a '+' grade will be 0.33 above the full grade value and a '–' grade 0.33 below. A+'s are allowed but still carry a 4.0 point value, a University of Pennsylvania policy.
2. For MBA classes with an MBA enrollment of 20 or more at the conclusion of the course, the Class MBA Grade Point Average (CMGPA) may not exceed 3.33. This upper limit CMGPA is raised by 0.04 for every enrollment count below 20. CMGPA is defined as the average point value of the grades assigned to all MBA students in a class who are governed by this grading system.
3. Faculty are required to notify the MBA Program Office of all students whose performance falls in the lowest 10% (LT) of their Wharton classes when total enrollment is greater than or equal to 20. Students who are consistently in the lowest 10% of their Wharton courses may be subject to academic discipline. See the section on Academic Performance Standards.
4. While the grades A+ through D– are relative performance indicators (i.e., they depend on how other students in the class perform), the F grade is based on an absolute performance standard in every course.
5. The F grade does not earn credit toward graduation and when students receive it in a core course, they are required to re-enroll in the course and obtain a passing grade in order to graduate unless an alternate remedy is deemed appropriate by the faculty member. The courses in which students receive F grades are counted toward the maximum course load for tuition purposes and F grades remain on the transcript.
6. Pass/Fail Option: Each student may take up to one elective credit unit on a Pass/Fail basis each semester. Pass grades will be excluded from individual GPA calculations. Fail grades will be included. Pass grades are not eligible for LT designations, but Fail grades are. The Pass/Fail option does not supersede departmental requirements for majors.

(Please note that courses which may only be taken on a Pass/Fail basis, such as MGMT 656 (GIP) and MGMT 891 (CPT), do not count toward the one credit unit limit for Pass/Fail courses.)

7. Students who withdraw from courses after the semester has begun may receive a grade of "Withdrawn" (W). The final decision on awarding a "W" rests with both the course instructor and the MBA Program Office. This grade is not included in the calculation of the GPA (see Academic Honors). Courses in which students receive a "W" after the drop deadline count towards the 21 cu maximum course load. Closed courses in which students receive a "W" may also count toward the 21 cu maximum course load.
8. Re-grade requests: Students who believe that there are errors in the grading of an assignment, exam, or any other course component may request that their instructor re-grade that component. These requests should be made as soon as possible and must comply with the requirements and time limits set by the course instructor. Students should be aware that, because of the CMGPA limit and the LT requirement, a change in one student's grade or LT status can affect another student's grade or LT status.

WHARTON GRADE DISCLOSURE POLICY

The Wharton School policy on grade disclosure states:

"Wharton students are free to disclose any aspect of their own academic transcripts to prospective employers or any other interested parties, and are encouraged to do so. Such disclosure is a legal right and it is Wharton policy to protect this right. Prospective employers are free to request from students any aspect of their academic transcripts."

COURSE ATTENDANCE

Attendance is an important aspect of the Wharton commitment. Wharton students are admitted in part because of the experiences they bring to the community and what they can add to class discussions. Without attending, learning as a collaborative process cannot exist. Accordingly, absences are only appropriate in cases of personal emergency. In addition, late arrival is disruptive to the learning environment and promptness is expected. Most courses meet twice a week during the day. Normally there are no MBA classes scheduled on Friday or in the evenings, but there are exceptions. Please make note of the start of the term and the end of the exam period as you make travel plans for the periods between terms.

Faculty are the final arbiters of who enters and remains in their classes. If a student's in-class performance has become disruptive to the class as a whole, the instructor can request that the MBA Program Office remove a student from the course roster. Faculty may also have attendance requirements. Some may require attendance in the first few classes as a necessary

condition of enrollment in the course regardless of the student's status in the registration. Some faculty may also require attendance in a minimum number of sessions to remain enrolled in the course. It is the student's responsibility to find out in advance if the course has such a requirement.

Most professors choose to base part of your course grade on attendance or participation and have a limit on the number of classes you may miss. If you find it necessary to miss a class or turn in written work late, you should seek permission from the instructor in advance. In case of illness, the professor may require a letter of confirmation from Student Health Services.

If you find yourself in a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. Employers are prohibited from requiring recruiting-related activities (e.g., interviews, events or travel) that conflict with a student's academic commitments. An employer's inflexibility on this issue is considered a violation of Wharton's recruiting policies.

EXAMINATION POLICIES

Examinations (including both midterms and finals) in Wharton courses are governed by the University policies on examinations which are published periodically in the University Almanac and can also be found in the University Pennbook. You should be aware that examinations are given on Fridays and evenings, including Thursday evenings, and you should check the examination calendar carefully.

If you have documentable special circumstances such as time conflicts between multiple exams, illness, or grave personal difficulties such as a death in the family, you should petition the MBA Program Office, which will work with the faculty in appropriate cases to find a resolution. The MBA Program Office will require documentation of your conflict as a matter of course. See the University website (PennBook) for policies covering absences resulting from religious observances. **You should never approach an instructor with a request to reschedule an exam or make a special accommodation.**

Approaching an instructor with a request to reschedule an exam or to make a special accommodation can be considered use of a dishonest method to gain unfair advantage over other students.

If you find yourself with a conflict due to your career search or recruiting activity, you should work with the MBA Career Management Office to find a resolution. Employers cannot require a student, as a condition of his or her employment candidacy, to participate in recruiting-related activities at a time that conflicts with his or her academic schedule. An employer's inflexibility on this issue is considered a violation of Wharton's recruiting policies. **A time conflict due to a job interview, a career pursuit or travel is not an appropriate reason to request accommodation on an academic commitment.**

ACADEMIC PERFORMANCE STANDARDS

Minimum academic standards are maintained in the following manner:

- (a) Probation. A student will be placed on academic probation upon reaching any one of the following conditions: (1) receive two grades of F in any grading period¹, (2) earn 2.5 credit units of Lowest 10% (LT) indicators in the first semester, (3) earn 4.0 credit units of Lowest 10% (LT) indicators in the first two semesters cumulatively, (4) earn 6.0 credit units of Lowest 10% (LT) indicators in the first three semesters cumulatively.² Once a student is on academic probation, the following steps are required:

1. Meet with an academic advisor and develop a plan to succeed which includes:
 - a. Course work for the remaining semesters
 - b. Extra-curricular activities
 - c. Career search activities
 - d. Other personal interests and needs

The effect of probation may include a limit on the number of credit units taken in a term, a limit on the number of leadership positions the student may hold, and/or the opportunity for school-funded tutoring.

This plan must be approved by an academic advisor in the MBA Program Office. Failure to develop an acceptable plan within one week of notification of probation may lead to enforced restrictions on the student such as a limit on credit units, a recommended suspension of school-sanctioned leadership roles, or a limit on career management services.

2. At the end of the grading period in which the plan is initiated, review the plan with an academic advisor to assess the student's success and the plan's viability;
3. At the end of the semester in which the plan was initiated, the student will meet with his or her academic advisor. If the student has avoided reaching the next probationary state, he/she will be taken off probation.

- (b) Dismissal. Any of the following three academic conditions will lead to dismissal from the MBA program: (1) receiving three grades of F in any grading period or in any two contiguous³ grading periods; (2) receiving two subsequent grades of F after being placed on academic probation; or (3) accumulating five credit units of the sum of lowest 10%

1. A grading period may be a quarter or a semester.

2. Note that a "semester" generally refers to fall and spring semesters and that summer terms may count if the student carries a full-time course load in that term, but are to be considered on an individual basis

3. Contiguous grading periods are those that are immediately adjacent to each other. For instance, the contiguous grading period for a full semester course would be the full semester immediately succeeding or preceding (e.g., spring follows fall; fall follows spring). The contiguous grading period for a half semester course would be the half semester immediately succeeding or preceding (e.g., Q2 is contiguous to Q1 and Q3 is contiguous to Q2; however, Q3 is not contiguous with Q1). In addition Q3 is contiguous to the fall semester. Q4 would not be contiguous to the prior fall semester, but would be contiguous to the following fall semester.

(LT) indicators and F grades that did not carry an LT in the first year or eight credit units of the said sum during the program.

- (c) Incompletes. Grades of Incomplete are given at the discretion of the instructor when, on the basis of work completed, the student is doing passing work, but some requirement of the course (e.g., exam or paper) is not completed. All Incomplete grades not removed from a student's record by the end of the first three weeks in the following regular semester shall be converted automatically to F. For example, Incompletes earned in the Spring semester must be removed by the end of the first three weeks of the Summer semester. Grades of Incomplete are changed to permanent grades by the instructor, who submits a change-of-grade upon completion of course requirements. Degrees are awarded in May, August, and December.
- (d) Students who finish any semester with grades of Incomplete shall have each Incomplete be considered as one-half of an F grade for academic standards purposes.
- (e) For the purpose of paragraphs (a) and (b) above, any Incomplete grade automatically converted to F will be presumed to be an F earned in the semester the student was registered for the course. This could cause a student to be retroactively placed on probation or be dismissed from the program.
- (f) A student who is dismissed from the program for academics or other reasons may appeal the decision by writing to the Chair of the MBA Executive Committee within seven days of receiving the dismissal letter. Upon receipt of the request, the committee will convene a hearing and give the student seven days advance notice. The student may appear in person or submit a written appeal. If the student wishes to appear, but cannot, the hearing will still be held. All Committee decisions are final. There is no further appellate body.
- (g) Students are considered to be in their first year for purposes of academic standards through the end of their first two full-time semesters in the MBA program. Lauder students and three-year JD/MBA students are considered to be in their first year through the end of their first three full-time semesters, which includes their first summer term and the subsequent two semesters of full-time residency.
- (h) The two summer sessions combined shall be considered as one semester (regardless of whether one or two sessions are attended) for the above purposes of probation or dismissal.
- (i) Except when an error is made, only those grades initially reported by instructors will be considered in determining whether a student is subject to probation or dismissal.

ACADEMIC HONORS

The Graduate Division recognizes outstanding academic performance in the MBA Program in several different ways. Academic honors are determined on the basis of the Grade Point Average (GPA) during the fall and spring semesters (summer courses are excluded from consideration for honors, with the exception of courses taken by Lauder and three-year JD/MBA students in the summer preceding Pre-Term). The GPA is determined by assigning the following numerical weights to the letter grades received in Wharton MBA courses: A=4 points, B=3 points, C=2 points, D=1 point, and F=0 points, with + (plus) increasing the full grade value by .33 and – (minus) decreasing the full grade value by .33. A+'s carry a 4.0 point value, a University of Pennsylvania policy. Courses outside the Wharton MBA program are not included in the GPA computation. Courses taken on a Pass/Fail basis are not included in the GPA calculations unless a Fail grade is earned. Thus, the GPA reflected on the transcript may not be the one used to compute academic honors as the transcript GPA reflects all coursework taken at the University of Pennsylvania. Further information on academic honors can be found on the MBA Program website under the Academic Performance tab.

1. *Director's List*: The Director's List is compiled and published each semester to recognize superior academic performance in that semester and is awarded to students who rank in the top 10% of their class based on their GPA for the semester. Eligibility for Director's List requires that the student take at least 4.5 credit units in the first semester and at least 4 credit units in each subsequent semester, 3 cu of which must be from Wharton courses taken for credit on a graded basis.
2. *First-Year Honors*: Students ranking in the top 20% of their class at the conclusion of the first-year will be awarded First-Year Honors. The ranking for First-Year Honors is based on the cumulative GPA during the first year and requires that students take at least 9 credit units during the fall and spring semesters.
3. *Isik Inselbag Scholarship*: To be eligible for the Isik Inselbag Scholarship, a grant of \$7,500, a student must have a first year GPA that places him or her among the top students in the class. In addition, the Inselbag Scholar must exemplify the spirit of Wharton through leadership, teamwork, scholarship, and service, as determined by the Vice Dean of the Graduate Division with inputs from the faculty and Graduate Division directors. Professor Inselbag, for whom the scholarship is named, served as Vice Dean and Director of the Graduate Division during 1992-95 and taught in the Finance Department for over twenty years.
4. *William G. McGowan Fellow*: Wharton selects one rising second year student as a McGowan Fellow each year. This student must have achieved an academic standing in the top five percent of his or her first year class and exemplified

leadership in current or former activities. Students must apply and complete an essay provided by the McGowan Fund. Financial need is a factor. The nominee receives one full year's tuition, attends the annual conference for McGowan Fellows and Alumni, and is assigned a respected business leader as a mentor.

5. *Ford Fellowship*: The student (or students, in the case of a tie) who achieves the highest academic performance during the first-year of the MBA program is awarded the Ford Fellowship, a grant of \$10,000. Academic performance for the Ford Fellowship is measured by the GPA during the first year and requires that the student take at least 9 credit units during the first year.
6. *Graduation with Honors*: Students who rank in the top 20% of their class at graduation are awarded Graduation with Honors. The ranking for Graduation with Honors is based on the cumulative GPA earned during the program.
7. *Palmer Scholars*: Students graduating in the top 5% percent of the class are designated Palmer Scholars. Class rank is based on the student's cumulative GPA earned during their two years at Wharton.

Students with any F grades are ineligible for academic honors. For the Director's List, this applies only to the semester under consideration. The University notes all honors on the official transcript.

LEAVES OF ABSENCE

If you need to interrupt the normal two-year course of study in the MBA Program, you must request a leave of absence by writing a letter to the Director of the MBA Program stating the reason for the request and the length of the expected absence. Depending on the circumstances, a leave of absence may be granted for up to one year. The Graduate Division only grants leaves to students in good academic standing. The Division handles requests for extension of the leave on a case-by-case basis. The maximum total duration for a leave of absence from the MBA Program is five years.

TRANSCRIPTS

You may obtain hardcopy or electronic copies of your transcripts by completing a Transcript Request Form which is available at the Registrar's Office, completing an online form, or by submitting a request in writing to:

Office of the University Registrar
University of Pennsylvania
221 Franklin Building
3451 Walnut Street
Philadelphia, PA 19104-6291

215.898.6411
www.upenn.edu/registrar/student-services/transcripts.html

You can also order transcripts online. The charge for official copies is \$10.00 per copy; allow 2-3 working days for processing. Same day service costs \$15.00. There are additional costs for express and international shipping. All students can review their unofficial transcripts in Penn InTouch. Transcript requests by email, fax or phone are not accepted. The University will not release transcripts and/or grades if you have not fulfilled all financial obligations to the University. Academic transcripts from your undergraduate programs, which were submitted for admission to Wharton, become a part of your permanent academic record and are not returned. For additional information about transcripts, see the registrar on the University website.

MBA Departments, Majors, and Courses

Core Courses. 20

MBA Departments and Other Areas of Study

Accounting.	26
Business Economics and Public Policy	28
Environmental and Risk Management	32
Finance	34
Health Care Management	38
Legal Studies and Business Ethics*	43
Management	46
Marketing	58
Marketing and Operations (Joint Major)	63
Operations and Information Management	64
Real Estate	70
Statistics	73
Wharton Communication Program*	77

*Other area of study, not an MBA major

PLEASE NOTE: Courses listed in this guide represent courses expected to be offered during the 2014-2015 academic year. While the School endeavors to offer as many of the courses as possible, not all courses are offered every semester, and some courses may not be offered due to staff availability. It is important to check with individual departments prior to scheduling classes to determine the availability of courses for any given semester.

Core Courses

Your core experience begins with MGMT 610: Foundations of Teamwork and Leadership. The fall semester will include fixed core that will be taken at specific times with your cohort. Flexible core can be scheduled according to your interests and the semesters in which the courses will be taught. You will have options to complete some core requirements and they are listed here.

ACCOUNTING

Either ACCT 611, ACCT 612 or ACCT 613

ACCT 611

Fundamentals of Financial Accounting

Description: The objective of this course is to provide an understanding of financial accounting fundamentals for prospective consumers of corporate financial information, such as managers, stockholders, financial analysts, and creditors. The course focuses on understanding how economic events like corporate investments, financing transactions and operating activities are recorded in the three main financial statements (i.e., the income statement, balance sheet, and statement of cash flows). Along the way, students will develop the technical skills needed to analyze corporate financial statements and disclosures for use in financial analysis, and to interpret how accounting standards and managerial incentives affect the financial reporting process. This course is recommended for students who want a more in-depth overview of the financial accounting required for understanding firm performance and potential future risks through analysis of reported financial information, such as students intending to go into security analysis and investment banking.

ACCT 612 (.5 cu)

Accelerated Financial Accounting

Description: The intended audience for this course is students with prior knowledge of financial accounting who understand: (1) the recording of economic transactions in the accounting records; (2) the basic financial statements that summarize a firm's economic transactions (the balance sheet, the income statement and the statement of cash flows) and (3) the fundamental concepts needed to prepare or understand published financial statements (e.g. use of accrual accounting). Exploiting prior knowledge, the course aims in six weeks to help students become effective users of financial statements.

ACCT 613

Fundamentals of Financial and Managerial Accounting

Description: This course provides an introduction to both financial and managerial accounting, and emphasizes the analysis and evaluation of accounting information as part of the managerial processes of planning, decision-making, and control. A

large aspect of the course covers the fundamentals of financial accounting. The objective is to provide a basic overview of financial accounting, including basic accounting concepts and principles, as well as the structure of the income statement, balance sheet, and statement of cash flows. The course also introduces elements of managerial accounting and emphasizes the development and use of accounting information for internal decisions. Topics include cost behavior and analysis, product and service costing, and relevant costs for internal decision-making. This course is recommended for students who will be using accounting information for managing manufacturing and service operations, controlling costs, and making strategic decisions, as well as those going into general consulting or thinking of starting their own businesses.

FINANCE

Either FNCE 611, FNCE 612, or FNCE 614

Either FNCE 613 or FNCE 615

FNCE 611

Corporate Finance

Description: This course serves as an introduction to business finance (corporate financial management and investments) for both non-majors and majors preparing for upper-level course work. The primary objective is to provide a framework, concepts, and tools for analyzing financial decisions based on fundamental principles of modern financial theory. The approach is rigorous and analytical. Topics covered include discounted cash flow techniques, corporate capital budgeting and valuation, investment decisions under uncertainty, capital asset pricing, options, and market efficiency. The course will also analyze corporate financial policy, including capital structure, cost of capital, dividend policy, and related issues. Additional topics will differ, according to individual instructors.

Format: Primarily lecture, one or two midterm exams and final. Additional assignments at discretion of instructor; they may include cases and homework problems.

Prerequisites: ACCT 611/612/613, MGEC 611/612 and STAT 613 prerequisite or concurrent.

FNCE 612 (.5 cu)

Accelerated Corporate Finance

Description: This course is intended for people with prior knowledge of financial analysis or with strong analytical backgrounds. It assumes that students are completely familiar with the material covered in the pre-term placement preparation course, FNCE 604. As a result, it is only available to those students who were undergraduate Finance majors or to those who successfully passed the FNCE 612 placement exam at the end of Pre-Term. The course forms the foundation for subsequent courses in corporate finance, security analysis, investments, and speculative markets. Its purpose is to develop a framework for analyzing a firm's investment and financing decisions and will provide an introduction to capital budgeting techniques under uncertainty, asset valuation, the operation and efficiency of

capital markets, and the optimal capital structure of the firm. Furthermore, the course will exploit the students' prior knowledge and/or quantitative backgrounds (as demonstrated in the FNCE 612 placement exam), and will cover all the topics of a typical semester-long finance introduction class in six weeks.

Format: Lecture, midterm, final exam and regular homework assignments.

Prerequisites: FNCE 604 and successful completion of FNCE 612 placement exam. Since the emphasis is on the fundamental concepts underlying modern finance, the approach will be analytical and rigorous, and requires some familiarity with accounting, mathematical and statistical tools.

FNCE 613

Macroeconomics and the Global Economic Environment

Description: This course is required of all students except those who pass the waiver examination or choose to take the half-semester course, FNCE 615. The purpose of FNCE 613 is to train the students to think systematically about the current state of the economy and macroeconomic policy, and to be able to evaluate the economic environment within which business and financial decisions are made. The course emphasizes the use of economic theory to understand the workings of financial markets and the operation and impact of government policies. Specifically, the course studies the determinants of the level of national income, employment, investment, interest rates, the supply of money, inflation, exchange rates, and the formulation and operation of stabilization policies.

Format: Classroom lectures and discussion—one or two mid-term exams and a final exam. Additional assignments at discretion of instructor.

Prerequisites: Introductory knowledge of economics is strongly recommended, either through a college-level economics course or private reading. The course materials, while starting at a basic level, rapidly progress so that the bulk of the analysis is conducted at an intermediate to advanced level; the range of topics covered is also quite extensive. Suggested texts for private study: (1) Parkin, *Economics*, Addison-Wesley; (2) Samuelson and Nordhaus, *Economics*, McGraw-Hill, (3) Mankiw, *Principles of Macroeconomics*, Dryden. You should emphasize the macroeconomic parts of these books, but the rudimentary parts of microeconomic concepts of supply and demand, price determination, and market clearing, etc. should also be covered.

FNCE 614 (.5 cu)

Corporate Finance

Description: This course serves as an introduction to corporate investments for non-majors. The primary objective is to provide a framework, concepts, and tools for analyzing financial decisions based on fundamental principles of modern financial theory. The approach is rigorous and analytical. Topics covered include discounted cash flow techniques, corporate capital budgeting and valuation, investment decisions under uncertainty, and capital asset pricing. This course will not cover the following topics included in FNCE 611, the full-semester

Corporate Finance course: market efficiency, corporate financial policy (including capital structure, cost of capital, dividend policy, and related issues), and option.

Please note that any student who contemplates majoring in Finance should be aware that this course does not count in any way toward the Finance major.

Format: Primarily lecture. Grading based on problem sets, one or two cases, and a final exam.

Prerequisites: ACCT 611/ACCT 612/ACCT 613, MGE 611/612 and STAT 613 prerequisite or concurrent.

FNCE 615 (.5 cu)

Macroeconomics and the Global Economic Environment

Description: FNCE 615 is a half-semester overview of macroeconomics. It is intended strictly for non-Finance majors. Any student who contemplates majoring in Finance should be aware that this course does not count in any way toward the Finance major. This course is new to the curriculum and is still under design. It will likely begin with the national income and products, which are the basic source of data on important macroeconomic data such as GDP, consumption, investment, exports and imports as well as prices. The course will also discuss other major sources of macroeconomic data, such as the monthly employment report and the consumer price index. These data descriptions will provide students with a basic level of macroeconomic literacy and will serve as the basis for analyzing specific topics and issues in macroeconomics. At of this writing, the set of topics and issues is still to be determined, but students should be aware that the half-semester format of the course will limit the breadth and depth of topics.

LEGAL STUDIES

Either LGST 611 or LGST 612 (*one of these options must be completed; cannot be waived*)

LGST 611 (.5 cu)

Responsibility in Global Management

Description: This course uses the global business context to introduce students to important legal and ethical challenges they will face as business leaders, with a particular focus on large, publicly traded, multinational corporations. Cases and materials will address how business leaders, constrained by law and motivated to act responsibly in a global context, should analyze relevant variables to make wise decisions. Topics will include an introduction to the basic theoretical frameworks used in the analysis of ethical issues, such as right-based, consequentialist-based, and virtue-based reasoning, and conflicting interpretations of corporate responsibility. The course will include materials that introduce students to basic legal (common law vs. civil law) and normative (human rights) regimes at work in the global economy as well as sensitize them to the role of local cultural traditions in global business activity.

Topics may also include such issues as comparative forms of corporate governance, bribery and corruption in global

markets, human rights issues, diverse legal compliance systems, corporate responses to global poverty, global environmental responsibilities, and challenges arising when companies face conflicting ethical demands between home and local, host country mores. The pedagogy emphasizes globalized cases, exercises, and theoretical materials from the fields of legal studies, business ethics and social responsibility.

Format: Class participation, midterm and final exams.

LGST 612 (.5 cu)

Responsibility in Professional Services

Description: This course uses a professional services context to introduce students to important ethical and legal challenges they will face as leaders in such fields as financial services, health care, real estate, and consulting. However, the scope is not limited to these contexts and will be equally useful to students preparing for any managerial position that is likely to place them in advisory and/or agency roles owing duties to employers, clients, suppliers, and customers. Although coverage will vary depending on instructor, the focus of the course will be on developing skills in ethical and legal analyses that can assist managers as they make both individual-level and firm-level decisions about the responsible courses of action when duties, loyalties, rules, norms, and interests are in conflict. For example, the rules of insider trading may form the basis for lessons in some sections.

Group assignments, role-plays, and case studies may, at the instructors discretion, be used to help illustrate the basic theoretical frameworks. The type of thematic question the course may address is whether management can or should be considered a “profession” in the ways that law and medicine are. In some sections, students will form industry groups representing different service sectors. These groups will research and present critiques of existing ethical codes as well as draft their own individual personal codes of conduct based on course materials and industry norms, as well as personal and/or religious values.

Format: class participation, quiz, group report, and final paper.

MICROECONOMICS

MGEC 611 and MGEC 612

MGEC 611 (.5 cu)

Microeconomics for Managers: Foundations

Description: This course establishes the economic foundations for understanding business decision-making. The course will cover consumer theory and market demand under full information, production theory and economic (and opportunity) cost, pricing strategies in competitive and monopoly markets, sophisticated pricing strategies with segmented markets using price discrimination and bundling, sophisticated pricing strategies of a single consumer using two-part tariffs, and government intervention in markets. Students are expected to have mastered these materials before enrolling in the second quarter course: Microeconomics for Managers: Advanced Applications (MGEC 612).

MGEC 612 (.5 cu)

Microeconomics for Managers:

Advanced Applications

Description: This course will cover the economic foundations of business strategy and decision-making in market environments with less than full information. Topics include game theoretic approach to market strategies with application to market creation and protection, auction theory and application, strategies for managing risk including the value of information, moral hazard and principle-agent theory with application to incentive contracts, asymmetric information and signaling strategies, public goods and externalities within and between firms, and the management of interdependencies through cooperative behavior or politics.

MANAGEMENT

MGMT 610 (*cannot be waived*).

Either MGMT 611 or MGMT 612 (*one of these options must be completed; cannot be waived*)

MGMT 610 (.5 cu)

Foundations of Teamwork and Leadership

Description: At every level of an organization, teamwork and leadership are required for organizational success. Teamwork and leadership have always been critical to society, but they are particularly significant in this era of heightened uncertainty, restructuring, and change. The tenor of leadership has changed as well. Many organizations are flattening their hierarchies and building work teams, with “command and control” leadership giving way to facilitation and empowerment. This course focuses on developing your knowledge and skill set for teamwork and leadership.

Format: This course is meant to be an intense immersion experience that draws strongly on the pedagogy of the “Wharton Teamwork and Leadership Simulation,” a team-based, highly interactive, simulation that was designed specifically to allow you to experience the core concepts you will learn in this class. The simulation is based on research evidence and on specific business cases and outcomes. The simulation is strongly interwoven with your classroom experience and cutting edge research and theory to give you a rich understanding of teamwork and leadership principles.

MGMT 611

Managing the Established Enterprise

Description: The management of large, established enterprises creates a range of multi-faceted challenges for the general manager. A general manager needs to understand the internal workings of a firm, how to assess and create a strategy, and how to take into account increasing globalization. While these issues are distinct, they are very much intertwined. As a result, this course will provide you with an integrated view of these challenges and show you that successful management in the 21st century requires a combination of insights drawn from economics, sociology, psychology and political economy. The first

major part of the course develops a set of analytical frameworks that enable you to explain performance differences among firms and that provide a structure for strategic decisions to enhance firms' future competitive positions. The second part of the course highlights the role of networks of cooperation, group conflicts, systems of power and influence, career paths, and reward systems on individual incentives, group processes, and the organizational performance. The third part of the course explores the variation in strategies deployed by multinational organizations who seek to either adapt to persistent cross-national institutional differences or exploit them to generate value in their global strategies.

MGMT 612

Managing the Emerging Enterprise

Description: The management of emerging enterprises — new, small, entrepreneurial organizations — creates a range of multifaceted challenges for the entrepreneur, whether the founder (and founding team) or the first generation of management. Establishing an emerging organization's unique business model or value proposition (not to mention its survival) is often the overriding preoccupation, but even in a new, small organization, managers need to understand how to develop the internal workings of a new firm, how to assess and create a strategy, and how to take into account ever-increasing globalization. While these issues are distinct, they are very much intertwined. As a result, this course will provide you with an integrated view of these challenges and show you that successful management in the 21st century requires a combination of insights drawn from economics, sociology, psychology and political economy. The course has three main parts. The first part deals with fundamental issues of strategy, examining issues central to the long- and short-term competitive position of an enterprise. The second part covers how to develop human resource systems that achieve competitive advantage through the management of people. The third part of the course stresses the deep and persistent cross-national differences in economic, political and social institutions that affect organizations.

MARKETING

MKTG 611 and either MKTG 612 or MKTG 613

MKTG 611 (.5 cu)

Marketing Management

Description: This course addresses how to design and implement the best combination of marketing efforts to carry out a firm's strategy in its target markets. Specifically, this course seeks to develop the student's (1) understanding of how the firm can benefit by creating and delivering value to its customers, and stakeholders, and (2) skills in applying the analytical concepts and tools of marketing to such decisions as segmentation and targeting, branding, pricing, distribution, and promotion. The course uses lectures and case discussions, case write-ups, student presentations, and a comprehensive final examination to achieve these objectives.

MKTG 612 (.5 cu)

Dynamic Marketing Strategy

Description: Building upon MKTG 611, the goal of this course is to develop skills in formulating and implementing marketing strategies for brands and businesses. The course will focus on issues such as the selection of which businesses and segments to compete in, how to allocate resources across businesses, segments, and elements of the marketing mix, as well as other significant strategic issues facing today's managers in a dynamic competitive environment.

A central theme of the course is that the answer to these strategic problems varies over time depending on the stage of the product life cycle at which marketing decisions are being made. As such, the PLC serves as the central organizing vehicle of the course. We will explore such issues as how to design optimal strategies for the launch of new products and services that arise during the introductory phase, how to maximize the acceleration of revenue during the growth phase, how to sustain and extend profitability during the mature phase, and how to manage a business during the inevitable decline phase.

Prerequisites: MKTG 611.

MKTG 613 (.5 cu)

Strategic Marketing Simulation

Description: Building upon MKTG 611, MKTG 613 is an intensive immersion course designed to develop skills in formulating and implementing marketing strategies for brands and businesses. The central activity will be participation in a realistic integrative product management simulation named SABRE. In SABRE, students will form management teams that oversee all critical aspects of modern product management: the design and marketing of new products, advertising budgeting and design, sales force sizing and allocation, and production planning. As in the real world, teams will compete for profitability, and the success that each team has in achieving this goal will be a major driver of the class assessment.

The SABRE simulation is used to convey the two foci of learning in the course: the changing nature of strategic problems and their optimal solutions as industries progress through the product life cycle, and exposure to the latest analytic tools for solving these problems. Specifically, SABRE management teams will receive training in both how to make optimal use of marketing research information to reduce uncertainty in product design and positioning, as well as decision support models to guide resource allocation.

Prerequisites: MKTG 611.

OPERATIONS AND INFORMATION MANAGEMENT

OPIM 611 and one of the following:

OPIM 612, OPIM 613, OPIM 614, or OPIM 615 (*one of these options must be completed; cannot be waived*)

OPIM 611 (.5 cu)**Managing the Productive Core of the Firm: Quality and Productivity**

Description: Matching supply with demand is an enormous challenge for firms: excess supply is too costly, inadequate supply irritates customers. In the course, we will explore how firms can better organize their operations so that they more effectively align their supply with the demand for their products and services. Throughout the course, we illustrate mathematical analysis applied to real operational challenges — we seek rigor and relevance. Our aim is to provide both tactical knowledge and high-level insights needed by general managers and management consultants. We will demonstrate that companies can use (and have used) the principles from this course to significantly enhance their competitiveness.

OPIM 612 (.5 cu)**Managing the Productive Core: Business Analytics**

Description: This is a course on business analytics tools and their application to management problems. Its main topics are optimization, decision making under uncertainty, and simulation. The emphasis is on business analytics tools that are widely used in diverse industries and functional areas, including operations, finance, accounting, and marketing. The course has a twofold purpose. First, it seeks to introduce you to simple business analytics models and ideas that provide powerful (and often surprising) qualitative insights about a large spectrum of managerial problems. Second, it aims to give you a feeling for the kinds of problems that can be tackled quantitatively, the methods and software available for doing so, and the difficulties involved in gathering the relevant data. Our ultimate ambition is to have an impact on the way you think about the surrounding world — even if you do not explicitly use any business analytics tools in the future!

OPIM 613 (.5 cu)**Managing the Productive Core of the Firm: Information Technology and Business Transformation**

Description: Information technology has transformed many industries, including media, financial services, and retailing, among others. These technologies have changed not only how we produce services (e.g., outsourcing and offshoring, and their newest extension, cloud computing) but what services we offer (virtual experiences, online advertising, long tail products and services, and social networking). The purpose of this course is to improve understanding of how information technologies enable transformation of business models within existing organizations as well as the development of completely new business models and new organizational forms. The course will serve as an introductory course on information technologies and will

serve as a foundation on which students can explore more advanced technology concepts. There are no pre-requisites and all students are welcome to register for the course.

OPIM 614 (.5 cu)**Managing the Productive Core of the Firm: Innovation**

Description: The course is first and foremost an intensive, integrative, project course in which student teams create one or more real businesses. Some businesses spun out of the course and now managed by alumni include Terrapass Inc. and Smatchy Inc. The project experience is an exciting context in which to learn key tools and fundamentals useful in innovation, problem solving, and design. Examples of these tools and fundamentals are: problem definition, identification of opportunities, generating alternatives, selecting among alternatives, principles of data graphics, and managing innovation pipelines. The course requires a commitment of at least 10 hours of work outside of class and comfort working on unstructured, interdisciplinary problems. Students with a strong interest in innovation and entrepreneurship are particularly encouraged to enroll. Please read carefully the syllabus posted on-line before registering for this course.

OPIM 615 (.5 cu)**Managing the Productive Core of the Firm: Operations Strategy**

Description: Matching supply with demand is a primary challenge for a firm: excess supply is too costly, inadequate supply irritates customers. Matching supply to demand is easiest when a firm has a flexible supply process, but flexibility is generally expensive. In this course we will 1) learn how to assess the appropriate level of supply flexibility for a given industry and 2) explore strategies for economically increasing a firm's supply flexibility. While tactical models and decisions are part of this course, the emphasis is on the qualitative insights needed by general managers or management consultants. We will demonstrate that companies can use (and have used) the principles from this course to significantly enhance their competitiveness.

Format: Lectures, cases, class discussions.

STATISTICS**STAT 613****Regression Analysis for Business**

Description: This course provides the fundamental methods of statistical analysis, the art and science of extracting information from data. The course will begin with a focus on the basic elements of exploratory data analysis, probability theory and statistic inference. With this as a foundation, it will proceed to explore the use of the key statistical methodology known as regression analysis for solving business problems, such as the prediction of future sales and the response of the market to price changes. The use of regression diagnostics and various graphical displays supplement the basic numerical summaries and provide insight into the validity of the models. Specific important topics

covered include least squares estimation, residuals and outliers, tests and confidence intervals, correlation and autocorrelation, collinearity, and randomization. The presentation relies upon computer software for most of the needed calculations, and the resulting style focuses on construction of models, interpretation of results, and critical evaluation of assumptions.

Format: Lecture and discussion, assigned exercises, data analysis project, quizzes and a final exam.

Prerequisites: The basic mathematical skills covered in Mathematics for Business.

STAT 621 (.5 cu)

Accelerated Regression Analysis for Business

Description: STAT 621 is intended for students with recent, practical knowledge of the use of regression analysis in the context of business applications. This course covers the material of STAT 613, but omits the foundations to focus on regression modeling. The course reviews statistical hypothesis testing and confidence intervals for the sake of standardizing terminology and introducing software, and then moves into regression modeling. The pace presumes recent exposure to both the theory and practice of regression and will not be accommodating to students who have not seen or used these methods previously. The interpretation of regression models within the context of applications will be stressed, presuming knowledge of the underlying assumptions and derivations. The scope of regression modeling that is covered includes multiple regression analysis with categorical effects, regression diagnostic procedures, interactions, and time series structure. The presentation of the course relies on computer software that will be introduced in the initial lectures.

Format: Lecture and discussion, assigned exercises, data analysis, quizzes, and a final exam.

Prerequisites: Recent exposure to the theory and practice of regression modeling.

WHARTON COMMUNICATION PROGRAM

WHCP 611 and WHCP 620 (*neither can be waived*) and one of the following: WHCP 612 or WHCP 615 (*one of these options must be completed; cannot be waived*)

WHCP 611 (.25 cu)

Management Communication

Description: WHCP 611 is the first course of the Management Communication Core Requirement. In this seminar-style course, students learn the essentials of persuasion, gain confidence in public speaking, and receive individualized feedback from instructors and second-year TAs: Wharton-Omnicom Communication Fellows. The course enables students to develop and demonstrate effective, business-oriented communication skills, regardless of their skill level when they start the course. Students may select a section designed specifically for non-native English speakers.

WHCP 620 (0 cu)

MBA Writing Requirement

Description: The Fall Writing Requirement, WHCP 620, is a pass/fail, non-credit course required for graduation. The course objectives are to teach clear, concise, persuasive writing.

In the spring of Year 1 students choose one of the following courses:

WHCP 612 (.25 cu)

Advanced Persuasive Speaking

Description: Instructs students in the theory and practice of advanced persuasion. The course requires an additional "Speaking Under Pressure" module that offers options such as speaking in a simulated TV studio.

WHCP 615 (.25 cu)

Communication Challenges for Entrepreneurs

Description: Focuses on the unique challenges entrepreneurs face when communicating their business plan.

See the section on Wharton Communication Program for a full description of all communication courses.

Accounting

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Accounting website at: <<http://accounting.wharton.upenn.edu/>>.

The Accounting major helps students acquire the skills to measure and communicate an organization's economic activities. Accounting is the formal system of collecting, organizing, and reporting the financial data used to make economic decisions. The data shed light on current financial status and liquidity, as well as past profitability and funds-generating capability. Its users include corporate shareholders, lenders, management, employees, research organizations, and taxing and regulatory agencies.

Many different types of economic decisions require accounting data. One major use of accounting data is to inform outsiders (interested people who do not have direct access to corporate records) of the firm's economic status and progress. By contrast, the firm's management requires data that will aid in controlling operations and evaluating performance. Outside agencies often collect accounting data for tax collection and other social and economic policy purposes.

The accounting major at the Wharton School focuses on the user of accounting data. Most courses in the department stress concepts, procedures and applications with a view to the student understanding how accounting information is generated and its reliability in analysis. Most accounting majors are preparing for careers in which accounting data are used extensively. The department's flexible curriculum also allows interested students to take the required courses toward certification as a CPA (certified public accountant) or CMA (chartered management accountant). As the specific course requirements for these certificates vary from state to state and usually exceed the minimum requirements for a Wharton MBA major, students who seek professional certification should seek the advice of the Accounting Department adviser as early as possible to plan their programs.

Requirements for the Major:

The specific courses that are required for an accounting major are designated by the department and cannot include the introductory core courses, ACCT 611/612 or ACCT 613.

Each accounting major is required to take one course in financial accounting (currently ACCT 742). In addition, a major is required to take three additional credit units of graduate courses offered by the department. **Courses taken to satisfy the accounting major cannot be taken on a pass/fail basis.**

From time to time an individual student wishes to pursue a course of study that extends beyond the coursework offered by the department. In that case, the student will elect an independent study course. A maximum of one credit unit of independent study may be counted toward the accounting

major, but only when both of the following conditions have been satisfied:

1. The student has obtained the agreement of an Accounting Department faculty member to supervise the independent study.
2. Written approval of the department Chair is received, indicating that the proposed project does represent: (1) a quantity and quality of work equivalent to a full semester in class course, and (2) the subject matter is indeed advanced work not covered in regularly scheduled Accounting Department courses.
3. FNCE 728 cannot be presented for major credit in addition to an independent study.

Summary Requirements for the Major:

NOTE: Core courses ACCT 611/612 and ACCT 613 do not count toward the major, but are prerequisite to all other courses in the department.

The equivalent of four credit units from the following:*

ACCT 706	Cost Management (.5 cu)**
ACCT 718	Auditing
ACCT 742	Problems in Financial Reporting
ACCT 743	Accounting for Mergers, Acquisitions, and Complex Financial Structures
ACCT 747	Financial Statement and Disclosure Analysis
ACCT 897	Taxes and Business Strategy
FNCE 728	Corporate Valuation

*Choose any four credit units from the list. As described above, under approved circumstances, an independent study within the Accounting Department may be substituted for one of the four course units.

**Half-credit courses count as .5 cu toward requirements.

MBA advisor: Brian Bushee (telephone: 215.898.4872; email: bushee@wharton.upenn.edu).

COURSE DESCRIPTIONS

ACCT 611

Fundamentals of Financial Accounting

Description: See Core Section.

ACCT 612 (.5 cu)

Accelerated Financial Accounting

Description: See Core Section.

ACCT 613

Fundamentals of Financial and Managerial Accounting

Description: See Core Section.

ACCT 703**Cost Accounting**

Description: Deals with the application of statistical tools and decision models to accounting data for the purpose of facilitating managerial control.

Prerequisites: ACCT 611/612/613 or waiver.

ACCT 706**Cost Management**

Description: This course covers managerial accounting and cost management practices that can be strategically applied across the various functions of a business organization to improve organizational performance. The course emphasizes the methods available to measure and evaluate costs for decision-making and performance evaluation purposes. It reviews a number of cost management issues relating to the design and implementation of strategic, marketing, value analysis, and other management models in modern firms; and identifies major contemporary issues in managerial accounting and financial decision-making. A variety of case studies in different industries and decision contexts are used to examine the application of these concepts.

Format: Lecture, case studies, class participation, written group cases, and exams.

Prerequisites: ACCT 611/612/613 or waiver.

ACCT 718**Auditing**

Description: This course includes a consideration of the role of the auditor, the organization of the accounting profession, and the current audit environment. It introduces the student to generally accepted auditing standards, professional ethics, and legal liability. A conceptual theory of auditing is discussed and practical examples of auditing techniques and work programs are used to illustrate the application of the theory. The course also covers the auditor's reporting standards and uses case studies and professional journal articles as bases for discussion and analysis.

Format: Lecture.

Prerequisites: ACCT 611/612/613 or waiver.

ACCT 742**Problems in Financial Reporting**

Description: This intensive one-semester course focuses on how to extract and interpret information in financial statements. The course adopts a user perspective of accounting by illustrating several specific accounting issues in a decision context.

Format: Discussions, lectures on advanced topics, problems and cases. Daily preparation of cases and reading assignments. Comprehensive final exam. Some instructors may choose to grade homework, class participation, and case write-ups.

Prerequisites: ACCT 611/612/613 completed or waiver. ACCT 742 cannot be taken concurrently with ACCT 611/612/613.

ACCT 743**Accounting for Mergers, Acquisitions and Complex Financial Structures**

Description: This class studies how complex financial structures account for their activities. Primary emphasis is on the application of purchase accounting for mergers and acquisitions, the equity method for investments, and preparing and interpreting consolidated financial statements. Other topics covered include translations and remeasurements for non-domestic investments, and earnings per share calculations for complex financial structures. Tax considerations and acquisition strategies are of only peripheral interest in this class, and students who are concerned primarily with those topics are advised to seek a different elective.

Format: Lectures and quizzes, class participation, and satisfactory performance on quizzes.

Prerequisites: ACCT 611/612/613 or waiver.

ACCT 747x**Financial Statement and Disclosure Analysis**

Description: This course focuses on the analysis of financial communications between corporate managers and outsiders, including the required financial statements, voluntary disclosures, and interactions with investors, analysts, and the media. The course draws on the findings of recent academic research to discuss a number of techniques that outsiders can use to detect potential bias or aggressiveness in financial reporting.

Format: Case discussions and lectures. Comprehensive final exam, group project, case write-ups, and class participation.

Prerequisites: ACCT 611/612/613 completed or waiver.

ACCT 897**Taxes and Business Strategy**

Description: The objective of this course is to develop a framework for understanding how taxes affect business decisions. Traditional finance and strategy courses do not consider the role of taxes. Similarly, traditional tax courses often ignore the richness of the decision context in which tax factors operate. The key themes of the framework — all parties, all taxes and all costs — are applied to decision contexts such as investments, compensation, organizational form, regulated industries, financial instruments, tax-sheltered investments, mergers and acquisitions, multinational, and multistate. The ultimate goal is to provide a new approach to thinking about taxes (and all forms of government intervention) that will be valuable even as laws and governments change.

Format: Lecture and case discussions.

Prerequisites: ACCT 611/612/613 or waiver and FNCE 611/612.

Business Economics and Public Policy

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Business Economics and Public Policy website at: <http://bepp.wharton.upenn.edu/>.

The Business Economics and Public Policy Department is committed to teaching and research in the areas of deregulation and privatization, technology, public and urban finance, insurance and risk management, and international industrial policy. The department offers two majors and participates in a cross-functional major in Environmental and Risk Management.

BUSINESS ECONOMICS AND PUBLIC POLICY

The Business Economics and Public Policy major equips future business leaders with the tools to analyze incentives and policies of firms, governments, and consumers. Whether a firm is engaged in real estate development, bringing new products to market, developing new technologies, exporting products, addressing environmental issues, or providing infrastructure services, it will need to be familiar with the incentives of competitors and the role of government so that it can understand which actions it can take, and how other actors will respond.

The major enables students to formulate policy with the best techniques offered by both private and public sector research. The tools will be useful across a range of careers, particularly those that involve developing economies or regulated industries. It helps future private managers to understand, react to, and help form the environment in which they will operate.

The department's courses focus on understanding the implications for the business world of increased globalization; technological change, such as the internet and e-commerce; the increasing role of intellectual property rights; and the public demand for greater government efficiency. These new developments have resulted in privatization, deregulation, and changes in health, antitrust, and environmental policy — all of which critically affect business interests.

Requirements for the Major

Four credit units in business economics and public policy (BEPP) are required. Students may seek approval to have one of the four credit units be from other departments of the Wharton School or in other Schools of the University. Courses in health care, energy, the environment, taxation, and international finance are some of those that have been approved for the major in the past. An advanced study project (BEPP 893) may be taken as one of the four credit units. **Pass/Fail elective courses cannot be counted toward the major.**

MBA Advisor: Judd Kessler (telephone: 215.898.7696; email: juddk@wharton.upenn.edu)

INSURANCE AND RISK MANAGEMENT

By majoring in insurance and risk management, an MBA student may fuse general management education with specialized expertise. This major enables the student to gain a thorough understanding of risk management and insurance theory and practice. Students are exposed to the legal, actuarial, financial, and economic principles underlying corporate and public sector risk management, with specific applications to individual, business, and social problems. Risk Management and Insurance theory, functions, and strategies are investigated against a background of accelerating change in the legal, regulatory, and economic environment.

Career opportunities for MBA graduates with a major in insurance and risk management include positions in many types of consulting, risk management, employee benefits management, insurance company management, and personal financial planning. Risk management involves financial and statistical analysis of risk and insurance-related problems that confront businesses and public sector managers. Positions are available in risk management departments of large corporations, risk management consulting firms, insurance brokerage firms, and special risk divisions of insurance companies that deal with large corporate risks as well as government and non-profit organizations around the world. The increasing importance of employee benefits in overall compensation management requires individuals with education in group insurance, pension plans, and deferred compensation arrangements. Positions are available in corporate benefit departments, employee benefit consulting firms, and bank trust departments as well as social insurance agencies in the public sector. Insurance company management positions are available in general management, marketing, financial management, and research and planning; jobs in the regulatory sector are also available to our graduates. The growth in the number of firms providing personal financial planning has increased the demand for persons with education in the use of life insurance and related mechanisms in capital accumulation and estate conservation.

Additional opportunities for an MBA combining finance and insurance include positions in insurance company investment, pension fund management, and social insurance program design and oversight. Management consulting firms also seek candidates with expertise in insurance for positions involving insurance industry analysis, including insurance company formations and acquisitions. This demand can be expected to accelerate in view of the ongoing erosion of traditional regulatory barriers between commercial banking, insurance, and the securities industry. The Department also participates in a cross-functional major in Environmental and Risk Management.

Requirements for the Major

The major requires four credit units, at least two of which must be BEPP courses. The other two credit units must be approved by the MBA Advisor. **Electives taken on Pass/Fail basis cannot be counted toward the Insurance and Risk Management major.**

MBA Advisor: Kent Smetters (telephone: 215.898.9811; email: smetters@wharton.upenn.edu)

COURSE DESCRIPTIONS

BEPP 704*

Financing Government

Description: This course studies the role of public policy in affecting the efficiency of markets and the distribution of resources in society. The first goal of the course is to survey public expenditure programs and their interaction with markets. The second goal is to discuss how the public sector raises revenue through taxation to finance these expenditure programs. The course is divided into six parts. After an overview of the tools of public finance, we study public goods and externalities. Next, we move to studying social insurance and income maintenance. We then turn to a framework for tax analysis. The next component studies the U.S. revenue system in particular. The course concludes with a segment on multi-government public finance, studying the interactions of local, state, and national government in a federal system.

Format: This course has two exams and three problem sets.

Prerequisite: Basic understanding of microeconomics.

BEPP 710*

Firms, Markets and Public Policy

Description: This course develops a formal approach to the study of industrial organization: it analyzes the behavior of firms, the structure of markets, and the role of public policy in protecting the interests of consumers and ensuring market competition. The first goal of the course is to develop the basic intuition for pricing and other forms of strategic behavior on the part of firms when faced with complex patterns of consumer demand and strategic competitors. The second goal is to use the theoretical insights to analyze the economic underpinnings of select antitrust cases and public policy design.

BEPP 720* (.5 cu)

Behavioral Economics and Prediction and Betting Markets

Description: This class considers an intriguing and growing set of non-traditional markets, including trading (or gambling) on the outcome of sporting events, elections, political risks, corporate outcomes, public policy and economic statistics. We will explore these markets, drawing on insights from economics and psychology, and highlighting the parallels between these markets and other existing markets. We will examine the potential uses of these markets in the business and public policy domains. Importantly, the success of these markets depends on whether these markets yield efficient forecasts, which in turn depends on factors such as market design, and the biases exhibited by individual traders. We then turn to discussing recent advances in behavioral economics and attempt to apply psychologically-

grounded theories of information processing to a particular set of prediction markets: sports betting. Assessing potentially profitable trading strategies with a critical eye, we will discuss not only investment opportunities, but what these findings reveal about both human psychology and the operation of markets.

BEPP/OPIM 761

Risk Analysis and Environmental Management

Description: This course is designed to introduce students to the role of risk assessment, risk perception and risk management in dealing with uncertain health, safety and environmental risks including the threat of terrorism. It explores the role of decision analysis as well as the use of scenarios for dealing with these problems. The course will evaluate the role of policy tools such as risk communication, economic incentives, insurance, regulation and private-public partnership in developing strategies for managing these risks. A project will enable students to apply the concepts discussed in the course to a concrete problem.

Prerequisites: None, but microeconomics helpful.

BEPP/OPIM 763

Energy Markets & Policy

Description: Over the last several decades, energy markets have become some of the most dynamic markets of the world economy. Traditional fossil fuel and electricity markets have seen a partial shift from heavy regulation to market-driven incentives, while rising environmental concerns have led to a wide array of new regulations and “environmental markets”. The growth of renewable energy could be another source of rapid change, but brings with it a whole new set of technological and policy challenges. This landscape requires quick adaptation from energy companies, but also offers opportunities to turn regulations into new business. The objective of this course is to provide students with the economist’s perspective on a broad range of issues that professionals in the energy industry will encounter. The focus will be on business and public policy issues related to the recent changes in energy markets. Topics include the effect of competition, market power and scarcity on energy prices, the impact of deregulation on fossil fuel and electricity markets, extraction and pricing of oil and gas, the environmental impact and policies related to the energy sector, environmental cap-and-trade markets, the economics of renewable energy, energy efficiency, and recent developments in the transportation sector.

BEPP 770

Introduction to Business Economics and Public Policy

Description: This introductory course explores the economics and politics of public policy to examine why, how and with what success/failure government intervenes in a variety of areas: the environment, income redistribution, social security, regulation. The course also examines the growing importance of allowing competitive markets to provide publicly funded services, taking advantage of private management approaches

* not offered in 2014-2015

to fostering innovation in public management: vouchers (for medical care, education and housing), and contracting with private firms for provision of “public” services. Although not a current events course, many of these issues will incorporate a discussion of the issues in the context of a new presidential administration, in an unusual economic environment.

Format: Lectures; there is a midterm and final exam.

Prerequisites: A basic understanding of microeconomics.

BEPP/REAL 772*

Urban Public Policy and Private Economic Development

Description: This course considers the pervasive interactions between real estate developers and government. Governments influence real estate development in many ways: through zoning laws, taxes, public expenditures, impact fees, infrastructure, building codes, and environmental regulations, to name just a few. Much of the time in the course is spent understanding the effect on residential and commercial real estate development of these government interventions.

As a “case study” of this interaction between government and real estate developers and markets, we will consider one of the major policy interventions currently being advocated, adopted, and considered by governments throughout the country — growth controls or smart growth to deal with the alleged problem of urban sprawl. To this end, we will consider what is meant by urban sprawl, why it is considered a problem — by whom — why growth controls are considered a solution to the problem, the possible effects of growth controls on various groups, the views of developers about both urban sprawl and growth controls. Several guest lecturers from the private, not-for-profit, and public sectors are scheduled to make presentations.

Format: Lectures, a midterm, and final exam.

Prerequisites: Microeconomics.

BEPP 773/FNCE 730/REAL 730

Urban Fiscal Policy

Description: The purpose of this course is to examine the financing of governments in the urban economy. Topics to be covered include the causes and consequences of the urban fiscal crisis, the design of optimal tax and spending policies for local governments, funding of public infrastructures and the workings of the municipal bond market, privatization of government services, and public financial systems for emerging economies. Applications include analyses of recent fiscal crises, local services and taxes as important determinants of real estate prices, the infrastructure crisis, financing and the provision of public education, and fiscal constitutions for new democracies using South Africa as an example.

Format: Lectures, a midterm, and final exam.

Prerequisites: MGEC 611, Corporate Finance (FNCE 611, FNCE 612, or FNCE 613).

BEPP 788*

International Industrial Development Strategies

Description: The course analyzes the problems of emerging markets. The course considers the industrialization strategies they have chosen and the recent financial and macroeconomic problems they have encountered. Particular emphasis will be given to the recent problems of Latin American and Asian countries that experienced rapid growth for considerable periods only to encounter major reversals in the last half of the 1990s. The implications of this experience for the private and public sectors will be considered in detail. The role of foreign aid, the World Bank and the International Monetary Fund in dealing with crises in developing countries will be explored in detail.

Format: Lectures, two exams, and one paper.

Prerequisites: MGEC 611/612 or an undergraduate intermediate microeconomics course.

BEPP 789

Nations, Politics, and Markets

Description: This course is designed for students who are interested in pursuing an international career and for those who plan to work for industrial and financial corporations that operate in emerging markets. The course will deal with the economic and political problems of macroeconomic adjustment, corruption, the transition economies, and international financial transactions. All of these topics will be illustrated with in-depth studies of economies in Africa, Asia, Latin America, the Middle East, Eastern Europe, and China.

Format: Lectures, two exams, and one paper.

Prerequisite: FNCE 613.

BEPP 805

Risk Management

Description: This course describes the concepts and techniques available to corporations, non-profit organizations, and other organizations in their efforts to manage pure risks. The costs associated with such pure risks as product liability, environmental impairments, property losses, work-related injuries, and employee benefits (e.g., pensions, health insurance, etc.) affect the daily management of all organizations. Managers who make decisions without appropriate consideration of risk management issues can jeopardize the long-term survival of their organizations. The course examines a common set of techniques which can be used by managers in dealing with these problems, including risk assumption, prevention, diversification, and transfer via insurance and non-insurance market mechanisms. In turn, students learn to recognize that the institutional structure of the organization itself influences its own risks and their corresponding treatments.

BEPP 811 (.5 cu)

Risk and Crisis Management

Description: The growing connectivity of global economies and financial markets has produced widespread risk contagion,

* Not offered in 2014-2015

resulting in increased volatility and an ever-increasing demand for risk capital. This course focuses on understanding the drivers of risk contagion and ways to restore confidence in worldwide markets for pure and financial risk. The class begins with an evaluation of recent financial and pure risk events: for example, the sovereign debt crisis, Japanese earthquake, and BP Deepwater Horizon. We explore how these events are being financed in innovative ways via the capital and insurance markets. Next we emphasize the role of risk management in the preservation and creation of value, helping firms identify, measure, monitor and manage/finance risk. Doing so results in risk-adjusted returns (or return on risk-adjusted capital) that exceed the cost of capital. We devote substantial focus on the practical implementation of effective risk management/financing, given evolving regulatory and governance standards. In addition, we explore opportunities for corporate growth as well as public/private partnerships. The course will conclude with a discussion of emerging markets and the role of risk management in developing a middle class needing new forms of risk transfer/financing.
Format: Lecture and case discussions, final exam, and homework.

BEPP 812 (.5 cu)

Markets for Pure Risks

Description: The increased frequency and severity of pure risk events hinders corporations' abilities to execute strategy and deliver sustainable financial results to stakeholders. Prominent recent examples include disruptions from Hurricane Katrina, Japan's earthquake/nuclear disaster/supply chain breakdowns, Thai floods, U.S. wildfires, and global terrorist attacks. At the same time, both industrialized and emerging economies understand that the management and financing of pure risk is critical to the success of their economies. Consequently, the rising demand for risk capital has ushered in several capital market innovations and public/private partnerships necessary for managing and financing pure risk. This course investigates these issues, beginning with an introduction to pure risks, their centers of gravity and global consequences for corporations, consumers, and the macroeconomies. Next we move on to traditional sources of risk capital provided to corporations and governments via insurance and reinsurance mechanisms. The course concludes with a discussion of new sources of risk capital provided by capital markets including catastrophic risk bonds, securitization of mortality and liability risk, and other forms of insurance-linked securities.

Format: Lecture and discussion, midterm, and final exam.

Prerequisites: Basic microeconomics and finance.

BEPP 823

Business Insurance and Estate Planning

Description: This course presents an analysis of overall private wealth management. This includes planning for: disposition of closely-held business interests; the impact of income taxes and other transfer costs on business interests and other assets; integration of life insurance, disability insurance, medical benefits, and long-term care insurance in the financial plan; planning

for concentrated asset (e.g., common stock) positions, diversification techniques, and asset allocation strategies; distribution of retirement assets; lifetime giving and estate planning; and analysis of current developments in the creation, conservation, and distribution of estates. Attention also is given to various executive compensation techniques (including restricted stock and stock options) and planning for various employee benefits. The course also covers sophisticated charitable giving techniques and methods for financing education expenses. Readings consist of a textbook, case studies, and bulk pack articles. This course should be attractive to most students to help them plan for their own or their families' financial affairs. It also should be particularly attractive to students with interests in entrepreneurship, wealth management, finance, and law.
Format: Lecture, class discussion, and case discussion, midterm exam, final exam, and an optional research paper.

BEPP/STAT 851

Fundamentals of Actuarial Science I

Description: This course is the usual entry point in the actuarial science program. It is required for students who plan to major in actuarial science. It can also be taken by others interested in the mathematics of personal finance and the use of mortality tables. For future actuaries, it provides the necessary knowledge of compound interest and its applications, and basic life contingencies definition to be used throughout their studies. Non-actuaries will be introduced to practical applications of finance mathematics, such as loan amortization and bond pricing, and premium calculation of typical life insurance contracts. Main topics include annuities, loans and bond, basic principles of life contingencies and determination of annuity and insurance benefits and premiums.

Format: Lectures, one midterm exam, a final exam, and homework assignments.

Prerequisites: One semester of calculus.

BEPP/STAT 852

Fundamentals of Actuarial Science II

Description: This specialized course is usually only taken by Wharton students who plan to major in actuarial science. It provides a comprehensive analysis of advanced life contingencies problems such as reserving, multiple life functions, and multiple decrement theory with application to the valuation of pension plans.

Format: Lectures, one midterm exam, a final project, and homework assignments.

Prerequisites: BEPP/STAT 851.

BEPP/STAT 853

Actuarial Statistics

Description: This course covers models for insurer's losses, and applications of Markov chains. Poisson processes, including extensions such as non-homogeneous, compound, and mixed Poisson processes are studied in detail. The compound model is then used to establish the distribution of losses. An extensive section on Markov chains provides the theory to forecast

future states of the process, as well as numerous applications of Markov chains to insurance, finance, and genetics. The course is abundantly illustrated by examples from the insurance and finance literature. While most of the students taking the course are future actuaries, other students interested in applications of statistics may discover in class many fascinating applications of stochastic processes and Markov chains.

Format: Lectures, one midterm exam, and a final exam.

BEPP/STAT 854

Applied Statistical Methods for Actuaries

Description: One half of the course is devoted to the study of time series, including ARIMA modeling and forecasting. The other half studies modifications in random variables due to deductibles, co-payments, policy limits, and elements of simulation. This course is a possible entry point into the actuarial science program. No BEPP course is a pre-requisite for BEPP 854. The Society of Actuaries has approved BEPP/STAT 854 for VEE credit on the topic of time series.

Format: Lectures, two exams and homework assignments.

Prerequisites: One semester of probability.

BEPP 893

Advanced Study Projects

Description: The ASP is intended to generate an interchange of ideas and perspectives and to provide the student with an opportunity to pursue a narrow topic in depth. ASP topics will be chosen by the student with advice from the instructor. The seminar instructor will act as coordinator for the projects. Other members of the department will serve as unofficial advisers to students according to expertise and interests.

MGEC 611 (.5 cu)

Microeconomics for Managers: Foundations

Description: See Core Section.

MGEC 612 (.5 cu)

Microeconomics for Managers:

Advanced Applications

Description: See Core Section.

Environmental and Risk Management

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of offerings for the upcoming semester or visit the Initiative for Global Environmental Leadership (IGEL) website at: <<http://environment.wharton.upenn.edu/>>.

The Environmental and Risk Management major is a good choice for students pursuing careers that focus on sustainable business initiatives. It centers on the confluence between environmental management and “triple bottom-line” reporting, which has become so important in balanced scorecard approaches to accounting and investor relations. Courses focus on the intersection of business ethics, social responsibility, and managerial decision making.

Increasingly, consideration of the impact of decisions on the physical environment is an important factor for business and other organizations. The decisions involved may concern such issues as the placement and structure of facilities, the use of chemicals in the workplace and agriculture, the manufacture of environmentally safe products, the usage of energy materials and supplies, and the disposal of waste products. The Environmental and Risk Management major will equip students with the tools necessary to address environmental challenges in their respective fields.

The major in Environmental and Risk Management concerns public and private sector issues in designing and implementing effective strategies related to the impacts of business activities on the environment and related areas in health and safety. There has been interest in such impacts because of their inherent importance for responsible management. This is due partially to the increasing costs of laws and regulations governing those business activities, which may pose risks to the environment, to the health and safety of workers, and/or to surrounding communities. An additional factor is the increasing concern about environmental “externalities” (both positive and negative) resulting from business behavior and operations.

This major is designed to provide in-depth foundations for those interested in pursuing careers in the growing environmental sector of the economy, whether in private business, in environmental consulting, or in government. Non-majors interested in an overview of business and policy in the environmental area should also find selected courses from this major of interest.

The program provides an interdisciplinary approach, building on faculty and courses from departments such as Accounting, Health Care Management, Insurance and Risk Management, Legal Studies and Business Ethics, Management, Marketing, Operations and Information Management, and Business Economics and Public Policy. Additional coursework on environmental and technological risks can be pursued in parallel with the Wharton program through studies in the School of Arts and Sciences and the School of Engineering and Applied Science.

Requirements for the Major

The major in Environment and Risk Management at the Wharton School requires five credit units of coursework as indicated below or four credit units of coursework and an advanced study project approved by the Director of the Environmental Management Program. **Courses taken on a pass/fail basis cannot be counted toward the major.**

- a) The following half-credit courses are required:
- | | |
|----------|---|
| OPIM 762 | Environmental Sustainability and Value Creation (.5 cu) |
| BEPP 811 | Risk and Crisis Management (.5 cu) |
- b) Four of the following courses are required OR three of the following courses and an Advanced Study Project (ASP):
- | | |
|---------------|---|
| HCMG 901 | Seminar in Health Care Cost Benefit and Cost Effectiveness Analysis |
| LGST 815 | Environmental Management: Law & Policy |
| OPIM/BEPP 761 | Risk Analysis and Environmental Management |
| BPUB 777 | Cost-Benefit Analysis |
| OPIM 615 | Operations Strategy |
| MKTG 733 | Social Impact of Marketing (.5 cu) |

ASP Advanced Study Project in the environmental and risk management area, supervised by a Wharton faculty member.

- c) In addition to electives that students may take in Environmental Studies in the School of Arts and Sciences (one such recommended course is ENVS 613, Business and the Natural Environment) and the School of Engineering and Applied Science, students are encouraged to take one or more of the following courses depending on their specific interests and majors:
- | | |
|----------|---|
| HCMG 844 | The Economics of Health Care and Policy |
| MKTG 712 | Marketing Research |
| OPIM 654 | Product Design and Development |

MBA Advisor: Eric Orts (telephone: 215.898.3018; email: ortse@wharton.upenn.edu)

The Environmental Management Program is coordinated, designed, and monitored by a school-wide interdepartmental group of faculty with teaching and research interest in the field. They include:

STANDING FACULTY

Arthur van Benthem (Business Economics and Public Policy)
 Eric Clemons (Operations and Information Management)
 Howard Kunreuther (Operations and Information Management)
 Eric Orts (Legal Studies and Business Ethics)
 Ruben Lobel (Operations and Information Management)
 Jerry Wind (Marketing)

AFFILIATED FACULTY

Cary Coglianese (Law School)
 Edward Emmett (Medical School)
 Kenneth Foster (Bioengineering)
 Robert Giegengack (Earth and Environmental Sciences)
 Ulku Oktem (Operations and Information Management)
 Peter Petraitis (Biology)
 Wen Shieh (Systems Engineering)

PLEASE NOTE: Before scheduling classes, check with the Finance Department to determine the availability of the courses you have selected for the upcoming semester or visit the Finance Department website at: <<http://finance.wharton.upenn.edu/>>.

The Finance major provides students with the analytic and theoretical tools required to master practical issues in Finance, with applications to financial management in business firms, financial institutions, government, and not-for-profit entities. While some attention is given to the descriptive, institutional, and historical aspects of the field, primary emphasis is placed on the analytical foundations of the discipline, emphasizing theory and methods of analysis and making extensive use of relevant techniques of economic analysis, mathematics, and statistics.

Graduates have begun their professional careers with positions in financial departments of non-financial firms, investment banks, broker-dealers, and management consulting firms, as well as various departments of commercial banks and other financial institutions, not-for-profit entities, central banks, and international financial organizations.

Requirements for the Major

The Finance major requires FNCE 611 and FNCE 613 plus four credit units of elective upper-level Finance courses. FNCE 612, an accelerated version of FNCE 611, earning .5 cu course units, may be substituted for FNCE 611, so that if you take FNCE 612 and FNCE 613, the major still requires only four credit units of upper-level coursework in Finance. If you waive one or both of FNCE 611 and FNCE 613, you will be required to take an additional upper-level Finance course for a total of five upper-level Finance credit units.

Please note that if you decide to take one of the half-semester introductory courses (FNCE 614 or 615), you will be foregoing the option of becoming a Finance major, unless you later take the full-semester version of the course.

These half-semester courses do not count in any way toward meeting the requirements for a Finance major.

In addition, note:

- No more than one credit unit may be a specially-arranged Independent Study Project (ISP; FNCE 899) **OR** a Finance Department-approved Global Modular course. You may combine half-credit units from any two of these two kinds of courses, but the maximum from this group that can be counted toward the major requirement must not exceed one credit unit. Please note that ISPs in Finance are intended to give students the opportunity to study a particular topic in Finance in greater depth than is covered in the curriculum. The application for an ISP should outline a plan of study that requires at least as much work as a typical course in the Finance Department that meets twice a week, requires substantial reading, and may include exams, case studies,

problem sets, and/or short papers. Applications for FNCE 899 courses for 1 cu will not be accepted after the end of the third week of the semester.

- Courses offered in other departments cannot be counted towards the Finance major unless they have been cross-listed with the Finance Department and have been assigned a Finance Department course number. You may not count any Finance course taken in a study abroad program toward your requirements for the Finance major.
- When you choose to take a Finance course pass/fail, it cannot be counted toward the requirements for a Finance major.
- The Finance Department believes that in the dynamic environment in which you will be working, you will be best served by broad exposure to a wide range of courses in Finance. For this reason, the Finance Department will not offer tracks in Finance; we will reject proposals for Individualized Majors that suggest you have specialized in some particular field in Finance. This would rule out titles that include such terms such as “finance,” “financing,” “investment,” “investing,” “funding,” “buy-outs,” “mergers & acquisitions,” “private equity,” or “valuation,” etc. The Department does not want the official transcript to imply that we offer specializations in Finance. If you wish to signal to prospective employers the depth or intensity of your interest in some subject within Finance, we suggest that you highlight on your resumé the key courses you have taken or, better still, provide a brief narrative to show how the courses you have selected give you special expertise.

We regret that the Finance Department is not able to offer every course listed below in every semester. Thus please check the Finance Department website to verify each semester’s course offerings as well as the professors who will teach those courses.

MBA Advisor: Richard Herring (telephone: 215.898.5613; email: herring@wharton.upenn.edu).

COURSE DESCRIPTIONS

FNCE 611

Corporate Finance

Description: See Core Section.

FNCE 612 (.5 cu)

Accelerated Corporate Finance

Description: See Core Section.

FNCE 613

Macroeconomics and the Global Economic Environment

Description: See Core Section.

FNCE 614 (.5 cu)**Corporate Finance**

Description: See Core Section.

FNCE 615 (.5 cu)**Macroeconomics and the Global Economic Environment**

Description: See Core Section.

FNCE 717**Financial Derivatives**

Description: The purpose of this course is to provide the student with the necessary skills to value and to employ options, futures, and related financial contracts. In order to provide a useful treatment of these topics in an environment that is changing rather rapidly, it is necessary to stress the fundamentals and to explore the topics at a technical level. The topics that will be covered include the valuation of futures contracts on stock indices, on commodities and Treasury instruments; the valuation of options, empirical evidence, strategies with respect to these assets, dynamic asset allocation strategies, or which portfolio insurance is an example, swaps, and the use (and misuse) of derivatives in the context of corporate applications. One-third of the course will be devoted to futures, a third to options, and a third to their applications. Many of the applications will be sprinkled along with the coverage of futures and options.

Prerequisites: FNCE 611 or FNCE 612; STAT 613; FNCE 613 may be taken concurrently.

FNCE 719**International Financial Markets**

Description: FNCE 719 is a course on international financial markets and exchange rates. Topics include pricing in the foreign currency and Eurocurrency markets, use of forward exchange for hedging, short-term returns and market efficiency in the international money markets, foreign currency options, international capital asset pricing, pricing of foreign currency bonds, currency swaps, Eurocurrency syndicated loans, foreign currency financing and exposure management.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613 may be taken concurrently.

FNCE 720**Investment Management**

Description: This course is designed to acquaint the student with the concepts of portfolio analysis in the general area of institutional investment management. The course discusses principles for managing financial assets. These principles apply, for example, to managing corporate pension funds, bank-administered trusts, and other institutional funds. Students will learn how to establish appropriate investment objectives, develop optimal portfolio strategies, estimate risk-return tradeoffs, and evaluate investment performance. Many of the latest quantitative approaches are discussed.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613; STAT 613.

FNCE/REAL 721**Real Estate Investment: Analysis and Financing**

Description: This course provides an introduction to real estate with a focus on investment and financing issues. Project evaluation, financing strategies, investment decision making and real estate capital markets are covered. No prior knowledge of the industry is required, but students are expected to rapidly acquire a working knowledge of real estate markets. Classes are conducted in a standard lecture format with discussion required. The course contains cases that help students evaluate the impact of more complex financing and capital markets tools used in real estate. There are case studies and two mid-terms, (depending on instructor).

Format: Lecture with discussion required

Prerequisites: FNCE 611 or FNCE 612.

FNCE 725**Fixed Income Securities**

Description: FNCE 725 is a rigorous study of fixed income securities, including default-free bonds, floating rate notes, and corporate bonds. Closely related financial instruments such as forwards and futures on fixed income securities, bond options, and interest rate swaps are also examined. In addition to analyzing specific types of fixed income securities, there will be an examination of the tools used in bond portfolio management.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613; STAT 613.

FNCE 726**Advanced Corporate Finance**

Description: The objective of this course is to study the major decision-making areas of managerial finance and some selected topics in financial theory. The course reviews the theory and empirical evidence related to the investment and financing policies of the firm and attempts to develop decision-making ability in these areas. This course serves as an extension of FNCE 611. Some areas of financial management not covered in FNCE 611 are covered in FNCE 726. These may include leasing, mergers and acquisitions, corporate reorganizations, financial planning, and working capital management, and some other selected topics. Other areas that are covered in FNCE 611 are covered more in depth and more rigorously in FNCE 726. These include investment decision making under uncertainty, cost of capital, capital structure, pricing of selected financial instruments and corporate liabilities, and dividend policy.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613.

FNCE 728**Corporate Valuation**

Description: The focus of this course is on the valuation of companies. Topics discussed include discounted cash flow techniques and valuation using alternative valuation techniques such as price multiples. Emphasis is on developing the required

information for valuation from financial statements and other information sources.

Prerequisites: Minimum of normal first-year courses in accounting, economics, statistics, and FNCE 611 or FNCE 612; FNCE 613 (further coursework in financial accounting such as ACCT 742 is very useful).

FNCE 730/BEPP 773/REAL 730

Urban Fiscal Policy

Description: The purpose of this course is to examine the financing of governments in the urban economy. Topics to be covered include the causes and consequences of the urban fiscal crisis, the design of optimal tax and spending policies for local governments, funding of public infrastructures and the workings of the municipal bond market, privatization of government services, and public financial systems for emerging economies. Applications include analyses of recent fiscal crises, local services and taxes as important determinants of real estate prices, the infrastructure crisis, financing and the provision of public education, and fiscal constitutions for new democracies using South Africa as an example.

Prerequisites: MGEC 611 and MGEC 612, FNCE 611 or FNCE 612.

FNCE 731

International Corporate Finance

Description: This course analyzes financial problems corporations face that result from operating in an international environment. Major topics covered are corporate strategy and the decision to invest abroad, forecasting exchange rates, international portfolio diversification, managing exchange risk, taxation issues, cost of capital and financial structure in the multinational firm, and sources of financing.

Prerequisites: FNCE 611 or FNCE 612.

FNCE 732

International Banking

Description: This course focuses on international financial institutions and international banking activities. We will examine how current and historical events are reshaping the industry. We will focus on the basic analytics of managing a bank's exposure to liquidity, credit, market and country risk. In addition, we will consider how to evaluate and compare the risk exposures and performance of individual banks. Throughout the semester we will discuss public policy issues such as international debt crises and regulation.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613. One, but not both, can be taken concurrently.

FNCE 738

Capital Markets

Description: This course examines the available corporate securities that firms can use to finance investment. The course will focus on: (1) the design of these securities (Why do bonds have embedded options? What is the role of preferred stock?); (2) the issuing process for these securities (What do investment

banks do? Is the underwriting process important for the cost of capital?); (3) the pricing of these securities (How are credit risk in bonds and loans priced?) The securities covered include corporate and junk bonds, bank loans, common and preferred equity, commercial paper, securitization, as well as some recent innovations. Other topics include the role of embedded options in corporate bonds; the role of bank and loan covenants; the function of bond rating agencies; exchange offers; prepackaged bankruptcies; bankruptcy Chapter 11; workouts; debtor-in-possession financing; and pricing credit risk. The course is designed to be complementary to Advanced Corporate Finance and Fixed Income Securities.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613.

FNCE 739

Behavioral Finance

Description: There is an abundance of evidence suggesting that the standard economic paradigm—rational agents in an efficient market—does not adequately describe behavior in financial markets. In this course, we will survey the evidence and use psychology to guide alternative theories of financial markets. Along the way, we will address the standard argument that smart, profit-seeking agents can correct any distortions caused by irrational investors. Further, we will examine more closely the preferences and trading decisions of individual investors. We will argue that their systematic biases can aggregate into observed market inefficiencies. The second half of the course extends the analysis to corporate decision making. We then explore the evidence for both views in the context of capital structure, investment, dividend, and merger decisions.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613.

Recommended: FNCE 720 and FNCE 726.

FNCE 750

Venture Capital and the Finance of Innovation

Description: This course covers the finance of technological innovation, with a focus on the valuation tools useful in the venture capital industry. These tools include the “venture capital method,” comparables analysis, discounted cash flow analysis, Monte Carlo simulation, contingent-claims analysis, decision trees, and real options. The primary audience for this course is finance majors interested in careers in venture capital or in R&D-intensive companies in health care or information technology.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613. FNCE 613 may be taken concurrently.

FNCE 751

The Finance of Buyouts and Acquisitions

Description: The focus of this course is on buying (or acquiring controlling stakes in) firms. The main topics to be covered are mergers and friendly acquisitions, hostile takeovers and buyouts. Using case studies, the course surveys the drivers of success in the transactions. While issues regarding motive and strategy will be discussed, financial theory would be the main lens used to view these control acquiring transactions. This will allow students to (1) evaluate transactions through valuation

approaches and (2) structure deals employing financial innovation as a response to legal framework and economic frictions. This course should be of interest to students interested in pursuing careers as private equity investors, advisors in investment banking and corporate managers that deal with these issues. This course will be demanding and assumes familiarity with valuation analysis.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613; FNCE 726 may be taken concurrently.

FNCE 754

Impact Investing

Description: This course explores Impact Investing, a discipline that seeks to generate social benefits as well as financial returns. From tiny beginnings, the Impact Investment space has expanded and now commands significant attention from policymakers, wealthy and public-spirited individuals, academia and, not least, the world's largest asset managers and philanthropic foundations. Evangelists believe it may be the key to freeing the world from poverty. Skeptics think it will remain confined to the boutique. Regardless, Impact Investing is becoming a distinct career specialization for finance professionals despite the diverse skillset each must have and the uncertainty of the new field's growth.

Prerequisites: This course has no specific prerequisites, but given its wide-ranging subject matter, students will benefit from completion of any of the following Wharton courses: FNCE 613, Macroeconomics and the Global Economic Environment; FNCE 720, Investment Management; FNCE 738, Capital Markets; and FNCE 895, Private Equity. Coursework or practical experience in microeconomics, development economics, international philanthropy, non-governmental organizations, financial risk management and political risk analysis will also be useful.

FNCE 891

Corporate Restructuring

Description: The objective of this course is to familiarize students with financial, legal and strategic issues associated with the corporate restructuring process. The main focus of the course will be on the restructuring of financially distressed firms. We'll begin by reviewing the financial instruments commonly used by risky firms (leveraged loans and high-yield bonds) and learn to interpret the contracts that govern them. We'll then survey a variety of restructuring methods (out-of-court workouts, exchange offers, pre-packaged and pre-negotiated bankruptcies, Chapter 11 reorganizations, and international insolvency practices) available to troubled firms and study the dynamics of the restructuring process through a number of historical and current case studies. Finally, we'll consider distressed debt as an asset class and develop techniques for investing in distressed securities. The course will provide students with tools to value distressed companies, understand the legal framework governing bankruptcy and reorganization, and navigate the key strategic issues facing managers and investors in distressed companies. It will also

provide students with a specialized vocabulary and important facts about the restructuring industry, distress investing, and leveraged financial markets.

Format: The course's content will be presented using a mixture of lectures, case studies, and guest speakers. The speakers will be Wharton alumni with leadership roles in the restructuring industry as managers, advisors, and investors.

Prerequisites: FNCE 611 or FNCE 612; FNCE 613; FNCE 726 and FNCE 728 or permission of the professor.

FNCE 892

Financial Engineering

Description: This class offers an advanced analysis of complex derivative pricing models. It aims to build an integrated framework allowing students to: 1) decide what factors (e.g., stochastic volatility, jumps, stochastic interest rates, credit risk) should be incorporated in a reasonable pricing model for the given derivative; 2) formulate a consistent model incorporating the chosen factors; 3) calibrate the model using market data; and 4) price the derivative and identify a hedging strategy. To allow for sufficient flexibility, the class will not place any special emphasis on models leading to closed-form valuation formulae (such as the Black-Scholes model), relying instead on the generality afforded by the martingale approach and Monte-Carlo simulation. Students will be asked to implement the models introduced in the class using VBA and Crystal Ball (an Excel Add-In specifically designed for Monte-Carlo simulation).

Prerequisites: FNCE 717 and FNCE 725, with a grade of A or higher in each of these two classes. Students who do not satisfy this prerequisite should obtain the instructor's permission to enroll.

FNCE 893

Global Monetary and Financial Institutions: Theory and Practice

Description: Goal: Provide the future global manager and economist the knowledge on the inter-workings of financial markets and policies set by central banks, regulators and governments. The core of the course will connect between the micro-structure of financial markets, their institutional frameworks and the macroeconomy in the US, the EU and other countries. The course will heavily use the data and events of the 2007-2010 financial crisis.

Requirements: Final and midterm examinations and a term paper that provides a description and analysis of one or more of the main topics for a certain country.

References: Use one or more textbooks as well as additional books, reports and analysis that were recently published on each of the topics

Prerequisites: FNCE 611 or FNCE 612; FNCE 613; STAT 613.

FNCE 894

Managing Fixed Income Portfolios

Description: The goal of this course is to teach you how to manage a real portfolio of Treasury, corporate and mortgage

bonds. We begin by learning how to infer market forecasts from current bond prices. We use analytical models to find the market forecasts and the prices the market is offering for bearing the different types of risks. To implement the concepts learned in class, students will form teams to manage a paper portfolio using Barclays Point (formerly Lehman Point) a state-of-the-art portfolio management system. Your team will trade a \$100 million portfolio of bonds for which your goal will be to outperform the Barclays Aggregate Index.

Prerequisites: FNCE 725.

FNCE 895 (.5 cu)

Private Equity

Description: The course will be a survey of the private equity asset class. Its objective is to provide an understanding of the concepts, agents, and institutions involved in the late stage corporate private equity market in the U.S. and around the globe. It will examine the buyout market and the activities of buyout funds from the differing perspectives of private equity investors, private equity fund sponsors, and managers of the portfolio companies. The course will be taught almost entirely with cases. Distinguished Wharton alumni in the private equity industry will be our guest speakers for many of the cases based on transactions they concluded. While this course is primarily intended for graduate students, admission may be granted to a limited number of interested undergraduate students.

Please Note: This course may be recorded for live or subsequent distribution, display, broadcast, or commercialization in any media, including video, audio, or electronic media. For additional information, see the course syllabus or contact the department.

FNCE 899

Independent Study Project in Finance

Description: Independent Study Projects (ISP) in Finance are intended to give students the opportunity to study a particular topic in Finance in greater depth than is covered in the curriculum. The application for ISP's should outline a plan of study that requires at least as much work as a typical course in the Finance Department that meets twice a week.

At a minimum, we need a description of the methodology you intend to employ, a bibliography and description of the data that you will use as well as a list of interim deliverables and dates to ensure that you will complete the project within the semester. The application must be signed by the member of **the standing faculty** who has agreed to supervise the project and then submitted to the Finance Department Academic Coordinator, 2411 SH-DH to obtain approval from the Finance Department's MBA Advisor. Applications for FNCE 899 ISP's for 1 cu will not be accepted after the third week of the semester.

Prerequisites: FNCE 726 and FNCE 751 or permission from the professor.

Health Care Management

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Health Care Management website at: <<http://hcmg.wharton.upenn.edu/>>.

The Health Care Management major builds on the established strength of the management core to provide expertise in the unique elements and issues of the health care industry. The manager's role in health care organizations continues to grow in importance, as the rapidly changing health care industry becomes the nation's second largest employer. A Wharton health care major is unusually well-qualified to respond to the many critical problems now faced by hospitals, government agencies, group practices, pharmaceutical and biotechnology firms, insurance and managed care organizations, and consulting firms.

Health Care majors draw on a rich variety of elective courses across the university, including courses in the behavioral and applied social sciences, biomedical sciences, and social policy. They also benefit from an interdisciplinary faculty based in the business, medical, and nursing schools, together with adjunct faculty from area health and science organizations. The program is closely associated with the Leonard Davis Institute of Health Economics (LDI), founded in 1967 to facilitate the university's activities and programs of research and education in health services financing and delivery. LDI provides a geographic center and supporting staff, with faculty drawn from schools and departments throughout the university.

The Health Care Management major differs from others at Wharton in that: (1) students must choose the major at the time of application to Wharton, and (2) it integrates academic and professional development, helping students to obtain summer and permanent positions in all parts of the health care sector, including consulting firms, biotechnology, pharmaceutical firms, hospitals, insurers, and government agencies. The department also sponsors a mentor program and links students to the Wharton Health Care Alumni Association. Most students in health care-related dual degree programs complete the Health Care Management major. The MD/MBA, MB/MBA, and MSN/MBA are the most common dual degree programs, among several other options.

Requirements for the Major

The major requires five credit units. **Courses taken on a pass/fail basis cannot be counted toward the Health Care Management Major.**

a) Two required courses (2 cu):

- | | |
|----------|---------------------------------------|
| HCMG 841 | The Health Services System |
| HCMG 653 | Health Care Field Application Project |

- b) Three full credit units selected from the following:
- | | |
|--------------|--|
| HCMG 845 | Managed Care and the Industrial Organization of Health Care |
| HCMG 849 | Financial Management of Health Institutions |
| HCMG 850x | Health Policy: Health Care Reform and The Future of the American Health Care System |
| HCMG 852 | Health Care Services Delivery: A Managerial Economic Approach |
| HCMG 854 | Legal Aspects of Health Care |
| HCMG 855 | Management of Health Care for the Elderly (.5 – 1 cu) |
| HCMG 858 | Health Care Marketing |
| HCMG 859 | Comparative Health Care Systems |
| HCMG 863 | Management & Economics of Pharmaceutical, Biotechnology, & Medical Device Industries |
| HCMG 866 | E-Health: Business Models and Impact |
| HCMG 867 | Health Care Entrepreneurship (.5 cu) |
| HCMG 868 | Private Sector Role in Global Health (.5 cu) |
| HCMG 890-001 | Advanced Study Project Seminar: Management of Health Service Businesses |
| HCMG 890-002 | Advanced Study Project Seminar: Medical Devices |
| HCMG 899 | Independent Study |
| HCMG 890-003 | Advanced Study Project Seminar: Health Business and Policy (.5 cu) |

MBA Advisor: June Kinney (telephone: 215.898.6861; email: kinneyj@wharton.upenn.edu)

COURSE DESCRIPTIONS

HCMG 653

Health Care Field Application Project

Description: This course focuses on leadership and management issues in health care organizations while providing students with a practice setting to examine and develop their own management skills. Each team acts as consultants to a health-care organization which has submitted a project proposal to the course. The teams define the issue and negotiate a contract with the client organization. By the end of the semester, teams present assessments and recommendations for action to their clients and reflect on their experience in a team paper.

Format: Seminar and workshop, a written and oral presentation of the team management study and a team paper reflecting on the experience.

Prerequisites: HCMG 841. Health Care Management MBA majors only.

HCMG 841

Health Services System

Description: This course provides an overview of the evolution, structure and current issues in the health care system. It examines the unique features of health care as a product, and the changing relationships between patients, physicians, hospitals, insurers, employers, communities, and government. The course examines three broad segments of the health care industry: payors, providers and suppliers. Within the payor segment, the course examines the sources and destinations of spending, managed care (HMOs, PPOs), employer based health insurance, technology assessment, payor strategy, and efforts to pay for the elderly, the poor & the medically indigent. Within the provider segment, the course examines the impact of cost containment and competition on hospitals and integrated delivery systems, long term care and disease management, and the important role of epidemiology in assessing population health needs and risks. Within the supplier segment, the course will examine developments in the biotechnology, pharmaceutical, medical devices, genomics and IT industries.

Note: This is a required course for Wharton Graduate Health Care Management majors; it counts as an elective course for all other Wharton Graduate students. It is also open to Law School and Nursing School students with a joint Wharton Program.

HCMG 845

Managed Care and the Industrial Organization of Health Care

Description: This course will focus on two interrelated topics: managed care and market structure. The section on managed care will cover strategic planning and marketing of managed care services, operational issues in developing a managed care network, actuarial issues, and the management of physician behavior. The section on health care market structure will analyze strategies of vertical integration and horizontal integration (M+As), and their attempt to alter the balance of power in local healthcare markets. The section will also analyze the operational issues in managing cost and quality in an integrated system, integration along the supply chain, and the performance of these systems, and the bargaining and negotiation between hospitals, physicians, and health plans.

Format: Lectures, cases, exam, and orally presented term project.

HCMG 849

Financial Management of Health Institutions

Description: This course focuses on health care organizations' financial decisions in the changing health care landscape. Upon completion of the course, students will be able to utilize a range of financial tools and techniques for making value-added financial decisions in a variety of important contexts in the health care sector. The course involves case analyses and lectures, including presentations by practitioners with extensive real world experience. The course is organized around cases dealing with publicly-traded health care company valuation, valuation and return on investment of biopharmaceutical and

medical technology development projects, valuation and deal structure for startup and early stage health care organizations, health plan pricing and finance, and health care provider risk-sharing arrangements. Each case is accompanied by background on tools, methods, institutions, and markets. Students seeking careers in health care with minimal finance background will obtain a solid introduction to key areas of health care finance and financial decision making. Students with more background will extend and enhance their analytical skills in a variety of important areas.

Format: Lecture and cases. Students work in teams to complete 4-5 case write-ups and an oral case presentation. There also is a written exam.

Prerequisites: FNCE 611, equivalent coursework, or experience

HCMG 850

Health Policy: Health Care Reform and the Future of the American Health Care System

Description: This course will provide students a broad overview of the current U.S. healthcare system. The course will focus on the challenges facing the health care system, an in-depth understanding of the Affordable Care Act (ACA) and of its potential impact upon health care access, delivery, cost, and quality as well as its effect on firms within the health care sector. The course will examine potential reforms, including those offered by liberals and conservatives and information that can be extracted from health care systems in other developed countries.

The course will also explore key facets of the ACA, including improving access to care and health insurance exchanges, improving quality and constraining costs through health care delivery system reforms, realigning capacity through changes in the health care workforce and in medical education, the potential impact on biomedical and other innovations, and the impact on economic outcomes such as employment, wage growth, and federal budget deficits. The course will also examine the political context and process of passing major legislation in general and health care legislation in particular, including constitutional arguments surrounding the Affordable Care Act. Throughout the course, the key lessons will integrate the disciplines of health economics, health and social policy, law and political science to elucidate key principles.

HCMG 852

Health Services Delivery: A Managerial Economic Approach

Description: The purpose of this course is to apply economics to an analysis of the health care industry, with special emphasis on the unique characteristics of the US healthcare markets, from pre-hospital to post-acute care. This course focuses on salient economic features of health care delivery, including: the role of nonprofit providers, the effects of regulation and anti-trust activity on hospitals, the degree of input substitutability within hospitals, the nature of competition in home health care, public versus private provision of emergency medical services, the effect of specialty hospitals and ambulatory surgery centers, defining and improving medical performance in

hospitals, specialization and investment in physical and human capital, shifting of services between inpatient and outpatient settings and its effect on health care costs and quality, and innovation in primary care from retail clinics to patient-centered medical homes and retainer-based medicine.

Format: Written exam and student presentation.

HCMG 854/LGST 811

Legal Aspects of Health Care

Description: This course offers a current and historical overview of the regulation of health care delivery and financing in the U.S. It examines principles and practical applications of the laws that affect the operational decisions of health care providers, payors, and managers and that impact development of markets for health care products and services. Also considered are the social and ethical issues encountered in trying to balance the interests, needs and rights of individual citizens against those of society. For part of the term, the class will divide into two groups so that students can focus on their choice of (1) health care management (antitrust law, and regulation of the drugs and medical device industry) or (2) selected issues of patients' rights (e.g. abortion, treatment of terminal patients, etc.).

HCMG 855 (.5 cu – 1 cu)

Management of Health Care for the Elderly

Description: This course is designed to provide students with an appreciation of the good, the bad and the ugly of how our current health care system cares for one of our nation's most precious resources—our seniors! This course will review care provided to seniors within a variety of institutional settings (hospitals, nursing facilities, various senior housing levels) as well as outpatient and home care services. Special attention will be paid to nursing homes and senior housing options and their past, present and future role within the overall health care system in the United States. The course will start with an overview of the senior population with special attention to their health and social needs. Several classes will be held off campus at selected nursing facilities and senior housing complexes. In addition, a broad range of special programs and services will be reviewed such as sub-acute care, long term care insurance, Medicare Risk Programs, elderly housing, adult day care, managed care, Medicare Part D, case management, hospice and other recent developments. Throughout the course, emphasis will be placed on entrepreneurial opportunities to serve the senior market at all levels.

Students are required to produce a paper for this course that focuses on a specific area impacting the senior market. This is a wonderful opportunity for students to select an area of personal interest and conduct an in depth review of that area including making direct contact with national experts within the topic selected. All student topics must be approved during the first two weeks of class and the depth of research required agreed upon between the student and the instructor. Interested students not in the HCMG major are urged to speak to the instructor before enrolling in the course.

HCMG 858**Health Care Marketing**

Description: This course is aimed at students interested in better understanding an increasingly complex market environment for health care product development and commercialization. Across the entirety of the class we will explore the facts and clarify the implications of five ongoing thematic changes — the 5 D's — that are fundamentally transforming commercial decision making in health care markets from insurance and care delivery to pharmaceuticals, biotechnology, and devices: (1) *Dispersion* (of choice): health care product/service choice has dispersed from a physician-centric world to include patients, payors, governments, advocacy groups, purchasing organizations, pharmacies, and hospitals. (2) *Data* (explosion of): How organizations understand and leverage the immense availability of data and shepherd its conversion into insights will be a key driver of future competitive differentiation. (3) *Disruption* (technological avalanche): The multiplicity of channels within which information is gathered, shared and exploited has caused much confusion in an industry that often feels hampered by regulatory oversight. How can a commercialization/marketing executive maintain control over information and brand identity in such an age? (4) *Division* (of responsibilities): Companies are most often organized in multiple customer-facing and/or functional silos (e.g., Customer Marketing, Professional Promotion, Managed Markets, Early Development, Data Managements). In a world where these organizational functions have converged, how is commercialization and marketing best managed? (5) *Dollars* (economic implications): Each stakeholder within this newly dispersed set has different concerns and interacts in different ways, at different points of the value chain, with different incentives! Understanding the collective impact of the interplays across these differences is a competence that any health care marketer needs to develop in order to craft and deliver market-perceived value.

Format: This course explores these challenges in detail, always concentrating on what is different — and what is not — about marketing in health care relative to other industries. This broad coverage lays the foundation for the course project — where students develop a plan and forecast for marketing a new health care product. Lectures and case discussions will provide a mix of strategic and toolkit content, and guest lectures from a variety of industry executives will provide additional real-life, real-time perspectives.

HCMG 859**Comparative Health Care Systems**

Description: This course examines the structure of health care systems in different countries, focusing on financing, reimbursement, delivery systems and adoption of new technologies. We study the relative roles of private sector and public sector insurance and providers, and the effect of system design on cost, quality, efficiency and equity of medical services. Some issues we address are normative: Which systems and which

public/private sector mixes are better at achieving efficiency and equity? Other issues are positive: How do these different systems deal with the tough choices, such as decisions about new technologies? We focus first on the systems in four large, prototypical OECD countries — Germany, Canada, Japan, and the United Kingdom — and then look at other developed and emerging countries with interesting systems — including Italy, Chile, Singapore, Brazil, China and India. We will draw lessons for the U.S. from foreign experience and vice versa.

Prerequisites: HCMG 841 or similar background or experience in health care systems.

HCMG 863**Management and Economics of Pharmaceutical, Biotech and Medical Device Industries**

Description: This course provides an overview of the management, economic and policy issues facing the pharmaceutical, biotechnology and medical device industries. The course perspective is global, but with emphasis on the U.S. as the largest and most profitable market. Critical issues we will examine include: R&D intensive cost structure with regulation and rapid technological change; strategic challenges of biotechnology startups; a complex global marketplace in which prices are regulated in most countries and customers include governments and insurers, as well as physicians and consumers; intense and evolving M&A, joint ventures, and complex alliances; thriving generics industry in the US and globally. We use Wharton and industry experts from various disciplines to address these issues

HCMG 866**E-Health: Business Models and Impact**

Description: This course will introduce students to the roles health information technologies (HIT) can play in improving the performance of health care delivery, financing and innovation. The course will discuss the portfolio of health information technologies; the opportunities to apply these technologies to improve health care safety, quality and efficiency; the challenges of HIT implementation and value realization; and emerging HIT areas. While this course will not prepare students for primary information technology management positions, it will provide a foundation that will prepare them as managers in, and consultants to, the health care industry. The course relies heavily on industry leaders to share their ideas and experiences with industry leaders.

HCMG 867 (.5 cu)**Health Care Entrepreneurship**

Description: The course focuses on the creation, funding, and management of biotechnology and health services enterprises. The course is designed to supplement other offerings in the Health Care Systems and Management Departments for those students with entrepreneurial interest in such ventures, and will focus on special issues surrounding the conceptualization, planning, diligence and capitalization, launch, compensation and management of these ventures. In addition, the

course offers methods for self-assessment & development of business models and plans, techniques for technology assessment and strategy, develops foundation for capitalization and partnering strategies, and creates a basis for best practices in company launch and plan execution. **Students must apply to take this course. Please see the Health Care Management Department for the application.**

HCMG 868 (.5 cu)**Private Sector Role in Global Health**

Description: This course explores entrepreneurial and other private sector solutions for both health services and access to medicines and technology in the developing world and other underserved areas. The course also encompasses a study of creative solutions such as drug development partnerships, public-private partnerships, and other incentive programs to engage the private sector in development of vaccines and medicines for tropical and neglected diseases, as well as therapeutic approaches and care systems for the rapidly growing problems of chronic diseases in populations in the developing world. The course goal is not to duplicate a conventional international public health course, but to build upon what is conventionally known and taught in such courses from a managerial solutions-oriented perspective. Learning is driven through readings, class discussions and a series of guest speakers representing the full range of global health issues. The major assignment in the course is a student group project.

HCMG 890-001**Advanced Study Project Seminar:****Management of Health Care Service Businesses**

Description: This course examines issues related to managing or investing in Health Care Services businesses. Defined as companies that manage, distribute or provide health care services, the Health Care Services sector touches almost every other portion of the health care system. We will study the key management issues related to a number of different health care services businesses with a focus on common challenges related to reimbursement, regulatory, margin, growth, and competitive issues. We will make extensive use of outside speakers who will all be current industry leaders within different sectors of the health care services industry and will address the current management issues they face in running their businesses. We will also hear Private Equity professionals and people involved legislatively in Washington with health care services. Students will then be asked to develop a plan to both buyout and subsequently manage a specific health care services business. Students will present their plans to a panel of leading Health Care Private Equity investors.

Prerequisites: HCMG 841.

HCMG 890-002**Advanced Study Project Seminar: Medical Devices**

Description: This course examines issues related to managing or investing in Health Care Services Businesses. Defined as companies that manage, distribute or provide

health care services, the Health Care Services sector touches almost every other portion of the health care system. We will study the key management issues related to a number of different health care services businesses with a focus on common challenges related to reimbursement, regulatory, margin, growth, and competitive issues. We will make extensive use of outside speakers who will all be current industry leaders within different sectors of the health care services industry and will address the current management issues they face in running their businesses. We will also hear Private Equity professionals and people involved legislatively in Washington with health care services. Students will then be asked to develop a plan to both buyout and subsequently manage a specific health care services business. Students will present their plans to a panel of leading Health Care Private Equity investors.

Prerequisites: HCMG 841.

HCMG 890-003 (.5 cu)**Advanced Study Project Seminar:****Health Business and Policy**

Description: This course will discuss how healthcare businesses (life sciences, health plans, and providers) and businesses providing health benefits are affected by government policies. Such actions include changes in the government's role as a payer, rules about insurance coverage for workers and dependents, and regulations dealing with workplace health and product safety. They also include regulations, subsidies, taxes, and public payments for health care goods and services supplied by organizations including for profit corporations, professional firms, and nonprofit entities. Finally they include organizations created by businesses and others to affect (lobby) government actions concerning health, health care, or health spending. Rather than ask the usual policy question about what business behaviors and reactions mean to the government's health policy, the course will ask what government health policy means to business.

Methods of health policy analysis (which explores the equity and efficiency consequences of alternative policies) will be used, along with positive (descriptive) models of political economy (median voter, interest groups) and the public budget.

Specific topics will include health reform, insurance regulation, Medicare and Medicaid payment and financing, government regulation of products and professions, and government influence on the form of medical care delivery and financing. Evaluation will involve written policy analyses, mock testimony, and policy critiques.

HCMG 899**Independent Study**

Description: Arranged with members of the Faculty of the Health Care Systems Department. For further information contact the Department office, Room 204, Colonial Penn Center, 3641 Locust Walk, 898.6861.

Legal Studies and Business Ethics

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Legal Studies and Business Ethics website at <<http://lgst.wharton.upenn.edu/>>.

The Legal Studies and Business Ethics Department brings together the main means society uses to shape the conduct of business: law and ethics. In some courses, law and ethics are tightly integrated. In others, the focus is on either law or ethics. Certain courses focus on specific industry contexts, such as in professional services, health care, sports, entrepreneurial activities, and financial markets.

The study of law provides valuable insights into the business-government relationship and the public policy process. It also enhances students' knowledge and reasoning skills in practical areas relevant to transactions and everyday business activities. Familiarity with the law enables one to identify potential legal problems, seek appropriate counsel before making key decisions, and to work more effectively with lawyers.

Ethics is a lens through which individuals and firms determine appropriate and fair ways to conduct their business both locally and globally. Law is one guidepost, but ethical values, human rights, stakeholder interests, and cultural norms are also valuable to consider. Some courses consider the social impact and responsibility of business broadly.

The core courses, LGST 611 and LGST 612, look at situations students will likely face in their careers from both a legal and an ethical viewpoint. These courses are designed to develop analytical ability in problem-solving context and to hone reasoning skills. LGST 611 is designed to cover material from a global perspective, whereas LGST 612 aims to cover some of the same topics from the vantage point of professional services.

The department participates in and is the administering department for the Environmental and Risk Management major and for the Social Impact secondary major. It also plays an important role in the popular Negotiations course.

The Legal Studies and Business Ethics Department is home to several research centers including the Initiative for Global Environmental Leadership (IGEL), the Wharton Sports Business Initiative (WSBI) and the Carol and Lawrence Zicklin Center for Business Ethics Research.

Our faculty includes experts in several domains of law and ethics, including global dimensions. The unique breadth of our faculty means that the department can offer specialized courses not found in other business schools, as well as courses that synthesize legal and ethical concepts.

MBA Advisor: Kevin Werbach (telephone: 215.898.1222; email: werbach@wharton.upenn.edu)

Core

LGST 611	Responsibility in Global Management (.5 cu)
LGST 612	Responsibility in Professional Services (.5 cu)

Electives

LGST 640	Digital Game Design Techniques for Business
LGST 692	Advanced Topics in Negotiations
LGST 693	Influence
LGST 785	Business Strategy & Corporate Law
LGST 802	Corporate Law and Management in Global Perspective
LGST 804	Real Estate Law
LGST 805	Law of Marketing and Antitrust
LGST 806	Negotiation and Conflict Resolution
LGST 807	Securities Regulation
LGST 809	Sports Business Management
LGST 810	Business Ethics and Corporate Responsibility
LGST 811	Legal Aspects of Health Care
LGST 813	Legal Aspects of Entrepreneurship
LGST 815	Environmental Management, Law & Policy
LGST 820	International Business Ethics
LGST 830	Social Impact and Responsibility

COURSE DESCRIPTIONS

LGST 611 (.5 cu)

Responsibility in Global Management

Description: See Core Section.

LGST 612 (.5 cu)

Responsibility in Professional Services

Description: See Core Section.

LGST/OPIM 640

Digital Game Design Techniques for Business: Rules, Incentives, Applications

Description: Why can't work be fun? And just what is fun, anyway? Leading firms are answering that question through a new business practice called gamification. They are using the techniques of digital game designers to serve objectives as varied as marketing, human resources management, innovation, health and wellness, education, and customer engagement. This course, the first of its kind, examines the mechanisms of gamification and provides an understanding of their effective use.

The course uses a project-based approach to explore gamification as a design practice, which is rooted in research on human motivation and implemented through online systems and social media. No particular technical skills or game knowledge is required. The course draws upon interdisciplinary source material as well as case studies to identify effective analytical models, strategies, techniques, and metrics for the application of game elements to real-world business context.

LGST/MGMT/OPIM 692**Advanced Negotiation**

Description: This course is designed to teach negotiation principles and to enable students to develop their negotiation skills. This course assumes familiarity with the basic negotiation concepts covered in the prerequisite for this course: Negotiations. In this course, we extend the study and practice of negotiations and we develop a deeper understanding for how specific aspects of the negotiation process (e.g., emotions, deadlines, trust violations) impact outcomes. Through course lectures, readings, and case exercises, students will develop a rich framework for thinking about the negotiation process and acquire tools for guiding the negotiation process.

Prerequisites: LGST 806, Negotiation and Conflict Resolution.

LGST/OPIM 693**Influence**

Description: Building, protecting and using influence is critical for achieving your goals. This requires good personal decision-making as well as understanding others' decision-making, proficiency at the negotiation table as well as with the tacit negotiations before and after sitting at the table. In this course we focus on building your facility with a wide range of influence tools to help with these efforts. Topics include persuasion, coalitional bargaining, social cognition, networks, and status, as well as their applications to analytics, organizational decision-making and policy.

LGST 785/LAW 542/MGMT 785**Business Strategy and Corporate Law**

Description: This course explores strategic, business and legal decision making in a fluid real world corporate context. Classes will cover a series of timely financial and legal subjects as well as case studies that deal with topical problems in corporate governance, investment strategy, executive compensation, and potential corporate and criminal behavior. Press, public market reaction, and governmental/political considerations will be integrated into the classroom.

LGST 802**Corporate Law and Management in Global Perspective**

Description: This course provides an introduction to the law of corporate management and finance, focusing on large publicly held corporations. It is presented from the perspective that before too long virtually all students will serve on one or more corporate boards of directors and that each should, therefore, know about the duties owed by directors and officers to those toward whom they bear a fiduciary duty. The course covers the basic obligations of corporate directors and managers under state corporate law and the federal securities laws. It also considers the rights and responsibilities of other major stakeholders in the governance of public corporations, including shareholders, creditors/bondholders, employees (including corporate executives), investment bankers, corporate lawyers, and accountants. Particular attention is given to the law of mergers and acquisitions. Important issues of social policy

concerning large business corporations are also discussed.

Format: Discussion of legal cases and materials, midterm, and final exam.

LGST/REAL 804**Real Estate Law**

Description: See Real Estate, REAL 804.

LGST 805/MKTG 760**Law of Marketing and Antitrust**

Description: The course explores the legal aspects of marketing strategy. The course considers the technology and intellectual property dimensions (including federal patent, copyright, and trademark law) as well as federal and state laws pertaining to trade secrets, unfair competition, and consumer protection. The focus is primarily on U.S. law, but the challenges posed by diverse domestic, foreign, and international regimes will also be emphasized. The course is useful to students contemplating employment in the field of marketing, and to students interested in anticipating legal constraints on competitive strategies. Most broadly, the course should be of interest to anyone desiring to understand the legal and public policy issues relating to the government regulation of business.

Format: Lecture and legal case discussion.

LGST 806/MGMT 691/OPIM 691**Negotiation and Conflict Resolution**

Description: This course examines the art and science of negotiation, with additional emphasis on conflict resolution. Students will engage in a number of simulated negotiations ranging from simple one issue transactions to multi-party joint ventures. Through these exercises and associated readings, students explore the basic theoretical models of bargaining and have an opportunity to test and improve their negotiation skills.

Format: Lecture, class discussion, simulation role-play, and video demonstrations.

LGST 807**Securities Regulations**

Description: The course examines the federal securities law and the operation of the Securities Exchange Commission. The legal responsibilities of corporate managers, accountants, underwriters, and broker-dealers, occasioned by the securities regulatory scheme, will be investigated. Students will be encouraged to evaluate, from a managerial perspective, the various aspects of securities regulation studied. The course will discuss the recent financial crisis and ask the question whether enhanced securities regulation will prevent such a crisis in the future. The material covered in the course will provide familiarity with the basic legal structure of securities regulation and will assist in understanding the current policy issues in securities law. The course should help students to develop the ability to read and learn further in the field and to improve their effectiveness of communication with attorneys. It will also suggest ways of detecting instances in which an attorney should be consulted. The course is particularly useful for those stu-

dents pursuing careers in corporate finance, investment banking, mergers and acquisitions, sales and trading, venture capital, private equity, entrepreneurship, accounting, corporate management and real estate.

Format: Midterm and final exam.

LGST 809/MGMT 815

Sports Business Management

Description: This course examines various business disciplines as they apply to the sports industry. The course provides the student with an overview of the business of the intercollegiate, Olympic and professional sports enterprises. In addition, the course investigates the business related issues encountered by managers of sports organizations and covers how business principles can be applied to effectively address these issues.

LGST 810

Business Ethics and Corporate Responsibility

Description: This course examines the foundations of moral reasoning and the analysis of ethical issues that arise in a wide range of contemporary business practices, both domestically and globally. This course is designed to inform and stimulate thinking on ethical issues, corporate social responsibility, and professional challenges encountered in business. The course material should help enable students to recognize and manage ethical issues and to formulate their own standards of integrity and professionalism. Ethics is not meant to be a stand-alone topic, but should be integrated into all aspects of business. The course relates to issues in organizational behavior and management, strategy, marketing, and international business. Topics covered include competitive intelligence gathering, diversity, fairness in the workplace, shareholder resolutions, social investing, bribery, corporate social responsibility and financial performance, microfinance, global health, and global poverty.

Format: Class discussion, student presentations, and guest speakers.

LGST 811/HCMG 854

Legal Aspects of Health Care

Description: See Health Care Management, HCMG 854.

LGST 813

Legal and Transactional Aspects of Entrepreneurship

Description: Legal Aspects of Entrepreneurship is a practical and intensive course that examines the critical legal and transactional issues confronting start-up and emerging growth companies. Although the context of the course is early stage companies, many of the concepts studied are equally applicable to more mature, established companies. The course provides perspective on how to use the law strategically to manage risk, deploy resources and maximize shareholder value. Topics include the enforceability of confidentiality, non-competition and other restrictive covenants in employment agreements; choice of business form including the legal, financial and tax advantages and disadvantages of general partnerships, limited

partnerships, corporations and limited liability companies; tax and securities law; legal aspects of raising capital including structuring venture capital and private equity financing; and entrepreneurial acquisition structures, employment law, and intellectual property law including trade secrets, copyrights, patents, and trademarks.

Format: Lecture and discussion with coverage of legal cases and materials. Class participation, midterm and final exam. Students who have taken certain legal studies courses may find limited overlap with this course.

LGST 815

Environmental Management Law and Policy

Description: This course provides an introduction to environmental management with a focus on law and policy as a basic framework. The primary aim of the course is to give students a deeper practical sense of the important relationship between business and the natural environment and to think critically about how best to manage this relationship.

LGST 820

International Business Ethics

Description: This course is a multidisciplinary, interactive study of business ethics within a global economy. A central aim of the course is to enable students to develop a framework to address ethical challenges as they arise within and across different countries. Alternative theories about acting ethically in global environments are presented, and critical current issues are introduced and analyzed. Examples include bribery, global sourcing, environmental sustainability, social reports, intellectual property, e-commerce, and dealing with conflicting standards and values across cultures. As part of this study, the course considers non-Western ethical traditions and practices as they relate to business.

LGST 830

Social Impact and Responsibility: Foundations

Description: What role can business play in helping to meet global societal needs, whether it involves the environment, improving health, expanding education or eradicating poverty? Is there any responsibility on the part of business to help meet those needs? What are models of successful business engagement in this area? How should success be measured? Are there limits to what businesses can and should do, and what institutional changes will enable businesses and entrepreneurs to better succeed?

This survey course provides students the opportunity to engage in the critical analysis of these and other questions that lie at the foundation of social impact and responsibility as an area of study. The course involves case studies, conceptual issues, and talks by practitioners. The course is designed to help students develop a framework to address the question: "How should business enterprises and business thinking be engaged to improve society in areas not always associated with business?"

Format: Twelve-session discussion-based course with midterm exam and final project.

Management

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Management website at: <<http://mgmt.wharton.upenn.edu/>>.

The Management major develops students' knowledge and expertise to manage complex, established enterprises or guide start-up enterprises in their formative years. The department encompasses strategic and entrepreneurial management, as well as the management of people and organizations across national and cultural borders. It offers a general major in Management, as well as focused majors in Entrepreneurial Management, Organizational Effectiveness, Multinational Management, and Strategic Management. Majors in Entrepreneurial Management, Strategic Management, and Multinational Management can count some courses outside the department toward their major requirements. The general Management major provides the flexibility of choosing courses across different areas of interest within the department.

Majors are available in the following fields:

- Entrepreneurial Management
- Management
- Multinational Management
- Organizational Effectiveness
- Strategic Management

Please note that only one Pass/Fail credit unit may be used to fulfill the requirements of any management major.

ENTREPRENEURIAL MANAGEMENT

The Entrepreneurial Management major provides MBA students with skills, analytical tools, perspectives, and experiences that prepare them for careers as autonomous entrepreneurs, family-business entrepreneurs, or entrepreneurs in corporate settings. Whether a student wants to start a business while in school, join an emerging business, or set the groundwork to launch a new firm later in his or her career, the program aims to provide preparation for all of these exciting options. Entrepreneurial skills and thinking are actively sought by more competitive and profitable growing businesses. The special strength of this program is that it combines theory with practice, providing students the opportunity to test the theories, models, and strategies learned in the classroom by creating real business plans, working on other field projects, and gaining access and insight from leaders in the entrepreneurial business community.

Requirements for the Major

The major consists of a total of five credit units, one of which is a part of the Management Core.

a) One credit unit (1 cu) of the Management Core

(any combination of Management core courses up to a maximum of 1 cu)

b) MGMT 801: Entrepreneurship (.5 cu) is required for the major and cannot be waived or substituted. Students are recommended (but not required) to take this foundation course before the elective courses listed in section 'c' below.

c) Three and a half credit units (3.5 cu) of the following:

FNCE 750	Venture Capital and the Finance of Innovation
HCMG 866	eHealth: Business Models and Impact
HCMG 867	Health Care Entrepreneurship (.5 cu)
LGST 813	Legal Aspects of Entrepreneurship
MGMT 731	Technology Strategy (.5 cu)
MGMT 766	Family Enterprise Management
MGMT 802	Change, Innovation and Entrepreneurship (.5 cu)
MGMT 804	Venture Capital and Entrepreneurial Management (.5 cu)
MGMT 806*	Formation and Implementation of Entrepreneurial Ventures
MGMT 809	Private Equity in Emerging Markets (.5 cu)
MGMT 810*	Societal Wealth Venturing
MGMT 811	Entrepreneurship through Acquisition (.5 cu)
MGMT 816	Building Human Assets in Entrepreneurial Ventures (.5 cu)
MGMT 833	Strategies and Practices of Family-Controlled Companies
MGMT 893	Advanced Study Project in Entrepreneurial Management (.5 cu or 1 cu)
MGMT 899	Independent Study in Entrepreneurial Management (.5 cu or 1 cu)
MKTG 781	Entrepreneurial Marketing (.5 cu)
MKTG 890	Global Consulting Practicum (only 1 cu can count toward the major)
OPIM 614	Managing the Productive Core of the Firm: Innovation (.5 cu)
OPIM 651	Innovation, Problem Solving, and Design (.5 cu)
OPIM 654	Product Design and Development (.5 cu)
OPIM 662	Enabling Technologies
REAL 891	Real Estate Entrepreneurship (.5 cu)

*MGMT 806 and MGMT 810 apply a common theoretical framework to businesses with differing value propositions and therefore students should not plan their course of study to include both of these courses.

- d) Optional: a maximum of one credit unit (1 cu) of the following courses may be substituted for 1 cu of elective courses listed under (c) above:*

FNCE 751	Finance of Buyouts and Acquisitions
MGMT 691/	Negotiations
OPIM 691/	
LGST 806	
MGMT 721	Corporate Development: Mergers and Acquisitions
MGMT 773	Managing Organizational Change
MKTG 721	New Product Management (.5 cu)
MKTG 724	Advertising Management (.5 cu)
MKTG 712	Marketing Research
MKTG 777	Marketing Strategy

MBA Advisor: Ms. Nellie Gaynor (telephone: 215.898.1901; email: nelliebk@wharton.upenn.edu)

MANAGEMENT

This major allows a student to flexibly choose among the full set of the department's offerings. As a consequence, students can mold a curriculum that spans issues of managing the internal processes of firms and considerations of strategic advantage— for both young and growing, as well as established organizations. Students will have the opportunity to develop a background that will make them well suited to general management and leadership positions in firms and to serve these firms in advisory roles with leading consulting firms. This major cannot be taken in conjunction with one of the other majors offered by the department.

Requirements for the Major

The major consists of five credit units. **Only one credit unit of pass/fail coursework can be counted toward the major.**

- Up to one credit unit (1 cu) may come from the Management Core (MGMT 610/611/612).
- The remaining four credit units can be fulfilled by any of the department's electives.

MBA Advisor: Adrian Tschoegl (telephone: 215.898.1149; email: tschoegl@wharton.upenn.edu)

MULTINATIONAL MANAGEMENT

The purpose of the multinational management major is to prepare MBAs for managerial, financial and consulting positions in which a sophisticated understanding of the multinational firm, the international competitive environment, and the cross-national political and social aspects of business is required.

The major consists of courses on multinational manage-

ment complemented by functional electives in the areas of finance, marketing, accounting, legal studies, public policy, real estate or healthcare management.

Requirements for the Major

The major consists of 4.5 credit units beyond the required curriculum (i.e., MGMT 611/612). **Only one credit unit of pass/fail coursework can be counted toward the major.**

- Required course (Between .5 cu and 1 cu)

MGMT 611	Managing the Established Enterprise
or	
MGMT 612	Managing the Emerging Enterprise
- At least 1.5 cu of Multinational Management electives (If neither MGMT 871 nor 875 are offered, an international functional course— see (c) — may be substituted with approval of the advisor.)

MGMT 715	Political Environment of the Multinational Firm (.5 cu)
or	
MGMT 720	Corporate Diplomacy
MGMT 871	Multinational Business Policy
MGMT 875	International Comparative Management
MGMT 894	ASP for Multinational Management
- Remaining credit units from any other international courses in Management, Finance, Marketing, OPIM, BEPP, Health Care or Legal Studies and Business Ethics. New course offerings, changes in offerings and changes in content make it impossible to provide a firm list of approved courses but the following is a list of courses that have typically been approved for the Multinational Management major:

MGMT 736	Inside Indian Business
MGMT 788	Governance and Management of Chinese Firms
MGMT 809	Private Equity in Emerging Markets (.5 cu)
ACCT 730	International Accounting and Financial Reporting
BEPP 788	International Industrial Development Strategies
BEPP 789	Nations, Politics, and Markets
BEPP 798	Privatization: An International Perspective
FNCE 731	International Corporate Finance
FNCE 732	International Banking
HCMG 859	Comparative Health Care Systems
HCMG 868	Private Sector Development in Global Health (.5 cu)
HCMG 890	Health Care Innovation in India
LGST 802	Global Corporate Law and Management
LGST 820	International Ethics
LGST 830	Social Impact and Responsibility
OPIM 673	Global Supply Chain Management (.5 cu)
REAL 821	Real Estate Development
REAL 890	International Real Estate Comparisons (.5 cu)

*Only 1 cu of Advanced Study Project including Global Modular Courses may count towards the Goergen Entrepreneurial Management elective requirements stated in (d) above and must have approval from the department.

Global Modular Courses, Advanced Study Projects or Independent Studies including MGMT 656, MKTG 890 and Field Application Projects that are highly international in scope and pedagogical purpose.

INSEAD and LBS courses that are highly international in scope and pedagogical purpose may be included with permission if you receive a grade of 3 or 4.

MBA Advisor: Adrian Tschoegl (telephone: 215.898.1149; email: tschoegl@wharton.upenn.edu)

ORGANIZATIONAL EFFECTIVENESS

The Organizational Effectiveness major is designed to educate students in the leading edge of theory and practice associated with the management of employees and the design of organizations. It spans topics from understanding the behavior of individuals and groups to designing management systems and structures to support business strategy. It serves students with a range of career objectives: (1) those who seek leadership positions focusing on employees in organizations; (2) those interested in consulting in the area of organizational effectiveness or management consulting more generally; and (3) those interested in balancing a more technical academic and business backgrounds with greater depth in understanding behavioral and management expertise.

Requirements for the Major

The major requires four credit units. **Only one credit unit of pass/fail coursework can be counted toward the major.**

- a) Organizational Effectiveness required courses (1.5 cu):
 - MGMT 610 Foundations of Teamwork and Leadership (.5 cu)
 - MGMT 611 Managing the Established Enterprise or
 - MGMT 612 Managing the Emerging Enterprise
- b) Plus 2.5 credit units of the following:
 - MGMT 625 Corporate Governance, Executive Compensation and the Board (.5 cu)
 - MGMT 671 Executive Leadership
 - MGMT 691 Negotiations
 - MGMT 736 Inside Indian Business
 - MGMT 740 Leading Effective Teams
 - MGMT 751 Strategic Management of Human Assets (.5 cu)
 - MGMT 772 Power & Politics in Organizations
 - MGMT 773 Managing Organizational Change
 - MGMT 788 Governance and Management of Chinese Firms
 - MGMT 802 Innovation, Change, & Entrepreneurship (.5 cu)

- MGMT 816 Building Human Assets in Entrepreneurial Ventures (.5 cu)
- MGMT 895 Advanced Study Project in Management

MBA Advisor: Adrian Tschoegl (telephone: 215.898.1149; email: tschoegl@wharton.upenn.edu)

STRATEGIC MANAGEMENT

This major provides students with a deep grounding in the basic logic of competitive advantage, premised on a careful analytical treatment of the distinct qualities and positions of individual firms and an understanding of broader competitive dynamics. This background would position students well for guiding strategy at both established and emerging enterprises, as well as prepare them for positions with consulting firms that work with firms in setting their strategies.

Requirements for the Major

Only one credit unit of pass/fail coursework can be counted toward the major.

- MGMT 611 Managing the Established Enterprise or
- MGMT 612 Managing the Emerging Enterprise

Course requirements for a Strategic Management major include four credit units from the following:

- a) At least three credit units must come from the following list:
 - MGMT 653 Field Application Project
 - MGMT 701 Strategy and Competitive Advantage
 - MGMT 711 Competitive Strategy and Industrial Structure
 - MGMT 714 American Business History
 - MGMT 717 Deals: The Economic Structure of Transacting and Contracting
 - MGMT 721 Corporate Development: Mergers and Acquisitions
 - MGMT 731 Technology Strategy (.5 cu)
 - MGMT 782 Strategic Implementation
 - MGMT 784 Managerial Economics and Game Theory (.5 cu)
 - MGMT 801 Entrepreneurship (.5 cu)
 - MGMT 871 Multinational Business Strategy
 - MGMT 891 Advanced Study Project in Strategic Management
 - MGMT 925 Seminar in Corporate Strategy (only with permission)

* At most one credit unit can come from MGMT 653 and MKTG 890. MGMT 691 does not count towards the Strategic Management major.

- b) You may count up to one credit unit from the following list:*

LGST 815	Environmental Law: Management and Policy
MGMT 715	Political Environment of the Multinational Firm (.5 cu)
MGMT 720	Corporate Diplomacy
MGMT 751	Strategic Management of Human Assets (.5 cu)
MGMT 773	Managing Organizational Change
MGMT 802	Innovation, Change & Entrepreneurship (.5 cu)
MKTG 777	Marketing Strategy
MKTG 890	Global Consulting Practicum (1.5 cu) (if approved by Strategy Advisor)
OPIM 666	Information/Industry Structure and Competitive Strategy (.5 cu)
OPIM/ MGMT 690	Managerial Decision Making

MBA Advisor: Adrian Tschoegl (telephone: 215.898.1149; email: tschoegl@wharton.upenn.edu)

COURSE DESCRIPTIONS

MGMT 610 (.5 cu)

Foundations of Teamwork and Leadership

(cannot be waived)

Description: See Core Section.

MGMT 611

Managing the Established Enterprise

Description: See Core Section.

MGMT 612

Managing the Emerging Enterprise

Description: See Core Section.

MGMT 625 (.5 cu)**

Corporate Governance, Executive Compensation and the Board

Description: This course studies the relationship between the firm and its owners. Managing owners and other external stakeholders is a core part of senior leaders' job. On the other side, the firm's owners need to be able to effectively control the behavior of management if they are to protect their investments. This course aims to train students to deal with corporate governance issues from both sides of the table. Specifically, the goals of the course are to: "Prepare students for leadership

roles in firms as entrepreneurs, CEOs or senior managers. We will learn about the core issues that leaders face in managing investors and other stakeholders, and the strategies that they can pursue to manage them." "Prepare students to manage investments in companies in Venture Capital, Private Equity or investment funds. Success in these professions requires being able to manage your relationship with the companies that you have invested in. We will learn the tools that are available to investors to run companies, and the problems that they can face." "Educate students in the responsibilities they may face as directors of companies, and how they can be effective in these roles." "Give students an overview of how business activities fit into broader society, by discussing who should control the firm, and the goals they should pursue."

Format: This course is mainly case based, but with extensive lecture and broader discussion.

Prerequisites: MGMT 611 or MGMT 612.

MGMT 653

Field Application Project

Description: The course is unique since there are no classroom meetings, all meetings are held in the professor's office in small groups of 4-6. Student teams work with faculty and host managers to construct innovative solutions to real-time issues. Solutions are integrative and cross-functional in nature. The course encourages creative thinking and uses cutting-edge ideas like game theory, measuring changes to brand equity, and non-market cap equity indexing. An emphasis is placed on teaching students how to frame unstructured business so as to convince others. Some projects are with non-profits, particularly those in microfinancing and the arts.

Format: Teams (4-6 members) meet with faculty on a weekly basis (30-45 minutes). There will also be 3-5 meetings with host managers. In addition to meeting with their Faculty Head, students are given access to "area of expertise" faculty. These faculty members are chosen based on their prime research areas. Students are given access to the most up-to-date models and information.

MGMT 656 (.5 cu)

Global Immersion Program

Description: Global Immersion Programs (GIPs) are elective courses designed to provide high-level surveys of economic, cultural and geo-political drivers behind regions integral to the global economy. Students who complete this course advance their understanding of what it takes to do business with and/or in the region of study. Programs are offered in several sections, each examining a different global market. In the 2013-2014 academic year programs were offered in China, South America (Brazil, Argentina, and Peru), India, and the Middle East (Israel, Jordan, and Turkey). Each section is limited to 35 MBA students.

Format: The course has 3 components: on-campus sessions, a multi-week study tour, and written assignments. On-campus sessions include orientation, 3 to 4 faculty lectures, health and pre-departure briefings. Lectures are offered by regional experts

* At most one credit unit can come from MGMT 653 and MKTG 890. MGMT 691 does not count towards the Strategic Management major. Global Modular Courses with a significant Strategic Management focus may be counted toward the major.

** May not be offered in 2014-2015.

drawn from the extensive Penn network. They are designed to establish foundational knowledge while providing an introduction to topics relevant to the region of study. The immersive component is between two- and three-weeks in length and takes place during winter or spring breaks or in the weeks between spring final exams and the start of most internships. Pre-arranged visits with leaders in business, government and culture, coordinated as part of this experience contribute exponentially to the course's academic component. Assignments include a company profile due prior to the immersion experience, company visit summary and a final research paper due after the immersion experience.

Requirements: Attendance at lectures and study tour visits, readings, active participation, written assignments and final paper.

Grading: Pass-Fail only. (This does not count toward the 1 cu limit of pass-fail courses per semester.)

MGMT 671

Executive Leadership

Description: Leaders mobilize resources toward valued goals. In this course, the focus is on growing the student's capacity as a total (whole) leader. Performance and results are our central concern. And, in response to the demands and opportunities in today's business environment, we extend beyond work to develop leadership in the context of the student's whole life. The core idea is that leadership is about making a difference in all aspects of one's life. This course provides leadership and communication tools needed to integrate work, family, community and self for increased performance and enriched lives. Students learn key leadership principles and apply them in self-designed experiments to better meet their current and future leadership challenges.

Format: In addition to readings, this course requires introspection, dialogue, and creative action in the real work that involves work, family, community and self.

MGMT/OPIM 690

Managerial Decision Making

Description: See Operations and Information Management, OPIM 690.

MGMT 691/OPIM 691/LGST 806

Negotiations

Description: This course examines the art and science of negotiation. This course develops managerial skills by combining lectures with practice, using exercises where students negotiate with each other. Over the course of the semester, students will engage in a number of simulated negotiations ranging from simple one issue transactions to multi-party joint ventures. Through these exercises and associated readings, students explore the basic theoretical models of bargaining and have an opportunity to test and improve their negotiation skills.

Format: Lecture, class discussion; simulation/role-play; video demonstrations, course diary of responses to readings, simulations, and observations of techniques in practice; and final paper.

MGMT/LGST/OPIM 692

Advanced Negotiation

Description: See Operations and Information Management, OPIM 692.

MGMT 701

Strategy and Competitive Advantage

Description: This course is concerned with strategy issues at the business unit level. Its focus is on the question of how firms can create and sustain a competitive advantage. A central part of the course deals with concepts that have been developed around the notions of complementarities and fit. Other topics covered in the course include the creation of competitive advantage through commitment, competitor analysis, different organizational responses to environmental changes, real options, modularity, and increasing returns. An important feature of the course is a term-length project in which groups of students work on firm analyses that require the application of the course concepts.

Format: Strong emphasis on class discussions based on prescribed readings and cases, project presentations by student groups, informed participation in class discussions; a paper and a presentation of the term project.

Prerequisite: MGMT 611 or MGMT 612.

MGMT 711

Competitive Strategy and Industrial Structure

Description: This is a course in analyzing competitive interactions. The course emphasizes a vision of strategy in which each competitor simultaneously chooses its strategy, taking into account the strategies of its opponents. Crucial to this vision is the anticipation of the moves of your opponent and, in particular, the expectation that your opponent is (almost) as smart as you. Equal attention will be given to the development of techniques for analyzing competitive interactions and to the application of those techniques. Game theory and the economics of industrial organization provide the basis for the theoretical constructs developed in the course. Topics that will be explored include: market failures and profitability, competitive bidding, signaling, entry deterrence, agenda setting, regulations, and price wars.

MGMT 712

Managing Interfirm Alliances

Description: This course explores the management of strategic partnerships between firms, which have surged in recent years in response to globalization, technological evolution, deregulation, shortened product life cycles, and intensified competition. Today's alliances drive corporate growth and change, and vary greatly in terms of partner type, commitment, equity investment, degree of control, scale, and scope. They range from bilateral arrangements to ecosystems to outsourcing, often blurring traditional organizational boundaries and leading to the creation of globally distributed enterprises. In view of these contemporary developments, the objectives of the course are two-fold: (1) to arm you with a set of tools to facilitate the

selection of an appropriate alliance strategy in a given situation; and, (2) to provide you with frameworks to help the initiate and implement different kinds of partnerships. The emphasis lies on strategic and organizational aspects in the formation and management of these transactions, rather than financial considerations. Alternative growth strategies to strategic alliances (e.g., acquisitions), the impact of these partnerships on competition within an industry, and regulatory constraints will also be discussed.

Format: In terms of its pedagogical approach, this is designed to be an interactive, applied, case-based course with accompanying conceptual readings to help structure your thinking. Given the nature of the course, we will also apply the lessons from the cases to understand the challenges and implications of relevant recent and on-going deals. In addition, guest speakers with experience in investment banking, consulting, and industry will be invited to share their perspectives. A group project is intended to give you the opportunity to apply your learning from the course to a context that is most interesting and relevant to you.

MGMT 714

American Business History

Description: This course examines how the kind of firms in which most Wharton students will spend the next stage of their careers came to be as they are today. At a superficial level, the course's objectives are descriptive and narrative. Its deeper purpose is to give students some idea of how to think about the future evolution of firms and industries. The course will discuss the historical development of the business enterprise as an institution. It will also cover the evolution of competition and strategy and of corporate finance. The focus will be on American developments, since many of the innovations took place here, but there is scope for comparison with institutions in Japan and the leading European economies if there is student interest. The course considers issues arising in a number of different management disciplines and shows off their interrelationships.

Format: Case and other document-based discussion and occasional lecture, research paper or examination and class participation.

Prerequisite: MGMT 611 or MGMT 612.

MGMT 715 (.5 cu)

Political Environment of the Multinational Firm

Description: Successful practitioners of corporate diplomacy meld art and skill in engaging external stakeholders to advance their corporate interests. They craft international coalitions of stakeholders spanning politicians, regulators, bureaucrats, analysts, investors, lawyers, reporters, consumers and activists. They influence these stakeholders' opinions, perceptions, behaviors and decisions so as to secure a favorable policy outcome, collective decision or shift in group opinion that enhances their corporation's ability to generate a profit by satisfying a market demand. This course surveys the managerial, political economic, sociological and psychological foundations of corporate

diplomacy as well as case study examples of successful and failed implementation in order to develop an interdisciplinary framework for the play of global influence games. The insights gained can be applied to influence team decision-making and organizational politics as well as by individuals and organizations in lobbying, marketing, sales, political campaigns and corporate, national or multilateral projections of soft power.

MGMT 717

Deals: The Economic Structure of Transacting and Contracting

Description: This course focuses on the role of professionals in creating value through transaction engineering. The overall goal of the course is to explain how private parties actually order their commercial interactions and to develop a relatively systematic theory of how they ought to do this. The first half of the course will be devoted to impediments to transacting including asymmetric information problems, difficulties intrinsic to contracting over time, enforceability, and various forms of strategic behavior and to a variety of possible responses rooted in decision theory, option theory, techniques for minimizing information problems, risk management, and incentive alignment. In the second half of the course, student teams will apply the tools developed in the first half to a series of real transactions. That part of the course will be described in a separate memo to be circulated once the roster of deals is fixed.

Format: Team performance, class participations, and final exam.

Prerequisites: This course has no formal pre-requisites but first-year MBAs should contact the professor (raff@wharton.upenn.edu) before registering.

MGMT 720*

Corporate Diplomacy

Description: This full semester elective is designed for students in the MBA program as well as other professional schools (e.g., Law, Communications, Public Policy and Engineering) with an interest in the interface between multinational corporations and political and social actors. The course is organized around a central phenomenon: international investors' attempts to overcome political and social challenges that stand between market demand and shareholder profit. The course is consciously interdisciplinary in its design. The course is built around the assumption that as international investment involves individual working in teams in multiple organizations from multiple countries motivated by some combination of self-interest, profit and public interest, an interdisciplinary perspective in which one genuinely integrates insights and tools from economics, political science, sociology, psychology will outperform a narrower approach. While our focus will be on corporate diplomacy in global influence games, the insights gained should be generalizable to many additional contexts including team decision-making, organizational politics, lobbying, marketing, sales, political campaigns and corporate, national or multilateral projections of soft power.

* May not be offered in 2014-2015.

Prerequisites: There are no formal prerequisites but participants should be able to contribute some individual expertise from previous coursework, training, and work experience and will, at other times, rely heavily on their peers to summarize and introduce key concepts and perspectives from other disciplines, industries or countries with which they may be less familiar.

MGMT 721

Corporate Development: Mergers and Acquisitions

Description: This course explores the various modes of corporate development available to managers to drive firm growth and change, including alliances, outsourcing, corporate venturing, and particularly mergers and acquisitions. The objectives are three-fold: (1) to arm the student with a set of tools to facilitate the selection of the appropriate growth strategy in a given situation; (2) to provide insights as to how to manage partnerships like alliances, outsourcing, and corporate venturing; and, (3) to develop a comprehensive framework for executing M&As, from initiation to implementation. The emphasis is on strategic and operational aspects of these transactions, rather than financial considerations. The class begins by examining the different modes of corporate development, including the applicability and management approaches for each, particularly various types of partnerships. It then delves into acquisition screening and deal-making. Afterwards, the course considers in detail post-merger integration. The course ends with the presentation of project work and a review of the course learnings. In terms of its pedagogical approach, this is designed to be an interactive, applied, case-based course with accompanying conceptual readings to help structure your thinking. Given the nature of the course, students will also apply the lessons from the cases understand the challenges and implications of relevant recent and on-going deals. In addition, guest speakers with experience in investment banking, consulting, and industry will be invited to share their perspectives. A semester-long group project is intended to give students the opportunity to apply learning from the course to a context that is most interesting and relevant.

Format: Two written assignments and a final paper.

Prerequisites: MGMT 611 or MGMT 612.

MGMT 731 (.5 cu)

Technology Strategy

Description: The course is designed to meet the needs of future managers, entrepreneurs, consultants and investors who must analyze and develop business strategies in technology-based industries. The emphasis is on learning conceptual models and frameworks to help navigate the complexity and dynamism in such industries. This is not a course in new product development or in using information technology to improve business processes and offerings. We will take a perspective of both established and emerging firms competing through technological innovations, and study the key strategic drivers of value creation and appropriation in the context of business ecosystems.

Format: This course uses a combination of cases, simulations and readings. The cases are drawn primarily from technology-based industries. Note, however, that the case discussions are mainly based on strategic (not technical) issues. Hence, a technical background is not required for fruitful participation.

MGMT 736

Inside Indian Business

Description: This project-oriented course focuses on Indian business. There are several themes underlying the course: the India Way, a mix of management and leadership practices that distinguishes many Indian firms; the contemporary political economy of India; the nature of the historic economic reforms of 1991, and how established Indian firms, particularly Indian conglomerates, adapted during the 1990's to the changed competitive landscape; the explosive growth of the Indian telecommunications sector; bottom of the pyramid business model and an emphasis on both product and business model innovation; the media and entertainment industries including Bollywood; the Indian health care sector; the software services sector and the remarkable global success of several firms, and their contemporary globalization challenges; and, finally, a comparison of China and India, and the different challenges facing them. The emphasis is integrative, and the course builds upon several required first year courses in Management.

Format: This class will involve a mix of lectures, cases, and guest speakers, group paper on a topic relating to Indian business, and class participation.

Prerequisites: MGMT 610 and MGMT 611 or MGMT 612.

MGMT 740

Leading Effective Teams

Description: This course is designed to develop students' skills in effectively designing, leading and consulting to teams in organizations. This is an interactive course, with an emphasis on class participation and experiential learning. One of the goals of this course is to provide both the conceptual understanding and the behavioral skills required to implement strategies for improving team effectiveness. To this end, class sessions will make use of a variety of approaches to teaching and learning, including the case method, simulation exercises, lectures, and a field project with a real team for which you will provide an analysis and set of recommendations. It is expected that students will leave this course with comprehensive knowledge of how to diagnose and intervene — as leader, member, or consultant — to improve the effectiveness of teams in any setting.

Format: Case method, simulation exercises, required textbook, lectures, and a field project.

Prerequisites: MGMT 610.

MGMT 751 (.5 cu)

Strategic Management of Human Assets

Description: This course introduces the student to the strategic role human resource management might play in creating competitive advantages for firms. We study P/HRM policies

and practices in context and consider broader corporate strategies, business activities, and competitiveness in an increasingly global marketplace. We give attention to the diversity of the American workforce, and to the effects of changing technologies in production and in provision of services.

Format: This course covers specific activities typically associated with the practice of P/HRM: staffing, the assurance of equal employment opportunity, compensation and employee relations. The final section of the course comprises customized readings and programs for study based on student interest. These modules will include interaction with practitioners where possible.

Prerequisites: MGMT 611 or MGMT 612, or equivalent.

MGMT 766

Family Enterprise Management

Description: This class will examine the causes and consequences of the creation of family fortunes, with a focus on the practical implications for family decision-making. We will discuss psychological characteristics associated with the typically entrepreneurial creators of family wealth; with their children, whose childhood development takes place in the context of growing businesses and accumulating wealth; and with their grandchildren and beyond, whose childhood development occurs in the context of established and often very public wealth, to build a comprehensive view of the interplay between family dynamics and economic decision making. Note that this class' focus will be on behavioral aspects of family dynamics in a wide range of decision settings, rather than on management of an operating business per se. While this class will be particularly relevant to individuals aspiring to create their own family fortunes or whose ancestors have already done so, it will also be useful for individuals interested in foundation management, non-profit fund-raising or businesses catering to the very wealthy such as asset management and luxury retail.

Format: The class will consist of a mixture of lectures, case discussions and class exercises. Submission of several written case studies, and a final examination are required.

MGMT 772

Power & Politics in Organizations

Description: The purpose of this course is to introduce you to the power dynamics in organizations. The course is designed so that you will learn concepts that are useful for understanding, analyzing, and harnessing power. But beyond discovering ways to extend your own power, influence and political skill in organizations, we will also uncover lessons about ways in which power and politics can blind you, and how to navigate situations in which you are up against powerful people. Using a range of theoretical and business articles, cases, exercises, assessments, and simulations, we will extract a variety of lessons about power and politics in organizations. Topics include political skill, influence, issue selling, change management, networks, hierarchy, political conflict, corruption, coping with intolerable bosses, speaking up, redemption, and downsizing.

MGMT 773

Managing Organizational Change

Description: During the last decade it has become clear that in the global economy, firms must constantly adapt to changing technological, competitive, demographic and other environmental conditions in order to survive and prosper. The importance of acquiring the knowledge and tools for changing organizations successfully cannot be overemphasized (particularly for students headed for consulting and general management careers, although not limited to them). This course focuses on specific concepts, theories and tools that can guide executives entrusted with the task of leading organizational change to successful execution. Among other topics, the course will focus on various change strategies such as leading change, managing cultural change, and mergers or acquisitions, corporate transformation, managing growth, building the customer centric organization, business process outsourcing both from client and provider perspectives, and managing radical organizational change. The perspective of the course is integrative and the focus is on successful execution.

Format: The class will involve a mix of case discussion, outside speakers, lectures and exercises. Participation is an important component, making attendance crucial. The course is project based. The major assignment will consist of a small group project working on a real "live" organization that is undergoing change and drawing lessons and making recommendations from such field research.

Prerequisite: MGMT 611 or MGMT 612.

MGMT 782*

Strategic Implementation

Description: This course is directed toward the attainment of five interdependent objectives: 1) to develop an understanding of strategy implementation in complex organizations; 2) to understand how organizational planning, design, control and human resource decisions are interdependent and critical to successful implementation; 3) to develop a sensitivity to the "realities" of strategy implementation in "real world" organizations; 4) to obtain a deeper understanding of your personal management style and how it may help or hinder strategy implementation; and 5) to become a better communicator and implementer of strategy. To meet these course objectives, the emphasis will be on learning powerful ideas about how to be systematic in strategy implementation efforts, making use of research about case problems, class discussions, in class exercises, and student presentations. Much of the learning will take place in group discussions outside the classroom in preparation for the time we meet in the classroom.

Format: Case research, participation in class discussions, presentations, group projects, individual paper.

Prerequisites: Familiarity with basic concepts of business strategy is a helpful preparation for this course.

* May not be offered in 2014-2015.

MGMT 784 (.5 cu)**Managerial Economics and Game Theory**

Description: The purpose of this course is to develop students' abilities to apply game theory to decision making. Development of the tools of game theory and the application of those tools is emphasized. Game theory has become an important tool for managers and consultants in analyzing and implementing tactical as well as strategic actions. This course will primarily focus on examples useful for developing competitive strategy in the private sector (pricing and product strategy, capacity choices, contracting and negotiating, signaling and bluffing, takeover strategy, etc.). Game theory can also be used to address problems relevant to a firm's organizational strategy (e.g., internal incentives and information flow within a firm) and to a firm's non-market environment (e.g., strategic trade policies, litigation and regulation strategy).

Format: Active participation and term paper.

Prerequisites: MGEC 611 (intermediate microeconomics) or equivalent. It is expected that the student has been introduced to some basic game theory. There will be a quick review of the basics and some recommended supplemental readings for those who have little or no background in game theory.

MGMT 788**Governance and Management of Chinese Firms**

Description: From the newly-minted Internet giants to the millions of street vendors, from the powerful state-owned enterprises (SOEs) to the nameless suppliers of Walmart, Chinese firms are among the most dynamic players in today's global business landscape. They are also the lens through which we can gain knowledge and insight about the unique business environment in China, and learn how to compete effectively in such an environment. The purpose of this course is to provide students with an opportunity to conduct in-depth analysis of Chinese firms and the complex business environment that they represent. Instead of describing what is happening in China, which is futile given its fast pace of change, we will tackle the fundamental global strategy questions given the deep-rooted political, economic, and cultural forces there.

Format: Lectures, cases, group projects, and individual assignments

MGMT 801 (.5 cu)**Entrepreneurship**

Description: MGMT 801 is the foundation course in the Entrepreneurial Management program. The purpose of this course is to explore the many dimensions of new venture creation and growth. While most of the examples in class will be drawn from new venture formation, the principles also apply to entrepreneurship in corporate settings and to non-profit entrepreneurship. We will be concerned with content and process questions as well as with formulation and implementation issues that relate to conceptualizing, developing, and managing successful new ventures. The emphasis in this course is on applying and synthesizing concepts and techniques from

functional areas of strategic management, finance, accounting, managerial economics, marketing, operations management, and organizational behavior in the context of new venture development. The class serves as both a stand-alone class and as a preparatory course to those interested in writing and implementing a business plan (the subject of the semester-long course, MGMT 806).

Format: Lectures and case discussions, class participation, interim assignments, final project.

Prerequisites: Wharton MBA students only.

MGMT 802 (.5 cu)**Innovation, Change and Entrepreneurship**

Description: This course will provide you with a theoretical foundation and a set of practical tools for the management of innovation, and the change associated with it, both in corporate settings and start-up situations. For the purposes of the course innovation is defined as the profitable commercialization of a new idea: product, market, process or technology. The theoretical background will be provided by multiple readings, your knowledge of which will be tested in a readings report. The practical tools will be provided via lecture/discussion sessions, your skills at which will be demonstrated in an innovation assessment for an actual innovation situation.

Format: Lectures, discussion, interim reports, class participation, readings report.

Prerequisites: Wharton MBA students only.

MGMT 804 (.5 cu)**Venture Capital and Entrepreneurial Management**

Description: This elective half-semester course focuses on venture capital management issues in the context of the typical high-growth start-up company. The course is fundamentally pragmatic in its outlook. It will cover six principal areas relevant to the privately held high-growth start-up—these include:

- Commentary on the venture capital industry generally, as well as a discussion of the typical venture fund structure and related venture capital objectives and investment strategies
- Common organizational issues encountered in the formation of a venture backed start-up, including issues relating to initial capitalization, intellectual property and early stage equity arrangements
- Valuation methodologies that form the basis of the negotiation between the entrepreneur and the venture capitalist in anticipation of a venture investment
- The challenges of fundraising, financing strategies and the importance of the business plan and the typical dynamics that play out between VC and entrepreneur
- Typical investment terms found in the term sheet and the dynamics of negotiation between the entrepreneur and the venture capitalist
- Corporate governance in the context of a privately-held, venture capital-backed start-up company and the typical dynamics that play out between VC and entrepreneur in an insider-led, "down round" financing

Format: Lecture, case studies, class participation, weekly case assignments, and final exam.

Prerequisites: MGMT 801 recommended.

MGMT 806

Formation and Implementation of Entrepreneurial Ventures

Description: This advanced course in entrepreneurship centers on writing a comprehensive business plan and implementation plan for a venture of your choice. The course examines ways to profitably launch and exploit business opportunities (as opposed to what opportunity to explore). It will allow you to acquire the skill set necessary for crafting a winning business model for your venture—developing and writing a coherent and effective plan to start a business, in either an independent or a corporate setting. The venture must distinguish itself from existing companies through differential innovation; for example, through an innovative product or service, an innovative production process, a new business model, or by creating a new market. Students must have successfully completed MGMT 801 before enrolling in this course.

Format: Highly interactive with team progress reports delivered regularly and student expertise shared with presenters. Class participation, interim assignments, team project and presentation.

Prerequisites: MGMT 801 required, MKTG 712 recommended.

SPECIAL NOTE: MGMT 806 and MGMT 810 apply a common theoretical framework to businesses with differing value propositions; therefore, students should not plan their course of study to include both of these courses.

MGMT 809 (.5 cu)

Private Equity in Emerging Markets

Description: This course is designed to provide students with a practical understanding of private equity issues focusing on developing country environments. The underlying premise of the course is that private equity in developing country environments is a distinctly different asset class than in industrialized countries for a number of reasons that will be identified and analyzed by students, such as valuation, corporate governance standards and practices, contract enforcement and regulations, and exit alternatives. Students will assess these differences that heighten the risks for private equity investors in emerging markets and explore how they can be successfully mitigated. The course will be analytically rigorous and require a high level of weekly preparation and class participation. The case method of teaching will predominate, allowing students to gain a realistic understanding of the roles, responsibilities and analytical skills required of practitioners, and the tensions that arise between the various stakeholders, including government officials who formulate regulations and policies that affect PE investor behavior and performance. Cases will be based on actual transactions, highlighting the challenges and tasks performed at each stage of the investment cycle, such as structuring a new fund,

originating investment, conducting due diligence, monitoring and creating value in portfolio companies and exiting.

Format: Two group and one individual written assignments, a group term written assignment and active class participation.

Prerequisites: Completion or waiver of FNCE 611 or FNCE 613.

MGMT 810

Societal Wealth Venturing

Description: The basic thesis of this elective course is that some societal problems, if attacked entrepreneurially, create opportunities for launching businesses that simultaneously generate profits and alleviate the societal problem. This approach generates societal wealth as well as entrepreneurial wealth. The course is distinguished from public sector initiatives to address social problems, and also from “social entrepreneurship” programs where social wealth creation is a by-product rather than the target of the entrepreneurial effort. Student teams are expected to develop a plan to launch a societal wealth generating business. The preference is for them to begin the course with already conceived ideas for entrepreneurial solutions to social problems. They may also join a team to work on a project proposed by a student who already has a business idea.

Format: Lecture, classroom participation, live case studies (presentations of students’ own work), interim assignments, readings report, and final business plan.

Prerequisites: MGMT 801 strongly recommended.

SPECIAL NOTE: MGMT 806 and MGMT 810 apply a common theoretical framework to businesses with differing value propositions and therefore students should not plan their course of study to include both of these courses.

MGMT 811 (.5 cu)

Entrepreneurship Through Acquisition

Description: MGMT 811 focuses on theoretical and practical issues of acquiring a business. Topics include: locating a business, due diligence, reviewing and analyzing data, valuation, raising capital/financing the deal, structuring the acquisition, and integrating the target.

Format: The class consists of lectures, in-class discussions of caselets, assigned readings, and a group project.

Prerequisites: MGMT 801 recommended.

MGMT 815/LGST 809

Sports Business Management

Description: See Legal Studies and Business Ethics, LGST 809

MGMT 816 (.5 cu)

Building Human Assets in Entrepreneurial Ventures

Description: The success of entrepreneurial endeavors depends, even more so than in larger more bureaucratic organizations, on the ability to locate and manage talent effectively. Specifically, on the need to find the right people and keep them engaged in working on the organization’s goals. We focus in this course on leading, building, and maintaining

human assets in start-up and small, growing operations. The course is designed with several key components, these are: conceptual and practical readings relevant to the topic; case studies illustrating key concepts and issues; lecture on practical application and examples; and lastly every class will also feature a presentation by and conversation with an outside expert whose work is relevant to guiding or advising start-ups and fast-growing small firms. We will focus on the following objectives: identifying the talent needed to initiate and sustain an entrepreneurial endeavor; structuring human resource policies and corporate culture to prepare for and facilitate firm growth; assessing the human aspects of valuing entrepreneurial companies; and responding to conflict and organizational threats within nascent firms. This course will apply recent research from strategic human resource management, personnel economics, and organizational behavior to the practical issues of building and managing human assets in new ventures.

Format: Case discussion, guest speakers and lectures, active class participation, final project.

Prerequisites: MBA students only.

MGMT 833

Strategies and Practices of Family-controlled Companies

Description: This course is designed for those persons who desire to understand the distinct strategies and practices of family-controlled companies and family wealth management. It will focus on shareholder decision making; financial and market driven options for long-run competitiveness, organizational structures and management team issues; strategic planning from a resource-based perspective; transition planning for the corporate entity, wealth, leadership and relationships; family dynamics and communication issues; and leadership empowerment. The course is intended for those who plan to consult or provide professional services to family-controlled companies and for those planning a career in a family firm.

Format: The class is structured around topical lectures with frequent utilization of case studies requiring active participation in class case discussions, as well as on-site and off-site project work time, submission of several written case studies, and a term research project.

Prerequisites: Open to Wharton MBA and Penn graduate students.

MGMT 871*

Multinational Business Strategy

Description: This course focuses on the creation of competitive advantage in the multinational firm. It examines the nature of global competition by exploring the characteristics of global vs. non-global industries and strategies that have been successful in a global context. The course also considers issues regarding make, vs. buy, sourcing, location decisions, and alliances — all issues related to designing and coordinating the global value chain for maximum advantage. Additionally, the course examines how firms attempt to build a national presence,

including examining the market entry decision, the role of the country manager, as well as design and human resource management policies in the multinational firm.

Format: See instructor.

Prerequisites: See instructor.

MGMT 875*

International Comparative Management

Description: This course covers how firms from the US, Asia, Europe and Latin America adapt to different countries and operate in the global economy. The complexities of a world of nation-states and trade blocs produce both opportunities and challenges to firms operating across national boundaries. Most recently, however, globalization has tended to delete national boundaries in selective ways and has created new managerial challenges. This course intends to provide the future international manager with a broad view of the factors underlying international and global business success through an understanding of the relevant comparative, cross-national differences. The emphasis will be placed on providing students with concepts, techniques, and factual knowledge useful for their careers in international and global business management.

MGMT 891-900 (.25 cu)

Advanced Study Project for Strategic

Management: Curricular Practical Training

Description: This class has been developed for MBA students who are about to enter their second year and who will be doing a summer work internship in a country other than their home country or will be doing an unpaid summer work internship. Students enrolled in MGMT 891 will undergo an assessment of their leadership and communications skills followed with daily lessons and assignments in developing areas of need. These lessons focus on areas such as: managing work and time effectively, effective communication, and identifying and developing talent. Through the lessons and assignments, students are testing their learning while at work, incorporating successful lessons and refining or discarding others. The goal of this course is to make students more aware of their behaviors as well as to shape their behavior for greater impact and efficacy. The course focuses on two of the following key learning areas (which two depends on the placement test results):

1. Managing Work and Time Effectively
2. Focus on Results
3. Effective Communication
4. Engaged Listening
5. Constructive Conflict Resolution
6. Rapport and Diplomacy
7. Negotiating
8. Business Knowledge
9. Assessing and Growing Talent
10. Inspiring Peak Performance
11. Strategic Thinking
12. Balanced Leadership

* May not be offered in 2014-2015.

This online course delivers one lesson per 24-hour period. Lessons cannot be sped up. The nature of this course is to integrate work and learning. The deadline for final completion of all assignments will be announced and will be final.

Format: Online course; daily assignments. Introduction and placement module, skill-based modules equaling 40 total lessons. The number of modules will vary based on the amount of lessons within your chosen modules; however, you must complete 40 total lessons. Please note that each module may contain an assessment test.

MGMT 891

Advanced Study Project for Strategic Management

Description: ASP topics can be individually selected by the student with the advice and consent of any instructor in the management Department. All ASP registrations require the written consent of the instructor and appropriate course and section number on the registration form. If the student has the instructor's written permission, he/she is not required to obtain written consent from the Department. Students, however, should send an email to MGMT-Courseinfo@wharton.upenn.edu to request the course and section numbers. To access an ISP/ASP registration form (as well as other MBA Program Office forms) see: http://spike.wharton.upenn.edu/mbaprogram/Forms_and_Surveys/forms_home.cfm

Prerequisite: Attendance at orientation seminar in late spring.

MGMT 892

Advanced Study Project for Technological Innovation

Description: This mini course is restricted to recipients of the Mack Fellowship for Technological Innovation which is offered each year to four students or teams via an open competition announced to all second-year MBA students in January, with winners selected in May. The mini-course is a required part of the broader Fellowship to ensure grounding in current concepts, frameworks and tools for managing emerging technologies. The course covers such topics as how to assess innovation opportunities, common traps firms fall into, winning strategies and business models, financing new ventures, organizational structure and alliances, as well as leadership. To access an ISP/ASP registration form (as well as other MBA Program Office forms) see: http://spike.wharton.upenn.edu/mbaprogram/Forms_and_Surveys/forms_home.cfm

MGMT 893

Advanced Study Project for Entrepreneurial Management

Description: ASP topics can be individually selected by the student with the advice and consent of any instructor in the management Department. All ASP registrations require the written consent of the instructor and appropriate course and section number on the registration form. If the student has the instructor's written permission, he/she is not required to obtain

written consent from the Department. Students, however, should send an email to MGMT-Courseinfo@wharton.upenn.edu to request the course and section numbers. To access an ISP/ASP registration form (as well as other MBA Program Office forms) see: http://spike.wharton.upenn.edu/mbaprogram/Forms_and_Surveys/forms_home.cfm

MGMT 894

Advanced Study Project for Multinational Management

Description: ASP topics can be individually selected by the student with the advice and consent of any instructor in the management Department. All ASP registrations require the written consent of the instructor and appropriate course and section number on the registration form. If the student has the instructor's written permission, he/she is not required to obtain written consent from the Department. Students, however, should send an email to MGMT-Courseinfo@wharton.upenn.edu to request the course and section numbers. To access an ISP/ASP registration form (as well as other MBA Program Office forms) see: http://spike.wharton.upenn.edu/mbaprogram/Forms_and_Surveys/forms_home.cfm

MGMT 895

Advanced Study Project for Management

Description: ASP topics can be individually selected by the student with the advice and consent of any instructor in the management Department. All ASP registrations require the written consent of the instructor and appropriate course and section number on the registration form. If the student has the instructor's written permission, he/she is not required to obtain written consent from the Department. Students, however, should send an email to MGMT-Courseinfo@wharton.upenn.edu to request the course and section numbers. To access an ISP/ASP registration form (as well as other MBA Program Office forms) see: http://spike.wharton.upenn.edu/mbaprogram/Forms_and_Surveys/forms_home.cfm

Marketing

PLEASE NOTE: Before choosing courses and scheduling classes, check the Marketing department's website to determine the availability of courses and the possible addition of new courses for the upcoming semester at the Marketing website at: <<https://marketing.wharton.upenn.edu/>>.

The marketing major is designed to build deep competency in the art and science of: (1) choosing which customers to serve, and (2) getting, keeping and growing them through delivering superior customer value. Marketing majors will gain a proficiency in the latest methods and concepts for understanding customer behavior and for devising effective marketing strategies. This is a valuable preparation for careers in consulting and general management and essential for entrepreneurs.

Students begin by taking Marketing Management (MKTG 611 and MKTG 612 or MKTG 613), an overview of the role of marketing in the development of business strategies. Using a combination of lectures, readings, case studies, and computer simulations, these core courses review fundamental approaches in product/market selection, product line management, communications management, pricing, distribution, and marketing research. Students can choose among many electives to structure a program of study to match their interests and career objectives.

MBA Advisor: Please contact the Department at 215.898.8243 or see the inside back cover of this Guide for current information regarding the MBA advisors.

Requirements for the Major

Two majors are available: the Marketing Management major and a cross-functional major in Marketing and Operations Management.

The Marketing Management major requires five credit units. In the instance where a core course(s) has been waived, an equivalent number of credits in another marketing course(s) must be completed to replace it. **Courses taken in fulfillment of the Marketing major cannot be taken on a pass/fail basis.**

a) The two core courses:

MKTG 611 Marketing Management: Program Design
and (.5 cu)
MKTG 612 Dynamic Marketing Strategy (.5 cu)

or

MKTG 611 Marketing Management: Program Design
and (.5 cu)
MKTG 613 Strategic Marketing Simulation (.5 cu)

b) The marketing research course:
MKTG 712 Marketing Research (*formerly MKTG 756*)

c) At least three credit units chosen from the MKTG elective courses. *NOTE: If you are taking electives to fulfill waived core course credits, you must still take these three additional credits.*

Full credit courses (1 cu each):

MKTG 711 Consumer Behavior
 (*formerly MKTG 773*)
MKTG 760 Law of Marketing and Antitrust
MKTG 768¹ Contagious: How Products, Ideas and
 Behaviors Catch On
 (*formerly MKTG 728*)
MKTG 771 Models for Marketing Strategy
MKTG 774¹ Forecasting Methods for Marketing
MKTG 775 Managing Customer Value
MKTG 776 Applied Probability Models in Marketing
MKTG 777 Marketing Strategy
MKTG 778 Strategic Brand Management
MKTG 792 Creativity (*formerly MKTG 892*)

One-half credit courses (.5 cu each):

MKTG 721 New Product Management (*formerly 753*)
MKTG 724 Advertising Management (*formerly 755*)
MKTG 725 Retailing (*formerly MKTG 793*)
MKTG 727 Marketing and Electronic Commerce
 (*formerly MKTG 784*)
MKTG 741¹ Entrepreneurial Marketing (*formerly 781*)
MKTG 742 Multinational Marketing (*formerly 782*)
MKTG 746¹ Business to Business Marketing
 (*formerly MKTG 786*)
MKTG 751¹ Sales Force Management
MKTG 754 Pricing Policy
MKTG 759¹ Channel Management

Special Topics and Experimental Courses²

MKTG 730x Digital Marketing and Electronic
Commerce (1 cu)
MKTG 731x The Psychology of Consumer Financial
Decisions (1 cu)
MKTG 733x Social Impact of Marketing (.5 cu)
MKTG 806 Special Topics: Retail Merchandising
 (.5 cu) (*formerly MKTG 896*)
MKTG 809 Special Topics: Experiments for Business
Decision Making (1 cu)
 (*formerly MKTG 669*)

1. Course will not be offered in 2014-15.

2. Experimental and Special Topics courses can be taken in fulfillment of the elective requirement.

Advanced Study³ and Independent Study^{3, 4}

MKTG 890	Advanced Study Project (1 cu, except GCP which is 1.5 cu) ³
MKTG 893	Advanced Study—global modular courses
MKTG 897	Advanced Study—global modular courses
MKTG 899	Independent Study

Non-Marketing Majors

Students not majoring in Marketing often find that there are several combinations of marketing electives that fit their interests well. Popular combinations of electives include: the New Product Development one-half credit course combined with the Advertising Management or the Pricing Policy one-half credit courses (to complete one credit unit), the Marketing Research course, and the Marketing Strategy course.

COURSE DESCRIPTIONS

MKTG 611 (.5 cu)

Marketing Management

Description: See Core Section.

MKTG 612 (.5 cu)

Dynamic Marketing Strategy

Description: See Core Section.

MKTG 613 (.5 cu)

Strategic Marketing Simulation

Description: See Core Section.

MKTG 711

Consumer Behavior

Description: Marketing begins and ends with the customer, from determining customers' needs and wants to providing customer satisfaction and maintaining customer relationships. This course examines the basic concepts and principles in customer behavior with the goal of understanding how these ideas can be used in marketing decision making. The class will consist of a mix of lectures, discussions, cases, assignments, project work and exams. Topics covered include customer psychological processes (e.g., motivation, perception, attitudes, decision-making) and their impact on marketing (e.g., segmentation, branding, customer satisfaction). The goal is to

3. The Marketing Department will permit a total of no more than 1 cu credit from any Advanced Study Project (MKTG 890 – including Global Consulting Practicum), Independent Study (MKTG 899) or Global Modular Course (MKTG 893 and 897) to count toward the Marketing Major elective requirements stated in (c) above. Students may combine such courses as long as the total credit does not exceed 1 cu.

4. A student contemplating MKTG 899 (Independent Study) must first find a faculty member who agrees to supervise and approve the student's written proposal for an independent study project. Authorization forms can be found on the MBA Program Office website. Completed and signed authorization forms for MKTG 899 sections must be submitted to the Marketing Department's Course Coordinator by the third week of the semester for 1 cu sections, or by the end of first week of the quarter in which the project will be completed for .5 cu sections. **Forms submitted after these deadline will not be accepted.**

provide you with a set of approaches and concepts to consider when faced with a decision involving understanding customer responses to marketing actions. *(Formerly MKTG 773)*

Format: Lectures and discussion, case analyses, presentations.

Prerequisites: MKTG 611; and MKTG 612 or MKTG 613.

MKTG 712

Marketing Research

Description: The objective of the course is to provide a rigorous experience in marketing research methods. The course is aimed at the manager, who is the ultimate user of the research and is responsible for determining the major scope and direction of research activities. Techniques of data collection, evaluation of alternative sources of information, and methods of evaluating data and presenting the results are covered. The course should help managers recognize the role of systematic information gathering and analysis in making marketing decisions. The course also deals with how to define information needs; the use of test marketing procedures; forms of analysis applicable to marketing research information; and the role of models in decision making. *(Formerly MKTG 756)*

Format: Lecture, discussion, and cases.

Prerequisites: Completion of MKTG 611; MKTG 612 or MKTG 613 concurrently; STAT 613 strongly recommended.

MKTG 721 (.5 cu)

New Product Management

Description: This course provides a total immersion in the new product development process — from sourcing ideas and innovation, through new product sales forecasting. The focus is on collective learning, what works, what doesn't, and why. While the primary focus is the new product development process within a corporate structure, some coverage is given to key issues surrounding start-ups. *(Formerly MKTG 753)*

Format: Lectures, cases, simulations, class discussions, and guest speakers.

Prerequisite: MKTG 611

MKTG 724 (.5 cu)

Advertising Management

Description: The primary objective of this course is to provide the students with an opportunity to learn and apply the core theories, strategies, principles and practices of effective advertising management. The course utilizes theory, marketing and communications research, and significant management experience that are relevant to the design, evaluation and management of advertising. The specific topics covered in the course include consumer segmentation and target selection, consumer motivation and insight, developing a powerful communications strategy and advertising idea, evaluating and optimizing advertising execution, and developing a targeted and effective consumer connections and media plan. *(Formerly MKTG 755)*

Format: Class discussion, cases, and presentation centered on the core subjects of the advertising development process.

Prerequisites: Completion of MKTG 611; MKTG 612 or MKTG 613 concurrently.

MKTG 725 (.5 cu)

Principles of Retailing

Description: This course provides an interdisciplinary overview of the retailing industry. Primary focus will be on the customer facing activities of retailers, including assortment planning, private-label development and the management of in-store operations, and the back-door activities (forecasting and supply chain management) that support customer interaction. In addition, current issues facing retailers, such as customer relationship management, industry consolidation and supplier relations, will be explored. The course will also survey topics in finance, operations, information technology and real estate as they relate to retail.

Format: Lecture and discussion, case analyses, guest speakers.

Prerequisites: MKTG 611 and either MKTG 612 or MKTG 613; or permission of instructor.

MKTG 727 (.5 cu)

Digital Marketing and Electronic Commerce

Description: The effect of the Internet and related technologies on business and social institutions is more profound than that of any prior invention, including the printing press and the internal combustion engine. Furthermore, marketing plays a key role in shaping the modern consumption-led economies fueled by these technologies. MKTG 727 provides a research-based and framework-driven approach to understanding digital marketing and electronic commerce.

The course is organized around three sections and utilizes relevant theory, empirical analysis, and practical examples to develop the key learning points. Part I presents will establish the behavioral foundations for understanding electronic commerce and covers relevant phenomena and theory from economics, marketing, and related fields. Part II examines ecommerce business models and institutions including Internet retail, subscription commerce, and curated commerce and so on. Part III focuses on how digital marketing fosters commerce business growth. In particular, we survey, critique, and evaluate common digital marketing methods and tactics.

(Formerly MKTG 784)

Prerequisites: Completion of MKTG 611 and either MKTG 612 or MKTG 613; or consent of instructor.

Note: Students may not take both MKTG 727 and the full semester version of this course, MKTG 730x, for credit.

MKTG 730x (1 cu)

Digital Marketing and Electronic Commerce

Description: See MKTG 727. The half semester version of this course is being expanded and offered as a full semester long experimental course

Prerequisites: MKTG 611, and either MKTG 612 or MKTG 613.

Note: Students may not take both MKTG 730x and the half semester version of this course, MKTG 727, for credit.

MKTG 731x (1 cu)

The Psychology of Consumer Financial Decisions

Description: Financial decision making is a significant aspect of consumers' decisions, providing great business opportunities, and with mistakes, having significant individual and societal consequences. We have all witnessed what amassing household debt, taking on a large mortgage without financial reserves, and having insufficient savings for retirement can do to individuals, households, and communities. The basic premise of this course is that better understanding of the psychology of consumer decision making in the context of financial products and services can provide significant business opportunities, and more importantly, provide better public policy that will increase consumer well-being.

Note that this course is rooted in the psychology of financial decisions and will not focus on financial or economic models. This is a course about the psychology of individual consumers rather than financial models of the firm. In this course the perspective of the individual is taken, rather than that of the firm. The focus is on actual behavior rather than normative rational behavior. This course is fundamentally about individual decision making in the context of the consumption of financial products and services. As such, the course will cover some concepts and theories (risk aversion, loss aversion, hyperbolic discounting, etc.) covered in other courses examining the behavioral aspects of consumers and managers, such as Customer Behavior (MKTG 711) and Managerial Decision-Making (OPIM 690).

Prerequisites: None

MKTG 733x (.5 cu)

The Social Impact of Marketing

Description: Private and public sector firms increasingly use marketing strategies to engage their customers and stakeholders around social impact. To do so, managers need to understand how best to engage and influence customers to behave in ways that have positive social effects. This course focuses on the strategies for changing the behavior of a target segment of consumers on key issues in the public interest (e.g., health behaviors, energy efficiency, poverty reduction, fundraising for social causes). How managers partner with organizations (e.g., non-profits, government) to achieve social impact will also be explored.

Format: Lecture, class discussion, simulations, cases and guest lecturers.

Prerequisites: MKTG 611 or permission of instructor.

MKTG 742 (.5 cu)

Multinational Marketing

Description: Global marketing is an extremely demanding discipline but, from a career standpoint, one which is both challenging and rewarding. Inherent to the success of any global marketing professional, yet many times overlooked and/or underappreciated, is the critical nature of human understanding and relationships in business planning and execution. This is especially relevant in today's business environment when you

consider the dual multinational company imperative of continued revenue and profit growth in mature markets and successfully expanding into new growth and emerging markets. This course assumes an understanding of marketing principles and some exposure to and appreciation of the global environment. The objective of the course is to provide an understanding of how the global environment (particularly cultural diversity) affects the application of marketing principles and business practice on a global basis and the competencies necessary to be a successful global manager. *(Formerly MKTG 782)*

Format: Cases, lectures, discussions

Prerequisites: Completion of MKTG 611; MKTG 612 or MKTG 613 concurrently.

MKTG 754 (.5 cu)

Pricing Policy

Description: The course provides a systematic presentation of the factors to be considered when setting price, and shows how pricing alternatives are developed. Analytical methods are developed and new approaches are explored for solving pricing decisions.

Format: Lecture and discussion

Prerequisites: Completion of MKTG 611; MKTG 612 or MKTG 613 concurrently; OPIM 612 and STAT 613 are recommended.

MKTG 760 (1 cu)

Law of Marketing and Antitrust

Description: See Legal Studies and Business Ethics, LGST 805

MKTG 771 (1 cu)

Models for Marketing Strategy

Description: In today's business environment, marketing executives are involved in complex decision-making and they become responsible for return on their marketing investments. The first objective of this course is to help participants become better executives. By exposing students to various analytical and computer-based tools, developed for solving marketing problems, it will help to prepare them for careers in industries such as consumer packaged goods, hi-tech, financial services, media and entertainment, pharmaceutical, consulting, and venture capital. The course's main focus is on various existing models, such as models that predict the consumer's dynamic adoption of an innovative product. However, at some point in their career, students may find themselves facing business problems for which a model can assist in making decisions, but no existing model is available. Hence, the second objective of the course is to provide participants with critical skills necessary to evaluate new models to which they may be exposed by attending presentations or reading the literature. The models to be discussed in the class have been implemented and proven useful in a wide range of industries (e.g., business-to-consumers and business-to-business).

The course is not only about models, however. It also covers modeling needs. Some industries such as the media and entertainment or the pharmaceutical industries present unique

problems and modeling needs. The third objective of the course is to expose participants to the nature and essence of such idiosyncratic problems as well as modeling needs in such industries. Overall, the course will make participants understand better critical marketing problems by analyzing them rigorously and will enhance their skills in either designing or evaluating models-based strategies.

Format: Evaluating marketing models; practicing with computer-based models and software; discussing case studies that describe modeling applications; group presentations of model-based marketing analysis and strategy

Prerequisites: Completion of: MKTG 611 and either MKTG 612 or MKTG 613; basic calculus; exposure to basic statistical analysis, and some tolerance for expressing critical ideas in simple math.

MKTG 775 (1 cu)

Managing Customer Value

Description: As the concept of CRM becomes common parlance for every marketing executive, it is useful to take a step back to better understand the various different behaviors that underlie the development of successful CRM systems. These "behaviors" include customer-level decisions, firm actions, and the delicate but complex interplay between the two. Accordingly this course is comprised of four main modules.

We start with the discussion of customer profitability—focusing on the concepts of "customer lifetime value" and "customer equity". We will examine how to measure long-run customer profitability in both business-to-customer and business-to-business environments, and the uses of these measures as major components assessing overall firm valuation. Second, we move to the value that the firm provides to its customers - better understanding the true nature of customer satisfaction and its non-trivial relationship with firm profitability. Third, we examine each of the three main components of the firm's management of its customer base: customer acquisition, development, and retention - and the complex resource allocation task that must be balanced across them. Finally, we conclude with a discussion of various tactical and organizational aspects of customer relationship management.

Format: Lecture and discussion

Prerequisites: None

MKTG 776 (1 cu)

Applied Probability Models in Marketing

Description: This course will expose students to the theoretical and empirical "building blocks" that will allow them to develop and implement powerful models of customer behavior. Over the years, researchers and practitioners have used these methods for a wide variety of applications, such as new product sales forecasting, analyses of media usage, customer valuation, and targeted marketing programs. These same techniques are also very useful for other types of business (and non-business) problems. The course will be entirely lecture-based with a strong emphasis on real-time problem solving. Most sessions will feature sophisticated numerical investigations using

Microsoft Excel. Much of the material is highly technical.

Format: Lecture, real-time problem solving

Prerequisites: Students must have a high comfort level with basic integral calculus, and recent exposure to a formal course in probability and statistics is strongly recommended.

MKTG 777 (1 cu)

Marketing Strategy

Description: This course views marketing as both a general management responsibility and an orientation of an organization that helps one to create, capture and sustain customer value. The focus is on the business unit and its network of channels, customer relationships, and alliances. Specifically, the course attempts to help develop knowledge and skills in the application of advanced marketing frameworks, concepts, and methods for making strategic choices at the business level.

Format: varies by instructor. Typically: case, lecture, group projects and class discussion. See syllabus.

Prerequisites: Completion of MKTG 611; and either MKTG 612 or MKTG 613.

MKTG 778 (1 cu)

Strategic Brand Management

Description: Which brands make you happy? Apple? Starbucks? The Daily Show? Google? What draws you into these brands? How do companies create compelling brand experiences? How could you cultivate a brand that fosters consumer's happiness? This course explores such questions with the goal of identifying the ingredients for building and managing an inspired brand, where brand is defined as "a reputation" — departing from traditional perspectives of brand.

The course has been created for individuals interested in building their own brands and/or immersing themselves in the enhancement of an existing brand. The course will interweave lectures, guest speakers, case discussions, in and out of class exercises — all of which will culminate in a Brand Audit group project that students will present in the final days of class.

The course will provide students with an appreciation of the role of branding and (taking a consumer-centric approach) will augment students' ability to think creatively and critically about the strategies and tactics involved in building, leveraging, defending, and sustaining an inspired brand.

Prerequisites: MKTG 611; and either MKTG 612 or MKTG 613.

MKTG 792 (1 cu)

Creativity

Description: The objective of this course is to enhance the students' creativity, ability to innovate, and ability to identify, recruit, develop, manage, retain, and collaborate with creative people. The course includes: (1) Interaction with creative guest lecturers from diverse fields; (2) A review of the literature on creativity, creative people, innovation, and design as well as the leadership and management of creative people and innovation; (3) Hands on learning of approaches for generating creative new products/services and business ideas; and (4) Applications

of creativity tools to selected management domains.

Approaches to the generation of creative options are not limited to the development of products and services or businesses, but can be applied to all areas of management, business, and life. The purpose of these sessions is to explore the applications of creative approaches to marketing, advertising, cost reduction efforts, M&A and strategic alliances, organizational design, and management challenges. Given the current global financial crisis and economic recession, much of the applications are going to focus on what corporations (and public policy decision makers) should do to creatively address their challenges. (5) Integration — Both via individual assignments and a group project in which interdisciplinary teams of students generate a creative project/ service/ business/ strategy. (Formerly MKTG 892)

Format: Lecture, class discussion, guest speakers.

Prerequisites: None

MKTG 806 (.5 cu)

Special Topics: Retail Merchandising

Description: This course provides a detailed introduction to the role of merchandising at various retailers, including apparel and other soft lines businesses, grocery stores, mass-merchandisers and "category killers". Selected topics may include product development, line planning, sourcing, product life cycle, forecasting, planning and allocation, pricing and mark-downs, and vendor relations. (Formerly MKTG 896)

Format: Lecture, discussion.

Prerequisites: MKTG 611; or MKTG 725 (Formerly MKTG 793)

MKTG 809 (1 cu)

Special Topics: Experiments for Business Decision Making

Description: In the past decade, massive shifts in how companies interact with their customers have suddenly made field experiments an economically feasible way to learn about a variety of business questions such as what types of promotions are most effective, what products should be stocked at a store, how e-mail promotions should be designed, how sales staff should be compensated, etc. Many marketers engaged in online retailing, direct-marketing, online advertising, media management, etc. are rapidly embracing a "test and learn" philosophy and a number of platforms such as Google Website Optimizer, have been developed to facilitate rigorous field experiments in the online environment. Just as with the quality revolution in manufacturing during the 1980s and 1990s, the rapid rise of the "test and learn" philosophy in marketing has created a huge demand for those who can design, field, and analyze marketing experiments.

Through this course, you will learn and practice a wide range of critical skills, from the statistical methods used to design and analyze experiments to the management and strategy required to execute an experiment and act on the results. Although the cases and examples will focus on marketing problems, the material covered can be applied in a number of other

domains particularly operations management and product design. (Formerly MKTG 669)

Prerequisites: MKTG 611 required; STAT 431 or equivalent required; MKTG 712 (formerly MKTG 756) recommended but not required.

MKTG 890 (.5–1.5 cu)

Advanced Study Project

Description: The principal objectives of this course are to provide opportunities for undertaking an in-depth study of a marketing problem and to develop the students' skills in evaluating research and designing marketing strategies for a variety of management situations. Selected projects can touch on any aspect of marketing as long as this entails the elements of problem structuring, data collection, data analysis, and report preparation. The course entails a considerable amount of independent work. (Strict library-type research is not appropriate) Class sessions are used to monitor progress on the project and provide suggestions for the research design and data analysis. The last portion of the course often includes an oral presentation by each group to the rest of the class and project sponsors. Along with marketing, the projects integrate other elements of management such as finance, production, research and development, and human resources.

Format: Individual group meetings with the instructor.

Prerequisites: For GCP Advanced Study Projects: acceptance to this course is by application only. Students must apply and be interviewed in September for spring participation. Visit <www.wharton.upenn.edu/gcp/> for information.

MKTG 899 (.5–1 cu)

Independent Study

Description: The department's Independent Study course (ISP) is offered on a limited basis to advanced students who wish to conduct academic research under the supervision of a Marketing Department faculty member. A student contemplating an independent study project must first find a faculty member who agrees to supervise and approve the student's written proposal as an independent study (MKTG 899). Please consult the department website for additional information, deadlines and required forms. <<https://marketing.wharton.upenn.edu/programs/mba-program-advising-and-registration/>> *No forms requesting an ISP will be accepted past the third week of the semester for semester-long ISPs, or past the first week of half-semester ISPs.*

Prerequisites: MKTG 611; and either MKTG 612 or MKTG 613; or permission of instructor and the department MBA faculty advisor.

Marketing and Operations (Joint Major)

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit either the Marketing, or Operations and Information Management website at:

<<http://marketing.wharton.upenn.edu/>>

<<http://opim.wharton.upenn.edu/>>

Marketing and Operations are two closely interrelated functional areas in all manufacturing and service firms. This cross functional major is designed to satisfy the strong need in industry for MBAs with in-depth training in both areas. Graduates from this major are better prepared to accept future career challenges at the intersection of these two disciplines. Examples of their first job assignment include brand managers who have to coordinate marketing and manufacturing for a particular product, members of new product development teams, leaders of quality management programs, or managers in the service sector with responsibility for creating and marketing new services.

The major requires 7 credit units and emphasizes the integration of the two functional areas. Students are required to take the core marketing and operations management, Marketing Research (MKTG 712). Remaining work for the major is satisfied by taking 4 credit units of electives. At least one credit unit must be from the Marketing department and at least two credit units must be from the OPIM department.

MBA Advisor: Joseph Simmons (telephone: 215-898-1630; email: jsimmo@wharton.upenn.edu).

Requirements for the Major¹

Total of 7 credit units (cu):

a. Marketing Core:²

MKTG 611 Marketing Management (.5 cu)
and either

MKTG 612 Dynamic Marketing Strategy
or

MKTG 613 Strategic Marketing Simulation (.5 cu)

1. Pass/Fail: Marketing elective coursework may not be taken on a pass/fail basis. One credit unit of OPIM elective coursework may be taken on a pass/fail basis each semester.

2. Students who waive a core MKTG or OPIM course, must replace it with an elective from that department.

- b. OPIM Core:²
- | | |
|------------|---|
| OPIM 611 | Managing the Productive Core of the Firm: Quality and Productivity (.5 cu) |
| and either | |
| OPIM 612 | Managing the Productive Core of the Firm: Business Analytics (.5) |
| or | |
| OPIM 613 | Managing the Productive Core of the Firm: Information Technology and Business Transformation (.5) |
| or | |
| OPIM 614 | Managing the Productive Core of the Firm: Innovation (.5 cu) |
| or | |
| OPIM 615 | Managing the Productive Core of the Firm: Operations Strategy (.5 cu) |
- c. MKTG 712 Marketing Research (1 cu)
(formerly MKTG 756)
- d. Electives totaling 4 credit units, with
 at least one credit unit from the Marketing Department^{3,4}
 and
 at least two credit units from the OPIM Department
 (additional flex-core courses (OPIM 612-615) can be included)

2. Students who waive a core MKTG or OPIM course, must replace it with an elective from that department.

3. MKTG 890: Students who wish to apply course MKTG 890 (Advanced Study Project) to the major must select a topic that integrates across production and marketing. Possible topics include new product development, managing the marketing /manufacturing /product engineering interface, integrating front/back office operations in services, after-sales service, and distribution channel management.

4. Beginning with the class entering Fall 2014, no more than 1 cu credit from MKTG 890 (Advanced Study Project including Global Consulting Practicum), MKTG 899 (Independent Study) or MKTG 893 and MKTG 897 (Global Modular Courses) will count toward the Marketing and Operations Management Major elective requirements stated above. Students may combine such courses as long as the total credit does not exceed 1 cu.

Operations and Information Management

*PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Operations and Information website:
 <<http://opim.wharton.upenn.edu/>>*

The Operations and Information Management major is designed to improve the quality and productivity of enterprises by: (1) educating highly capable professionals; and (2) discovering, developing, and validating new principles, theory, and methods. Members of the department share common interests in process management, decision-making, and information. Our common approach to education and research is to blend rigor and relevance. We believe in science-based management and our work is built around models. We seek to reconcile theory and data, and to influence practice. We are a group of individuals with diverse interests and training; indeed, our diversity is central to the intellectual vitality of our community. Nevertheless, several themes characterize the questions of primary concern to most members of the department.

- How can the speed and quality of decision-making by individuals, groups, and organizations be improved?
- How can useful inferences be made from large datasets?
- How can supply chains be managed to provide the right products at the right time and place for least cost
- How can organizations create high-quality and efficient service delivery operations?
- How can the process of developing goods and services be transformed to deliver better products more efficiently?
- How do changes in the quality, speed, and frequency of information exchange impact an enterprise's functions, productivity, and organization?

The department administers MBA Program majors in:

- Operations and Information Management
- Information: Strategy and Economics
- Joint Major in Marketing and Operations Management (with the Marketing department)

OPERATIONS AND INFORMATION MANAGEMENT

Requirements for the Major

The requirements for the OPIM major are:

- Five credit units from any courses offered by the OPIM department, including core courses.
- OPIM courses cross-listed with other departments will count towards the major.
- Global Consulting Practicum (MKTG 890) does count toward the major.
- Waivers of OPIM courses do not count towards the major.
- **Up to one credit unit of pass/fail elective may be counted toward the major each semester.**

Following are suggested tracks, which constitute coherent sets of courses in specific areas of study. However, these tracks are only suggestions and students are free to construct their own programs of study.

Operations Management Track

OPIM 612	Business Analytics
OPIM 615	Operations Strategy
OPIM 614	Managing the Productive Core of the Firm: Innovation (.5 cu)
OPIM 654	Product Design and Development
OPIM 658	Service Operations Management (.5 cu)
OPIM 697	Retail Supply Chain Management (.5 cu)

Information Systems Track

OPIM 613	Information Technology and Business Transformation
OPIM 662	Enabling Technologies.
OPIM 672	Decision Support Systems

Decision Processes Track

OPIM 672	Decision Support Systems
OPIM 690	Managerial Decision Making
OPIM 691	Negotiations
OPIM 692	Advanced Negotiations
BEPP 811	Risk and Crisis Management (.5 cu) <i>(may be counted as an OPIM course for the purposes of satisfying the .5 cu requirement for the Decision Processes Track)</i>

MBA Advisor: Joseph Simmons (telephone: 215.898.1630; email: jsimmo@wharton.upenn.edu).

INFORMATION: STRATEGY AND ECONOMICS

The field of strategy is constantly evolving as the competitive environment facing firms changes, and as our knowledge of the field evolves to keep pace. One of the most significant changes has been the dramatic improvement in the information endowments, or “states of informedness,” enjoyed by the firm, its customers, and its competitors. The acceleration of informedness, like changes in transportation in the late 1890s or in available sources of power and energy earlier, will transform commerce and society in ways that are not fully understood, leading to new winners among nations, industries, groups of workers and managers, and firms. The discipline of Information Strategy and Economics has emerged to deal with changes in information endowments and their impact on strategy, by focusing on change and uncertainty, and on new sets of paradigms that help predict outcomes. The major provides an excellent foundation for careers in strategic management, both within the firm and as consultants in strategic management. It uses historical precedent and economic theory to develop a pragmatic set of skills that help students see emerging patterns and develop strategies in rapidly changing business environments. Its courses

are motivated by its focus on “states of informedness” as drivers of strategy, hence its location in the OPIM department, but it does not study technology nor does it have the quantitative analysis focus of the rest of the OPIM department.

The increase in consumer informedness is changing consumer behavior in a wide range of situations. Customers find the least expensive alternative in categories of little importance to them, while finding the perfect match with their wants and needs, cravings and longings, in categories they find salient. Online trust is a strong determinant of shopping behavior and will continue to be.

Likewise, the increase in information available to firms, and the increasing variety of strategies available for the use of information—from dynamic repricing to online distribution, from labor productivity enhancements to labor arbitrage and outsourcing—requires a dramatic revision of managerial mental models of their competitive options. Revising mental models and enhancing mental agility are both essential to executive leadership, rather than mere conservation and management, in today’s environment of rapid and discontinuous change in the competitive environment.

The ability to target profitable market segments and to identify individual customers is reducing the value of scale-based operations and the strategic advantage of large firms with existing market share. The ability to monitor the performance of units abroad is leading to greater reliance upon outsourcing, benefiting many service industries and once again reducing the advantage of many large firms. At the same time, the impact of information technology on the transparency and efficiency of securities markets is destroying the profits of entire segments of financial services. All aspects of the firm—production, service, sales, marketing, and strategy—will be affected. Clearly, some firms will win and others will lose; nearly all will have to change. And yet, fundamental laws of economics have not been repealed. How can previous economic theory, and previous experience with rapid technological change, provide insights for the development of strategy in an increasingly digital age?

As power continues to shift among retailers, distributors, and manufacturers/primary suppliers, many industries are being forced to deal with restructuring caused by disintermediation resulting from electronic channels.

While these changes are directly driven by information technology, it is the management challenges, and not the underlying technology, that are addressed by this new interdisciplinary major.

- What is the future of advertising and push-based communications concerning mass-market consumer products? What is the future of more targeted offerings, intended to produce resonance with the wants and needs of smaller market segments, and the role of organic consumer-driven dialog about new products?
- What is the appropriate production strategy as the balance between local and global production, between internal production and external procurement, and between short term contracting and long term strategic alliances are all altered?

- What is the appropriate marketing strategy as the balance shifts between established competitors with dominant share and apparent cost advantages and new entrants with targeted strategies? What pricing strategies are thus enabled? How can information be used to provide enhanced differentiation strategies by allowing more accurate targeting of individualized products and services?
- What is the appropriate distribution strategy as disintermediation becomes possible, but intermediaries still retain considerable power over segments of the customer population, and thus will retaliate against premature attempts at bypassing them?
- Once appropriate strategies are determined, how can they be implemented with speed and agility and how can the organization be led into its new vision?

These management challenges lead to the development of the ISE major as an interdisciplinary program that draws upon existing strengths in management, marketing, and information management to create a powerful and innovative interdisciplinary focus on information strategy. Understanding the strategic aspects of information and information management is being transformed; what were once skills of specialized technologists are now critical aspects of the preparation of all executives. This major prepares students for careers in consulting and venture capital, and for senior management positions in a wide range of industries already being transformed by the interacting forces of information, globalization, and deregulation.

Course Requirements

Requirements for the major can be satisfied by selecting from courses already offered in OPIM, Management, and Marketing. The major is intended to allow great flexibility, as individual students may wish to focus on issues of information strategy applied to marketing, change management, internal governance, or external alliances. Students are required to take at least one course from an approved list of Marketing courses and at least one course from an approved list of Management courses. Additionally, students must complete at least three credits within the OPIM Department.

Required Courses in Information Strategy

Both of the following courses:

- | | |
|----------|--|
| OPIM 613 | Managing the Productive Core of the Firm: Information Technology and Business Transformation (.5 cu) |
| OPIM 669 | Advanced Topics in Information Strategy (Intended as a second semester second year capstone course to integrate the diverse subjects covered in the major) |

External Focus/Marketing

At least one course from the following list or other as negotiated with the MBA Coordinator based on individual student's needs and preferences:

- | | |
|----------|---|
| MKTG 712 | Marketing Research |
| MKTG 776 | Applied Probability Models in Marketing |
| MKTG 777 | Marketing Strategy |
| MKTG 759 | Channel Management (.5 cu) |

Internal Focus/Management

At least one course from the following list or other as negotiated with ISE program coordinator based on individual student's needs and preferences:

- | | |
|----------|--|
| MGMT 711 | Competitive Strategy and Industry Structure |
| MGMT 773 | Managing Organizational Change |
| MGMT 782 | Strategic Implementation |
| MGMT 784 | Managerial Economics and Game Theory (.5 cu) |

OPIM ISE Electives

At least two of the following, as needed so that approved courses taken for the major total at least five credit units and the approved OPIM courses total at least three credit units:

- | | |
|----------|--|
| OPIM 615 | Managing the Productive Core of the Firm: Operations Strategy (.5 cu) |
| OPIM 658 | Service Process Management (.5 cu) |
| OPIM 662 | Enabling Technologies |
| OPIM 670 | Special Topics in Information Systems |
| OPIM 676 | Electronic Markets (.5 cu) |
| OPIM 691 | Negotiations |
| OPIM 899 | Independent Study in Information Strategy (Can be advised by faculty members in OPIM, Marketing, Management, or Finance, as appropriate to student needs.) (.5 cu or 1 cu) |

MBA Advisor: Joseph Simmons (telephone: 215.898.1630; email: jsimmo@wharton.upenn.edu).

COURSE DESCRIPTIONS

OPIM 611 (.5 cu)

Managing the Productive Core of the Firm: Quality and Productivity

Description: See Core Section.

OPIM 612 (.5 cu)

Managing the Productive Core: Business Analytics

Description: See Core Section.

OPIM 613 (.5 cu)

Managing the Productive Core of the Firm: Information Technology and Business Transformation

Description: See Core Section.

OPIM 614 (.5 cu)

Managing the Productive Core of the Firm: Innovation

Description: See Core Section.

OPIM 615 (.5 cu)

Managing the Productive Core of the Firm: Operations Strategy

Description: See Core Section.

OPIM 640/LGST 640 (.5 cu)

Digital Game Design Techniques for Business: Rules, Incentives, Applications

Description: Why can't work be fun? And just what is fun, anyway? Leading firms are answering that question through a new business practice called gamification, using the techniques of digital game designers to serve objectives as varied as marketing, human resources management, innovation, health and wellness, education, productivity enhancement, training, innovation, and customer engagement. This course, the first of its kind, examines gamification and provide an understanding of their effective.

The course uses a project-based approach to explore gamification as a design practice, which is rooted in research on human motivation and implemented through online systems and social media. No particular technical skills or game knowledge is required. The course draws upon interdisciplinary source material as well as case studies to identify effective analytical models, strategies, techniques, and metrics for the application of game elements to real-world business context.

OPIM 650 (.5 cu)

Operations Performance Analysis

Description: Operational performance has long been emphasized as a key driver of firm value in the basic materials industries (e.g., steel or paper) as well as in mature and highly competitive manufacturing industries (e.g., automotive or personal computers). In contrast, industries such as financial services, healthcare, or pharmaceuticals have enjoyed sufficiently high margins that operational performance only recently began receiving significant managerial attention. Given its emergence as a relatively new topic in these industries, managers and consultants often struggle with questions such as "What performance measures should we track?", "How do operational performance measures impact the bottom line performance?", or "How do we go about improving processes to achieve various operational performance improvements, including cost savings, lead-time reduction, or increases in product variety?" Even in more mature industries, managers often struggle to correctly prioritize operational improvement initiatives and to link them directly to financial performance. The objective of the course is to provide students with a set of tools that supports them in analyzing the operational performance of a company and to guide them in increasing the overall value of the firm by improving its operations. Specifically, we will discuss

how to: (1) develop an integrated model linking operational performance measures to financial value; (2) analyze indicators of opportunities for operational improvement; (3) identify levers (techniques) to improve operational performance; (4) value potential operational improvements, both individually as well as collectively.

OPIM 652

Design & Development of Web-Based Products and Services

Description: This course will cover applications of decision models to managerial problems in a variety of business functions. The course will use management science techniques such as mathematical programming (LP/IP/NLP), Monte-Carlo simulation, decision trees, probability theory and statistical analysis as the vehicle for applying diverse management theories to real-world problems. Potential in-class applications include product-line selection, risk management, corporate real options, and supply-chain restructuring. The course will emphasize the practical application of these techniques; problems will be solved using popular packages such as Excel, and Crystal Ball.

Format: Taught through Wharton Semester in San Francisco and online in summer.

OPIM 653

Mathematical Modeling and its Application in Finance

Description: Quantitative methods have become fundamental tools in the analysis and planning of financial operations. There are many reasons for this development: the emergence of a whole range of new complex financial instruments, innovations in securitization, the volatility of fixed-income markets since interest rate deregulation, the increased globalization of the financial markets, the proliferation of information technology, and so on. In this course, models for hedging, asset allocation, and multi-period portfolio planning are developed, implemented, and tested. In addition, pricing models for options, bonds, mortgage-backed securities, and swaps are discussed. The models typically require the tools of statistics, optimization, and/or simulation, and they are implemented in spreadsheets or a high-level modeling environment, MATLAB. This course is quantitative and will require extensive computer use. The course is intended for students who have a strong interest in finance. Prospective students of this course should be comfortable with quantitative methods, such as basic statistics and the methodologies (mathematical programming and simulation) taught in OPIM 612.

OPIM 654

Product Design and Development

Description: The course provides the student with a number of tools and concepts necessary for creating and managing product development processes. The course consists of two interwoven parts. First, it presents the basic steps that are

necessary for moving from a “cool idea” to a product sufficiently mature to launch an entrepreneurial start-up. This includes cases, lectures, and exercises on topics like identifying customer needs, developing a product concept as well as effective prototyping strategies. The capstone of this first part is a real project in which student teams conceptualize and develop a new product or service up to the completion of a fully functional prototype. Second, the course discusses a number of challenges related to product development as encountered by management consultants, members of cross-functional development teams as well as general managers. We will analyze several cases related to, among others, resource allocation in R&D organizations, organizational forms of product development teams, as well as managing development projects across large geographic distances.

Format: Lectures, case and problem analyses, group presentations, the development of a new product to the prototype stage.

OPIM/MKTG 655 (.5 cu)

Operations, Marketing, and Design Integration

Description: This course covers topics that span marketing and operations management. Students will examine issues and decisions that require significant coordination between managers in marketing and operations. Topics include channel management, supply chain design, product variety management and service operations pricing and control.

Prerequisites: Any of the following: MKTG 611/612/613/ OPIM 611/615.

OPIM 658 (.5 cu)

Service Operations Management

Description: The service sector represents the largest segment of most industrial economies. In the U.S., for example, it accounts for approximately 70% of GDP and 70% of employment. In addition to this “pure” service sector, the operations and competitive positions of many manufacturing firms are becoming increasingly service-oriented. While operational excellence is critical for success in most industries today, in a wide range of service industries this is particularly true. For example, recent, significant deregulation in banking, health care, and communications has led to intensified competition and pressure on operations. At the same time, the rapid evolution of information technology has enabled firms to operate in a fashion—and offer a level of service—that has not been previously possible. Elements common to most services make the management of their operations complex, however. In particular, services are intangible, not storable or transportable, and often highly variable. Frequently their delivery involves distributed operations with a significant amount of customer contact. All of these factors make service operations end up looking quite a bit different than manufacturing operations, and the task of achieving excellence in them requires specialized analysis frameworks and tools. This course covers a mix of qualitative and quantitative models that provide the necessary tools. The class will focus on simple models that

should help you to better understand both the difficulty of managing and the underlying economics of the service operations being considered. You will have the opportunity to apply these course tools in a group service assessment field project.

Prerequisites: Courses in operations management, linear programming, probability and statistics

OPIM 662

Enabling Technologies

Description: This course is about understanding emerging technology enablers with a goal of stimulating thinking on new applications for commerce. No prerequisite or technical background is assumed. The class is self-contained (mainly lecture-based) and will culminate in a class-driven identification of novel businesses that exploit these enablers.

No prerequisite or technical background is assumed. Students with little prior technical background can use the course to become more technologically informed. Those with moderate to advanced technical background may find the course a useful survey of emerging technologies. The course is recommended for students interested in careers in consulting, investment banking and venture capital in the tech sector.

Format: Lectures, discussions, assignments, and class participation.

OPIM 665 (.5 cu)

Operations Management in Health Care

Description: In an era where health care systems around the world face rapidly rising costs and quality issues, organizations large and small are looking into the operational side of health care for solutions. Likewise, the abundance of unfulfilled needs in the health care marketplace has led to an array of technology ventures with innovative new products and services. In this course, we apply the tools of operations management to analyze the health care value chain. The course consists of four modules: (1) the management of productivity, quality, and variability by care providers; (2) capacity and investment decisions under uncertainty confronting pharmaceuticals; (3) the design of health insurance by health plans and the determination of health benefits by employers; and (4) business ideas and operations models from the intersection of academic research and technology ventures. Students will learn from case discussions, hands-on decision tools, and several distinguished speakers and alumni from Stanford Hospital & Clinics, Merck, U.S. Naval Academy, and Deloitte Consulting. No prior exposure to the health care industry is assumed. The course prepares students for several career paths including consulting, operations management, and health care administration and is open to both first- and second-year MBA students.

Prerequisites: OPIM 611.

OPIM 672

Decision Support Systems

Description: The past few years have seen an explosion in the amount of data collected by businesses and have witnessed

enabling technologies such as database systems, client-server computing and artificial intelligence reach industrial strength. These trends have spawned a new breed of systems that can support the extraction of useful information from large quantities of data. Understanding the power and limitations of these emerging technologies can provide managers and information systems professionals new approaches to support the task of solving hard business problems. This course will provide an overview of these techniques (such as genetic algorithms, neural networks, and decision trees) and discuss applications such as fraud detection, customer segmentation, trading, marketing strategies and customer support via cases and real datasets.

Format: Lectures and discussions, written assignments, projects using software packages to build models.

OPIM 673 (.5 cu)

Global Supply Chain Management

Description: New information technology has dramatically reduced the cost of communication and accelerated the outsourcing and offshoring movement that has been going on for some time. This leaves companies pondering questions such as what to do in-house, what to outsource, where to produce, and how to manage a supply chain that usually involves production in multiple countries. This course will study the design and management of global supply chains, with a particular focus on the issues listed above. The course will be highly interactive, using case discussions in most of the classes. The industries covered include shoes and apparel, toys, consumer electronics, food, and auto.

OPIM 676

Electronic Markets: Structures, Market Mechanisms and IT Enabled Strategies

Description: This course deals with Electronic Markets and Market structures and the strategic uses of information within the firm. The course consists of four related modules on the design and functioning of Business to Business markets, use of technology to source services from global providers—i.e., outsourcing of business processes (as opposed to IT), the use of strategic technological platforms such as CRM and Web Services and the technology-enabled precision pricing techniques. Further, students are exposed to strategy formulation and execution in an online market where they compete both against each other and against (electronic) agents. This course is recommended for students interested in a career in consulting, strategic management and to students interested in information technology related professions. The course will be delivered through a mix of lectures, case discussions and hands-on trading in virtual markets using different market mechanisms. The online course instruction site will be used for discussions and responses from instructor and TA. We do not assume or require any specific technical knowledge.

Workings of electronic markets and market mechanisms and how IT can enable the formulation of new strategies and empower firms to define new markets in ways that were not

possible until recently. This is an advanced elective that covers several essential topics in information strategy—IT and market structure, impact of IT on knowledge-intensive products and services and creating hybrid markets that span multiple channels. Students will compete in simulated electronic markets, using different market mechanisms and formulate information-based strategies. Students will also study how IT has enabled the globalization of services through the outsourcing of processes (BPO) and how quasi market structures which combine elements of organization and markets are emerging in knowledge-intensive service industries.

Prerequisites: MGEC 611 and MGEC 612 are recommended.

OPIM/MGMT 690

Managerial Decision Making

Description: The course is built around lectures reviewing multiple empirical studies, class discussion, and a few cases. Depending on the instructor, grading is determined by some combination of short written assignments, tests, class participation and a final project (see each instructor's syllabus for details).

OPIM 691/LGST 806/MGMT 691

Negotiations

Description: Negotiation is the art and science of creating good agreements. This course develops managerial negotiation skills by mixing lectures and practice, using cases and exercises in which students negotiate with each other. The cases cover a wide range of problems and settings: one-shot deals between individuals, repeated negotiations, negotiations over several issues, negotiations among several parties (both within and between organizations), and cross-cultural issues. Performance in the negotiation's cases accounts for a significant portion of the course grade. OPIM 691 sections differ from LGST 806 and MGMT 691 sections in that OPIM 691 covers theoretical aspects of negotiation (including psychological theories of judgmental mistakes negotiators make) in a bit more depth, and covers fewer legal and dispute resolution issues. Students can take only one of the three courses.

Format: Lectures, cases, presentations, and written assignments.

Prerequisites: STAT 613.

OPIM/LGST/MGMT 692

Advanced Negotiation

Description: This is a course that builds on the basic Negotiation course. In this course, we explore a wide range of negotiation topics from crisis and hostage negotiations, to the role of emotions including anxiety, envy and anger in negotiations, to backlash effects for women in negotiations, and the role of alcohol in negotiations. We will survey many aspects of current negotiation research, discuss historic negotiation cases, and students will participate in role-play exercises. Many of the role play exercises will involve multi-party negotiations and afford opportunities to hone skills in team-based negotiations.

Format: Cases, presentations, lecture and discussion.

OPIM 697 (.5 cu)**Retail Supply Chain Management**

Description: This course is highly recommended for students with an interest in pursuing careers in: (1) retailing and retail supply chains; (2) businesses like banking, consulting, information technology, that provides services to retail firms; (3) manufacturing companies (e.g. P&G) that sell their products through retail firms. Retailing is a huge industry that has consistently been an incubator for new business concepts. This course will examine how retailers understand their customers' preferences and respond with appropriate products through effective supply chain management. Supply chain management is vitally important for retailers and has been noted as the source of success for many retailers such as Walmart and Home Depot, and as an inhibitor of success for e-tailers as they struggle with delivery reliability.

Format: Lectures, case discussion, guest speakers. Class participation, papers, and a team report.

OPIM/BEPP 761**Risk Analysis and Environmental Management**

Description: See Business Economics and Public Policy, BEPP 761.

OPIM 762 (.5 cu)**Environmental Sustainability and Value Creation**

Description: This course approaches environmental issues, and sustainable development more largely, from the standpoint of business. It emphasizes the trends in corporate practices and uses case studies to examine the interactions between the environment and the firm. Value creation focuses on new innovative services and financial products in this fast growing sphere. This course has three objectives: to increase your knowledge as future top decision makers on key environmental questions; to recognize environmental concerns as competitive opportunities; and to teach students to think strategically and act entrepreneurially on environmental issues. You will leave the class with a tool-kit for action.

Format: Lecture and discussion including guest speakers, class discussion, presentations, and final project.

OPIM/BEPP 763**Energy Markets and Policy**

Description: See Business Economics and Public Policy, BEPP 763

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Real Estate website at: <http://real-estate.wharton.upenn.edu/>.

The Wharton School has offered a real estate concentration for MBA students and undergraduates since 1985. The concentration has grown and developed, both in size and scope. The concentration consists of three required credit units and two electives. While the required courses focus on real estate law, development, and finance, the electives allow students to explore a variety of issues related to real estate. These include real estate economics, urban fiscal policy, the relationship between government policy and private development, international real estate markets.

The real estate concentration prepares students to be leaders in the real estate industry and provides the quantitative and qualitative tools necessary for their roles in shaping the future of the industry. To keep students informed of current issues in Real Estate, the Real Estate Department and Samuel Zell and Robert Lurie Real Estate Center sponsors conferences, seminars, and special programs on vital public policy issues relevant to the field.

Gilles Duranton is the chair of the Real Estate Department. The department is located in 1400 Steinberg-Dietrich Hall, and the department's main phone number is: 215.898.9687.

Requirements for the Major

The major requires five credit units. **Courses taken to satisfy the Real Estate major cannot be taken on a pass/fail basis.**

a) Three required credit units (3 cu):

REAL 721	Real Estate Investment: Analysis and Financing
REAL 804	Real Estate Law
REAL 821	Real Estate Development (the two courses above are prerequisites for this course.)

b) Two additional credit units (2 cu) selected from the following:

REAL 724	Urban Real Estate Economics
REAL 730	Urban Fiscal Policy
REAL 772	Urban Public Policy and Private Economic Development
REAL 840	Advanced Real Estate Investment and Analysis
REAL 890	International Real Estate Comparisons (.5 cu)
REAL 891	Real Estate Entrepreneurship (.5 cu)
REAL 899	Independent Study
REAL 899	Annual Student Research Competition

MBA Advisor: Todd Sinai (telephone: 215.898.5390; email: sinai@wharton.upenn.edu)

COURSE DESCRIPTIONS

REAL/FNCE 721

Real Estate Investment: Analysis and Financing

Description: This course provides an introduction to real estate with a focus on investment and financing issues. Project evaluation, financing strategies, investment decision making and real estate capital markets are covered. No prior knowledge of the industry is required, but students are expected to rapidly acquire a working knowledge of real estate markets. Classes are conducted in a standard lecture format with discussion required. The course contains cases that help students evaluate the impact of more complex financing and capital markets tools used in real estate. There are case studies and two mid-terms, (depending on instructor).

Format: Lecture with discussion required.

Prerequisites: FNCE611/612

REAL 724

Urban Real Estate Economics

Description: Urban Real Estate Economics uses economic concepts to analyze real estate markets, values, and trends. The course focuses on market dynamics in the U.S. and internationally, with an emphasis on how urban growth and local and federal government policies impact urban development and real estate pricing. A group development project gives hands on experience, and invited guest speakers bring industry knowledge. Besides the group project and presentation, problem sets are required along with a midterm and optional second exam.

Format: Lecture.

Prerequisites: MGEC 611, Managerial Economics.

REAL 730/BEPP 773/FNCE 730

Urban Fiscal Policy

Description: The purpose of this course is to examine the financing of governments in the urban economy. Topics to be covered include the causes and consequences of the urban fiscal crisis, the design of optimal tax and spending policies for local governments, funding of public infrastructures and the workings of the municipal bond market, privatization of government services, and public financial systems for emerging economies. Applications include analyses of recent fiscal crises, local services and taxes as important determinants of real estate prices, the infrastructure crises, financing and the provision of public education, and fiscal constitutions for new democracies using South Africa as an example.

Format: Lecture, discussion.

Prerequisites: MGEC 611 and MGEC 612.

REAL/BEPP 772

Urban Public Policy and Private Economic Development

Description: This course considers a range of local policies in cities and regions. Examples include: clusters and other local development initiatives, large scale regional policies, employment zones and other targeted policies. More traditional urban policies such as zoning and planning and constraints, transportation pricing, and parking policies among many others will also be considered. Practical examples will be extremely diverse and include the Silicon Valley and attempts to copy it, the Tennessee Valley Authority, housing restrictions in developing countries such as Brazil, congestion pricing in London, etc. Students will be expected to actively participate and make presentations. The course emphasizes the importance of the economic context, the understanding of the underlying rationale for policies, and how the private agents respond to public incentives. The main learning goals are the following: be able to use simple empirical tools of economic evaluations, be able to articulate a critical analysis of competing viewpoints and assessments, and be able to integrate various analytic steps into an overall assessment of economic policies that relies on sound principles and is well argued.

Prerequisites: Microeconomics, basic familiarity with Statistics

REAL/LGST 804

Real Estate Law

Description: This course examines the fundamentals of real estate finance and development from a legal perspective. The course serves as a foundation course for real estate majors and provides an introduction to real estate for other students. It attempts to develop skills in using legal concepts in a real estate transactional setting. The course will be of interest to students contemplating careers in accounting, real estate development, real estate finance, city planning, or banking. The main topics covered may include the following: land acquisition, finance; choice of entity; tax aspects; management (leasing, environmental); disposition of real property (sale of mortgaged property, foreclosures, wraparound mortgages, sale-leasebacks); and recent legal developments.

Format: Although some of the material is presented by lecture, the instructor expects considerable class participation.

REAL 821

Real Estate Development

Description: This course evaluates "ground-up" development as well as re-hab, re-development, and acquisition investments. We examine raw and developed land and the similarities and differences of traditional real estate product types including office, R & D, retail, warehouses, single family and multi-family residential, mixed use, and land as well as "specialty" uses like golf courses, assisted living, and fractional share ownership. Emphasis is on concise analysis and decision making. We discuss the development process with topics including market analysis, site acquisition, due diligence, zoning, entitlements, approvals, site planning, building design, construction, financing,

leasing, and ongoing management and disposition. Special topics like workouts and running a development company are also discussed. Course lessons apply to all markets but the class discusses U.S. markets only. Throughout the course, we focus on risk management and leadership issues. Numerous guest lecturers who are leaders in the real estate industry participate in the learning process.

Format: Predominately case analysis, discussion, some lectures, and project visits.

Prerequisites: REAL/FNCE 721 and REAL/LGST 804. The prerequisites are STRICTLY enforced for this class unless it is undersubscribed.

REAL 840

Advanced Real Estate Investment and Analysis

Description: This course, is designed for majors in Real Estate, but is also open to finance-oriented students who wish a deeper analysis of real estate investment and investment analysis issues than that offered in REAL/FNCE 721. The class will contain a mixture of lectures, guest speakers and case discussions. Academic research is paired with recent industry analysis of key issues in order to marry sound theory and empirical results with current events and practices. Several classes will include lectures outlining what economics and finance tell us about a number of topics. Generally, these will be followed by guest lectures from industry professionals who will focus on a specific application of the principles introduced in the lectures.

Format: Lecture, industry speakers.

Prerequisites: REAL/FNCE 721.

REAL 890 (.5 cu)

International Real Estate Comparisons

Description: As a truly non-U.S. focused course, we explore the world of cross-border real estate development and investment, with a focus on fast growing emerging market economies. We examine the rationale for international RE investing and its challenges — including demographic, economic, transparency, taxation, subsidy, legal and political issues, the strategies of composing an international real estate portfolio, the macro and micro factors that will determine the performance of the investment, and the different investment formats suited to different international settings. International cases presented by practitioners are an integral part of the course. Cases have been selected to cover different types of real estate developments: residential, office, retail, hospitality, and logistics — important emerging market countries/continents — East / South Asia, Latin America, Russia, Sub-Saharan Africa and the Middle East and different investment strategies. Offered in the second quarter of the semester.

REAL 891 (.5 cu)

Real Estate Entrepreneurship

Description: What makes a successful entrepreneur in the real estate industry? This half semester mini-course exposes undergraduates and MBA students to this question in the context of

real estate opportunities past and present: equity investments, debt investments and real estate operating companies. The topics require the evaluation of entrepreneurial opportunities, structures, investment decision-making, and risks which are present in commercial real estate markets. This course requires a strong understanding of core business topics, especially: entrepreneurship, finance, management and real estate. No formal prerequisites or past experience are required but will prove helpful. This course focuses on identifying real world opportunities, developing concepts, identifying and mitigating risks, raising capital and exiting investments. Offered in the first quarter of the semester.

Format: Lecture, case discussions, and guest lectures by leading entrepreneurs. Offered in the first half of the semester.

REAL 899

Independent Study

Description: All independent studies must be arranged and approved by a Real Estate Department faculty member with the exception of the Annual Student Research Competition.

Annual Student Research Competition Seminar: This class meets in the Spring semester to analyze how to conduct research in the real estate market, where to find data, how to critique research, how to frame research questions, how to write a business research report, how to present a business research report. Topics are provided each year. For further information regarding the Annual Student Research Competition see the Real Estate department's website at: <http://real-estate.wharton.upenn.edu/>.

PLEASE NOTE: Before scheduling classes, check with the department to determine the availability of courses for the upcoming semester or visit the Statistics website at <<http://statistics.wharton.upenn.edu/>>.

The Statistics major develops the skills and insights required to draw inferences and conclusions from many types of data. A key challenge facing managers is the interpretation of the vast amount of data generated in the world of business today. Modern computing systems now produce large volumes of information whereas previously one could often only rely upon intuition and guesses. Yet this information does not directly answer important business questions. What combination of features is most desirable for consumers? What will sales be next month? How did we do last month? Data analysis and statistics offer a systematic approach that can help provide answers to these questions.

Courses offered by the Statistics Department develop the skills and insights required to make effective use of statistical methods. The courses provide the knowledge needed to select and apply techniques and to communicate statistical results. Interpretation in realistic applications offers guiding examples, and theory is used to motivate and compare alternative schemes. The courses range from a rigorous training in the fundamentals of statistical theory (STAT 430, 512) to applications of popular methodologies, such as regression analysis (STAT 701) and forecasting (STAT 711).

Regardless of topic, all of these courses provide useful skills that augment the substantive managerial abilities of students. Courses also provide exposure to computer software that implements key techniques.

Requirements for the Major

The Statistics major may be tailored in accordance with student's interests, which may involve a second major. Five credit units are required and the required prerequisite STAT 613 may contribute one credit unit. Some courses offered by other departments are permitted (students who wish to include courses from other departments in the major should request permission to include these from the Statistics Department advisor and file this permission with the MBA Program Office).

Courses taken on a Pass/Fail basis cannot be counted toward the major.

The following courses additional courses beyond STAT 613 offered by the Department of Statistics are eligible for the major:

STAT 430/510	Probability (<i>NOTE: only STAT 430–401 honors section in the fall semesters is cross-listed with STAT 510–401.</i>)
STAT 432/512	Mathematical Statistics
STAT 433	Stochastic Processes
STAT 435/711	Forecasting Methods for Management
STAT 436	Stochastic Modeling

STAT 471/701	Advanced Statistics for Management
STAT 472/712	Decision Making Under Uncertainty
STAT 474/974	Modern Regression for the Social, Behavioral, and Biological Sciences
STAT 475/920	Sample Survey Methods
STAT 476	Applied Probability Models in Marketing
STAT 520	Applied Econometrics I
STAT 521	Applied Econometrics II
STAT 622	Statistical Modeling
STAT 853	Actuarial Statistics
STAT 854	Applied Statistical Methods for Actuaries
STAT 910	Forecasting and Time Series Analysis
STAT 926	Multivariate Analysis: Methodology
STAT 950	Quantitative Consulting Seminar

MBA Advisor: Robert Stine (telephone: 215.898.3114; email: stine@wharton.upenn.edu)

ACTUARIAL SCIENCE

The Wharton actuarial science curriculum prepares students for professional certification as an actuary. The curriculum includes general business courses important for developing a strong, general understanding of the business environment, as well as quantitative courses in economics, accounting, computer science, and finance. The location of the actuarial science program within an internationally renowned business school provides students with an exceptional opportunity to blend studies in economic theory, financial strategies, general business principles, insurance company management, corporate risk management, and public policy. Students enrolling are expected to have undergraduate training in calculus and at least one course in statistics and probability theory. Students are encouraged, but not required, to take actuarial examinations organized by the Society of Actuaries or the Casualty Actuarial Society during their studies.

The Society of Actuaries and the Casualty Actuarial Society adopted a new examination system in 2007. Three topics (Applied Statistical Methods, Corporate Finance, and Economics) require Validation by Educational Experience (VEE). The Society of Actuaries has approved a large number of Wharton and Penn courses that satisfy the VEE requirements. A list of these approved courses can be found on the Society website.

Students then need to pass four preliminary exams: Probability, Financial Mathematics, Actuarial Models, and Construction and Evaluation of Actuarial Models. Actuarial courses offered by the Department prepare students for the Financial Mathematics and the Actuarial Models examinations.

Requirements for the Major

The major requires five credit units. **Electives taken on a Pass/Fail basis cannot be counted toward the Actuarial Science major.** Deviations from these requirements must be approved by the MBA Advisor.

The major in actuarial science consists of three required courses, one additional course, and an Advanced Study Project:

- a) Three required courses (3 cu):

STAT 851	Fundamentals of Actuarial Science I
STAT 852	Fundamentals of Actuarial Science II
STAT 854	Applied Statistical Methods for Actuaries
BEPP 890	Advanced Study Project
- b) One of the following courses (1 cu):

BEPP 811	Risk and Crisis Management (.5 cu)
and	
BEPP 812	Markets for Pure Risk (.5 cu)
BEPP 822	Employee Benefit Plan Design and Financing
BEPP 823	Business Insurance and Estate Planning
BEPP 827	Risk Management and Treatment
BEPP/	Actuarial Statistics (Recommended)
STAT 853	
BEPP 835	Financial Strategies and Analysis: Insurance

An elective course taken to fulfill the actuarial major cannot be used for the insurance and risk management major.

MBA Advisor: Jean Lemaire (telephone: 215.898.7765; email: lemaire@wharton.upenn.edu)

COURSE DESCRIPTIONS

STAT 430/510

Probability

(NOTE: only STAT 430-401 honors section in the fall semesters is cross-listed with STAT 510-401)

Description: Discrete and continuous sample spaces and probability; random variables, distributions, independence; expectation and generating functions; Markov chains and recurrence theory.

Format: Lecture and discussion, homework problems, two midterms and a final exam.

Prerequisites: Students should be comfortable with basic calculus.

STAT 432/512

Mathematical Statistics

Description: An introductory course in the mathematical theory of statistics. Topics include estimation, confidence intervals, hypothesis testing, decision theory models for discrete data, and nonparametric statistics.

Format: Assigned and graded exercises, midterm, and final exam.

Prerequisite: STAT 613, STAT 430 or equivalent.

STAT 433

Stochastic Processes

Description: This course is to be a basic introduction to stochastic processes. The primary focus will be on Markov chains both in discrete time and in continuous time. By focusing attention on Markov chain, we can discuss many interesting models (from physics to economics). Topics covered include: stable distributions, birth-death processes, Poisson processes, time reversibility, random walks, Brownian motion and Black-Scholes.

Format: Lecture and discussion, homework problems, two midterms, and a final exam.

Prerequisite: STAT 430 or permission of instructor.

STAT 436x

Stochastic Modeling

Description: This course will allow the student to solve stochastic control problems arising in economics and finance, as well as in engineering and biology. We will study probability, Markov processes, martingales, and Ito calculus mainly at an intuitive, non-rigorous, level. The student will be expected to put in a lot of effort, but the return will be proportional.

Prerequisites: STAT 430 or equivalent or permission of instructor.

STAT 432/512

Mathematical Statistics

Description: An introductory course in the mathematical theory of statistics. Topics include estimation, confidence intervals, hypothesis testing, decision theory models for discrete data, and nonparametric statistics.

Format: Assigned and graded exercises, midterm, and final exam.

Prerequisite: STAT 613, STAT 430 or equivalent.

STAT 474x/974

Modern Regression for the Social, Behavioral and Biological Sciences

Description: Function estimation and data exploration using extensions of regression analysis: smoothers, semiparametric and nonparametric regression, and supervised machine learning. Conceptual foundations are addressed as well as hands-on use for data analysis.

Prerequisites: STAT 102 or STAT 112 or equivalent.

STAT 475/920

Sample Survey Methods

Description: This course will cover the design and analysis of sample surveys. The focus of attention will be on the latter, specifically, classical analyses of random sampling, stratified sampling, cluster sampling, large sample results, and other topics as time permits and students' interests dictate.

Format: Lecture and discussion, homework assignments, a final project, and a presentation.

Prerequisites: STAT 613 or equivalent with permission of instructor.

STAT 476**Applied Probability Models in Marketing**

Description: This course will expose students to the theoretical and empirical “building blocks” that will allow them to construct, estimate, and interpret powerful models of customer behavior. Over the years, researchers and practitioners have used these models for a wide variety of applications, such as new product sales, forecasting, analyses of media usage, and targeted marketing programs. Other disciplines have seen equally broad utilization of these techniques. The course will be entirely lecture-based with a strong emphasis on real-time problem solving. Most sessions will feature sophisticated numerical investigations using Microsoft Excel. Much of the material is highly technical.

Prerequisites: High comfort level with basic integral calculus, and recent exposure to a formal course in probability and statistics such as STAT 430 is strongly recommended.

STAT 510/430**Probability**

Description: This course provides an introduction to the basic tools needed to develop probability models that describe data. The material of the course is best summarized with an example. Suppose that we have just completed a marketing survey of 50 potential customers. As part of the survey, these customers were asked if they would purchase a new product at a specific price. Based on the results of this survey, the product manager must arrive at a price for the product when national marketing begins, and must also provide an estimate of ultimate sales.

This course develops models that provide a systematic approach to this task and many other problems. The course seeks to provide students with sufficient background so that they can develop and apply probability models in varying domains. This background includes understanding the essential ideas of probability and randomness and the manipulation of and relationships among various popular models. Topics in this course include: Elements of matrix algebra; discrete and continuous random variables and their distributions; moments and moment generating functions; joint distributions; functions and transformations of random variables; law of large numbers and the central limit theorem; point estimation: sufficiency, maximum likelihood, minimum variance, and confidence intervals.

Format: Lecture and discussion. Assigned and graded exercises, midterm, and final exam.

Prerequisites: Students should be comfortable with basic calculus.

STAT 520**Applied Econometrics I**

Description: This is a course in econometrics for graduate students. The goal is to prepare students for empirical research by studying econometric methodology and its theoretical foundations. Students taking the course should be familiar with elementary statistical methodology and basic linear algebra, and should have some programming experience. Topics include conditional expectation and linear projection,

asymptotic statistical theory, ordinary least squares estimation, the bootstrap and jackknife, instrumental variables and two-stage least squares, specification tests, systems of equations, generalized least squares, and introduction to use of linear panel data models.

Format: Exercises, midterm, and a final exam.

Prerequisites: MATH 114 and MATH 312 or equivalents, and an undergraduate introduction to probability and statistics.

STAT 521**Applied Econometrics II**

Description: Topics include system estimation with instrumental variables, fixed effects and random effects estimation, M-estimation, nonlinear regression, quantile regression, maximum likelihood estimation, generalized method of moments estimation, minimum distance estimation, and binary and multinomial response models. Both theory and applications will be stressed.

Prerequisites: STAT 520. This is a continuation of STAT 520.

STAT 613**Regression Analysis for Business**

Description: See Core Section.

STAT 621 (.5 cu)**Accelerated Regression Analysis for Business**

Description: See Core Section.

STAT 622 (.5 cu)**Statistical Modeling**

Description: This six-week, elective MBA course continues the required MBA statistics course, STAT 613. It expands the material covered in STAT 613 in several ways, adding both breadth (e.g., logistic regression) and depth to the coverage of regression (e.g., more diagnostics, model selection). The course emphasizes the models for decision making from large data sets, as common in data-mining. Lectures feature extensive analysis of large data sets from marketing, personal finance, and management. The course presumes that students are familiar with the inferential methods covered in STAT 613 (including hypothesis tests, confidence intervals, p-values) as well as the use and interpretation of least squares regression models. The course also uses JMP as in STAT 613. Beginning with a review of these concepts, STAT 622 covers related methodologies that produce fits that resemble and extend regression models. The methodologies include those that expand the nature of the predictors (as in the use of special transformations in time series and the construction of regression trees) and allow the use of categorical responses (logistic regression). The course concludes by exploring the relationship between a regression fit to observational data and an analysis of variance estimated from experimental data, as in a conjoint analysis.

Format: Lecture and discussion. Assigned and graded individual and group exercises, data analysis project, and a final exam.

Prerequisites: STAT 613.

STAT 701**Advanced Statistics for Management**

Description: This is a course in modern methods in statistics. It will focus on regression, time series, data mining and machine learning. The regression module will extend your knowledge of building multiple regressions. The time series module will introduce you to some ideas in finance. The last two modules will show how these ideas can be applied to large data sets that are more frequently found in the modern age. Throughout the class data based on finance, retail credit, global warming, and the “wikipedia” will be discussed.

Format: Lecture and discussion. Assigned and graded exercises.

Prerequisites: STAT 613 or equivalent.

STAT 711**Forecasting Methods for Management**

Description: This course provides an introduction to the wide range of techniques available for statistical forecasting. Qualitative techniques, smoothing and decomposition of time series, regression, adaptive methods, autoregressive-moving average modeling, and ARCH and GARCH formulations will be surveyed. The emphasis will be on applications, rather than technical foundations and derivations. The techniques will be studied critically, with examination of their usefulness and limitations.

Format: Assigned and graded exercises.

Prerequisites: STAT 613 or equivalent.

STAT 712**Decision Making Under Uncertainty**

Description: Fundamentals of modern decision analysis with emphasis on managerial decision making under uncertainty and risk. The basic topics of decision analysis are examined. These include payoffs and losses, utility and subjective probability, the value of information, Bayesian analysis, inference and decision making. Examples are presented to illustrate the ideas and methods. Some of these involve: choices among investment alternatives; marketing a new product; health care decisions; and costs, benefits, and sample size in surveys.

Format: Lecture and discussion, homework assignments, a project, and midterm and final exams.

Prerequisite: STAT 613 or equivalent.

STAT/BEPP 851**Fundamentals of Actuarial Science I**

Description: See Business Economics and Public Policy, BEPP 851.

STAT/BEPP 852**Fundamentals of Actuarial Science II**

Description: See Business Economics and Public Policy, BEPP 852.

STAT/BEPP 853**Actuarial Statistics**

Description: This course covers models for insurer's losses, and applications of Markov chains. Poisson processes, including extensions such as non-homogenous, compound, and mixed Poisson processes are studied in detail. The compound model is then used to establish the distribution of losses. An extensive section on Markov chains provides the theory to forecast future states of the process, as well as numerous applications of Markov chains to insurance, finance, and genetics. The course is abundantly illustrated by examples from the insurance and finance literature. While most of the students taking the course are future actuaries, other students interested in applications of statistics may discover in class many fascinating applications of stochastic processes and Markov chains.

Prerequisites: Two semesters of statistics.

STAT/BEPP 854**Applied Statistical Methods for Actuaries**

Description: One half of the course is devoted to the study of time series, including ARIMA modeling and forecasting. The other half studies modifications in random variables due to deductibles, co-payments, policy limits, and elements of simulation. This course is a possible entry point into the actuarial science program. The Society of Actuaries has approved STAT 854 for VEE credit on the topic of time series.

Prerequisites: One semester of probability.

STAT 910**Forecasting and Time Series Analysis**

Description: Many types of measurements naturally occur over time. Most macroeconomic data, such as gross national product, stock market returns, or short-term interest rates, are collected sequentially. This sequential behavior characterizes time series data and leads to a collection of models that can accommodate repeated measurements. This course develops a range of models appropriate for the description and prediction of time series data. A by-product of this exposure is a greater appreciation of the assumptions implicit in regression analysis and econometrics. The primary focus is upon developing, applying, and critically evaluating statistical models that are appropriate in varying conditions. A unifying theme in the course is the selection of an appropriate model, and several schemes are offered, ranging from informal graphical methods to sophisticated likelihood methods such as the AIC. The presentation also contrasts the prediction characteristics of the various models. The range of models considered includes the Box-Jenkins ARIMA class, combinations of time series models and regression methods, frequency-domain techniques, models of co-integration and causation, and nonlinear models based on smoothing techniques.

Format: Primarily lecture and discussion with occasional computing recitations. Assigned and graded exercises, data analysis project, midterm, and final exam.

Prerequisite: STAT 622/701 or permission of instructor.

STAT 926

Multivariate Analysis: Methodology

Description: This is a course that prepares PhD students in statistics for research in multivariate statistics and data visualization. The emphasis will be on a deep conceptual understanding of multivariate methods to the point where students will propose variations and extensions to existing methods or whole new approaches to problems previously solved by classical methods. Topics include: principal component analysis, canonical correlation analysis, generalized canonical analysis; nonlinear extensions of multivariate methods based on optimal transformations of quantitative variables and optimal scaling of categorical variables; shrinkage- and sparsity-based extensions to classical methods; clustering methods of the k-means and hierarchical varieties; multidimensional scaling, graph drawing, and manifold estimation.

Format: Lecture and discussion.

Prerequisites: STAT 622; some facility in computing via statistical packages; a working knowledge of matrix algebra; breadth of intellectual and scientific curiosity beyond immediate applications.

STAT 950

Quantitative Consulting Seminar

Description: The Practicum offers the opportunity for small combined teams of PhDs and MBAs to work on “real life” quantitative consulting projects. These projects are drawn from both business and University sources. The emphasis is on providing a relevant and comprehensible solution to the client’s problem. In-class brainstorming sessions, client presentations and written reports give students the opportunity to test for the existence of an intersection between their quantitative and communication skills.

Prerequisites: No prerequisites, but please talk to the instructor to determine your fit with the course.

Wharton Communication Program

The Wharton Communication Program helps prepare business leaders for the communication challenges of the workplace.

The Management Communication core requirement has three components, **all of which must be completed during the first year** of the student’s Wharton MBA program and cannot be waived. The requirement includes a:

- Fall Speaking Requirement (WHCP 611, .25 cu): Management Communication. Students take this course in either Q1 or Q2 of the first year.
- Fall Writing Requirement (WHCP 620, 0 cu): The writing requirement must be completed the same quarter that students take WHCP 611 (above).
- Spring Speaking Requirement (.25 cu) Students choose one of two options and take the course in either Q3 or Q4 of the first year:
 - WHCP 612 (.25 cu): Advanced Persuasive Speaking
 - WHCP 615 (.25 cu): Communication Challenges for Entrepreneurs (*please note the special requirements for this course*)

COURSE DESCRIPTIONS

WHCP 611 (.25 cu)

Management Communication

(cannot be waived)

Description: WHCP 611 is the first course of the Management Communication Core Requirement. In this seminar-style course, students learn the essentials of persuasion, and gain confidence in public speaking. Students benefit from the teaching, feedback and coaching from instructors, 2nd year Wharton - Omnicom communication fellows, and peers. The course enables students to develop and demonstrate effective, business-oriented communication skills, regardless of their skill level when they start the course. Students may select a section designed specifically for non-native English speakers.

WHCP 620

Fall Writing Requirement

(cannot be waived)

Description: Surveys of alumni and recruiters identified the ability to write well as crucial to career success. Wharton faculty responded by adding a writing requirement to the core curriculum, signaling a greater emphasis on writing for all Wharton MBA students. The Fall Writing Requirement is a pass/fail, non-credit course that is required for graduation. The course objective is to teach clear, concise, persuasive writing.

WHCP 620 includes writing assignments ranging from 50 to 500 words each. Students receive peer feedback and

feedback from a professional writing coach. Peer feedback is offered through the Wharton Writing Challenge, an IP-protected competition, supported by a patent issued in 2014 by the U.S. Patent and trademark office. The Writing Challenge requires students to meet multiple writing deadlines.

Students who fail to demonstrate writing proficiency in the fall complete up to 30 hours of additional writing instruction in the spring. When mastery of English impedes students' writing progress, they will receive writing assistance from the University of Pennsylvania's English Language Program. These instructors have extensive experience working with non-native English speakers and writers.

Students who switch WHCP 611 from Q1 to Q2 cannot switch the writing requirement, WHCP 620. Once students register for the speaking course, WHCP 611 in Q1, they're assigned their own writing coach (WHCP 620) for that quarter. Coaches agree to work with a pre-determined number of students, and are matched with those students before Q1 begins. As a result, if students are registered in WHCP 611 in Q1, but change to Q2, they must remain in the writing requirement WHCP 620 for Quarter 1.

Spring Speaking Requirement: One of the following courses must be completed in Q3 or Q4 of Year 1.

WHCP 612 (.25 cu)

Advanced Persuasive Speaking

Description: This course instructs students in the theory and practice of advanced persuasion. Students speak on persuasive topics which can include their own business start-up idea. Students will field tough questions under pressure, and choose from outside-of-class sessions such as an on-camera interview in a simulated TV studio.

WHCP 615 (.25 cu)

Communication Challenges for Entrepreneurs

Description: This course focuses on the unique challenges entrepreneurs face when communicating their business plan. This course will help students understand the process, characteristics, and best practices for communicating as entrepreneurs. Students will receive coaching from either a successful entrepreneur or an investor experienced with start-ups.

To enroll in this course, students must use their own business idea, and must provide in writing a business summary including company description and product/service description; market/industry analysis; marketing/sales plan; and risk factors. Basic financials, funds required, and use of funds are due the third class meeting.

Only approved students will be allowed to assign a preference for WHCP 615 in Coursematch. In the fall, watch for information explaining how students can register for this course.

Financial Information

Tuition and Expenses	80
Tuition Billing, Rebates, and Surcharges.	80
Paying Your Bill	81
Fellowships.	81
Financing Your Education	82
University Employment	82
Student Credit Union.	82

Financial Information

TUITION AND EXPENSES

The following is the estimated 2014-2015 Wharton MBA Student Educational Budget for first- and second-year students.

Expenses	1st year	2nd year
Tuition/Fees¹		
Tuition	\$62,424	\$62,424
Course Materials Fee	700	700
General Fee	2,586	2,586
Pre-Term	2,000	0
Clinical Fee	500	500
Total Tuition & Fees Expenses	\$68,210	\$66,210
Books & Supplies		
Book, Bulk Packs & Supplies	1,300	1,300
Total Book & Supplies Expenses	\$1,300	\$1,300
Room & Board²		
Rent and Utilities	15,650	16,587
Rental Insurance	200	200
Board	4,776	4,776
Total Room & Board Expenses	\$20,626	\$21,563
Miscellaneous		
Est. Health Insurance ³	2,996	2,996
Transportation	910	819
Personal and Misc. Expenses	3,500	3,350
Total Miscellaneous Expenses	\$7,406	\$7,165
Total Expenses	\$97,542	\$96,238

1. Your printing account will open with a non-refundable \$40 balance. Any monies added to this account will be refunded if not used.

2. Room/board assumes a 10-month calendar and 9-month second-year calendar.

3. Students not enrolling in the Penn Student Health Insurance Plan will be assessed a clinical fee of approximately \$500. The fees for 2014-2015 are expected to rise

Tuition: Covers full-time attendance at the Wharton School.

General Fee: Mandatory fee. Covers access to Career Management, graduate activities, recreational facilities, library services, and other University services not directly associated with specific courses.

Health Insurance: Mandatory unless covered by an outside agency.

Room and Board: Reflects an average off-campus shared residence.

Books, Supplies & Miscellaneous: Includes required texts and classroom supplies, telephone service, inter-city travel, entertainment, laundry, clothing and other general personal items.

Course Materials Fee: This includes the cost for Study.Net materials for core courses.

Pre-Term: Mandatory Pre-Term fee (\$2,000) applies only to the first year of the program.

Clinical Fee: This fee is mandatory for full-time, non-dissertation status students and for students enrolled the Penn Student Health Plan (PSIP). <www.vpul.upenn.edu/shs/clinicalfee.php>

Costs not included in the educational budget include:

	Avg.	Middle 50% Range
Student Activities (clubs, conferences, parties)	\$860	\$650-1,150
	Avg.	Range
Global Immersion Program*	\$4,315	\$5,800-7,800

* Optional. Includes cost of program and round-trip airfare to and from NYC, NY.

Other expenses to consider are: moving or travel expenses, prior debt, furniture, car expenses, security deposits, cell phones, entertainment, club or student activity fees, computer purchase, animal care, gifts, clothing, or expenses related to your job search.

Your own costs may vary depending on lifestyle, tastes, and other individual considerations. We strongly recommend that you construct a personal budget for planning purposes using the student educational budget as a point of reference. If you are married or have dependents, you may face higher costs. Students with extenuating circumstances can request a budget reevaluation to borrow funds above the set student budget once the fall semester has started

TUITION BILLING, REBATES, AND SURCHARGES

The MBA program is a full-tuition program. This means that: (a) you normally pay full tuition in each semester regardless of your course load, and (b) you must pay at least four semesters' full tuition and fees before you can graduate. For four semesters' tuition and fees, you are allowed a maximum of 21 cu before graduating from the MBA program. If with the permission of your academic advisor you carry a course load beyond 21 cu, you will be billed a tuition surcharge. The tuition surcharge will be \$8,014 per cu for the 2014-2015 academic year. Course loads of less than 21 cu do not entitle you to a tuition rebate. All 21 credit units must be taken before graduation. Once you have graduated, you cannot return to use these credit units. You are responsible for counting the number of credits taken. You may consult with an academic advisor for assistance.

Summer Courses

Tuition for the University's summer courses is billed separately for each course; the rate per cu will be \$8,014 plus a summer MBA general fee of \$324 for the 2014-2015 academic year. If you take summer courses and are in a position to graduate from the MBA program after the fall semester of your second year, you may be liable for a surcharge according to the following criterion. If the total tuition you have paid in the summer plus the fall of your second year is less than full tuition for the second year, then the surcharge is the difference as per rule (b) above. Conversely, if by taking summer courses you need to carry only a partial load in your second year, then the tuition in your last semester is appropriately reduced so that (as long as your total credit load in the MBA program does not exceed 21 cu), your total tuition equals the normal four semesters' tuition. Please see the following paragraphs for surcharge and rebate policies for dual-degree programs.

Dual-Degree Students

(except Lauder, the Law School, JD/MBA, and the School of Design)

Students in approved dual degree programs are required to be in residence at Wharton for three semesters, minus the above noted exceptions. Wharton is the primary school of residence during these three semesters and the alternate program is the secondary school of residence. Tuition is paid to the primary school of residence.

During the three semesters of primary residence with Wharton, students are limited to 16.5 credit units, regardless of whether those credits are from courses at Wharton or another School at Penn. Tuition paid for courses completed during the summer sessions will be deducted from the tuition in the last semester of residence at Wharton if the cumulative credits during the three semesters of primary residence do not exceed the 16.5 credit unit maximum. Credit units earned beyond the 16.5 limit will be charged at the rate of 7,670 per credit for the academic year 2014-2015.

MBA/MA Lauder Students

For the Wharton component of their tuition, Lauder MBA/MA students are governed by tuition policies that apply to regular MBA students. Because four credit units from the Lauder students' MA degree are counted toward the MBA, Lauder students may only take 17 Wharton credit units (therefore meeting the 21 credit limit) above which tuition surcharges apply at the per credit unit rate.

The Law School/The School of Design

For the Wharton component of their tuition, JD/MBA students and all MBA/School of Design dual degree students (MBA/March, MBA/MLA, MBA/MCP, MBA/MLA and MBA/MHP) will spend two semesters at Wharton and will pay tuition at the Wharton rate. For the remainder of their dual degree program, they will reside at the Law School or the Design School, paying tuition to the Law or Design Schools.

MBA/JD and MBA/Design students are limited to a total of 11 credit units during their two semesters in residence at Wharton. Any course work done after the second semester is billed at the rate appropriate to the Law or Design School. If one chooses to enroll in courses during the summer following the two semesters at Wharton, these courses cannot be counted toward the Law or Design portion of their dual degree program. They will instead count toward the MBA portion, and if they exceed the 11 credit maximum for the first year, they will be surcharged accordingly.

PAYING YOUR BILL

The Office of Student Financial Services (SFS) will send the first fall semester bill in early July. The bill is sent to the permanent address that you gave the Registrar on your Student Data Form, and it is also available <<http://sfs.upenn.edu/pennpay/how-to-use.htm>>. All subsequent bills are electronic and sent directly to your Wharton email account.

The fall semester bill is due at the end of July. It is your responsibility to contact SFS at 215.898.1988 or go to their website if a bill is not received. If your bill is correct, pay online using Penn.Pay, or mail your check or money order in the envelope provided by the date indicated on the bill. Credit card payments are permitted only when paying your bill online with American Express. Late payment will result in interest charges. Payment may also be made in person at the Cashier's Office, a division of the Office of Student Financial Services located at 100 Franklin Building. Finally, students may make tuition payments by way of wire transfer, a method which may be especially convenient to students from outside the U.S. Details are available on the Penn.Pay website, or through the SFS Information Center at 215.898.1988.

Remember to keep the top portion of your tuition bill as a receipt after it has been sent back to you. This is known as your matric card. If credit for an expected scholarship or loan has not been applied to your bill, contact the Wharton Financial Aid Office at 215.898.8728.

If the tuition charge on your bill is incorrect, contact the MBA Program Office, 300 Jon M. Huntsman Hall, 215.898.7604. If you have questions about dining services, residence charges, or health insurance, call the appropriate office. The telephone numbers are listed on the back of your student bill.

FELLOWSHIPS

Wharton offers merit-based fellowships to qualified students. All admitted students are considered for these funds. If you are selected, you will receive a fellowship letter and a Financial Notification Letter. Selections for Wharton fellowships are made by a Fellowship Committee.

FINANCING YOUR EDUCATION

Financing your education can be done through several sources. These sources consist of family assets, sponsorships, scholarships and/or federal and institutional loans. The majority of graduate students finance their education through loan programs. U.S. citizens and permanent residents are eligible to apply for federal loans, such as the Direct Loan, formerly Stafford Loan. If you need to borrow more than the federal student loans, you can borrow through one of the alternative loan provider of your choosing. International students are generally advised to apply for alternative loans with a creditworthy U.S. citizen/permanent. It is important that you follow the instructions provided by the Wharton Financial Aid Office if you plan to finance your education through loans.

If you have questions on financing your education, you can contact Wharton's Graduate Admissions and Financial Aid Office, 111 Vance Hall; tel: 215.898.8728 fax: 215.898.0120; or by e-mail: financialaid@wharton.upenn.edu.

UNIVERSITY EMPLOYMENT

Federal regulations require that all of a student's academic year earnings be considered a resource in determining financial need. Consequently, students receiving financial aid who obtain work need to inform the University's Office of Student Financial Services. Any job earnings may result in a reduction of the financial aid award.

Teaching and Research Assistantships

MBA students are occasionally able to obtain a teaching or research assistantship through one of Wharton's academic departments, research centers, or administrative offices. Time commitment and remuneration vary with the position. Qualified students should contact the department(s) of their choice directly. For a list of department addresses and telephone numbers, refer to the telephone directory at the end of this book. Finally, you are not limited to the Wharton School in your search for an assistantship. Your skills and expertise may be attractive to other schools within the University.

Residential Advisors

Each year, the University hires graduate students and upperclassmen to serve as residential advisors. Duties include counseling undergraduates on personal, social, and academic matters, and helping to plan dorm activities. Remuneration includes a furnished room and, in some cases, a cash stipend. Completed applications must be filed in January for the following academic year. Late applications are assigned a waiting list status and are considered as positions become available. Applications and further information can be obtained from the Office of Housing & Conference Services, 3901 Locust Walk, 215.573.3676 or from the website: www.collegehouses.upenn.edu.

Employment for Spouses

Spouses interested in obtaining employment at the University should file an application with The Penn Job Center (Unique Advantage), 3550 Market Street, Suite 110 (Science Center), Philadelphia, 19104, phone 215.222.2246, website: www.hr.upenn.edu/jobs/. Spouses who are not U.S. citizens must make sure to meet necessary visa requirements. For details, please consult the International Scholar and Student Services, 3701 Chestnut Street, Suite 1W, phone 215.898.4661, website: www.upenn.edu/oip/iss.

Other Part-Time Employment

The Office of Student Employment at the University maintains a comprehensive listing of nontechnical employment opportunities, both on campus and in Philadelphia. Students who wish to obtain part-time employment should visit this office, located in the Franklin Building. The Philadelphia area offers numerous opportunities for Wharton students to earn money during the year. In the past, students have found employment in local firms. Since few Wharton Graduate classes are held on Friday, job opportunities are sometimes feasible for students who wish to work then. Students who are not U.S. citizens should check visa requirements with the International Scholar and Student Services, 3701 Chestnut Street, Suite 1W, phone 215.898.4661 or check the website at www.upenn.edu/oip/.

STUDENT CREDIT UNION

The University of Pennsylvania Student Federal Credit Union opened its doors in April 1987. It has since gone on to become the nation's largest student-run credit union, with over \$7.1 million in assets and approximately 6,200 members.

Membership in UPSFCU is open to all Penn students and alumni, and offers services that focus on student's special needs. These include share (savings) and share draft (checking) accounts, MAC ATM cards, credit cards, CDs, and travelers checks. In addition, UPSFCU offers a variety of loans specifically designed for students. These include credit history loans, graduate assistance loans, computer loans, travel, and transition loans. UPSFCU is located 3401 Walnut Street, Suite 431A. Hours are Monday through Friday from 11:00 a.m. to 5:00 p.m. UPSFCU also offers bank by phone services. For more information call 215.898.9697 or check the website at <https://www.upennsfcu.org>.

Wharton/Penn Resources and Policies

Wharton Computing	84
Wharton Operations (Scheduling and Facilities Services)	85
Libraries	86
MBA Career Management	86
University Policies and Resources	87
Security	91

Wharton Computing

SPIKE

SPIKE <<https://spike.wharton.upenn.edu>> is Wharton's student portal. Log in to reserve Group Study Rooms, find classmates in Wharton's Online Community, get news from across the school, access quick links to your course information, view a calendar of your class schedule, find out about Wharton events, and more

STUDENT SUPPORT

Wharton Computing's dedicated Student Support team is available 24/7 to help with a variety of technology needs, including configuring devices for Wharton services.. In-person support is available in SH-DH 114 M-Th: 9 a.m.–8 p.m. and Friday: 9 a.m.–6 p.m. To make an appointment, visit Spike or call 215-898-8600. Around-the-clock support is available via chat, email, phone, and Twitter (@whartonsupport). Visit the Computing tab in SPIKE for more information <<http://spike.wharton.upenn.edu/support/>>.

GETTING STARTED

To quickly get up and running with Wharton Computing's services, visit the online "Get Whartonized" guide <<http://whr.tn/whartonize>>, where you can learn about the wide variety of technology resources available to you, and find instructions on how to configure your devices to access them.

WHARTON COMPUTING LABS AND PRINTING

Wharton Computing manages four computing labs, 57 Group Study Rooms, and almost 500 computers across Huntsman Hall, Lauder-Fischer Hall, Steinberg Hall-Dietrich Hall and the Lippincott Library, available whenever the buildings are open. Additionally, a Virtual Computer Lab allows access to Wharton resources remotely. MyWhartonDrive is your personal network file location, which maps to the Y: drive when you're logged into public computers. Be sure to save your work frequently to MyWhartonDrive or to a removable storage device. Files saved to MyWhartonDrive are accessible from Wharton public computers or via a browser at: <<https://mywhartondrive.wharton.upenn.edu>>.

Don't forget to log out when you are finished using a Wharton lab or classroom computer.

Printing is supported from your laptop or lab computers to any printer in the Wharton complex. Need to print something from a smartphone or tablet? Then print by email is for you. All Wharton MBA students are given a printing account with an initial balance of \$40.00, with an additional non-refundable \$40.00 credit issued at the beginning of each semester. Once this credit has been depleted, students' PennCash accounts will be automatically charged for printing.

If you have any problems with a computer or printer, contact Wharton Computing Student Support at <<http://spike.wharton.upenn.edu/support/>>.

OPERATIONS CUSTOMER SUPPORT CENTER

F30 Jon M. Huntsman Hall
8:30 a.m. – 5:30 p.m., Monday – Friday
215.898.2575 phone
215.573.8532 fax
repair-it@wharton.upenn.edu

Please visit the Wharton Operations website
<<http://operations.wharton.upenn.edu/>> for the most up to date information regarding:

- Wharton Building Policies
- Emergency Building Procedures
- Parking Permits
- Projects
- Scheduling: Wharton recognized student clubs may schedule space within the Wharton complex please go to <<http://spike.wharton.upenn.edu/Calendar/index.cfm>>
- Security
- Mail Services
- Sustainability Program

Wharton Complex Building Hours*

Spring/Fall Hours

BUILDING	MON – FRI	WEEKENDS	HOLIDAYS
Colonial Penn Center	8 a.m. – 6 p.m.	Closed	Closed
Jon M. Huntsman Hall	24 Hours	24 Hours	TBA
Lauder-Fischer Hall	7 a.m. – 7 p.m.	Closed	Closed
Steinberg Hall-Dietrich Hall	7 a.m. – 10 p.m.	8 a.m. – 5 p.m.	Closed
Vance Hall	7 a.m. – 9 p.m.	8 a.m. – 5 p.m.	Closed

Summer Hours

BUILDING	MON – FRI	WEEKENDS	HOLIDAYS
Colonial Penn Center	8 a.m. – 6 p.m.	Closed	Closed
Jon M. Huntsman Hall	7 a.m. – 10 p.m.	7 a.m. – 10 p.m.	TBA
Lauder-Fischer Hall	7 a.m. – 6 p.m.	Closed	Closed
Steinberg Hall-Dietrich Hall	7 a.m. – 7 p.m.	8 a.m. – 5 p.m.	Closed
Vance Hall	7 a.m. – 7 p.m.	Closed	Closed

*A valid Penn ID is required to enter any open Wharton buildings
Monday – Friday between 7 p.m. – 7 a.m. and 24 hours on weekends.

EMERGENCY CLOSING AND DELAYS (WEATHER RELATED/OTHER)

When the University closes due to emergencies such as severe weather conditions, the University will communicate closing information via its special information number: 215.898.MELT (6358) and the PennAlert system:

1. If not already a member – register for PennAlert
Notifications at <www.publicsafety.upenn.edu/pennready/upennalert/> to receive University announcements via text messages, voicemail and email.
2. Check the University of Pennsylvania MELT LINE by dialing 215-898- MELT (6358)
3. Log onto the University of Pennsylvania Website
<www.upenn.edu>

If the University suspends normal operations due to a weather or other emergency related event all scheduled classes and special events would be cancelled.

INFORMATION DESK

Wharton's Information/Security desk, inside the Locust Walk Lobby of Jon M. Huntsman Hall, provides directions and general information on school facilities.

LOST AND FOUND

The Wharton Complex lost and found station is located at the main security desk located inside the Locust Walk lobby of Jon M. Huntsman Hall. Articles found in the Wharton complex will be brought to the desk. Articles found elsewhere on the Penn campus are taken to the main desk in Houston Hall.

Libraries

THE LIPPINCOTT LIBRARY OF THE WHARTON SCHOOL

West Wing

Van Pelt-Dietrich Library Center

www.library.upenn.edu/lippincott

The Lippincott Library of the Wharton School is a business research library serving Wharton and the University of Pennsylvania community. Located in the Van Pelt-Dietrich Library Center, Lippincott features: state-of-the-art electronic resources for both on-site and remote use—over 100 business databases, with access to data, journals, news sources, analyst reports, and more; reference and research consultation services, and specialized research training sessions.

Lippincott Library is an invaluable resource for those preparing research projects, class presentations, entrepreneurial projects and job searches.

The Facility

Lippincott Library is housed on the second and third floors of the west wing of the Van Pelt-Dietrich Library Center. The Safra Business Research Center, located on the second floor, provides a beautifully-designed environment for general study and using the Library's electronic resources. The Yablon Financial Resources Lab is a 16 seat classroom with Bloomberg and S&P Capital IQ terminals, an ideal space for working on finance projects.

Lippincott Directory

Reference Help: 215.898.5924

Course Reserves: 215.898.5926

Email: lippinco@wharton.upenn.edu

Business FAQ: <<http://faq.library.upenn.edu/recordList?library=lippincott>>

LIBRARIES AT PENN

The University Library that Benjamin Franklin founded—one of the first in the country—is the only Penn institution to have been in continuous operation since 1750. Today, Penn Libraries consist of fourteen libraries, each designed to serve the knowledge and information needs of Penn's schools and research centers.

MBA Career Management

3718 Locust Walk

50 McNeil Building

215.898.4383 phone

<http://mbacareers.wharton.upenn.edu/>

OUR MISSION

During the course of the MBA program, MBA Career Management works in partnership with students to develop MBA-level career management skills and attain success in every stage of the job search process.

The **MBA Career Management mission** is to enable Wharton MBA students to achieve career goals by:

- Helping students explore and refine their career aspirations
- Teaching career management skills and strengthen students as potential candidates
- Supporting students through the career search process
- Marketing Wharton talent to employers and strengthening the Wharton brand

MBA CAREER MANAGEMENT STAFF

The MBA Career Management team has dozens of years of combined career management and industry experience. Our dynamic and committed staff works to connect employers and students—to help companies meet their recruiting needs and students to fulfill their career goals by:

- Providing experience from a broad range of academic and professional backgrounds
- Maintaining extensive knowledge of the global market
- Developing and maintaining strong relationships with a large and diverse recruiting base
- Partnering with alumni, faculty and research centers to help students and alumni take advantage of job opportunities at all levels

University Policies and Resources

STUDENT RESOURCES

Some of the office's resources include:

- *Individual Career Advising:* Experienced career advisors provide direct support on all aspects of an individual's job search through one-on-one meetings.
- *Career Education Workshops/Programs:* Career Management delivers a wide variety of specialized programs designed to improve job search skills including strategy development, resume writing, networking, and interviewing.
- *Comprehensive Student Website:* Students gain easy access to databases and educational information designed to provide critical information for the job search process
- *Job Postings and Company Information:* Through MBA Career Management's online recruiting system, students have access to a large number of job opportunities along with an extensive database of company contacts and company information.
- *Employer Recruiting Events:* Through a variety of networking and information events, students interact and connect with a large number of companies across a broad range of industries.

It is critical to remember that students of the Wharton School are part of the larger University of Pennsylvania community. As a community of scholars, the University depends upon mutual trust among its members, their fundamental respect for the rights, dignity, and the worth of others, their support for basic principles of free and open expression, and their abiding commitment to the highest levels of quality and integrity of academic work. These University expectations are embodied in the Non-Discrimination Statement, the Statement on General Conduct, the Racial and Sexual Harassment Policies, the Guidelines on Open Expression, and the Code of Academic Integrity. In addition to these documents, the University has issued other policies, guidelines, and procedures to make explicit the expectations of the students, faculty, administrators, teaching assistants, advisors, coaches, and support staff in dealing with one another. These documents are available through the University PennBook at <www.vpul.upenn.edu/osl/pennbook.html>.

These published statements outline basic expectations for behavior on campus and thus pertain to students of the Wharton School. Additional regulations, requirements and procedures of the Wharton School are spelled out in this publication as well as in periodic academic bulletins.

POLICIES

Non-Discrimination Statement

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, color, sex, sexual orientation, gender identity, religion, creed, national or ethnic origin, citizenship status, age, disability, veteran status or any other legally protected class status in the administration of its admissions, financial aid, educational or athletic programs, or other University-administered programs or in its employment practices. Questions or complaints regarding this policy should be directed to the Executive Director of the Office of Affirmative Action and Equal Opportunity Programs, Sansom Place East, 3600 Chestnut Street, Suite 228, Philadelphia, PA 19104-6106; or (215) 898-6993 (Voice) or (215) 898-7803 (TDD).

Office of Affirmative Action

The mission of the Office of Affirmative Action and Equal Opportunity Programs is to provide central leadership and support for the University's efforts to achieve an educational and work environment that is diverse in race, ethnicity, interests, abilities and perspectives. The office will ensure the implementation of equal opportunity, affirmative action, and nondiscrimination policies through education, training and active partnership with others from the campus and the broader Philadelphia communities. The Office is at 228 Sansom

Place East, 3600 Chestnut Street, Philadelphia, PA 19104-6106. The telephone numbers are 215.898.6993 (voice) and 215.898.7803 (TDD). The website is <www.upenn.edu/affirm-action>.

Grievance Procedures

Student Grievances: Federal law requires the University to designate an employee to coordinate its compliance, including the investigation of complaints with Title VI of the Civil Rights Act of 1964, Title IX of the Education amendments of 1972, and the Rehabilitation Act of 1973. In addition, the University is required to have procedures for the resolution of student and employee grievances alleging violations of these laws.

Any student in the University who feels that he or she has been discriminated against by an individual or office acting for the University or that the University is not complying with the requirements of Title VI, Title IX, or the Rehabilitation Act, has a right to register a complaint and seek redress of his or her grievance. The student may take his/her complaint to the Office of Affirmative Action & Equal Opportunity Programs. The University outlines procedures for submitting grievances. See the Complaint Resolution website at: <www.upenn.edu/affirm-action/resolcomplaint.html>.

- **Academic Grievances:** Schools and academic departments within the University have established procedures for the resolution of student grievances concerning academic matters. Students should contact the Dean's Office of the particular school for a copy of the appropriate procedures and for guidance regarding the grievance process. A student who wishes to register a grievance regarding the evaluation of his/her academic work should follow the academic grievance procedure applicable in the school or department in which the academic work was performed.
- **Administrative and Employment Grievances:** Students with administrative grievances should contact the Office of the Vice Provost for University Life, 3611 Locust Walk, 215.898.6081. Students with a grievance related to employment should consult the Deputy Provost or the Office of Human Resources, 3401 Walnut Street, 215.898.6093.
- **Office of the Ombudsman:** Members of the Penn community may consult the Office of the Ombuds with concerns or problems ranging from academic disputes and issues of campus life to those that are interpersonal or work-related. Anyone wishing to use the service should request an appointment by phone (215.898.8261) or through the Office's website, <www.upenn.edu/ombudsman/>. The University Ombuds is Dr. Thadious Davis and the Associate Ombudsman is Marcia Martínez-Helfman. The office is located in 113 Duhring Wing, an annex to the Fine Arts Library. In order to protect confidentiality, the Office of the Ombuds conducts its business in person and over the telephone but not by email.

Office of the Vice Provost for University Life

The Division of the Vice Provost for University Life (VPUL) is the foremost provider of student support services to the Penn community. VPUL's mission supports the four tenets of the Penn Compact: increased access; integrative knowledge; and local and global engagement through the following core services: access, achievement and equity programs; campus resource centers; civic engagement initiatives; facility and administrative services; health and wellness programs; and student activities and VPUL facility and administrative services that reach all 23,000 Penn undergraduate, graduate, and professional students as well as thousands of faculty, staff, alumni, and community members. The Office of the Vice Provost for University Life is located at 3611 Locust Walk. The telephone number is 215.898.6081, and the website is <www.vpul.upenn.edu>.

RESOURCES

Housing

The University of Pennsylvania provides both off-campus and on-campus housing facilities. On-campus graduate housing at Sansom Place is within walking distance of the School. Units include single rooms and apartments which are fully furnished and utilities are included in the monthly rent. More information is available on the Residential Services website, <www.upenn.edu/housing>. Contact information for the Housing Assignments Office is 215-898-3547, living@exchange.upenn.edu. Staff positions are also available for graduate students interested in living and working in one of the undergraduate College Houses or Sansom Place as a Graduate Advisor. For information please visit <www.collegehouses.upenn.edu> and <www.upenn.edu/housing> respectively. Most graduate students seek off-campus living arrangements. The Office of Off-Campus Services maintains a website at: <www.upenn.edu/offcampusservices> that provides information about living in Philadelphia, apartment listings, and step-by-step information about renting (particularly useful for international students who have not previously lived in the U.S.). Each year in spring, the office organizes a rental housing fair with representatives from most major landlords and buildings in the area. Incoming students may also wish to consult the graduate housing guide, with detailed landlord and building information that is published on the website in the spring. The Office of Off-Campus Services is located at 3702 Spruce Street, and the telephone number is 215.898.8500.

International Student and Scholar Services

Upholding the University of Pennsylvania's commitment to shape the next generation of global leaders is core to the mission of the International Student and Scholar Services (ISSS) at <www.upenn.edu/oip/iss/>. ISSS oversees services for the University's scholars, faculty and professional staff, including expert advice on US visa processing and immigration. It provides guidance to departments and student groups regarding cross-cultural and intercultural issues through workshops and educational programs and initiatives. ISSS also coordinates

and spearheads the International Student Advisory Board, International Partners Outreach Group and the Intercultural Leadership Program. ISSS' general number is 215.898-4661. ISSS is located at 3701 Chestnut Street, Suite 1W.

Graduate Student Center

The Graduate Student Center empowers graduate and professional students to create and participate in a graduate community at Penn. The Center provides intellectual, social, and professional development programs and services to bring together the wide range of graduate and professional students at Penn for cross-disciplinary, cross-cultural exchanges, and language chats. The Center is a centrally-located home for graduate and professional students which includes a lounge, computer lab, and meeting and event space. Conveniently located at 3615 Locust Walk, the telephone number is 215.746.6868, the email is center@gsc.upenn.edu, and the website is www.gsc.upenn.edu.

Family Resource Center

The Family Resource Center at Penn is a safe, welcoming environment for all Penn students and their children, as well as designated caregivers. The Family Center provides a hub for information, resources, and activities for students with children. The space includes a children's play area complete with toys, books, stuffed animals, and a private lactation room equipped with a Symphony breast pump. Children must be supervised by parents or caregivers at all times. The Family Center is open Monday through Friday from 10 a.m. to 3 p.m. during the academic year and is located at Houston Hall, 3417, Spruce Street, Suite 240. Please consult the website at: <http://familycenter.upenn.edu/> or contact kids@gsc.upenn.edu for more information.

Learning Resources at Penn

The Weingarten Learning Resources Center houses two central University of Pennsylvania offices that support student learning — the Office of Learning Resources and the Office of Student Disabilities Services. The Weingarten Center is located at 3702 Spruce Street, Suite 300 (Stouffer Commons), 215-573-9235, TDD: 215-746-6320. All services are free and confidential.

- **The Office of Learning Resources (OLR)** provides professional consultation services in university relevant skills such as academic reading, writing, study strategies, and time management to the Penn community. This academic support is provided through a varied menu of services and program. www.vpul.upenn.edu/lrc/lr/whatwedo.php
- **The Office of Student Disabilities Services (SDS)** assures that students who self-identify with disabilities are afforded equal academic opportunities and participation in all University-sponsored programs. Students who are requesting reasonable accommodations should contact SDS as early as possible to self-identify and submit documenta-

tion. Call SDS (215-573-9235) for additional information and to schedule an appointment with a member of the professional staff.

Penn Women's Center

The Penn Women's Center's mission is to understand and address the evolving needs of all women at the University of Pennsylvania, redress gender inequity and, in so doing, support and advance women's personal and professional development and empower them to reach their fullest potential. The Center sponsors programs on career development, stress management, parenting, sexual violence prevention, health and wellness alongside events highlighting women writers, activists, artists and political and professional leaders. The Center plays an advocacy role regarding issues of gender equity, health, childcare, workplace discrimination, domestic and sexual violence, and mental health. The Center has a fully-equipped nursing room, a film and book library, a TV lounge, wireless internet access and assorted meeting rooms. The Center is located at 3643 Locust Walk; telephone: 215.898.8611, email: pwd@pobox.upenn.edu. The website is www.vpul.upenn.edu/pwc.

Athletic Facilities

The University of Pennsylvania's Department of Recreation offers the opportunity for the Penn Community to participate in intramural sports, open recreation, adult recreation classes, sport clubs, fitness programs, and special interest programs. The facilities website reviews athletic services offered at Penn. The Pottruck Center (across the street from Jon M. Huntsman Hall) is one of the main venues at the University. It offers a range of facilities including fitness equipment, pools, and climbing walls. Hours are convenient for students. For more information about registration, schedules and fees, see the website at: www.upenn.edu/recreation/ or call 215.898.6100.

STUDENT HEALTH SERVICES

Student Health

The Student Health Service is located at 3535 Market St., Suite 100. Hours are available on the SHS website at: www.vpul.upenn.edu/shs/index.php. The Student Health Service (SHS) has integrated online scheduling for appointments on the main page of the site. To schedule an appointment by phone, call 215-746-3535. They will try to accommodate you with the next available appointment whenever possible. In some instances, you will be able to schedule an appointment for the same day. If you have an urgent problem and need special arrangements for care, a nurse may help to arrange for an appropriate evaluation. If you choose not to use on-line or phone scheduling, you may also come directly to SHS to make an appointment. You will be offered any same-day appointments that are available. If there are no same-day appointments, they will offer you the next available that works with your schedule. If you have an urgent issue, they will try to have you seen as soon as possible. Sometimes patients will have a nurse evaluate them to provide care while they wait until the

next available provider appointment (which could be later that day or the next day).

Students with illnesses requiring urgent or emergency treatment may obtain care at a local Emergency Room. They may also call the Student Health provider on-call for phone consultation. This provider may give medical advice over the phone, or may decide that the student should seek emergency medical attention. Students should go to the Emergency Department at HUP (1st floor Silverstein Building on 34th Street). The Student Health provider on-call can be reached by calling 215-746-3535 and connecting to the hospital operator.

Health Insurance

All full-time students are required to carry health insurance to cover services beyond those offered at the Student Health Service. Students may either enroll in the Penn insurance plan or carry insurance equivalent in coverage to the Penn plan. SHS maintains a website at: <www.vpul.upenn.edu/shs/insurance.php> with information about health insurance. For further information, call the Student Health Insurance Office at 215.746.3535, or stop at the office located in 3535 Market St., Suite 100, Room B101.

Dental Care

Penn Dental is located at Robert Schattner Center, 240 South 40th Street, 3rd floor where faculty from the Dental School provides care at fees comparable to private practice. Hours are Monday through Friday from 8 a.m. until 5 p.m. Call 215.898.4615 for an appointment. Please visit <www.mypenndentist.org> for more practice information including our other locations. Dental care is not covered by the Student Health Service or the medical insurance plan. However, the University offers an optional dental insurance policy. For information on dental insurance, see the Penn Student Insurance section of the Student Health Service website at: <www.vpul.upenn.edu/shs/> or call 215.746.3535.

Campus Health Initiatives

<www.vpul.upenn.edu/shs/campushealth/index.php> Campus Health Initiatives, the public health arm of Student Health Service, seeks to improve health and well-being across campus through policy, health promotion and epidemiology. We direct programs and policy efforts in several different areas, including <www.vpul.upenn.edu/shs/campushealth/bewell.php> stress reduction and mindfulness, <www.vpul.upenn.edu/shs/campushealth/bikewell.php> bike safety, <www.vpul.upenn.edu/shs/campushealth/eatwell.php> nutrition, <www.vpul.upenn.edu/shs/campushealth/movewell.php> physical activity, <www.vpul.upenn.edu/shs/campushealth/sexwell.php> sexual health, and <www.vpul.upenn.edu/shs/campushealth/epidemiologyupdates.php> communicable disease prevention.

Students, student groups, or faculty and staff can arrange health education events by contacting our office. Additionally, Campus Health serves as the advisor for the <www.vpul.upenn.edu/shs/campushealth/SHAB.php> Student Health Advisory

Board (open to graduate students!) and the Penn Undergraduate Health Coalition.

Our website is a myriad of resources, and students can follow our <www.vpul.upenn.edu/shs/campushealth/blog.php> blog for current updates and health messages.

We're also on <<http://instagram.com/healthypenn>> Instagram, <www.facebook.com/healthypenn>, <<https://twitter.com/HealthyPenn>> Twitter and <www.pinterest.com/healthypenn/> Pinterest @HealthyPenn!

COUNSELING AND PSYCHOLOGICAL SERVICES

CAPS provides free and confidential professional psychological and psychiatric services to students who are having personal problems involving social, emotional, academic, and career issues. The most frequent concerns are poor academic performance, stress management, depression, anxiety, low self-esteem, eating problems, drug and alcohol abuse, racial/ethnic identity issues, relationship conflicts, sexual identity concerns, career conflicts and loss/grief.

The unique circumstances and concerns of graduate and professional students are recognized and addressed by CAPS staff in individual and group workshop sessions. Graduate women's groups, and groups addressing interpersonal relationships and sexual orientation are provided. CAPS also offers workshops on topics like feeling confident in academia and secrets to grad school success.

Students can also schedule appointments by calling or walking in to CAPS Monday – Friday. CAPS is open from 9 a.m. until 5 p.m. on Monday, Tuesday and Friday and until 7:00 p.m. on Wednesday and Thursday. Following a brief screening interview, students will be given an appointment with the appropriate clinician. Counseling and Psychological Services is located at 133 S. 36th Street (corner of 36th & Walnut Streets across the street from the Penn Bookstore). The telephone number is 215.898.7021. For psychiatric or psychological emergencies outside of business hours or during weekends, contact 215.349.5490 and ask for the CAPS clinician on call.

STUDENT IDENTIFICATION

Identification Cards (PennCards)

The PennCard is a student's general identification card and passport to University services and facilities. It acts as a "smart card." The following are areas in which the card can be used for building access, purchases, Penn Transit, recreation services, and as a pre-paid debit card (PennCash).

Incoming first-year students do not need to apply for a PennCard. Once a digital photo is uploaded to Campus Express for MBA Community, a copy of the photo is sent to the PennCard Center. The Center then creates a PennCard that is distributed to first-year students on the opening day of Pre-Term. Students with partners can apply for a card for a domestic partner or spouse. For more information about obtain-

Security

ing a PennCard or about Penn Cash and related services, visit the PennCard website at: <www.business-services.upenn.edu/penncard/> or call 215.417.CARD. The PennCard center is located at The Penn Bookstore, 3601 Walnut Street, 2nd floor, room 219. Regular Office hours are Monday–Thursday 8:30 a.m. through 5 p.m. PennCards are provided free-of-charge. There is a \$25 replacement charge.

DIVISION OF PUBLIC SAFETY

The Division of Public Safety (DPS) is responsible for providing comprehensive safety and security services for all areas comprising the Penn Patrol Zone, which includes 30th Street to 43rd Street, on the east-west border, and Market Street to Baltimore Avenue, on the north-south border. The Division is comprised of eight departments that report to the Vice President for Public Safety & Superintendent of Penn Police, Maureen Strut, M.S., CPP: the Office of the Vice President, Penn Police Department, Fire & Emergency Services, Security Technology, Emergency Communications, Security Services, Special Services, and Finance & Administration. The Division employs a total of 176 fulltime staff, 116 of whom are sworn, armed Penn Police officers.

DPS has over 550 Allied-Barton Public Safety officers on foot, bike patrol, and posted within Penn buildings. Public Safety Officers provide free motorist assistance, including jump-starts and vehicle lockouts, and offer walking escort services to anyone within the Penn Patrol Zone 24 hours a day, 365 days a year. DPS also maintains a state-of-the-art security technology network of several hundred emergency phones, 118 pan-tilt-zoom closed-circuit television (CCTV) cameras, and hundreds of fixed CCTV cameras throughout campus. Electronic access control card readers, burglar and door alarms, sensors, and duress alarms installed in restrooms are the other key features of the security technology program located in Penn-owned buildings throughout campus.

Services to Enhance Your Security:

- **Walking Escort Service:** 215.898.WALK (9255). Available 24 hours a day, 365 days a year, between 43rd and 30th Streets and Market Street to Baltimore Avenue. Escorts are also available from 10 a.m. until 3 a.m. between 50th and 30th Streets and Spring Garden Street to Woodland Avenue via the University's partnership with the University District Ambassador Program. This program is available to both the Penn and University City community.
- **Penn Transit RIDE:** 215.898.RIDE (7433). Operated by Business Services between 50th and 20th Streets and Spring Garden Street to Woodland Avenue is available from 6 p.m. until 3 a.m. daily (on-call for emergencies, between 3 a.m. and 7 a.m.). There are a number of options, including door-to-door services. See <<http://cms.business-services.upenn.edu/transportation/about-penn-transit/about-penn-transit.html>> for more information.
- **Blue Light Phones:** If you observe a potential safety hazard, would like a walking escort or require the Division of Public Safety's assistance, you can use one of more than 200 blue light emergency phones on campus and in the

surrounding community. Just pick up the receiver or press the button.

- **UPennAlert:** The UPennAlert Emergency Notification System enables fast and efficient dissemination of critical information to members of the University community during a major emergency via text messaging, email, digital displays and the Penn Siren Outdoor System (Penn SOS).

The effectiveness of this notification system depends upon individuals providing accurate and up-to-date personal contact information. We urge all Penn faculty, staff and students to partner with the University in registering their cell phone number, as well as other emergency contact information, so that University officials can communicate with them wherever. If you have not done so already, please take a few minutes now to register or update your contact information. All information is secure and confidential.

- *Students:* Access Penn InTouch via Penn Portal at <www.upenn.edu/penn_portal>
- *Faculty/Staff:* Access the Penn Directories via <www.upenn.edu/directories>

When a UPennAlert is sent the Division of Public Safety uses their website (Digital Display) to provide current and continuous updates acting as a central reference point for accurate information. This method is useful for those both on and off campus. In an emergency please go to us online at <www.publicsafety.upenn.edu> for more information.

- **Penn Guardian:** Penn Guardian is a service that allows you to rapidly provide information about you to the Division of Public Safety during an emergency.

By building a personal profile, information about you can be immediately accessed by PennComm dispatchers should you call Public Safety from a registered cellphone.

Penn Guardian can also provide police with GPS coordinates from your phone, which can decrease response time and allow first responders to locate you should you not be able to give them your location. To utilize this service, you must sign up and register your cell phone number. A PennComm dispatcher will be able to view the profile information that you have entered (such as a food allergy or other medical condition) when you call the DPS emergency number – 215-573-3333. This service also allows the dispatcher to identify your GPS coordinates when you call from a cell phone that you have registered with Penn Guardian. DPS emergency personnel can only view your information or your location if you have activated the system with a call from your registered cell phone.

Register for Penn Guardian on the DPS website: <www.publicsafety.upenn.edu/pennguardian>.

- **Campus Express Property Registration:** Penn Students and Faculty/Staff can register their bicycles, electronic equipment and other valuable property, online with the University of Pennsylvania Police Department. Students can also purchase a U-Lock through their SFS account.

Remember: don't leave your property unattended!

- *Students:* Access Campus Express Online via <<http://campusexpress.upenn.edu>>
- *Faculty/Staff:* Access U@Penn via <www.upenn.edu/u@penn>

- **Safety Presentations and Materials:** Members of the Division of Public Safety will provide safety information including brochures, videos, and presentations upon request. To request materials or arrange for a presentation, please contact our Special Services Department at 215.898.4481 or online at <www.publicsafety.upenn.edu/Resources_forms.asp>.

Most Important Numbers:

- **Emergencies:** 215.573.3333 or 511 (*from any campus phone*)
- **911** (*to reach Philadelphia Police for off-campus emergencies*)
- **General DPS Information:** 215.898.7297
- **Walking Escort Services:** 215.898.WALK (9255)
(*24 hours a day from 30th Street to 43rd Street and Market Street to Baltimore Avenue*)
- **Penn Transit Ride:** 215.898.RIDE (7433)
- **Special Services:** 215.898.6600

For more information on the Division of Public Safety please visit the website at: <www.publicsafety.upenn.edu>.

PLEASE NOTE: MBA majors and departments are indicated in italics

A

Academic Advising	12
Academic Calendar 2014-2015	98
Academic Departments	4
Academic Divisions	3
Academic Honors	17
Academic Performance Standards	16
Academic Policies	14
<i>Accounting</i>	26
<i>Actuarial Science</i>	73
Advanced Study Projects	10
Affirmative Action	87
Athletic Facilities	89
Attendance	15

B

<i>Business Economics and Public Policy</i>	28
---	----

C

Career Management	86
Clusters	8
Code of Ethics	5
Cohorts	8
Computing Services	84
Core	9
Core Courses	20
Core Course Waivers	9
Counseling and Psychological Services	90
Course Attendance	15
Course Load	11
Course Match (see Registration)	12
Credit Union	82
Curriculum	9

D

Dental Care	90
Doctoral Programs	4
Dual Degree Programs	14, 81

E

Electives	10
Emergencies	92
Emergency Closing	85
Employment	82
English Language Programs	11
<i>Entrepreneurial Management</i>	46
<i>Environmental and Risk Management</i>	32
Evaluations (Course/Faculty)	12
Examination Policies	15
Exchange Programs	13
Executive Education	4

F

Facilities	85
Faculty Advisors	12
Family Resource Center	89
Fellowships	81
<i>Finance</i>	34
Financial Information	80
Financing Your Education	82

G

Global Consulting Practicum	13
Global Immersion Program	13, 49
Global Modular Courses	13
Grading System	14
Graduate Division	3
Graduate Student Center	89
Grievances	88

H

Health Services (Student)	89
<i>Health Care Management</i>	38
Housing	88

I

Identification Cards (PennCards)	90
Independent Study	10
<i>Information: Strategy and Economics</i>	65
<i>Insurance and Risk Management</i>	28
International Exchange Programs	13
International Student and Scholar Services	88

J

<i>Joint Major in Marketing and Operations Management</i>	63
Joint Majors	11

L

Language Study	11
Learning Resources	89
Leaves of Absence	17
<i>Legal Studies and Business Ethics</i>	43
Libraries at Penn	86
Lippincott Library	86
Lost and Found	85

M

Majors	11
<i>Management</i>	46
<i>Management (Major)</i>	47
<i>Marketing</i>	58
Materials	12
Math for Business	8
<i>Multinational Management</i>	47
Multiple Majors	11

N

Non-Discrimination Statement	87
--	----

Course Index

O

<i>Operations and Information Management</i>	64
<i>Organizational Effectiveness</i>	48

P

Part-Time Employment.	82
Paying Your Bill.	81
Pre-Term Program.	8
Printing Services	84
Program Planning	8
Program Requirements	8
Public Safety	91

R

<i>Real Estate</i>	70
Registration.	12
Research Centers and Initiatives	4
Residential Advisors	82

S

Scheduling and Facilities Services	85
Security and Safety	91
Specialized Programs	4
<i>Statistics</i>	73
<i>Strategic Management</i>	48
Student Identification	90
Student Disabilities (see Learning Resources)	89
Study.Net (see Materials).	12
Summer Sessions.	13

T

Teaching and Research Assistantships	82
Transcripts.	17
Tuition and Expenses	80
Tutoring	12

U

Undergraduate Division	3
University Course Registration	10
University Employment	82
University of Pennsylvania.	2
University Policies and Resources	87

V

Vice Provost for University Life.	88
---	----

W

Waivers for Core Courses	9
<i>Wharton Communication Program</i>	77
Wharton Computing	84
Wharton MBA for Executives (MBA Exec).	3
Wharton Operations.	85
Wharton Organizational Chart	3
Wharton School	2
Wharton/University Overview	2
Women's Center	89

CORE COURSES

ACCT 611	Fundamentals of Financial Accounting . . .	20
ACCT 612	Accelerated Financial Accounting.	20
ACCT 613	Fundamentals of Financial and Managerial Accounting	20
FNCE 611	Corporate Finance	20
FNCE 612	Accelerated Corporate Finance.	20
FNCE 613	Macroeconomics and the Global Economic Environment	21
FNCE 614	Corporate Finance	21
FNCE 615	Macroeconomics and the Global Economic Environment	21
LGST 611	Responsibility in Global Management . . .	21
LGST 612	Responsibility in Professional Services . . .	22
MGEC 611	Microeconomics for Managers: Foundations	22
MGEC 612	Microeconomics for Managers: Advanced Applications	22
MGMT 610	Foundations of Teamwork and Leadership. .	22
MGMT 611	Managing the Established Enterprise	22
MGMT 612	Managing the Emerging Enterprise	23
MKTG 611	Marketing Management	23
MKTG 612	Dynamic Marketing Strategy	23
MKTG 613	Strategic Marketing Simulation	23
OPIM 611	Managing the Productive Core of the Firm: Quality and Productivity	24
OPIM 612	Managing the Productive Core: Business Analytics	24
OPIM 613	Managing the Productive Core of the Firm: Information Technology and Business Transformation	24
OPIM 614	Managing the Productive Core of the Firm: Innovation	24
OPIM 615	Managing the Productive Core of the Firm: Operations Strategy	24
STAT 613	Regression Analysis for Business.	24
STAT 621	Accelerated Regression Analysis for Business	25
WHCP 611	Management Communication	25
WHCP 620	MBA Writing Requirement	25
WHCP 612	Advanced Persuasive Speaking	25
WHCP 615	Communication Challenges for Entrepreneurs.	25

ACCOUNTING

ACCT 611	Fundamentals of Financial Accounting . . .	26
ACCT 612	Accelerated Financial Accounting.	26
ACCT 613	Fundamentals of Financial and Managerial Accounting	26

ACCT 703	Cost Accounting	27
ACCT 706	Cost Management	27
ACCT 718	Auditing	27
ACCT 742	Problems in Financial Reporting	27
ACCT 743	Accounting for Mergers, Acquisitions and Complex Financial Structures	27
ACCT 747x	Financial Statement and Disclosure Analysis	27
ACCT 897	Taxes and Business Strategy	27

BUSINESS ECONOMICS AND PUBLIC POLICY

BEPP 704	Financing Government	29
BEPP 710	Firms, Markets and Public Policy	29
BEPP 720	Behavioral Economics and Prediction and Betting Markets	29
BEPP 761	Risk Analysis and Environmental Management	29
BEPP 763	Energy Markets & Policy	29
BEPP 770	Introduction to Business Economics and Public Policy	29
BEPP 772	Urban Public Policy and Private Economic Development	30
BEPP 773	Urban Fiscal Policy	30
BEPP 788	International Industrial Development Strategies	30
BEPP 789	Nations, Politics, and Markets	30
BEPP 805	Risk Management	30
BEPP 811	Risk and Crisis Management	30
BEPP 812	Markets for Pure Risks	31
BEPP 823	Business Insurance and Estate Planning	31
BEPP 851	Fundamentals of Actuarial Science I	31
BEPP 852	Fundamentals of Actuarial Science II	31
BEPP 853	Actuarial Statistics	31
BEPP 854	Applied Statistical Methods for Actuaries	32
BEPP 893	Advanced Study Projects	32
MGEC 611	Microeconomics for Managers: Foundations	32
MGEC 612	Microeconomics for Managers: Advanced Applications	32

FINANCE

FNCE 611	Corporate Finance	34
FNCE 612	Accelerated Corporate Finance	34
FNCE 613	Macroeconomics and the Global Economic Environment	34
FNCE 614	Corporate Finance	35
FNCE 615	Macroeconomics and the Global Economic Environment	35
FNCE 717	Financial Derivatives	35
FNCE 719	International Financial Markets	35
FNCE 720	Investment Management	35
FNCE 721	Real Estate Investment: Analysis and Financing	35

FNCE 725	Fixed Income Securities	35
FNCE 726	Advanced Corporate Finance	35
FNCE 728	Corporate Valuation	35
FNCE 730	Urban Fiscal Policy	36
FNCE 731	International Corporate Finance	36
FNCE 732	International Banking	36
FNCE 738	Capital Markets	36
FNCE 739	Behavioral Finance	36
FNCE 750	Venture Capital and the Finance of Innovation	36
FNCE 751	The Finance of Buyouts and Acquisitions	36
FNCE 754	Impact Investing	37
FNCE 891	Corporate Restructuring	37
FNCE 892	Financial Engineering	37
FNCE 893	Global Monetary and Financial Institutions: Theory and Practice	37
FNCE 894	Managing Fixed Income Portfolios	37
FNCE 895	Private Equity	38
FNCE 899	Independent Study Project in Finance	38

HEALTH CARE MANAGEMENT

HCMG 653	Health Care Field Application Project	39
HCMG 841	Health Services System	39
HCMG 845	Managed Care and the Industrial Organization of Health Care	39
HCMG 849	Financial Management of Health Institutions	39
HCMG 850	Health Policy: Health Care Reform and the Future of the American Health Care System	40
HCMG 852	Health Services Delivery: A Managerial Economic Approach	40
HCMG 854	Legal Aspects of Health Care	40
HCMG 855	Management of Health Care for the Elderly	40
HCMG 858	Health Care Marketing	41
HCMG 859	Comparative Health Care Systems	41
HCMG 863	Management and Economics of Pharmaceutical, Biotech and Medical Device Industries	41
HCMG 866	E-Health: Business Models and Impact	41
HCMG 867	Health Care Entrepreneurship	41
HCMG 868	Private Sector Role in Global Health	42
HCMG 890	Advanced Study Project Seminar: 001 Management of Health Care Service Businesses	42
	002 Advanced Study Project Seminar: Medical Devices	42
	003 Advanced Study Project Seminar: Health Business and Policy	42
HCMG 899	Independent Study	42

LEGAL STUDIES AND BUSINESS ETHICS

LGST 611	Responsibility in Global Management . . .	43
LGST 612	Responsibility in Professional Services . . .	43
LGST640	Digital Game Design Techniques for Business: Rules, Incentives, Applications . .	43
LGST 692	Advanced Negotiation	44
LGST 693	Influence	44
LGST 785	Business Strategy and Corporate Law. . . .	44
LGST 802	Corporate Law and Management in Global Perspective	44
LGST 804	Real Estate Law	44
LGST 805	Law of Marketing and Antitrust	44
LGST 806	Negotiation and Conflict Resolution	44
LGST 807	Securities Regulations	44
LGST 809	Sports Business Management	45
LGST 810	Business Ethics and Corporate Responsibility	45
LGST 811	Legal Aspects of Health Care	45
LGST 813	Legal and Transactional Aspects of Entrepreneurship	45
LGST 815	Environmental Management Law and Policy	45
LGST 820	International Business Ethics	45
LGST 830	Social Impact and Responsibility: Foundations	45

MANAGEMENT

MGMT 610	Foundations of Teamwork and Leadership	49
MGMT 611	Managing the Established Enterprise	49
MGMT 612	Managing the Emerging Enterprise	49
MGMT 625	Corporate Governance, Executive Compensation and the Board	49
MGMT 653	Field Application Project	49
MGMT 656	Global Immersion Program	49
MGMT 671	Executive Leadership	50
MGMT 690	Managerial Decision Making	50
MGMT 691	Negotiations	50
MGMT 701	Strategy and Competitive Advantage	50
MGMT 711	Competitive Strategy and Industrial Structure	50
MGMT 712	Managing Interfirm Alliances.	50
MGMT 714	American Business History	51
MGMT 715	Political Environment of the Multinational Firm	51
MGMT 717	Deals: The Economic Structure of Transacting and Contracting	51
MGMT 720	Corporate Diplomacy	51
MGMT 721	Corporate Development: Mergers and Acquisitions	52
MGMT 731	Technology Strategy	52
MGMT 736	Inside Indian Business	52
MGMT 740	Leading Effective Teams	52
MGMT 751	Strategic Management of Human Assets . .	52
MGMT 766	Family Enterprise Management	53

MGMT 772	Power & Politics in Organizations	53
MGMT 773	Managing Organizational Change	53
MGMT 782	Strategic Implementation	53
MGMT 784	Managerial Economics and Game Theory. .	54
MGMT 788	Governance and Management of Chinese Firms	54
MGMT 801	Entrepreneurship	54
MGMT 802	Innovation, Change and Entrepreneurship	54
MGMT 804	Venture Capital and Entrepreneurial Management	54
MGMT 806	Formation and Implementation of Entrepreneurial Ventures	55
MGMT 809	Private Equity in Emerging Markets	55
MGMT 810	Societal Wealth Venturing	55
MGMT 811	Entrepreneurship Through Acquisition . .	55
MGMT 815	Sports Business Management.	55
MGMT 816	Building Human Assets in Entrepreneurial Ventures	55
MGMT 833	Strategies and Practices of Family-controlled Companies	56
MGMT 871	Multinational Business Strategy	56
MGMT 875	International Comparative Management . .	56
MGMT 891	-900 Advanced Study Project for Strategic Management: Curricular Practical Training.	56
MGMT 891	Advanced Study Project for Strategic Management	57
MGMT 892	Advanced Study Project for Technological Innovation	57
MGMT 893	Advanced Study Project for Entrepreneurial Management	57
MGMT 894	Advanced Study Project for Multinational Management	57
MGMT 895	Advanced Study Project for Management. .	57

MARKETING

MKTG 611	Marketing Management	59
MKTG 612	Dynamic Marketing Strategy	59
MKTG 613	Strategic Marketing Simulation	59
MKTG 711	Consumer Behavior	59
MKTG 712	Marketing Research	59
MKTG 721	New Product Management	59
MKTG 724	Advertising Management	59
MKTG 725	Principles of Retailing	60
MKTG 727	Digital Marketing and Electronic Commerce	60
MKTG 730x	Digital Marketing and Electronic Commerce	60
MKTG 731x	The Psychology of Consumer Financial Decisions	60
MKTG 733x	The Social Impact of Marketing	60
MKTG 742	Multinational Marketing	60
MKTG 754	Pricing Policy.	61

MKTG 760	Law of Marketing and Antitrust.	61
MKTG 771	Models for Marketing Strategy	61
MKTG 775	Managing Customer Value.	61
MKTG 776	Applied Probability Models in Marketing .	61
MKTG 777	Marketing Strategy.	62
MKTG 778	Strategic Brand Management.	62
MKTG 792	Creativity.	62
MKTG 806	Special Topics: Retail Merchandising	62
MKTG 809	Special Topics: Experiments for Business Decision Making	62
MKTG 890	Advanced Study Project	63
MKTG 899	Independent Study	63

OPERATIONS AND INFORMATION MANAGEMENT

OPIM 611	Managing the Productive Core of the Firm: Quality and Productivity	66
OPIM 612	Managing the Productive Core: Business Analytics	66
OPIM 613	Managing the Productive Core of the Firm: Information Technology and Business Transformation	66
OPIM 614	Managing the Productive Core of the Firm: Innovation	67
OPIM 615	Managing the Productive Core of the Firm: Operations Strategy	67
OPIM 640	Digital Game Design Techniques for Business: Rules, Incentives, Applications .	67
OPIM 650	Operations Performance Analysis	67
OPIM 652	Design & Development of Web-Based Products and Services.	67
OPIM 653	Mathematical Modeling and its Application in Finance	67
OPIM 654	Product Design and Development	67
OPIM 655	Operations, Marketing, and Design Integration	68
OPIM 658	Service Operations Management	68
OPIM 662	Enabling Technologies	68
OPIM 665	Operations Management in Health Care .	68
OPIM 672	Decision Support Systems	68
OPIM 673	Global Supply Chain Management	69
OPIM 676	Electronic Markets: Structures, Market Mechanisms and IT Enabled Strategies . .	69
OPIM 690	Managerial Decision Making	69
OPIM 691	Negotiations	69
OPIM 692	Advanced Negotiation	69
OPIM 697	Retail Supply Chain Management	70
OPIM 761	Risk Analysis and Environmental Management	70
OPIM 762	Environmental Sustainability and Value Creation	70
OPIM 763	Energy Markets and Policy.	70

REAL ESTATE

REAL 721	Real Estate Investment: Analysis and Financing	71
REAL 724	Urban Real Estate Economics	71
REAL 730	Urban Fiscal Policy	71
REAL 772	Urban Public Policy and Private Economic Development	71
REAL 804	Real Estate Law	71
REAL 821	Real Estate Development	71
REAL 840	Advanced Real Estate Investment and Analysis	72
REAL 890	International Real Estate Comparisons . .	72
REAL 891	Real Estate Entrepreneurship	72
REAL 899	Independent Study	72

STATISTICS

STAT 430/510	Probability	74
STAT 432/512	Mathematical Statistics.	74
STAT 433	Stochastic Processes	74
STAT 436x	Stochastic Modeling.	74
STAT 432/512	Mathematical Statistics.	74
STAT 474x/974	Modern Regression for the Social, Behavioral and Biological Sciences.	74
STAT 475/920	Sample Survey Methods.	74
STAT 476	Applied Probability Models in Marketing. .	75
STAT 510/430	Probability	75
STAT 520	Applied Econometrics I	75
STAT 521	Applied Econometrics II	75
STAT 613	Regression Analysis for Business.	75
STAT 621	Accelerated Regression Analysis for Business	75
STAT 622	Statistical Modeling	75
STAT 701	Advanced Statistics for Management	76
STAT 711	Forecasting Methods for Management . . .	76
STAT 712	Decision Making Under Uncertainty	76
STAT 851	Fundamentals of Actuarial Science I.	76
STAT 852	Fundamentals of Actuarial Science II.	76
STAT 853	Actuarial Statistics	76
STAT 854	Applied Statistical Methods for Actuaries. .	76
STAT 910	Forecasting and Time Series Analysis	76
STAT 926	Multivariate Analysis: Methodology.	77
STAT 950	Quantitative Consulting Seminar.	77

WHARTON COMMUNICATION PROGRAM

WHCP 611	Management Communication	77
WHCP 620	Fall Writing Requirement	77
WHCP 612	Advanced Persuasive Speaking	78
WHCP 615	Communication Challenges for Entrepreneurs	78

Academic Calendar 2014-2015

Dates subject to change

AUGUST 2014

Wednesday - Friday, July 30 - August 1
Accounting, Finance, and Statistics
Waiver and Placement Classes

Saturday-Sunday, August 2-3
Waiver and Placement Exams

Monday, August 4
International Student Orientation

Monday, August 4
Pre-Term Begins

Monday and Tuesday, August 11-12
Learning Team Retreat

Friday-Thursday, August 15-21
Teamwork and Leadership
(MGMT 610)

Monday, August 25
Convocation

2014 FALL SEMESTER

Wednesday, August 27
First day of Core and Elective Classes

Monday, September 1
Labor Day
(classes do not meet)

Wednesday, October 8
Last Day for Q1 Core Classes
(courses operate on a Monday schedule)

Thursday-Friday, Oct 9-10
Reading days for Core Exams
(full semester core classes do not meet)

Thursday-Friday, October 9-10
Fall Break
(elective classes do not meet)

Monday-Friday, October 13-17
Core Exams
(core classes do not meet)

Thursday, October 16
Last day for Q1 Elective courses

Monday, October 20
First day of Q2 Core and
Elective courses

Monday-Wednesday, November 24-26
(core classes do not meet)

Tuesday, November 25
*(University operates on a Thursday
schedule; Tuesday-only elective classes
do not meet; Thursday-only elective
classes meet)*

Wednesday, November 26
*(University operates on a Friday schedule;
Wednesday-only elective classes do not meet;
Friday-only elective classes meet)*

Thursday-Sunday, November 27-30
Thanksgiving Break

Thursday, December 4
Core Classes End

Tuesday, December 9
Elective Classes End

Wednesday-Thursday, December 10-11
Reading Days

Friday-Friday, December 12-19
Final exams for Q2 and full
semester classes
Winter Break begins at close
of exams

2015 SPRING SEMESTER

Monday, January 12
First day of Q3 and Full Semester
Core Courses
*(Wharton operates on a Wednesday
schedule; Monday-only classes do not meet;
Wednesday-only core classes meet)*

Wednesday, January 14
First day of Q3 and Full Semester
Electives
*(University operates on a Monday sched-
ule; Wednesday-only classes do not meet;
Monday-only core and elective classes meet)*

Monday, January 19
Martin Luther King, Jr. Day observed
(classes do not meet)

Thursday-Friday, January 22-January 30
Focused Recruiting Period
(core classes do not meet)

Tuesday, March 3
*(core classes operate on a Thursday
schedule; Tuesday-only core classes do not
meet; Thursday-only core classes meet)*

Tuesday-Friday, March 3-6
Core Exams

Saturday-Sunday, March 7-15
Spring Break
(classes do no meet)

Monday, March 16
First day of Q4 Core and Elective Classes

Thursday, April 23
Core Classes End

Wednesday, April 29
Elective Classes End

Thu-Friday, April 30-May 1
Reading Days

Monday-Tuesday, May 4-12
Final Exams

Sunday, May 17
MBA Graduation Ceremony

Monday, May 18
University of Pennsylvania
Commencement

2015 SUMMER SESSIONS

Tuesday, May 26-Wednesday, July 1
Summer Session I

Thu, July 2-Friday, August 7
Summer Session II

WHARTON SCHOOL ADMINISTRATION

Geoffrey Garrett <i>Dean</i>	1000 SH-DH 215.898.4851	Maryellen Lamb <i>Deputy Vice Dean of MBA Admissions, Financial Aid, and Career Management</i>	50 McNeil 215.898.4331
Michael R. Gibbons <i>Deputy Dean</i>	1000 SH-DH 215.898.8248	Marguerite Bishop Lane <i>Vice Dean, MBA for Executives</i>	108 SCC 215.898.8601

Graduate Division Administration

Howard Kaufold <i>Vice Dean and Director</i>	300 JMHH 215.898.1439
Stephan Dieckmann <i>Deputy Vice Dean, Academic Affairs</i>	300 JMHH 215.898.4260
B. Kembrel Jones <i>Deputy Vice Dean, Student Life</i>	300 JMHH 215.898.7604

Building Codes

CPC	Colonial Penn Center
JMHH	Jon M. Huntsman Hall
L-FH	Lauder-Fischer Hall
McNeil	McNeil Building
SCC	Steinberg Conference Center
SH-DH	Steinberg Hall-Dietrich Hall
VH	Vance Hall

All e-mail addresses are @wharton.upenn.edu
Wharton web address is <www.wharton.upenn.edu>

ACADEMIC DEPARTMENTS AND PROGRAMS

Accounting 1300 SH-DH Robert Holthausen, <i>Chair</i> 215.898.7781 Brian Bushee, <i>Advisor</i> 215.898.4872 Email: bushee	Healthcare Management 204 CPC Scott Harrington, <i>Chair</i> 215.898.9403 June Kinney, <i>Advisor</i> 215.898.6861 Email: kinneyj	Management (major), Multinational Management, Organizational Effectiveness, Strategic Management Adrian Tschoegl, <i>Advisor</i> 215.898.1149 Email: tschoegl Marketing JMHH, 7th Floor Eric Bradlow, <i>Chair</i> 215.898.8255 Americus Reed, <i>Advisor</i> 215. 898.0651 Email: amreed Patti Williams, <i>Advisor</i> 215.898.0670 Email: pattiw	Real Estate 1400 SH-DH Gilles Duranton, <i>Chair</i> 215.898.2859 Todd Sinai, <i>Advisor</i> 215.898.5390 Email: sinai Statistics JMHH, 4th Floor Mark Low, <i>Chair</i> 215.898.8227 Email: lowm Jean Lemaire, <i>Advisor, Actuarial Science</i> 215.898.7765 Email: lemaire
Business and Public Policy 1400 SH-DH Mark Duggan, <i>Chair</i> 215. 898-3015 Judd Kessler, <i>Advisor, Business Economics and Public Policy</i> 215.898.7696 Email: juddk Kent Smetters, <i>Advisor, Insurance and Risk Management</i> 215.898.9811 Email: smetters	Leadership Program JMHH, G47 Jeff Klein, <i>Graduate Program Leadership Director</i> 215.573.1210 Lynn Krage, <i>Advisor</i> 215-898-4054 Email: lkrage Legal Studies and Business Ethics JMHH, 6th Floor Richard Shell, <i>Chair</i> 215.898.9525 Kevin Werbach, <i>Advisor</i> 215.898.1222 Email: werbach	Marketing and Operations Management JMHH, 5th Floor Joseph Simmons, <i>Advisor</i> 215.898.1630 Email: jsimmo Operations and Information Management JMHH, 5th Floor Gerard Cachon, <i>Chair</i> 215.573.8743 Joseph Simmons, <i>Advisor</i> 215.898.1630 Email: jsimmo	Wharton Communication Program JMHH 330 Lisa Warshaw, <i>Director</i> 215.898.5330 Margaret Lambires, <i>Advisor</i> 215.898.4173 Email: lambires
Environmental and Risk Management JMHH, 6th Floor Eric Orts, <i>Advisor</i> 215.898.3018 Email: ortse Finance 2300 SH-DH David Musto, <i>Chair</i> 215.898.4239 Richard Herring, <i>Advisor</i> 215.898.5613 Email: herring	Management 2000 SH-DH Daniel Levinthal, <i>Chair</i> 215.898.6826 Entrepreneurial Management Nellie Gaynor, <i>Advisor</i> 215.898.1901 Email: nelliebk		

MBA Program Office

The Wharton School
University of Pennsylvania
300 Jon M. Huntsman Hall
3730 Walnut Street
Philadelphia, PA 19104.6340

215.898.7604 phone
215.898.0425 fax
mbaprogram@wharton.upenn.edu
www.wharton.upenn.edu