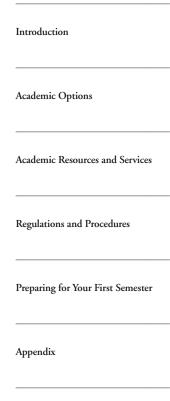
Class of 2010 Handbook





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ACADEMIC CALENDAR

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Fal	l Term	2006
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August	31	Thurs	Move-in for first-year students; New Student Orientation (NSO) activities begin
September	1	Fri	Placement exams (Check the NSO calendar.)
	3	Sun	Penn Reading Project (Check the NSO calendar.)
	4	Mon	Labor Day
	5	Tues	Advising, Opening Exercises, Freshman Convocation
	6	Wed	First day of class
	15	Fri	Last day to add writing courses or language courses below 200-level
	22	Fri	Last day to add a course
October	13	Fri	Last day to drop a course or change grade type
	13-15	Fri-Sun	Family Weekend
	21-24	Sat-Tues	Fall term break (begins at close of classes on Friday)
	25	Wed	Classes resume at 8:00 A.M.
	28	Sat	Homecoming
October 30-N	November 12	Mon-Sun	Advance Registration for spring term
November	17	Fri	Last day to withdraw from a course
	22-26	Wed-Sun	Thanksgiving break (begins at close of classes on Wednesday)
	27	Mon	Classes resume at 8:00 A.M.
December	8	Fri	Fall term classes end
	9-12	Sat-Tues	Reading days
	13-20	Wed-Wed	Final examinations
	20	Wed	Fall term ends

Spring Term 2007

January	8	Mon	Spring term classes begin
	12	Fri	Last day to add a writing course or language course below 200-level
	15	Mon	Martin Luther King, Jr. Day observed
	19	Fri	Last day to add a course
February	9	Fri	Last day to drop a course or change grade type
March	2-11	Fri-Sun	Spring term break (begins at close of classes on Friday)
	12	Mon	Classes resume at 8:00 A.M.
March 19–April 1		Mon-Sun	Advance Registration for fall and summer classes
March	23	Fri	Last day to withdraw from a course
April	20	Fri	Spring term classes end
	23-25	Mon-Wed	Reading days
April 26–May 4		Thurs-Fri	Final examinations
May	12	Sat	Alumni Day
	13	Sun	Baccalaureate, College Graduation
	14	Mon	Commencement
Summer Sessions 2007			

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May	14	Mon	12-week evening session classes begin
	15	Tues	First session classes begin
	28	Mon	Memorial Day (no classes)
June	22	Fri	First session classes end
	25	Mon	Second session classes begin
July	4	Wed	Independence Day (no classes)
August	3	Fri	Second session and 12-week Evening session classes end

TABLE OF CONTENTS

Preface

- 2 Message from the Dean of the College
- 3 How to Use This Book
- 4 Checklist for Entering Freshmen

I Introduction to the College

- 6 Articulating Your Academic Goals
 - 6 Choosing Your Courses
 - 6 Advisors
 - 7 Responsibility and Confidentiality
- 8 The Academic Framework
 - 8 The College of Arts and Sciences Degree Program
 - 8 The General Education Curriculum
- 12 Academic Integrity
 - 13 The Code of Academic Integrity
- 14 The College of Arts and Sciences
 - 14 History
 - 14 Mission

II Academic Options

- 16 Language Study
 - 16 Language Departments and Programs
 - 16 Penn Language Center
 - 16 Language Certificate Program
- 17 Writing at Penn
 - 17 The Center for Programs in Contemporary Writing
 - 17 Writing Seminars
- 18 Additional Seminars and Special Courses
 - 18 Freshman Seminars
 - 18 Communication Within the Curriculum
 - 18 Benjamin Franklin Seminars
 - 18 College 99
 - 18 College of General Studies (CGS)
 - 18 Preceptorials
- 19 Learning Beyond the Classroom
 - 19 Research
 - 19 Research Directory
 - 19 CUREJ
 - 19 Internships
 - 19 Academically Based Community Service
 - 19 College House Programs
- 20 Options for the Major and Minor
 - 20 Majors in the College
 - 20 Double Major
 - 20 Individualized Major
 - 20 Minors

- 21 In Addition to the B.A.
 - 21 Dual Degree
 - 21 Submatriculation
- 23 Scholars Programs
 - 23 Benjamin Franklin Scholars
 - 23 University Scholars
 - 23 Vagelos Scholars
- 23 Study Off Campus
 - 23 Study Abroad
 - 24 Quaker Consortium
 - 24 Washington Semester
 - 24 Credit Away (Study Away)

III Academic Resources and Services

- 26 Academic Advising
 - 26 The Goals of Pre-Major Advising
 - 26 The Responsibilities of College Students in the Advising Program
 - 26 Peer Advising
 - 26 Assistant Deans for Advising
 - 27 Additional Services in the College Office
 - 27 Advice About Choosing a Major
 - 27 Major Advising
 - 28 Academic Timeline
- 30 Advising in the College Office
 - 30 Assistant Deans for Advising
 - 31 Advising for Benjamin Franklin and University Scholars
 - 31 Additional Services in the College Office
- 32 College Houses
- 33 Academic Support
 - 33 Office of Learning Resources
 - 33 Penn Mentoring
 - 33 Department of Academic Support Programs
 - 34 The Writing Center
 - 34 Communication Within the Curriculum
 - 34 The Wheel
 - 34 Library Services
 - 35 The Center for Undergraduate Research and Fellowships
 - 35 Student Athletes
 - 35 Help for Students with Disabilities
- 36 Print and On-line Publications
 - 36 Help With Selecting Courses
 - 36 The PennBook
 - 36 The PennPortal
 - 36 The College Website
- 37 The College Web Site

- 38 Penn InTouch
- 40 Resources and Services
 - 40 Computing Services
 - 40 Health Services
 - 41 Additional Services
 - 42 Looking Toward the Future

IV Regulations and Procedures

- 46 Regulations Governing Requirements
 - 46 Degree Requirements
 - 46 Double-Counting Courses
 - 46 Foundational Approaches
 - 47 Sector Requirement
 - 48 The Major
 - 48 Free Electives
 - 48 Requirements for Graduation
 - 48 Residency Requirement
- 49 Regulations Governing Courses
 - 49 Registration
 - 49 Credit Load
 - 49 The Risks of Being Enrolled in Fewer than Four Courses
 - 49 Special Circumstances
 - 49 Adding, Dropping, Withdrawing
 - 49 Non-College Courses
 - 50 Repeating a Course
 - 50 Auditing
 - 50 Graduate Courses
 - 50 Class Attendance
 - 50 Holidays
 - 50 Final Examinations
- 51 Regulations Governing Grades
 - 51 Letter Grades
 - 51 Pass/Fail
 - 51 Incompletes
 - 52 Additional Grade Types
 - 52 Calculating Grade Point Average
 - 52 Changing Grades
- 52 Academic Honors
 - 52 Dean's List
 - 52 Dean's Scholars
 - 52 Graduation Honors
 - 52 Honors in the Major
 - 52 Phi Beta Kappa
- 53 Transfers, Leaves and Withdrawals
 - 53 Voluntary Leave of Absence
 - 53 Tuition Refund Policy
 - 53 Transfers within the University
 - 53 Withdrawals from the University

- 54 Poor Academic Performance
 - 54 Course Problem Notices
 - 54 General Academic Probation
 - 54 Deferred Drop
 - 54 Dropped from the Rolls
 - 54 Readmission
 - 54 Mandatory Leave of Absence
- 55 Academic Status
 - 55 Class Designation
 - 55 Athletic Eligibility
- 55 Enforcement of Academic Regulations
 - 55 Petitions
 - 55 Academic Grievances

V Preparing for Your First Semester

- 57 Registration Overview
 - 57 Advance Registration
 - 57 Course Selection Period
 - 57 Suggestions for First Semester Course Selection
- 58 Preparing to Register
 - 58 Preparation for Fall Registration
 - 58 Using Penn InTouch
 - 60 Course Codes

Appendix

- 62 Advanced Standing Policy
 - 62 Pre-College Credit
 - 62 A.P. Courses and Exams
 - 62 International Exams
 - 62 Additional Information
- 63 Advanced Placement Equivalence
- 64 International Baccalaureate Policy
- 65 Advanced Standing and Course Selection
 - 65 G.C.E. Advanced A-Level Exam Policy
 - 65 Advanced Placement for Math
 - 65 Advanced Placement for Physics
 - 66 Advanced Placement for Chemistry
 - 67 Advanced Placement for Biology
 - 68 Advanced Placement for Languages
- 69 Major Departments and Programs
 - 69 Credits Required for Each Major
- 70 Department and Program Descriptions
- 88 Index
- 92 Contacts for Departments and Programs

MESSAGE FROM THE DEAN OF THE COLLEGE

Dear Members of the Class of 2010:

The time has finally arrived: you are coming to Penn. You've survived the anxiety and pressure of the college application process. Congratulations on your success, and on the wisdom you have shown in choosing to pursue your education at one of the great educational institutions of the world.

What happens next is an adventure, I promise you. Your four years in the College of Arts and Sciences will provide everything you need to blaze your way to a brilliant career, to experience the pleasures of learning for its own sake, and to lay the foundation for a life filled with extraordinary accomplishments.

In the 18th century the founder of the University of Pennsylvania, Benjamin Franklin, was a master of informed choice; once he set a goal for himself, whether vocational, political or scientific, he knew how to marshal all available resources to pursue and achieve his aim. I urge you to emulate Franklin in your exploration of the immense, rapidly-changing world of the 21st century, beginning in your first semester at Penn. As you do so, I offer you the following advice:



First, take responsibility for your own education. The College is a wonderful environment, with nearly 2,000 courses and more than 50 majors. It is *your* responsibility to craft a coherent and meaningful educational experience from these resources. Of course, we have requirements that insist you gain competence in writing, in another language, in quantitative analysis, depth in a major and breadth of experience. But you must use these resources and guidelines, with the aid of your teachers, advisors and peers, to produce your own education and develop your own independent intellectual identity.

Second, be adventuresome. It is tempting when entering a new environment to cling to the familiar. If you do that here, you will fail to exploit the richness of the University, and the breadth of the academic programs in the College and the professional schools. Each year, take courses in subjects with which you are totally unfamiliar: try a new language, explore an unfamiliar part of the world or follow new directions in science with researchers who are making ground-breaking discoveries. This was the spirit of intellectual adventure that motivated Franklin and led to his success in every aspect of his life.

Third, never underestimate yourself. Seek the most challenging courses and programs of study, and never assume that you aren't good enough to succeed in them. Penn's outstanding faculty are here to help you stretch your intellectual muscles and train them. If you get in over your head we can help.

Fourth, plan ahead. When you explore, it's best to have a map in hand. This handbook provides much of the practical information you will need to get started at Penn and plan your way through the next four years. For example, many majors require that you take preparatory courses in their own and other departments. If you want to study abroad you should think about your language courses, and about how to integrate studying abroad with your major. Similarly, one of the most rewarding aspects of a College education can be engaging in a research project, which will put you in touch with how knowledge is gained and allow close interaction with the best of our faculty. This often requires advance planning, and taking appropriate preparatory courses. As you select your courses each semester, try to have some long-term plan in mind, even if you change that plan repeatedly. Your academic advisors and the faculty stand ready to guide you.

Finally, think outside the classroom. Learning at Penn happens everywhere: in the classroom to be sure, but also in the college houses, at lectures from world-renowned speakers, in concert halls and museums and in the Philadelphia community. At Penn you are fortunate to be among the best students in the world. Work cooperatively with your peers, argue with them, learn from them and teach them both inside and outside the classroom. Seek out students with diverse backgrounds and interests so you can expand your understanding of different ways of thinking. Take advantage of the resources available only at a great university like Penn, set in an extraordinary city.

The College's faculty, advisors and staff aim to guide and inspire you. It is widely recognized that an Arts and Sciences education is the strongest foundation for success in business and most professions. More important and lasting are the excitement of discovery and the pleasures of the "life of the mind" that are at the core of this education. Bring to Penn all the considerable talent, energy and intelligence we saw in you when you were admitted, and we promise you will not be bored.

I look forward to meeting you during the next four years and hearing the stories of your own adventures.

Best wishes,

Dennis DeTurck

Dean of the College of Arts and Sciences

GETTING STARTED

We know there's a lot going on in your life right now, and much to do before starting your first semeter at Penn. High on this list should be investigating the options and resources available to help you create an exciting, individualized and successful academic career. You'll also be responsible to know and comply with the College's academic regulations and procedures. Here's how to get started.

The Freshman Handbook

Read and Keep this Handbook!



This handbook is your introduction to academic life at Penn. It can help you think in broader terms about your academic choices and introduce you to many of the College's academic options and resources. The handbook will also help you navigate through course selection and registration for your first term and set you on the right path toward academic success. Keep this book as a reference throught your undergraduate career.

Checklist for Incoming Freshmen

See page 4 for the checklist



The checklist presents some of the academic questions you may be asking ourself and helps you begin to find answers in this handbook. It can also help you focus on some of the most imprtant academic issues to consider as you prepare to register for your first semester.

The College Website

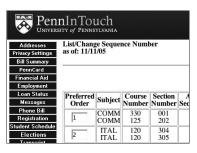
http://www.college.upenn.edu/



The College website is a comprehensive resource you can use to get ideas, research options and keep on track with regulations and procedures. It is an excellent gateway to academic resources across the University. The site is constantly updated to reflect the latest academic information and links important to students in the College. We encourage you to browse through the site and use it as a reference and a gateway to other resources on campus.

The Registration Tutorial

Link from http://www.college.upenn.edu/freshmen/



From the freshman page, you'll be able to access a five-minute tutorial that will underscore some of the information you'll need to know prior to registering for classes, and help you familiarize yourself with Penn InTouch, Penn's on-line student information system.

CHECKLIST FOR ENTERING FRESHMEN

College students need to be active and informed participants in the advising process, learning to assume an ever-increasing level of responsibility for shaping their education and defining their life goals. A good place to begin is by reading this handbook and becoming familiar with the College's other publications and web pages. Students should also:

- Use Penn InTouch to enter their course requests, to make and confirm any schedule changes and to create an electronic worksheet to chart their progress toward graduation.
- · Keep appointments with their pre-major advisor and come to the advising sessions prepared with a list of questions and issues to discuss.
- Speak with an assistant dean for advising in the College Office regarding special academic options of interest.
- Take note of deadlines for adding dropping and withdrawing from courses each semester and for altering grade type

(grade to pass/fail or vice versa).	from courses each semester and for altering grade type		
☐ 1. How do I begin to plan my academic career in the College?	☐ 7. What courses may be taken to satisfy the College's requirements?		
Read carefully the first section, "Introduction to the College," pages 5 to 14.	The College website features up-to-date lists of courses that satisfy most College requirements. See http://www.college.upenn.edu/curriculum/requirements/2010.html . Also see page 46-48 of this handbook for more details on the General Education Curriculum and graduation requirements.		
\square 2. What is academic integrity and why is it important?			
The College expects that all students will understand and share the values of the University's Code of Academic Integrity. Pay special attention to page 13.	□ 8. What is Penn InTouch?		
integrity. Tay special attention to page 13.	Penn InTouch is a web-based system that allows students		
☐ 3. How does advising in the College work, and what is my role in it?	to register for courses, view academic records (including the transcript) or fill out the on-line consent form for release of information. It is one of the most important informational tools available to Penn students and it is essential that they become familiar with it. Page 38 provides a complete list of the system's various functions.		
All incoming College students are expected to meet regularly with their pre-major advisor and hopefully develop a good working relationship with this person through at least their first two years at Penn. Pages 26 and 27 provide an			
outline of the College advising system.	\square 9. Are there any tools to help me plan future courses?		
☐ 4. Whom should I talk to if my pre-major advisor is not available over the summer?	One of the features of Penn InTouch is an on-line work- sheet that can help students see how courses they have taken fit into the curriculum requirements. It is also an		
If a student is unable to contact their pre-major advisor by phone or email until September, they can arrange a phone or in-person appointment with one of the assistant deans	excellent tool for planning courses to take in future semesters. For information on the worksheet, see page 39.		
for advising in the College Office. Pages 30 and 31 introduce the assistant deans, the Dean of Freshmen, and other members of the College Office staff.	□ 10. I have thought about my courses and spoken with my pre-major advisor to choose a roster that suits my intellectual goals. Now, how do I register?		
☐ 5. I may be eligible for Advanced Placement, International Baccalaureate, or other advanced standing credit. How do I find out what credits I may receive?	Pages 57 to 59 present a step-by-step outline of the Advance Registration process and the later Course Selection Period, when adjustments to the schedule can be made.		
The charts on pages 63 to 65 explain the equivalent credits. Pages 65 to 67 will help interpret these results for sci-	☐ 11. How can I find out more about Penn's library system and the services it offers?		
ence credits.	Page 34 offers some introductory information on the many resources available through Penn's library system.		

☐ 6. How do I find out more about various options for language and writing study in the College? Pages 18 and 19 provide information on writing courses and

on language study options.

SECTION I

INTRODUCTION TO THE COLLEGE



Becoming an educated person is hard work. It takes not only knowledge about the world but also the critical, creative and conceptual tools to be able to add to that knowledge. It takes detailed understanding of a few domains and an appreciation for a broad range of human endeavors. It takes the ability to view a problem from a variety of perspectives, appreciating the insight that each allows. And it takes the ability to convey to others in concise and effective ways the nature of your knowledge. Most of all it takes the skills that will underlie a lifetime of adding to your knowledge and to that of others.

The College curriculum is designed to assist you in developing these abilities. At its core is a framework of directed studies, including five Foundational Approaches, seven broad fields of knowledge represented by the Sector Requirement, the Major and the Free Electives. How you weave these elements into a cohesive program is largely up to you.

Penn offers students a great deal of freedom in their academic and social life. In turn, the University expects that students will take responsibility for their decisions. Academically, this means thinking carefully about what you want to study.

ARTICULATING YOUR ACADEMIC GOALS

By Dr. Janet Tighe Dean of Freshmen and Director of Academic Advising

Why have you come to the College of Arts and Sciences at Penn? In what direction do you wish to pursue your further intellectual development? It is important for you to consider these questions at the beginning of your time here and to refine your answers at regular intervals thereafter. Before you can choose a set of courses that are right for you, you must consider the broader question of what you hope to achieve in your time as an undergraduate.

Setting an academic goal means determining the combination of intellectual abilities, knowledge and mastery of methods that makes the most sense for you as an educated adult. Academic goals should be carefully differentiated from career goals—though they may well complement each other, they are pursued for different reasons. Your intellectual development is a process that will continue throughout your life. Indeed, its purpose is to help you live your life to the fullest and to make the most of your abilities. Academic goals ultimately must be seen as preparing you in a broader way than for one particular job or profession.

Some students in the College wish to learn the methodologies and practices of a laboratory science, with the ultimate goal of understanding how modern science investigates and explains the world around us. Many of these students will gain first-hand experience in a faculty member's laboratory.

Other students will set themselves the goal of understanding in more detail the larger human society around them by studying a humanities or social science field in more depth, perhaps augmenting that with specific experiences like community service, research or involvement in creative or artistic endeavors.

However you determine your priorities, remember that what you do now lays the foundation for an education that will long outlast your time in the College.

Choosing Your Courses

Choosing courses for each new semester is an intellectual process that is as important as any other you will undergo during your time in the College. The College's curriculum gives you considerable freedom in making these choices, but it asks in return that you think seriously about the courses you wish to take and how they contribute to your broader academic goals.

As you select a course to fulfill one requirement, we suggest you think about its relationship to the courses that fulfill others. If you seek interrelationships among disciplines, you will gain an education that is coherent and purposeful. Although the General Education Curriculum and the majors are designed to aid you in this process of making meaningful connections between courses, it is primarily up to you to make your curriculum more than a string of individual courses. We encourage you to build on the framework of requirements by taking advantage of the many academic options available to you. Explore research opportunities, study abroad, take a small seminar course with a world-renowned scholar or put your academic theory to

practice in community service courses. Your educational experience is yours to create. The College offers the framework, the academic options and the guidance for you to take responsibility and make your education truly yours.

The following are a few examples of how students have chosen courses in light of academic goals they have set for themselves:

Angela studied Spanish for five years before coming to Penn and was able to place out of the Foreign Language Requirement. A longstanding concern for human rights issues and an interest in Latin America led her to take courses that opened her eyes to children's issues in Brazil. As she formulated a plan to study abroad in Brazil in her junior year, she began to study Portuguese to prepare herself for her time in that country.

Carl came to the College with an interest in architecture and a desire to study buildings and how they contribute to the human environment. He chose a class in the architectural history of Philadelphia because of his desire to know more about the new city in which he found himself. At the same time his interest in the city guided him toward the environmental studies program and its courses in environmental issues in urban areas.

Jaclyn had always enjoyed mathematics and wanted to understand it at a much more advanced level. She had also long been a painter and wanted to continue to exercise her creative abilities. Feeling that she was exercising two different but complementary skills, she decided to study both fields in more detail and so looked for coursework in mathematics, fine arts and related fields.

However you make your decision, you should be sure that you have chosen courses based on a careful thought process and in consultation with your advisor and others.

Advisors

Each incoming College student is assigned a pre-major advisor in the summer before their first semester at Penn. You should view this person as someone with whom you will build a working relationship and engage in an ongoing discussion about your academic career and intellectual development. Your advisor will also be someone to whom you can turn for information and advice on academic options. Meetings with your advisor will often be occasioned by the need to choose courses for the next semester, and they will be much more productive if you come having thought carefully about the courses you want to take.

In addition to your pre-major advisor, you will have various other advisors available to you throughout your time in the College. Your peer advisor will provide a student's perspective while you are still new to Penn. Once you are ready to declare a major, an advisor from this area of study will help you get the most out of your experience with that major department or program. Throughout your time in the College, the assistant deans for advising in the College Office are available for both general and specialized advising.

Responsibility and Confidentiality

In high school, your grades and other records were considered your parents' property as much as yours. In college, your academic and medical records are considered your own property. Penn's policy regarding student information is that students are adults, and the University generally will not share your academic and other records (apart from directory information) with third parties without your explicit consent. This is in accordance with the federal Family Educational Rights and Privacy Act. Though there are situations in which the University can choose to divulge information without a student's consent (for example, if you are listed as a dependent on your parents' tax returns), for the most part you are the one to decide who has access to your academic record. You can indicate whether or not you wish your parents or others to see your educational records using the "Privacy Settings" screen on Penn InTouch (page 38).

As you begin your career at Penn, therefore, it is very important for you to think carefully about your own responsibility and to have a discussion with your parents about these confidentiality rules. The College will expect you to be aware of your grades, your registration and all other aspects of your academic career. The Penn InTouch system gives you 24-hour access to all of this information. Your pre-major advisor is there to help you make the most of your academic career, and the University provides a wide range of support services for both academic and non-academic concerns. It is your responsibility to familiarize yourself with these services and make use of them when appropriate. While there are many people at Penn who can help you, ultimately you are the only person who can make decisions about the path you take.

THE ACADEMIC FRAMEWORK

These pages serve as an introduction to the requirements for the Bachelor of Arts degree that the College confers upon its graduates. This degree is an outward sign of a student's personal growth and transformation. The Mission statement on page 14 provides an expression of what the College and its faculty hold to be most important about this educational process.

Nevertheless, degree requirements are not themselves sufficient to define a student's educational goals. It would be possible to satisfy all of the requirements and yet fail to acquire a good education. It would also be possible to acquire a good education while technically failing to satisfy the degree requirements. Students are not here fundamentally for the purpose of completing degree requirements, and thinking of the College education solely in terms of fulfilling requirements would lead to an unsatisfying experience and a missed opportunity.

College students are instead encouraged to think about their education as a process, a process that is given shape by the curriculum. *Curriculum* comes from the Latin for course, in the sense in which one might speak of the course of a person's life. It denotes a movement from some starting point to a destination, and it's a movement that proceeds along some course or route. Students are certainly not left to their own devices to figure out how to get from here to there. But neither is the path straight and narrow. There is in fact a network of paths, and students are free to explore as many as they care to. Many alternative paths can be taken to gain a good understanding of the lay of the land. It is not necessary to travel every route or see every point along the path. The most important thing to remember is this: the curriculum is the way, not the destination.

The College of Arts and Sciences Degree Program

The College's curriculum draws the student toward two distinctive goals: toward general education across the wide range of the arts and sciences and toward specialized education in a major. A commitment to holding these two together—general and specialized education—has been the genius of American higher education since the early part of the last century. The College continues to believe that these two elements constitute an education best suited to enabling intelligent people to live fulfilling and productive lives in the 21st century.

Reflecting these twin ideals of general and specialized education, the College curriculum is made up of several components: the General Education Curriculum (comprising the Foundational Approaches and the Sector Requirement) and the Free Electives, which together provide the breadth of experience associated with a general education; and the Major, which affords students an opportunity for specialization in a particular discipline. (See the chart on page 11.)

The General Education Curriculum

The College's new General Education Curriculum, which takes effect beginning with the Class of 2010, has two broad objectives. It seeks to educate students in some general skills or approaches to knowledge and to engage them in the intellectual work of the disciplines in a variety of fields across the arts and sciences.

In following this curriculum, students will be guided by two kinds of degree requirements corresponding to these two objectives. One deals with Foundational Approaches and the other with specific disciplines and fields of knowledge. Within any given course, these two—an approach and a field of study—are integral to one another. An approach is learned by practice in relation to a field of knowledge: the ability to use a foreign language is developed through learning about the culture in which the language is rooted; understanding a work of art is acquired by learning how to write about it; one learns how to analyze quantitative data by thinking about what these data mean in relation to real-world phenomena. Some courses, however, give priority to developing skills and approaches, while others give priority to a field under investigation.

Five requirements are intended to teach Foundational Approaches, which are key intellectual capabilities demanded in a variety of disciplines. The seven sectors of the Sector Requirement are intended to ensure breadth of education across the sectors or fields of knowledge. Two of these sectors—Humanities and Social Science, and Natural Science and Mathematics—provide occasions for interdisciplinary explorations, in which approach and sector are blended in even proportions.

The five Foundational Approaches are:

- Writing
- Foreign Language
- Quantitative Data Analysis*
- Formal Reasoning*
- Cross-Cultural Analysis*
- * The requirements marked with an asterisk may be satisfied with a course that also satisfies one of the other General Education requirements or a Major Requirement. Therefore, the total number of courses required by the General Education Curriculum is between 8 and 15, depending on the amount of overlap and the number of courses needed to fulfill the Foreign Language Requirement.

The seven sectors of the Sector Requirement are:

- I: Society
- II: History and Tradition
- III: Arts and Letters
- IV: Humanities and Social Science
- V: The Living World
- VI: The Physical World
- VII: Natural Science and Mathematics

Each of these requirements, with the possible exception of the Foreign Language Requirement, is fulfilled by taking a single course. The Foreign Language Requirement is fulfilled either by examination or by taking from one to four language courses, depending upon your initial level of competence. In either event, students must demonstrate a level of competence equivalent to that achieved in the second semester of an intermediate-level college course.

Foundational Approaches

Writing Requirement

"He took occasion to talk to me about the manner of my writing; observed that, though I had the advantage of my antagonist in correct spelling and pointing (which I ow'd to the printing-house), I fell far short in elegance of expression, in method and in perspicuity, of which he convinced me by several instances.

"I saw the justice of his remark, and thence grew more attentive to the manner in writing, and determined to endeavor at improvement."

-Benjamin Franklin, The Autobiography

Before Benjamin Franklin wrote out the story of his early life in his *Autobiography*, he made writing the center of his vision of a liberal arts education in his *Proposals Relating to the Education of Youth in Pennsylvania* (1749). There, he imagined communities of students writing and practicing not only for tutors but also for one another, reading the writings of others and making works of their own. At Penn two and a half centuries later, writing plays an even more central role within the curriculum. As the medium within which scholars create knowledge and communicate their findings to others, it literally constitutes their ideas. A considerable portion of a student's intellectual work at Penn, therefore, will be written work, and this writing will often be the primary medium through which the quality of the student's thinking and ideas will be judged.

For these reasons, Penn requires students to take at least one course in writing and encourages them to fulfill the Writing Requirement in their first year of study. Good writing instruction will equip students to write within the University and across a range of academic disciplines. Ideally writing will become a foundation of their professional and personal lives outside of the University, a means of providing clarity and of challenging others to see beyond themselves.

Foreign Language Requirement

The Faculty of the School of Arts and Sciences considers competence in a foreign language essential for an educated person. Participation in the global community is predicated on the ability to understand and appreciate cultural difference, and nothing brings this more sharply into focus than the experience of learning a foreign language. The foreign language not only affords unique access to a different culture and its ways of life and thought; it also increases awareness of one's own language and culture. For these reasons, the College of Arts and Sciences sets forth a Foreign Language Requirement.

Penn is immensely proud of its language programs, the variety that they offer, and the results that students achieve in them. The Foreign Language Requirement should be considered as a clear expression of this University's realization that effective modes of communication will be increasingly important in the 21st century.

Quantitative Data Analysis Requirement

In contemporary society, citizenship, work and personal decision-making all require sophisticated thinking about quantitative evidence. To ensure that graduates are equipped with appropriate skills, students in the College complete a course that uses mathematical or statistical analysis of quantitative data as an important method for understanding another subject. Through such study, students learn to think critically about quantitative data and the inferences that can be drawn from these data. They also gain experience with the use of quantitative analysis to interpret empirical data and to test hypotheses.

Courses in calculus and computer science do not fulfill the requirement because these courses do not require students to analyze actual data sets with the goal of evaluating hypotheses or interpreting results. To count toward the Quantitative Data Analysis Requirement, a course must include such data analysis.

Formal Reasoning and Analysis Requirement

In contrast to Quantitative Data Analysis courses, which deal with inductive reasoning, courses designated for this requirement focus on deductive reasoning and the formal structure of human thought, including its linguistic, logical and mathematical constituents. These courses emphasize mathematical and logical thinking and reasoning about formal structures and their application to the investigation of real-world phenomena. In addition to courses in mathematics, this sector includes courses in computer science, formal linguistics, symbolic logic and decision theory.

Cross-Cultural Analysis Requirement

To prepare for an increasingly interconnected world, College students are required to take at least one course to develop their ability to understand and interpret the cultures of peoples with histories different from their own. The Cross-Cultural Analysis Requirement aims to increase students' knowledge and understanding of socio-cultural systems outside the United States. The focus may be on the past or the present and it should expose students to distinctive sets of values, attitudes and methods of organizing experience that may not be obtained from American cultures. This exposure to the internal dynamic of another society should lead students to understand the values and practices that define their own cultural framework.

Through courses designated as fulfilling the Cross-Cultural Analysis Requirement, students learn methods of analyzing alternative systems of living and making meaning and are exposed to the "local knowledge" of another culture, as made visible in its social practices and institutions. This might encompass the art of close, careful reading of texts, pictures and other artifacts of culture as well as their

analysis, interpretation and placement in a larger context. Likewise, it might include social immersion into or the ethnographic study of an unfamiliar locality. The goal is to develop intellectual habits necessary for a lifetime of understanding diverse cultures and societies and to encourage a thoughtful approach that stresses different ways of looking at the world.

Sector Requirement

The seven courses taken to fulfill the Sector Requirement are intended to ensure breadth of education across a broad range of fields of knowledge, along with interdisciplinary explorations that link diverse fields.

Sector I: Society

The structure and norms of contemporary human societies, including their psychological and cultural dimensions.

Courses in this sector use many analytical techniques that have been developed to study contemporary society, with its complex relations between individuals and larger forms of mass participation. Some Society courses are largely devoted to the analysis of aggregate forms of human behavior (encounters, markets, civil society, nations, supranational organizations, and so on), while others may focus on the relations between individuals and their various societies. While historical materials may be studied, the primary objective of Society courses is to enable students to develop concepts and principles; test theories; and perfect tools that can be used to interpret, explain and evaluate the behavior of human beings in contemporary societies. This objective will be realized through the specific content of the various courses, but the emphasis in each course should be on developing in students a general capacity for social analysis and understanding.

Sector II: History and Tradition

Studies of continuity and change in human thought, belief and action.

Understanding both ancient and modern civilizations provides students with an essential perspective on contemporary life. Courses in this sector examine the histories of diverse civilizations, their cultures and forms of expression, their formal and informal belief systems and ideologies, and the record of their human actors. Students will learn to interpret primary sources, identify and discuss their core intellectual issues, understand the social contexts in which these sources were created, pose questions about their validity and ability to represent broader perspectives, and utilize them when writing persuasive essays.

Sector III: Arts and Letters

The means and meaning of visual arts, literature and music, together with the criticism surrounding them.

Most courses in this sector are concerned with works of creativity—paintings, films, poetry, fiction, theatre, dance and music. They generally address a considerable breadth of material rather than an individual work or artist. The objective of Arts and Letters courses is to confront students

with works of creativity; cultivate their powers of perception (visual, textual, auditory); and equip them with tools for analysis, interpretation and criticism. This objective will be realized through the specific content of the various courses, but the emphasis in each course will be on developing and strengthening in students a general capacity for understanding meaning and the ways in which it is achieved in its distinctive environment of culture and moment.

Sector IV: Humanities and Social Sciences

Diverse approaches to society, history, tradition and the arts.

Greater depth of experience can be accomplished either by greater focus on one area, by study in a related area, by bringing to bear the various humanistic and social perspectives upon a single issue or topic or by engaging directly in academically-based activities informed by these perspectives.

In this sector, students broaden their perspective by taking a course in the humanities or social sciences that has been approved as a General Education course and that cuts across two or three sectors. Other courses approved for this sector will seek a more integrative approach by addressing a problem or topic from a variety of disciplinary perspectives. Still others will combine disciplinary study with community service or activism, constructively and reflectively connecting the theoretical with the actual. Finally, courses in the arts that combine creative or performance experience with reflection and grounding within a discipline will be approved for this sector.

Sector V: The Living World

The evolution, development, structure and/or function of living systems.

Courses in this sector study the variety of approaches that are useful in understanding living organisms, ranging from analyses at the molecular and cellular level to analyses of evolution and adaptation to environments. Students learn the methods used by contemporary natural science to study these topics, including ways in which hypotheses are developed, tested and reformulated in light of ever-increasing research findings. A full understanding of living organisms incorporates insights from approaches at many different levels.

Sector VI: The Physical World

The methodology and concepts of physical science.

Courses in this sector aim to provide insight into the content and workings of modern physical science. Some courses in this sector are part of a major, while others are designed primarily to provide an introduction to the field for non-science majors. Courses for non-science majors may include some discussion of the historical development of the subject as well as the most important conceptual notions and their mathematical expressions. Courses in this sector seek to demonstrate the generally accepted paradigm of modern science: experiment and observation suggest mathematically formulated theories, which are then tested by comparison with new experiments and observations.

All courses in this sector use a significant mathematical prerequisite (advanced high school algebra through introductory calculus)—that is, students will actually be expected to use mathematical methods and concepts to achieve an understanding of subjects in physical science.

Sector VII: Natural Science and Mathematics

Diverse approaches to the natural sciences and mathematics.

In this sector, students broaden their perspective by taking a course in the natural sciences or mathematics that has been approved as a General Education course and that cuts across Sectors V and VI. Other courses approved for this sector will seek a more integrative approach by addressing a problem or topic from a variety of disciplinary perspectives. Still others will combine disciplinary study with community service or activism, constructively and reflectively connecting the theoretical with the actual.

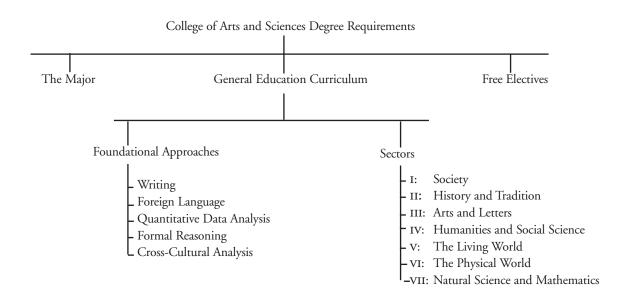
Free Electives

Free Electives provide students with the freedom to explore new fields of knowledge, to take additional work in the field of their special interest, or to study further with a particular instructor. Above all, they provide the breadth associated with a liberal education, just as the major program provides depth.

The Major

The major program offers the student an opportunity to explore in depth the methodology and goals of a given field. It provides a focus for his or her intellectual interests, and it may well constitute a building block for a career or for entry into graduate or professional school. Great care should be taken in choosing a major. Students are strongly advised to seek the help of their academic advisors and of individual faculty members in making this choice. Most major programs consist of major courses and major-related courses. The latter are courses taken in other departments or programs that have a bearing on the major in question and count as major courses.

College of Arts and Sciences Degree Requirements



ACADEMIC INTEGRITY

Academic integrity is the core value of a university. It is only through honest scholarship that we become educated and create knowledge. Admission to Penn signifies a student's entry into a community of scholars and a responsibility to abide by our commonly agreed upon rules for the creation of knowledge.

Academic work represents not only what we have learned about a subject but also how we have learned it. Values and beliefs about academic integrity have been adopted by students so that others may trace our honorable footsteps, verify what we have learned, and build upon our work. We, the members of the academic community at the University of Pennsylvania, are expected to meet these obligations and to be honest about the nature of our work.

To the Class of 2010:

Congratulations and welcome to the University of Pennsylvania. Your scholarly and creative achievements are remarkable. In your classes and dining halls, you will meet valedictorians and salutatorians, class presidents, editors, team captains and first-chair musicians. These classmates will provide you with inspiration, friendship, motivation and joy for the next four years and for your lifetime.

But this concentration of talent also creates pressure. It's likely that never before have you been in such a challenging environment. The academic and social demands of Penn life can be strenuous as well as exhilarating, and you may feel anxious about meeting certain expectations, maintaining scholarships or preserving athletic eligibility.

It will be at times like this that you may be tempted to compete unfairly and neglect your responsibility to uphold the honest community of scholars of which you are now a part. You must understand exactly what academic integrity is and what it is not so that you do not find yourself in a compromising situation.

The first thing you must know: Ignorance of rules, expectations and guidelines is no excuse. If you are unsure of what you may do and what you must not do, ask. Ask your professor or teaching assistant in class. Speak with your professor during office hours; a few minutes spent with a professor to be absolutely sure will pay off in the long run.

This emphasis on academic integrity is not confined to a few classrooms or to the Office of Student Conduct. Every administrator, professor, graduate student and undergraduate should be committed to academic honesty. It holds the academic community together and makes the educational experience more valuable for all involved.

Ultimately, your success at Penn depends on you. The degree to which you adhere to the high standards of honesty and responsible behavior expected of Penn students is also up to you. We all share the responsibility of maintaining the excellence of Penn's character and reputation, and we are delighted to welcome you to this community.

Of Critical Importance

Sadly, every year the Office of Student Conduct handles numerous cases in which students are accused of violating Penn's Code of Academic Integrity. For those students found responsible for misconduct, the consequences can be very serious. As a community of scholars, the University has decided, as a matter of principle and policy, that students responsible for academic dishonesty should ordinarily be suspended from school. Moreover, a finding of academic dishonesty becomes a permanent part of that student's academic record. More often than not, a failing grade in the course also follows. These consequences can be avoided if a student has a personal sense of integrity and the knowledge of where to turn for help in difficult or confusing academic situations.

Michele Goldfarb, J.D.

Director of the Office of Student Conduct
http://www.upenn.edu/osc/

The Code of Academic Integrity

Since the University is an academic community, its fundamental purpose is the pursuit of knowledge. Essential to the success of this educational mission is a commitment to the principles of academic integrity. Every member of the University community is responsible for upholding the highest standards of honesty at all times. Students, as members of the community, are also responsible for adhering to the principles and spirit of the following Code of Academic Integrity.

Activities that have the effect or intention of interfering with education, pursuit of knowledge or fair evaluation of a student's performance are prohibited. Examples of such activities include but are not limited to the following definitions:

Cheating

Using or attempting to use unauthorized assistance, material, or study aids in examinations or other academic work or preventing, or attempting to prevent, another from using authorized assistance, material, or study aids. Examples: using a cheat sheet in a quiz or exam, altering a graded exam and resubmitting it for a better grade, etc.

Plagiarism

Using the ideas, data or language of another without specific or proper acknowledgement. Examples: copying another person's paper, article or computer work and submitting it for an assignment, cloning someone else's ideas without attribution, failing to use quotation marks where appropriate, etc. Electronic sources, such as library databases or the World Wide Web, must also be cited.

Fabrication

Submitting contrived or altered information in any academic exercise. Examples: making up data for an experiment, fudging data, citing nonexistent articles, contriving sources, etc.

Multiple Submissions

Submitting, without prior permission, any work submitted to fulfill another academic requirement.

Misrepresentation of Academic Records

Misrepresenting or tampering with or attempting to tamper with any portion of a student's transcripts or academic record, either before or after coming to the University of Pennsylvania. Examples: forging a change of grade slip, tampering with computer records, falsifying academic information on one's resume, etc.

Facilitating Academic Dishonesty

Knowingly helping or attempting to help another violate any provision of the Code. Example: working together on a take-home exam, etc.

Unfair Advantage

Attempting to gain unauthorized advantage over fellow students in an academic exercise. Examples: gaining or providing unauthorized access to examination materials, obstructing or interfering with another student's efforts in an academic exercise, lying about a need for an extension for an exam or paper, continuing to write even when time is up during an exam, destroying or keeping library materials for one's own use, etc.

The best strategy is to avoid situations where academic dishonesty might occur.

- When in doubt, cite. There are many publications, such as the *Chicago Manual of Style* or the *MLA Handbook for Writers of Research Papers* (which has been placed in Rosengarten Reserve by the Honor Council), that provide information about methods of proper citation. Failure to acknowledge sources is plagiarism, regardless of intention.
- Consult with instructors about assignments.
- Plan ahead to leave sufficient time to complete work.
- Utilize academic support services.
- If a student is unsure whether his or her action(s) constitute a violation of the Code of Academic Integrity, it is that student's responsibility to consult with the instructor to clarify any ambiguity.
- Remember that all members of the university community are expected to exemplify the utmost integrity in their academic lives. Since many graduate and professional schools specifically request information about a student's academic honesty, a violation of the Code of Academic Integrity can have major consequences.

For more about academic integrity, see page 12 and the website for the Office of Student Conduct http://www.upenn.edu/osc/.

THE COLLEGE OF ARTS AND SCIENCES

History

The College is the largest of Penn's four undergraduate schools, enrolling 6,000 of the University's 9,000 undergraduates, and providing classes for all of Penn's undergraduates. The study of the arts and sciences provides students with critical perspectives on their world and with the fundamental intellectual skills necessary for engaging it. As Benjamin Franklin recognized, professional education relies on the sustenance provided by the arts and sciences and could not exist without them. The School of Arts and Sciences remains the heart and soul of the modern University of Pennsylvania.

The story of the College's origins is the story of the University. In 1749, Benjamin Franklin and 21 leading citizens of Philadelphia founded what would come to be known as the "College, Academy and Charitable School of Philadelphia in Pennsylvania." The first commencement took place on May 17, 1757, and graduated a class of seven.

Alumni of the College of Philadelphia were instrumental in the development of the nation and played vital roles in the American Revolution. Twenty-one members of the Continental Congress were graduates of the College, nine signers of the Declaration of Independence were either trustees or alumni, and eleven signers of the Constitution were associated with the College. In 1791, the merger of the College with the originally independent "University of the State of Pennsylvania" created the institution that would become the University of Pennsylvania, the first university in the United States. The University moved in 1872 from 9th Street to a 10-acre plot of land, purchased for \$80,000, that was located across the Schuylkill River. The land was in a semi-rural area known as Blockley Township.

During Franklin's 40 years on the board of trustees, his idea of combining practical and traditional education guided the curriculum of the University. Thanks to Franklin, Penn went beyond the traditional classical education and diversified into the sciences, mathematics, history, logic and philosophy. Franklin indicated his philosophy of education when, in establishing the University, he said, "As to their Studies, it would be well if they could be taught every Thing that is useful, ... Regard being held to the several Professions for which they are intended." The emphasis Franklin placed on the practical aspects of education distinguished the University of Pennsylvania from other colleges and universities of the era. This tradition has continued throughout the history of the University. For example, the first medical school (1765), business school (1881) and law classes (1850) in America were founded at Penn.

In 1878, the Towne Scientific School and the Music Department admitted nine women for the first time into their programs. In 1879, the first black students were admitted, one to the College, one to the Dental School and one to the Medical School. The College of Liberal Arts for Women was established in 1933 as a means to provide women with a liberal arts education; it merged with the College of Arts and Sciences in 1974, thus forming our modern-day School of Arts and Sciences, which includes the Graduate School, the College of General Studies and the College of Arts and Sciences.

Mission

From its central position in an international research university, the College of Arts and Sciences invites students to explore the broad spectrum of human knowledge and takes pride in its capacity to respond to the particular intellectual needs of those who join it. The College thrives on the diversity of scholars and students whose interests it sustains and whose intellectual goals it unites.

The College is committed to offering a broad education that will lay a durable foundation for critical and creative thinking. The College's goal is to help students to become knowledgeable about the world and the complexities of today's society; aware of moral, ethical and social issues; prepared to exercise intellectual leadership and enlivened by the use of their minds. We believe that students should explore fundamental approaches to the acquisition and interpretation of knowledge through introduction to substantive bodies of current thought in the natural sciences, social sciences, and humanities. Equally important, they should learn to understand and evaluate the sources and methods from which this knowledge derives. In this way, they can be led to appreciate the contingency of all knowledge and to participate in the ongoing excitement of intellectual discovery that is at the heart of the College.

We challenge our students to develop the skills of analysis and communication that will enable them to perceive pattern in complexity, render reasoned judgments, make wise choices under conditions of uncertainty and join with others in the pursuit of common endeavors. They should, for example, be able to write and speak effectively as well as to analyze quantitative data and to use another people's language as one means of access to the diversity of contemporary and historical culture.

A student's emerging interests and talents find expression through an organized program of study in a major field. In the specialized context of the major, students investigate the traditions and contemporary status of an established branch of knowledge. The structured study of a discipline complements the general exploration of our intellectual heritage to provide the balance of educational breadth and depth to which the College is committed. Study of the arts and sciences provides a solid basis for advanced scientific and scholarly research, for subsequent training in the professions and for the informed exercise of the rights and responsibilities of citizenship.

There is no single or easy path to the benefits of liberal education. A program of study must be shaped as a student grows. But the special strengths of the University of Pennsylvania—its combination of academic and professional excellence, its diverse and interdisciplinary tradition, its active community of scholars at all levels of experience—provide a setting in which the College can dedicate itself to nurturing honest, eager and critical minds. In the tradition of its 18th-century founders, the College of Arts and Sciences regards the enduring purpose of education as the liberation of the mind from ignorance, superstition and prejudice. Therefore, the College welcomes those who seek to understand, appreciate and contribute to the achievements of the human intellect.

SECTION II

ACADEMIC OPTIONS



Some freshmen may be entering Penn without a particular career in mind. This is perfectly fine. Students are encouraged to explore, study what they love, talk with as many people as possible and develop their career goals as a result. Some students may find that what they thought were clear career goals change slightly—or significantly—as a result of their undergraduate experience.

The academic options in this section are designed to complement the General Education Curriculum. By taking advantage of the College's many academic options, students have the opportunity to create an individual course of study leading to a unique and rewarding undergraduate experience. Most of these options do not require students to make decisions in their first term, but it is recommended that students consider the possibilities and discuss any options of particular interest with their pre-major advisor as they select fall courses.

15

LANGUAGE STUDY

The study of foreign languages is a cornerstone of the arts and sciences curriculum for students in the College. With its tremendous diversity of academic offerings in language, the College offers a unique opportunity for students to learn about many of the world's cultures. Students are especially encouraged to go beyond the Foreign Language Requirement and seek out ways to make further language study a part of their personalized curriculum. In addition to the programs below, students should refer to the information on study abroad (pages 23-24).

Language Departments and Programs

The University of Pennsylvania departments and programs offer instruction in well over 60 languages, including:

African Studies

(Öffered through the Penn Language Center) Amharic, Swahili, Twi, Yoruba, Zulu, and tutorials in various African languages (currently Chichewa, Igbo, Kinyarwanda, Setswana, Shona and Wolof)

Classical Studies

Classical and Medieval Latin, Ancient Greek and (offered through the Penn Language Center) Modern Greek

East Asian Languages and Civilizations

Classical Chinese, Classical Japanese, Japanese, Korean, Mandarin and (offered through the Penn Language Center) Cantonese, Tagalog, Taiwanese, Thai and Vietnamese

Germanic Languages and Literatures Dutch, German, Yiddish and Swedish

Linguistics

(Offered through the Penn Language Center) American Sign Language and Irish Gaelic

Near Eastern Languages and Civilizations

Akkadian, Arabic, Avestan/Old Persian, Hittite, Modern and Biblical Hebrew, Sumerian, Syriac, Old Egyptian and (offered through the Penn Language Center) Persian and Turkish

Romance Languages

French, Spanish, Italian and Portuguese

Slavic Languages

Russian and (offered through the Penn Language Center) Czech, Hungarian, Polish and Ukrainian

South Asia Studies

Hindi, Sanskrit and (offered through the Penn Language Center) Bengali, Gujarati, Kannada, Malayalam, Marathi, Panjabi, Pashtu, Tamil, Telugu and Urdu.

Penn Language Center

In addition to the language courses that are offered as part of the degree programs by various departments and programs, a wide variety of less commonly taught languages is available through the Penn Language Center. The Center also offers language courses for special purposes, such as business and medical languages. While many students opt to satisfy the Foreign Language Requirement by continuing to study the language that they had already begun in high school or earlier, other students take the opportunity to explore a new culture and area of our globe by beginning a foreign language that they never studied before. The University offers many language courses that are seldom available at the pre-collegiate level, such as Tagalog, Urdu or Pashtu, which allow students to develop different perspectives and cultural insights.

Language Certificate Program

http://www.college.upenn.edu/curriculum/language_cert.html

Students in the College have several choices to guide their study of a language other than English. In addition to completion of the College's Foreign Language Requirement, students may complete a major or minor in a language, or they may earn a language certificate. The language certificate is available for students who wish to continue their language study beyond the Language Requirement, but who do not choose to fulfill the requirements of a major or minor. Completion of the certificate will be noted on the student's transcript at the time of graduation.

Students who would like to obtain a language certificate should apply to the department in which that language is offered. If the language is not offered in any department, they should apply to the director of the Penn Language Center. The appropriate language departments will verify completion of the requirements for the certificate. To earn a certificate, a student must complete three courses of language study, courses in Foreign Language Across the Curriculum, or courses in literature and culture taught in the original language. An average grade of B+ or higher must be earned in these three courses. The courses must be taken after the student has demonstrated the level of competence established for the College's Foreign Language Requirement. It is critical that these courses be taught in the original language. Study abroad courses may be used with departmental approval. Consult the department for information about which courses may be counted toward the certificate and about any additional criteria that may apply to a particular language.

WRITING AT PENN

The Center for Programs in Contemporary Writing

The University's writing programs have been brought together to form the Center for Programs in Contemporary Writing (CPCW). The Center provides a home for all Penn writers, students of writing and, teachers of writing. CPCW also welcomes supporters of the art, and all those who have an unexplored passion for writing, feel the need to improve the clarity and force of their prose, or want help with a writing project. The following programs make up CPCW.

The Critical Writing Program

http://www.writing.upenn.edu/critical/

The innovative Critical Writing Program provides Penn's writing curriculum. Each semester, the program sponsors approximately 90 writing seminars across the University, including topics in the arts and art history, archaeology, film, literature, philosophy, classical studies, history, economics, engineering, theatre, health and medicine, journalism and publishing. The program also includes the Writing Center, which offers writing support to undergraduate and graduate students, publishes two undergraduate journals, and provides training for all writing faculty and tutors.

Creative Writing Program

http://www.writing.upenn.edu/cw/

The Creative Writing Program offers writing workshops every semester in fiction, poetry and non-fiction, as well as workshops in screenwriting and playwriting. Any student may take these courses as electives. Additionally, students who are English majors can choose to concentrate in creative writing, focusing either on poetry and poetics or on prose genres. There are approximately 80 such concentrators in any given year, making the option one of the most popular in the English major. There is also a new Creative Writing minor (see page 74). The program invites visiting writers to Penn for readings and talks and sponsors a University-wide writing contest each spring.

Kelly Writers House

http://www.english.upenn.edu/~wh/

The Kelly Writers House is an actual 13-room house at 3805 Locust Walk on Penn's campus that serves as a center for writers of all kinds from Penn and the Philadelphia region at large. Each semester the Writers House hosts approximately 150 public programs and projects—poetry readings, film screenings, seminars, web magazines, lectures, dinners, radio broadcasts, workshops, art exhibits and musical performances. The Writers House also has a strong virtual presence. Live interactive webcasts give listeners from across the country the opportunity to talk with writers such as John Updike, Robert Creeley, Tony Kushner and Grace Paley. And via dozens of listservs and email discussion groups, Writers House links writers and readers from across the country and around the world. Through its many programs and projects, the Writers House promotes

the full range of contemporary literature, addressing writing both as a practice and as an object of study.

Writing Seminars

All undergraduate students at Penn must fulfill their Writing Requirement through courses offered by the Critical Writing Program. Freshmen are encouraged to take a critical writing seminar during their first year, whenever possible. Courses that satisfy the Writing Requirement do not fulfill any other requirements in the College's General Education curriculum.

For more on writing at Penn see the Writing Requirement on pages 46, the Creative Writing minor on page 74 and the Writing Center on page 34.

Seminars in the Critical Writing Program include:

Critical Writing Seminars

Various departments offer critical writing seminars, typically numbered 009, as in ENGL 009: Writing Seminar in Literature, or BIOL 009: Writing Seminar in Microbiology. Each writing seminar is discipline-based, exploring current topics and debates in its field as well as the writing styles and conventions of its discipline. One critical writing seminar will fulfill the Writing Requirement.

Writing-Intensive Freshman Seminars

Taught by faculty from across the University and open only to freshmen, these discipline-based seminars place a special emphasis on writing. One writing-intensive freshman seminar will fulfill the Writing Requirement. Writing-intensive freshman seminars may not be used to fulfill a Sector Requirement.

English 125

These are writing seminars with various non-fiction topics designed for upperclassmen and exceptional freshmen. Freshmen are admitted by permission only (portfolio required). ENGL 125 fulfills the Writing Requirement.

English 011:

Writing for International Students

Designed for multilingual students who need practice reading and writing in English, and who wish to become more familiar with American college writing conventions. Fulfills the Writing Requirement.

English 135:

Peer Tutor Introduction and Training

Open to qualified freshmen and sophomores only. Introduction, training, mentoring and fieldwork. Successful completion of coursework qualifies students for positions as peer tutors at Penn. Requires permission of instructor. Does not fulfill the Writing Requirement.

ADDITIONAL SEMINARS AND SPECIAL COURSES

Freshman Seminars

http://www.college.upenn.edu/courses/seminars/index.html

The primary goal of the freshman seminar program is to provide every freshman with the opportunity for a direct personal encounter with a faculty member in a small class setting devoted to a significant intellectual endeavor. Each year, nearly one hundred seminars are offered. Enrollment is limited to 20 students per seminar. The program sponsors offerings in fields across the arts and sciences. Freshmen receive a brochure describing each of the fall seminars in the mailing accompanying this handbook. A smaller number of seminars is offered in the spring; the spring brochure may be picked up in the College Office at the time of Advance Registration in early November. A maximum of one freshman seminar may be used to fulfill part of the Sector Requirement.

Communication Within the Curriculum

http://www.sas.upenn.edu/cwic/

Communication Within the Curriculum (CWiC) supports a range of courses for students interested in oral communication and developing their speaking abilities. All CWiC-affiliated classes are regular departmental courses, but with an emphasis on speaking. CWiC affiliates with an array of classes to offer students the opportunity to improve their speaking in courses in a variety of disciplines. CWiC also sponsors more speaking-intensive courses, including Critical Speaking courses, which explicitly focus on helping students develop their speaking abilities while studying discipline-based materials, and Classical Studies 135, which takes oral argument as its subject and prepares students to work as speaking advisors. For current course listings, see the website. (For more about CWiC see page 34.)

Benjamin Franklin Seminars

http://www.upenn.edu/curf/bfs/courses.html -

These small courses are in-depth seminars with a heavy focus on class discussions, readings from primary sources and paper writing. Students who are members of the Benjamin Franklin Scholars program (page 23) have automatic access to the seminars; however, any undergraduate may enroll in a seminar. Approximately 25 seminars are offered each semester; some are specifically for freshmen, while others are limited to juniors and seniors. While most of these seminars are taught by faculty in the School of Arts and Sciences, courses are also offered by faculty from the other schools, including Wharton, Medicine, Engineering and Law. For a current list, please see the website. The Benjamin Franklin Scholars program is part of the Center for Undergraduate Research and Fellowships (CURF), located in the ARCH, 3601 Locust Walk.

College 99

http://www.college.upenn.edu/curriculum/college99.html

College 99 is a course designation that permits a student in the College to undertake independent study with a faculty member of the University outside of the School of Arts and Sciences. A student should consider taking a College 99 only if preparatory course work has already been done, and if his or her interests cannot be accommodated through regular or independent study within a department in the School of Arts and Sciences.

Students interested in College 99 should see the website for details about the application process and how completed work will be evaluated. Students may also contact Mrs. Guna Mundheim in the College Office.

College of General Studies

http://www.sas.upenn.edu/CGS/

The College of General Studies (CGS) is a division of the School of Arts and Sciences. CGS administers Penn's programs for adult and part-time students, and offers late-afternoon, evening and Saturday courses. In some cases, full-time undergraduates in the College may use CGS courses to fulfill degree requirements. College students are advised to discuss their course registration options with their advisor prior to registering.

College students may register for CGS courses through Penn InTouch. Note that a certain number of spaces may be reserved for CGS students until the first week of classes, and some classes have restricted enrollments for CGS students only. College students may direct questions about enrollment policies for specific CGS classes to the CGS office. CGS courses are listed in the back of the regular *Course Timetable* and in the on-line *Course and Room Roster*. (They are not listed in the *Freshman Timetable*.) A complete CGS course guide, with full descriptions of courses offered, is available at the CGS office and website.

Note: The College does not give credit for Wharton Evening courses.

Preceptorials

http://dolphin.upenn.edu/%7Eprecepts/

Preceptorials are short, small, non-credit seminars generated by students and led by some of the University's most distinguished faculty. The program is designed to foster student-faculty interaction and learning for its own sake; to that end, there are no grades or tests. Most preceptorials meet three times over the course of the semester, for 1-1/2 hours per session, but some are one-day trips. There is no fee to participate. A list of preceptorials can be found at the website above. Students request preceptorials during Advance Registration using Penn InTouch.

LEARNING BEYOND THE CLASSROOM

While courses provide the central focus of a student's work at Penn, the College recognizes that there are many other valuable learning experiences that occur beyond the bounds of the traditional classroom. Listed here are just a few of the many directions students can take to broaden their horizons and build upon what they have learned in their courses. Students are encouraged to speak with their academic advisors about these and other options.

Research

Research can be an important component of the undergraduate experience. Indeed, one of the major advantages of being an undergraduate at a research university is the wide variety of opportunities available for scholarship. Most College students have substantial research experience, as defined by their participation in hands-on, independent problem-solving activities in all departments and programs, and we hope that an even larger proportion of our undergraduates will have such experiences in the years ahead.

Undergraduate research in the College encompasses a wide range of activities. In some disciplines, such as English, philosophy and history, students read original works, or the primary literature, and look for new connections and interpretations of these writings. In areas such as anthropology or history of art, students study artifacts, works of art or ancient languages, gaining insights on earlier civilizations and the lives of those who contributed to them. Some students do research in biology, chemistry or psychology, seeking insights on genetic coding, molecular structure or animal behaviors. Students may receive college credit for research activities and scholarship, or receive work-study funds or stipends from faculty grants. (Also see the Center for Undergraduate Research and Fellowships, page 35.)

Research Directory

http://165.123.9.110/Research/index.htm

Many College students look for positions as research assistants with faculty, both to earn money through the work-study program and to gain experience in the field. The Center for Undergraduate Research and Fellowships maintains a database of Penn faculty and researchers interested in having undergraduates involved in their research. Students can browse for research assistant positions from among five broad subject areas: Biomedical Science, Business and Economics, Engineering and Computing, Humanities and Social Science, and Physical and Theoretical Science.

CUREI

http://repository.upenn.edu/curej/

The College Undergraduate Research Electronic Journal, (CUREJ) highlights the best undergraduate research in the Arts and Sciences. This repository holds examples of research exploring a wide range of academic interests from the natural sciences, the social sciences and the humanities, including music, painting and more.

Internships

The College of Arts and Sciences and the Career Services Office recognize that it is important for students to gain practical experience through internship programs that augment their formal education and enhance their professional preparation. The College prefers that its students be paid for their work, but when this is not an option and companies insist that the students receive credit as a condition of their "employment" there is another option. College students, including dual degree students whose home school is the College, are permitted to have a notation placed as a "comment" on their transcript indicating that they have completed an internship, e.g., "Internship: Summer 2007." Students will not earn a credit unit toward their degree, however. Students should meet with a College advisor before they begin the internship to discuss applying for this special notation.

Academically Based Community Service Courses

http://www.upenn.edu/ccp/

Supported by the Center for Community Partnerships, Academically Based Community Service (ABCS) courses involve hands-on, real-world problem solving and help students become active, participating citizens of a democratic society. Through their work with West Philadelphia public schools, communities of faith and community organizations, ABCS faculty and students work to solve critical community issues in a variety of areas, such as the environment, health, arts and education. ABCS is rooted in and intrinsically linked to teaching and research and promotes student and faculty reflection on the service experience. ABCS is committed to linking theory and practice through activities that make a significant difference in the community of West Philadelphia and at Penn.

Over 150 ABCS courses from diverse schools and disciplines across the University have engaged in work in West Philadelphia through the Center for Community Partnerships. During the 2004-2005 academic year, 1,628 ABCS students were involved in 46 undergraduate courses across 19 departments and 16 graduate courses involving eight of the professional schools. See the website for a complete listing of ABCS courses.

College House Programs

http://www.collegehouses.upenn.edu/

Each College House at Penn provides a rich array of programs, social events and outings to foster a sense of community among its residents and expand their horizons. Talks, group dinners and trips into the city are just a few of the ways students will find to bond with their fellow College House residents and learn more about Penn, Philadelphia and the world around them. Students are encouraged to speak to their resident advisor, graduate associate and house dean as soon as they can about programs available in their College House.

OPTIONS FOR THE MAJOR AND MINOR

Majors in the College

See descriptions of major departments and programs available to College students beginning on page 70.

Double Major

Students wishing to complete more than one College major may do so by applying for, and completing the requirements for, each major. At least 18 different c.u. must be taken in fulfillment of major requirements. All College requirements must also be completed. Some students find that it takes more than eight semesters to complete a double major. Students interested in doing more than one major should consult with an academic advisor.

Students may double-count no more than one course between that major and the Sector Requirement. Biological Basis of Behavior, Biology and Biophysics majors may double-count two courses between the Major and the Sector Requirement: one each in the Living World and Physical World sectors. Double majors may double count two courses, one from each major, with the Sector Requirement.

Note: While a double major indicates that a student is taking two majors within the College of Arts and Sciences, Penn undergraduates also have the opportunity to receive two Bachelor's Degrees simultaneously from two different schools within the University (the College and the School of Engineering, for example). See Dual Degree, page 21.

Individualized Major

http://www.college.upenn.edu/curriculum/major_indiv.html

While most College students are encouraged to choose one of the more than 50 departmental or interdisciplinary majors available in the College, it is recognized that there are students who find that the standard majors do not satisfy their intellectual interests.

The individualized major offers an opportunity for exceptional, creative, self-motivated students to explore innovative and multidisciplinary fields of knowledge. The individualized major is meant to foster a closer relationship between the student and the faculty advisors. The student will develop an academic research project from its inception, through a coherent set of courses, the different stages of research, and the writing and rewriting, under a scholar's mentorship, of a high quality thesis.

Students interested in proposing an individualized major should meet with Dr. Alice Kelley in the College Office by their fourth semester to discuss details of the application process. Students should expect that designing an individualized major will take considerable effort and time as well as imagination.

Many students with individualized majors graduate with a standard major or minor as well.

Minors

http://www.college.upenn.edu/curriculum/minors/index.html

Although College students are not required to complete a minor, students may choose to pursue one or more secondary areas of interest, develop skills and a knowledge base that complement their major, express themselves in a creative area that is or will likely become an avocation, or learn more about themselves and/or their heritage. Minors such as those in foreign languages, mathematics, and computer science may not only be pedagogically sound but also indicate a skill to a prospective employer. The urban education minor includes strands through which it is possible to become certified in elementary or secondary education.

Most major programs in the College of Arts and Sciences offer corresponding minors as well. A minor is usually half of a major, generally six to eight courses, depending upon the program. Some programs require specific courses for the minor; others do not. For a complete list of minors available to College students, see http://www.college.upenn.edu/curriculum/minors/list.html.

Interschool Minors

These minors are offered by the School of Arts and Sciences and one or more of the other schools of the University, including Wharton, Design, Education and Nursing.

- Actuarial Mathematics
- American Public Policy
- Biological Basis of Behavior and Health Services Management
- Consumer Psychology
- Fine Arts
- Jewish Studies and Education
- Landscape Studies
- Legal Studies and History
- Nutrition
- Photography
- Organizations and Environmental Management
- Urban Education
- Urban Real Estate and Development

College students may also complete minors from the School of Engineering and Applied Science. These include Computer Science and Engineering, Electrical Engineering, Chemical and Biomolecular Engineering, Cognitive Science, Computer and Telecommunications Engineering, Materials Science and Engineering, Mechanical Engineering, Nanotechnology, and Systems Engineering. Call (215) 898-7246 for more information.

It is not possible to do a minor in the Wharton School. Students may take Wharton courses as non-College Free Electives (page 48) or, if permitted, as part of their major. See a College advisor for suggestions.

For more information, and the procedure for declaring a minor, see the website.

In Addition to the B.A.

Dual Degree

Penn undergraduates have the unique opportunity to receive two Bachelor's degrees simultaneously by completing the requirements of the College along with those of the Schools of Engineering, Nursing or Wharton.

The main advantage of the dual degree option is the possibility of experiencing two undergraduate schools concurrently. However, doing so severely limits the ability to take a broad range of elective courses within the arts and sciences. The dual degree programs are very demanding and usually require semesters of at least five course units and often six. Therefore, careful planning of any dual degree program is extremely important and should begin in the freshman year.

Students can apply for a dual degree at the end of the freshman year or the middle or the end of the sophomore year. Students interested in the dual degree option should see Dr. Srilata Gangulee or Dr. Flora Cornfield in the College Office as early as possible.

Dual degree students may apply six non-College courses toward their Free Electives.

College/Engineering

There are many individually-designed programs leading to a Bachelor of Arts in the College of Arts and Sciences and a Bachelor of Science or a Bachelor of Applied Science in Engineering.

Students interested in applying for a dual degree with the School of Engineering should see advisors in the College and the School of Engineering as early as possible in the freshman year.

College/Nursing

Students interested in doing a dual degree with the School of Nursing should see advisors in the College and in Nursing as early as possible.

College/Wharton

Satisfying the requirements of the College and the Wharton School may require more than four years, depending upon the major chosen in the College and advanced placement credits that students bring in upon admission. Students who wish to apply at the end of their freshman year must have a minimum 3.40 cumulative g.p.a. and have taken, or have a waiver for, ECON 001-002 and MATH 104. The 3.40 cumulative g.p.a. is merely a minimum requirement for application. It does not guarantee admission to the program. To be truly competitive, College students should have a g.p.a. of approximately 3.6 for acceptance. Students who wish to apply in December of their sophomore year need to have taken ACCT 101 and STAT 101 and those who apply at the end of their sophomore year must complete ACCT 102 and STAT 102.

Submatriculation

The submatriculation program allows students in the College to obtain both a baccalaureate degree and a master's degree simultaneously. Application is normally made in the student's junior year. Under no circumstances will a student be admitted to the program after the end of the seventh semester. The application for all submatriculation programs except the Law School (see page 22) must be approved by the student's major advisor, the graduate chair of the proposed program and Dr. Srilata Gangulee in the College Office. In addition, the student must file an application for admission to the relevant graduate program and comply with the procedures involved in the graduate admission process. Only after admission to the submatriculation program has been granted will graduate credits be counted towards the master's degree.

College students may submatriculate into relevant graduate programs within the School of Arts and Sciences (SAS), the Graduate School of Education, the School of Design, the School of Medicine (Ph.D. only), the School of Veterinary Medicine, the Law School, the Fels Program in Government Administration, the Biotechnology program in the School of Engineering and the School of Social Policy and Practice. A few students matriculate into the College as bio-dental submatriculants with a major in Biology in the College, going into the School of Dental Medicine after completing the necessary requirements in three years.

College students submatriculating in SAS graduate programs are expected to complete both degrees in four years. They may not extend their undergraduate program without special permission. College students submatriculating in non-SAS graduate programs will normally receive their Bachelor of Arts degree after four years and then be considered solely graduate students.

The minimum course requirement for the master's degree is 8 c.u., although some graduate programs may require more than this minimum. Courses earning credit for the master's degree must be at the graduate level as specified by the graduate program, usually at the 500 level and above. In any submatriculation program, no more than 4 c.u. within the minimum requirements for the B.A. degree may be applied to the master's degree. Thus, the minimum number of course units for a submatriculation program is 36. These four courses may be part of the Major Requirement or the electives of the undergraduate program, but they may not include courses in independent study. Some graduate programs may permit fewer than four courses to be double-counted.

Independent study courses applied to the master's degree in the Graduate Division of Arts and Sciences may not be taken as part of the B.A. degree requirements. They must be numbered at the 600 level and above, and they must be approved in advance by the Associate Dean for Graduate Studies.

The Joint B.A./J.D. Program in Arts and Sciences and Law

http://www.college.upenn.edu/curriculum/bajd.html

This rigorous program is for the highly qualified and motivated student. Applicants must be committed to the study of law in its theoretical and practical aspects and accept the challenge of combining the broad overview of undergraduate studies with the specific professional focus of law school.

Students with an interest in this program must first meet with Dr. Hocine Fetni in the College Office to assess whether they are qualified to apply for admission. It is expected that prospective applicants will have fulfilled, among other requirements, the General Education Curriculum for the B.A. and most of the rest of their degree requirements by their junior year. Upon approval by the College, students will submit their applications to the Law School for admission in the fall semester of their junior year. For more information about this program, please contact the College Office at (215) 898-6341 or visit the website.

Bio-Dental Submatriculation Program

This is a seven-year program intended for incoming students with a biology major who wish to start dental school in their senior year of College. Admission into this sevenyear program is conditional upon the student's academic performance in his/her three years of College, the g.p.a. in the sciences taken in the College, and the Dental Admissions Test (DAT) score. The student needs to apply to the Dental School again at the end of the junior year when all but 8 c.u. for the undergraduate work are finished. Four Dental School classes will be counted toward the Biology major, and four others as Free Electives in the College. The student may elect to opt out of the program, in which case he or she may complete the undergraduate degree with a Biology major or even choose a different major. For further information contact Dr. Srilata Gangulee in the College Office.

Roy and Diana Vagelos Science Challenge Award

http://www.sas.upenn.edu/biochem/challenge.html

Each academic year, five Challenge Awards will be made annually to College students in the chemistry or physics submatriculation program. The Award is intended to challenge College science students to get the most from Penn and themselves both in the classroom and in the laboratory, and is independent of financial need.

Secondary Education

Students may submatriculate into the Master's Degree program by taking by taking two approved graduate level courses in education. For more information contact Maureen Cotterill at (215) 898-7364, or at maureenc@gse. upenn.edu.

Students interested in education may also wish to investigate the urban education minor (page 87) which may be used as a path toward certification in elementary or secondary education.

SCHOLARS PROGRAMS

Benjamin Franklin Scholars

http://www.upenn.edu/curf/bfs/

The Benjamin Franklin Scholars (BFS) Program encourages the highest level of scholarship from its students, who are given preferential access to challenging and stimulating seminar courses, individualized advising and academic research (and are expected to take advantage of these opportunities). Advisors encourage students to explore exciting research opportunities that emerge from a changing and demanding collection of Benjamin Franklin seminars designed and taught by professors who are leaders in their fields. Individual advising with the BFS professional staff brings scholarly inquiry and challenging courses together into an educational whole. Scholars are strongly encouraged to continue their studies after their undergraduate careers, and many BFS students obtain prestigious grants for graduate scholarship. There is an informal network of nearly 4,000 BFS alumni. Some students are selected for the BFS program at the time of application to the University. This selection is based on high school records, overall excellence of the Penn application (especially the essays) and other signs of serious academic interests. Intellectually ambitious students already on campus are also strongly encouraged to apply. Applications are accepted from the end of the first semester at Penn up to the end of the sophomore year. Potential applicants are strongly encouraged to take a Benjamin Franklin Seminar (page 18) or another challenging seminar before applying.

University Scholars

http://www.upenn.edu/curf/uscholar/

University Scholars provides an academic environment for intellectually dynamic students who have demonstrated their commitment to research. Through mentoring, research funding and scholarly events, the program supports and encourages students to take maximum advantage of their undergraduate years, not only with in-depth research, but also by making an early start in graduate and professional courses, ranging widely (or focusing narrowly) on their curricular choices. Students apply to the program from the end of their freshman year through the first semester of their junior year. See the website for details.

Vagelos Scholars

http://www.sas.upenn.edu/biochem/vspmls.html

This program offers Penn's most motivated young scientists an opportunity to begin intensive course work and research in their first year. Vagelos Scholars major in Chemistry or Biochemistry and complete a second major in any other natural science with the option of a master's degree. The program requires and funds summer research.

Students, especially those with more than three units of A.P. credit in math, physics and/or chemistry, should email biochemistry@sas.upenn.edu or call the Department of Biochemistry office at (215) 898-4771. Students enter the program in their first semester.

STUDY OFF CAMPUS

Study Abroad

http://www.college.upenn.edu/curriculum/abroad/index.html

The College of Arts and Sciences is committed to international education as a way to prepare students to live and work effectively, knowledgeably and sensitively in a world whose cultures and nations have become increasingly interdependent.

Semester and Full-Year Programs

Each year, approximately 650 Penn undergraduates attend credit-bearing programs abroad. The University's Office of International Programs offers an extraordinary range of programs in virtually every academic discipline and located in numerous countries. Students with a minimum g.p.a. of 3.00 may apply to study abroad for the fall or spring semester, or for a whole academic year. They will pay regular Penn tuition and continue to receive financial aid as if they were in residence on Penn's campus. Under this arrangement, students study in Penn-affiliated programs, and their grades become a regular part of their transcript and are tabulated into their Penn g.p.a.

Programs and Course Approval

The College faculty, in concert with the Office of International Programs and academic advising in the College, closely monitor the academic quality of the programs in which Penn students enroll. Students are required, therefore, to meet with their College advisors and their major advisors to discuss their choice of program and the courses they wish to take abroad to ensure that they will receive credit upon their return.

The College maintains a database of approved courses (http://college.sas.upenn.edu/studyabroad/) from which students may choose courses, but it is hardly a comprehensive list of everything offered in a foreign program or university. If a student wishes to get courses approved for his or her major, course choices must be confirmed with the major advisor on a proposed course of study form.

A student may wish to enroll in courses that have not been previously evaluated by a department and are not found on the database. In this case, it will be necessary for the student to visit the appropriate department prior to going abroad to confirm with the undergraduate chair that those courses will be accepted for credit.

continued

A Penn department may impose additional requirements for credit to be granted or the department may wish to evaluate credits upon the student's return from study abroad. Whether pursuing a general course of study or course work for the major, students would be well advised to bring back all papers, exams, bibliographies and syllabi from abroad.

Summer Study Abroad

http://www.sas.upenn.edu/CGS/summer/abroad/

Students who are unable to or do not wish to study abroad during the regular academic year may choose to study abroad in the summer through the summer study abroad programs offered by the College of General Studies. Approximately 200 students attend these programs every summer. In most cases, financial aid does not extend to summer programs. Grades earned on Penn summer study abroad are tabulated into the student's grade point average. Students interested in Penn summer study abroad should consult the website.

Summer Study Abroad at Other Universities

Students may choose to study abroad in the summer through an institution other than Penn. In order to do so, they must seek prior approval from academic departments at Penn for the credits they wish to transfer back. These credits will be treated as credit away (see below) and the grades will not be tabulated into the Penn g.p.a.

Quaker Consortium

http://www.college.upenn.edu/curriculum/quaker_consortium.html

College students have the unique opportunity to study at Bryn Mawr, Haverford or Swarthmore College during the fall and spring terms of the academic year. The four schools constitute the Quaker Consortium and have a reciprocal agreement for tuition and the granting of grades and credits for work completed at any of the participating institutions.

Penn students wishing to attend a course or courses at Bryn Mawr, Haverford or Swarthmore should make an appointment to meet with Dr. Godlove Fonjweng in the College Office. Students will need a dean's letter of permission and must have the chosen course(s) approved by the equivalent Penn department. At the end of the semester, students should request that a transcript be forwarded to the College Office. Upon receipt of the transcript and credit forms, the courses and the grades will be entered onto the body of the Penn transcript. The grades will be calculated into the Penn g.p.a.

Consortium agreements do not apply to summer school, which is treated as credit away (see below).

Students may search course offerings at Bryn Mawr, Haverford or Swarthmore using the TriCollege Course Guide accessed from the web page above.

Washington Semester

http://www.ssc.upenn.edu/~washsem/

The Washington Semester Program offers Penn students an opportunity to learn from first-hand experience in the political and governmental process while taking courses taught by Penn faculty in the nation's capital. Although designed primarily to fit the needs of social science majors, the program may be suitable for science and humanities majors with serious interest in public policy, politics and government. The program features 4 c.u. of study (including a research project) and a work assignment (internship) in an organization or agency related to the student's career and research interests.

Credit Away (Study Away)

http://www.college.upenn.edu/curriculum/credit_away.html

Taking courses at another American university after matriculation into the College and transferring the credit back to Penn is called "credit away." To arrange for credit away, the student takes a description of the course at the other school and a credit away form (available in the College Office or on the College website) to the undergraduate chair of the appropriate Penn department. If the chair determines that the course is equivalent to a Penn course, he or she will approve it. The signed credit away form should then be taken to the College Office. The student must arrange for a copy of the official transcript to be sent to the College Office at the completion of the course. Some departments may require the student to take an exam in the subject before conferring final credit.

- No more than 5 c.u. may be taken at another American college or university.
- Only 4 c.u. may be transferred for work done during one summer.
- Grades received from other institutions are not recorded on the Penn transcript nor are they included in the g.p.a. at Penn.

No credit will be granted for:

- Courses taken at two-year institutions
- Courses taken in time frames significantly different from the regular University schedules (academic year and summer sessions)
- Courses other than field courses taken on sites without appropriate facilities of a college or university (e.g., libraries and laboratories) unless supervised by SAS faculty
- Distance learning or online courses taken with institutions other than Penn.

NOTE: Students must complete the final two semesters of full-time study in the College.

SECTION III

ACADEMIC RESOURCES AND SERVICES



The College has a multifaceted network of advising and support to help you achieve your academic goals. This network includes academic advisors, learning instructors, group and individual tutoring, electronic planning tools and writing support. You should get to know these resources and make use of them as often as you can.

25

ACADEMIC ADVISING

All College students work with an a pre-major advisor for their first two years to explore intellectual opportunities and begin to craft a coherent curriculum. This pre-major advising is an absolutely essential part of the freshman and sophomore experience, and it is the responsibility of each student to make full use of this resource.

The Goals of Pre-major Advising

- Students will have the opportunity to develop a relationship with at least one adult representative of the
 University to whom they can turn for assistance in planning an undergraduate program, for clarification of the
 University's policies and procedures and degree requirements, and in moments of crisis.
- Students will successfully make the transition from secondary school to college.
- Students will become familiar with the course offerings and other academic opportunities within the College and other schools at Penn and make good use of them.
- Students will be ready to declare a major and know how they wish to structure the rest of their undergraduate program by the second semester of their sophomore year.
- Students will follow up on the initial contacts with support and counseling services made by their advisors and continue to avail themselves of these resources when necessary.
- Students will increase their level of self-awareness and grow intellectually as they explore the curricular and extracurricular offerings at Penn and in Philadelphia.
- Students will learn to take responsibility for their actions (or inactions) and decisions.

The Responsibilities of College Students in the Advising Program

- To be active and informed participants in the advising process and learn to take responsibility for the shape of their education and defining life goals.
- To read the publications sent to them from the College Office, especially the *Class of 2010 Handbook*, and to use information available on the College website at http://www.college.upenn.edu/ (see pages 36-37).
- To be aware of registration-related deadlines.
- To use Penn InTouch to make course and grading status changes and confirm the accuracy of their registration.
- To keep appointments with their pre-major advisors and come to advising sessions prepared with a list of questions and issues to discuss.
- To make appointments with, or send email to, assistant deans for advising in the College Office if they need advice beyond the expertise of their pre-major advisor.

Remember: Incoming freshmen will not be able to register for fall courses until they have spoken with their academic advisor and submitted the Freshman Questionnaire.

Peer Advisors

Peer advisors are trained College students who can:

- Provide the perspective of an upperclass student in the College when choosing courses.
- Assist with Advance Registration in the summer and in November and March.
- Help with the use of Penn InTouch, including creating a worksheet at the appropriate time.
- Help schedule appointments with academic advisors during Advance Registration.
- Help find the answers to questions in College and University publications.
- Answer questions about degree requirements, academic support services and University procedures throughout the first year.
- Help with information about opportunities for research and academic pursuits outside of the classroom.
- Help modify the College tab on the PennPortal to suit individual needs (see page 36).

Any student who does not know who his or her peer advisor is can call the College Office, (215) 898-6341 and ask for Ms. Katrina Glanzer.

Assistant Deans for Advising

Assistant deans for advising are available in the College Office Monday through Friday from 9:00 A.M. to 4:30 P.M. for scheduled meetings, and until 4:00 P.M. for emergency or peak-period walk-in meetings. To schedule an appointment call (215) 898-6341. (The assistant deans are pictured on pages 30-31, with a brief listing of their areas of particular expertise.)

Students should contact an assistant dean to:

- Clarify the College's degree requirements, policies and procedures.
- Supplement the advising of the pre-major advisor regarding special academic programs such as study abroad and dual degrees, or during the summer if the pre-major advisor is not available.
- Assist in locating resources on campus and for help with academic problems.

The assistant deans also develop programs to help remind upperclass students of academic options, responsibilities, deadlines and opportunities. Students are encouraged to check the College home page for links to information specifically intended for their class.

The assistant deans responsible for class programs are:

Sophomores: Dr. Diane Frey, Dr. Alice Kelley

Juniors: Dr. Flora Cornfield, Dr. Srilata Gangulee Seniors: Dr. Hocine Fetni, Mrs. Guna Mundheim

Note: Freshman programs are coordinated by Dr. Janet A. Tighe, Dean of Freshmen and Director of Academic Advising, with the assistance of Ms. Katrina Glanzer, Assistant Director of Advising Services and Academic Support.

Additional Services in the College Office

Leave of Absence/Absence from Class

Students who are ill or have a family emergency that will force them to miss a class, who are experiencing longer-term academic or personal difficulties, or who are thinking of requesting a leave of absence may call the College Office at (215) 898-6341 and ask to speak to the College academic support network (CaseNet) member who is on duty. This person can contact faculty to make them aware of extenuating circumstances (proper documentation is required), connect the student with an appropriate academic advisor, or refer the student to on-campus support services as appropriate.

The Help Desk in the College Office

The Help Desk is available on a walk-in basis or by email (answers@sas.upenn.edu) for quick questions on routine information about academic procedures.

Learning Resources in the College

The Office of Learning Resources provides instruction and develops resources to help students improve their approaches to academic reading, writing, study strategies and time management. Contact Dr. Myrna Cohen, Director of Learning Resources (cohenm@pobox.upenn. edu), for help in these areas and for information about many additional resources. (Also see page 33.)

Advice about Choosing a Major

http://www.college.upenn.edu/departments/chairs.html

While investigating possible majors, students should talk with instructors, advisors and students in the department. The web page above lists faculty members in the departments who can advise students interested in the major. Students should also review descriptions of the majors available on the program's website.

Links to all departmental websites can be found at http://www.college.upenn.edu/departments/index.html.

Majors Dinners

http://www.college.upenn.edu/file/dinners.html

Each semester, a series of dinner discussions on majors is held in various College Houses. These dinners are an opportunity to meet with faculty and upperclass students in the various majors. Freshmen and sophomores will be emailed a schedule. The dinners are open to all students, but require reservations that can be made on the website.

Major Advising Program (MAP)

http://www.college.upenn.edu/map/index.htm

Junior and senior students who have declared their majors volunteer through MAP to introduce their fields of study to students still investigating potential majors. Students may search on-line for an area of interest and attend upper-level courses with a student in that major.

Course and Majors Fair

Each year, representatives from academic departments and programs are available at the Course and Majors Fair to present information about interesting classes in their field, answer questions, and discuss a variety of academic options.

Major Advising

When students have declared their major, they will be assigned a major advisor. This may be the undergraduate chair, director or another faculty member in the department or program. This advisor will assist in planning the major, identifying research opportunities in the major and discussing fellowship and post-graduate opportunities in this academic field. Students should still speak with an assistant dean for advising in the College Office periodically to discuss their overall progress toward the degree as well as special academic options and programs.

ACADEMIC TIMELINE

Freshmen http://www.college.upenn.edu/perspectives/freshmen.html

Summer is the time for freshmen to:

Correspond with their peer advisor and meet or contact their pre-major advisor. Incoming freshmen will be on registration hold, which keeps them from being able to advance register until they communicate with their premajor advisor.

Fall is the time for freshmen to:

- Meet with their pre-major advisor during New Student Orientation, August 31 to September 5 (see the NSO calendar to confirm dates), and again during Advance Registration for the spring, October 30 to November 12, to discuss course selections for the upcoming semester. Freshmen will be on registration hold, which keeps them from being able to advance register, until they meet with their advisor.
- Let their pre-major advisor know of any problems they are having that are affecting their academic work.

Spring is the time for freshmen to:

- See their pre-major advisor before Advance Registration in March to discuss courses for the fall semester.
 Freshmen are on registration hold until they meet with their advisor.
- Start talking to faculty and students in their prospective majors. Attend classes in the major and get the student's perspective through the Major Advising Program (page 27).
- Watch for Career Services' Internship Week if they are interested in a summer internship. On-campus recruiting for internships begins early in the semester.
- If interested, begin to investigate the dual degree program with Engineering, Nursing or Wharton at the end of the freshman year or in the middle or end of the sophomore year. (See page 21.)
- If interested, begin to investigate study abroad programs by looking over the literature available on the programs that Penn sponsors. The Office of International Programs (http://www.upenn.edu/oip/) is an excellent place to start.
- If interested in taking courses at another university during the summer, begin the process of getting the credits preapproved (see Credit Away, page 24).

Sophomores http://www.college.upenn.edu/perspectives/sophomores.html

Fall is the time for sophomores to:

- Meet with their pre-major advisor to discuss progress toward selecting a major and meeting the degree requirements. This meeting is also an opportunity to explore options such as minors, research and study abroad.
 Sophomores will be on registration hold, which keeps them from being able to advance register, until they meet with their advisor.
- Become completely familiar with the rules and requirements for their major. These are available on the department websites (see http://www.upenn.edu/departments/index.html) and in the http://www.upenn.edu/registrar/academic_bulletin/index.html).
- Look into summer study abroad programs available through the College of General Studies by visiting http:// www.upenn.edu/summer/abroad/index.html.
- Seek information about study abroad for a semester or a year. Information is available in the Office of International Programs (http://www.upenn.edu/oip/). After reading material, students should call the College Office and ask to speak with the advisor who acts as the liaison for the country of interest.
- If interested, apply for the dual degree program with Nursing, Engineering or Wharton. This may be done in the fall or at the end of the sophomore year (see page 21).
- Visit the Center for Undergraduate Research and Fellowships (CURF) website at http://www.upenn.edu/curf for guidance about available scholarships, fellowships and grants and the application process.

Spring is the time for sophomores to:

- Meet with their pre-major advisor before declaring a major to discuss their plans.
- Visit the department to declare the major officially.
 A registration hold will keep students from being able to advance register for the following fall until the declaration is completed. Once the major is declared, the department will remove the hold.

Note: Students may add a second major or a minor at a later date. They may also change their major. Students who have questions about their options should make an appointment with an assistant dean for advising in the College Office.

 If interested in taking courses at another university during the summer, begin the process of getting the credits preapproved (see Credit Away, page 24).

- Start planning for an internship. Watch for Career Services' Internship Week. On-campus recruiting begins at the beginning of the semester.
- Open a file at Career Services. This will be an invaluable resource when applying for jobs or graduate schools.
 Before applying for any position, students should have Career Services review their cover letter and resume.
 Students unsure about what they might do after graduation should make an appointment with one of the Career Services advisors.
- If interested, attend Career Services pre-law or pre-med workshops no later than their junior year. Students should also be familiar with all requirements and deadlines. Check the Career Services website and pages 43-44.
- Become a peer advisor and help a freshman entering Penn (see page 26).

Juniors http://www.college.upenn.edu/perspectives/juniors.html

Fall is the time for juniors to:

- Meet with their major advisor to discuss their major program and how it integrates with their education as a whole. Discuss opportunities for research, internships or other avenues of intellectual growth.
- Check the Penn InTouch worksheet to make sure all requirements are fulfilled and appropriate progress is being made toward graduation, including the required number of College electives. Check with an assistant dean for advising in the College Office for answers to any questions.
- Investigate submatriculation options.
- Check with Career Services for information about internships, since many competitive internships have fall deadlines. These internships usually target juniors.
- Visit the Center for Undergraduate Research and Fellowships website (http://www.upenn.edu/curfl) if con-

- sidering research, graduate study or independent study in the major.
- Consider sharing their major with underclassmen by becoming Major Advising Program (MAP) advisors at http://www.college.upenn.edu/map/.

Spring is the time for juniors to:

- Meet with their major advisor to discuss progress and future plans.
- Plan for an internship early in the spring. Watch for Career Services' Internship Week. On-campus recruiting for internships begins second semester.
- Sign up to become peer advisors for the following year (see page 26).
- If interested in taking courses at another university during the summer, begin the process of getting the credits preapproved (see Credit Away, page 24).

Seniors http://www.college.upenn.edu/perspectives/seniors.html

Fall is the time for seniors to:

- Meet with their major advisor to make sure all requirements for the major will be completed and to discuss future plans.
- Use Penn InTouch to check their progress toward fulfilling requirements before the end of the Course Selection Period.
- Consult with Career Services. The job search can span the entire school year, depending on a student's interests.
 On-campus recruiting starts in the beginning of this semester. (See pages 42-44.)
- Confirm that their intended graduation date and local address are correct on Penn InTouch.

- Make sure to submit their application for graduation by the appointed deadline.
- Consider sharing their major with underclassmen by becoming Major Advising Program (MAP) advisors at http://www.college.upenn.edu/map/index.htm.

Spring is the time for seniors to:

- Meet with their major advisor to make sure that they will complete the major and to discuss their plans for the future.
- Before the end of the Course Selection Period, confirm that they have the courses they need to graduate.

Advising in the College Office



Dr. Janet A Tighe, Dean of Freshmen and Director of Academic Advising, oversees the College's academic advising program. She studied history and literature at Johns Hopkins University and received a doctorate in American Civilization from Penn. As a member of the History and Sociology of Science Department, she co-directed Penn's interdisciplinary Health and Societies Program. Her research and teaching focuses on modern America's cultural investment in scientific medicine, and its interaction with, among others, the law and capitalism. Teaching courses on the history of medicine, public health and health policy, she has been awarded both the Provost's Teaching Award (1999) for outstanding contributions to the graduate and undergraduate curriculum and the Dean's Teaching Award (2004).



Dr. Diane Dailey Frey, Director of Academic Services and Assistant Dean for Advising, provides general academic advising as well as advising for transfer students. Dr. Frey works on academic issues pertaining to sophomores, serves as the College liaison to the Committee on Undergraduate Academic Standing and chairs the Committee of Assistant Deans. She also oversees the College's

leave of absence and readmission processes. Dr. Frey holds a Ph.D. in history from the University of Washington.

Assistant deans for advising are available in the College Office by appointment Monday through Friday from 9:00 A.M. to 4:30 P.M. and on a walk-in basis until 4:00 P.M. The office is located at:

120 Logan Hall, 249 South 36th Street Philadelphia, PA 19104-6304 phone: (215) 898-6341 fax: (215) 573-2023 college@sas.upenn.edu http://www.college.upenn.edu



Dr. Alice Kelley, Associate Director of Academic Advising and Assistant Dean for Advising, answers questions about language waivers and the individualized major and is a willing ear for those whose lives are confused or uncomfortable as well as those who have found their intellectual passion. She is also the College Athletic Eligibility Officer and works on academic issues pertaining

to sophomores. In her past life as a Penn English professor she wrote several books on Virginia Woolf.



Dr. Niel McDowell, Associate Director of Academic Advising and Assistant Dean for Advising, edits College publications, oversees the College's academic support network (CaseNet), and advises students in all four classes. Dr. McDowell received his Ph.D. in German from the University of Pennsylvania and has research interests in late medieval and early modern medical history and popular culture.

Assistant Deans for Advising



Dr. Flora Campos Cornfield, Assistant Dean for Advising and Study Abroad, received her B.A. and M.A. in French literature and her Ph.D. in Romance Languages from Penn. She is particularly knowledgeable about dual degrees and study abroad programs (with a focus on those in France, Spain, Israel, Germany and Latin America) and is on the Provost's Task Force for Study Abroad. She works

on academic issues pertaining to juniors and has served ex-officio on the Board of Overseers of the School of Arts and Sciences.



Ms. Janice Curington, Assistant Dean for Multicultural Affairs and Advising, advises all students, but actively seeks to address the academic needs of underrepresented minority students through a variety of programs and collaborations. She is the liaison for the PENNCAP Pre-Freshman program and for study abroad programs in sub-Sahara Africa particularly. She has a Master's in English from the University

of Illinois and is enrolled in a doctoral program in the Graduate School of Education with a focus in educational anthropology.



Dr. Hocine Fetni, Assistant Dean for Advising, is responsible for study abroad programs in North Africa, the Middle East (except Israel), Turkey, Greece, Australia and New Zealand. He also advises students interested in the BA/JD submatriculation program. Dr. Fetni holds a law degree from New York University and a Master of Laws and a Ph.D. in International Relations from

Penn. As a faculty member in the Sociology Department, he has developed courses on law and society, law in Africa, law and social change, and the sociology of the legal profession. He also teaches international law and the theory of international relations.



Dr. Godlove Fonjweng, Assistant Dean for Advising, works with students in the standard and Pilot Curriculum and advises students about the Quaker Consortium and study abroad in Italy, Belgium and Senegal. He graduated from Swarthmore College with a B.A. in geochemistry, earned a Ph.D. in geology from Penn and teaches in Penn's Earth and Environmental Science Department.



Dr. Srilata Gangulee, Assistant Dean for Advising, advises students who wish to study in England and Asia, those who wish to pursue a dual degree with or transfer to another undergraduate division, and those who wish to submatriculate into a graduate program. She holds a Ph.D. in economics from New York University and teaches in the Asian American Studies and South Asia Studies programs at Penn.



Mrs. Guna Mundheim, Assistant Dean for Advising, assists students who wish to study in Central and Eastern Europe, Scandinavia, Russia, Scotland or Ireland. She is also in charge of the College 99 program. Because she graduated from Penn with a degree in chemistry, she is particularly able to advise students who wish to study the physical sciences. She has a paral-

lel career as a painter. She has taught painting and exhibits her work in New York and Philadelphia galleries.



Dr. Gary Purpura, Assistant Dean for Advising, oversees the College's academic probation process and is a member of the College's academic support network (CaseNet). He also advises students in all four classes. Dr. Purpura earned the Ph.D. in philosophy from the University of Pennsylvania and regularly teaches courses in contemporary philosophy of mind, with

a particular interest in the intersection between philosophy and the cognitive sciences.

Benjamin Franklin Scholars and University Scholars

Advisors for these programs and are located in the Center for Undergraduate Research and Fellowships, 2nd Floor, 3601 Locust Walk, Philadelphia, PA 19104-6334, (215) 898-7451.



Dr. Harriet Joseph is the Associate Director of the University Scholars Program and also works with the Benjamin Franklin Scholars Program. She graduated from the University of Wisconsin and has a doctorate in Urban Education from Temple. Before coming to the Scholars program, she was the Director of the Alumni Council on Admissions, working as a liaison between legacy appli-

cants to Penn and the Admissions Office. She was also an advisor in the College Office and helped start the Peer Advising program.



Ms. Linda Wiedmann is the Associate Director of the Benjamin Franklin Scholars Program. Ms. Wiedmann is a native Philadelphian. As associate director, she has developed opportunities for student research, established the University-wide fellowship directory and helped to create innovative courses. She has a particular interest in the role

of women in higher education and was a recent president of Penn's Association of Women Faculty and Administrators.

Additional Services in the College Office



Dr. Myrna Cohen, Director of Learning Resources, is available to assist students who would like to strengthen their overall study strategies or improve their study skills in a particular discipline. You may contact Dr. Cohen by email at cohenm@pobox.upenn.edu or schedule an appointment through the receptionist in 120 Logan Hall.



Ms. Ada Obrea, Assistant Director of Advising Services, is a member of the CaseNet support team (see page 27) and is available in person or through the online help desk, answers@sas.upenn.edu, to answer quick questions about academic issues. Ms. Obrea also oversees the Major Advising Program (MAP) and co-coordinates the College Graduation Ceremony.



Ms. Kendal Barbee,
Assistant Director of
Advising Services, is a
member of the CaseNet
support team (see page
27). In addition, she coordinates academic advising
related programs and
Family Weekend events.



Katrina Glanzer, Assistant Director of Advising Services, is a member of the CaseNet support team (see page 27). In addition, she coordinates pre-major advising related programs, freshman seminars and the Peer Advising Program.

College Houses

Each College House has a faculty master and faculty/senior fellows living in residence. In addition, each House also has its own house dean who heads its administrative office and supervises the programs in that House. The house deans are trained to provide general academic advice and direct students to academic support programs. Depending on their schedules, staff are available to meet with students in the daytime or evening and are available to handle emergencies at any time. For more on College Houses see http://www.collegehouses.upenn.edu/.

W. E. B. Du Bois College House

(215) 898-3677

Faculty Master: Prof. Terry Adkins, School of Design House Dean: Patricia Williams pcw2@pobox.upenn.edu

Fisher Hassenfeld College House

(215) 573-4295

Faculty Master: Prof. Arnold Rosoff, Legal Studies

House Dean: Jane Rogers

rogersj@pobox.upenn.edu

Gregory College House

(215) 573-4633

Faculty Master: Prof. Robert Lucid, Emeritus, English

House Dean: Dr. Christopher Donovan

cdonovan@pobox.upenn.edu

Harnwell College House

(215) 573-3497

Faculty Master: Prof. Daniel Bogen, Bioengineering

House Dean: Dr. Suhnne Ahn

suhnnea@pobox.upenn.edu

Harrison College House

(215) 573-3539

Faculty Master: Prof. Lawrence Sipe, Graduate School of Education

House Dean: Dr. Frank Pellicone frankpel@pobox.upenn.edu

Hill College House

(215) 898-5237

Faculty Master: Prof. Asif Agha, Anthropology

House Dean: Amy Pollock

apollock@pobox.upenn.edu

Kings Court / English College House

(215) 898-2530

Faculty Master: Prof. Jorge Santiago Aviles,
Electrical and Systems Engineering

House Dean: Dr. M. Krimo Bokreta
bokreta@pobox.upenn.edu

Riepe College House

(215) 898-2855

Faculty Master: Prof. Ann Farnsworth-Alvear, History

House Dean: Dr. Marilynne Diggs-Thompson
diggst@pobox.upenn.edu

Rodin College House

(215) 573-3576

Faculty Master: Prof. Jay Reise, Music House Dean: Ken Greich kgreich@pobox.upenn.edu

Stouffer College House

(215) 573-8473

Faculty Master: Prof. Philip Nichols, Legal Studies

House Dean: Michele Grab

mgrab@pobox.upenn.edu

Ware College House

(215) 898-9531

Faculty Master: Prof. Mark Liberman, Linguistics

House Dean: Dr. Nathan Smith

nws@pobox.upenn.edu

ACADEMIC SUPPORT

Office of Learning Resources

http://www.vpul.upenn.edu/lrc/lr/

The Office of Learning Resources provides professional instruction in university-relevant skills such as academic reading, writing and study strategies to the Penn student community. Topics often addressed during instruction include time management, reading efficiently, taking lecture and text notes, exam preparation, test-taking skills and writing for a variety of purposes. Individual instruction is available by appointment, Monday through Friday from 9:00 A.M. to 5:00 P.M. In addition, walk-in hours are available Monday through Friday from noon to 3:00 P.M.

Instruction is provided by a multidisciplinary professional staff and includes an informal assessment of a student's learning strategies followed by instruction that supports the student's courses and interests. All instruction is free and confidential.

Group instruction is also available through several workshop series:

- Mastering the Ivy League is offered during the fall semester and provides an introduction to college-level study strategies.
- The Academics Plus series presents topics of interest for international undergraduate and graduate students.
- The Winning Edge series is scheduled for first-year athletes early in the fall semester.

In addition, workshops can be developed to address the needs and interests of specific groups of students.

Workshop schedules are available on the website.

Print information is available in the form of self-help pamphlets, handouts and calendar tools for independent use.

The Weingarten Learning Resources Center provides a study lounge, a computer lab and group study spaces for student use Monday through Thursday 9:00 A.M. to 9:00 P.M., Friday from 9:00 A.M. to 5:00 P.M., and Sunday from noon to 5:00 P.M.

The Center is located in Stouffer Commons, Suite 300, 3702 Spruce Street, phone: (215) 573-9235, TDD: (215) 746-6320, fax: (215) 746-6326, email: lrcmail@pobox. upenn.edu.

Penn Mentoring

http://www.rescomp.upenn.edu/mentoring/

Recognizing that students are a wonderful resource for one another, the Penn Mentoring Program (PMP) connects students who have excelled in a discipline, and who are chosen by faculty, with students taking introductory courses in those disciplines. The students meet weekly in small learning communities in a College House setting. The mentors and mentees are supported by their faculty and professional staff from the Office of College Houses and Academic Services and the Office of Learning Resources. For information and a list of current courses, see the website.

Department of Academic Support Programs

http://www.vpul.upenn.edu/dasp/

The Department of Academic Support Programs (DASP) offers a variety of resources designed to promote the intellectual development of scholars. The programs and services offered are developed in collaboration with faculty, academic departments and schools and include:

 PENNCAP / Pre-Freshman Program (215) 898-6440

This program offers a strong academic summer component (the Pre-Freshman Program) that includes innovative courses designed by faculty from the four undergraduate schools to prepare approximately 110 selected students for the academic expectations of the University. PENNCAP is designed to help each student enrolled in the program reach his or her academic and career goals through continuous structured academic and personal support, such as academic program planning, career decision-making, financial advising and cultural enrichment activities throughout his/her four years.

Academic Enrichment Programs
 (215) 898-6440

This part of DASP sponsors the University's Pre-health Professions and Pre-law Mentor Programs, in collaboration with the Schools of Medicine, Dental Medicine, Veterinary Medicine, Nursing, and Law. The programs link first-year African American, Asian American, Latino/ Chicano and Native American students with upper-class students and faculty or professional mentors with similar academic or career interests, and offer activities throughout the year to foster mentor/mentee interaction.

 Ronald E. McNair Post Baccalaureate Achievement Program (215) 898-3115

http://www.vpul.upenn.edu/dasp/mcNairScholars_home.html

The McNair program prepares eligible high-achieving students for graduate studies leading to the Ph.D. degrees. Benefits include undergraduate research opportunities under the direction of a standing faculty mentor and assistance with the graduate school application process.

• The Tutoring Center
(215) 898-8596
http://www.penntutoring.info/Tutoring/

The Tutoring Center offers individual tutoring in specific courses, walk-in tutorial services at satellite locations across campus, course-based or faculty-led group tutorials, mid-term and finals reviews and special events during finals week. The Tutoring Center also administers the Old Exam File.

The Writing Center

http://www.writing.upenn.edu/critical/help/

As part of the Critical Writing Program (page 17), tutors in the Penn Writing Center help students write with greater confidence and skill, learning to:

- proofread their own papers
- identify patterns of error and how to correct them
- define their topic and audience
- plan research strategies
- develop a sound thesis
- analyze texts
- organize material and revise drafts
- cultivate a distinct and masterful writing voice.

Communication Within the Curriculum

http://www.sas.upenn.edu/cwic/

CWiC works with students to help them improve their speaking abilities. To help students express themselves clearly and compellingly, CWiC provides an array of resources. For students interested in the opportunity to develop as speakers within their coursework, CWiC affiliates with courses in departments across Penn; check the CWiC website to find speaking-intensive classes for each semester. The CWiC Speaking Center offers students access to trained peer speaking advisors. These advisors provide individualized coaching for students and groups working on presentations or seeking less formal speaking guidance. CWiC also offers non-credit workshops on speaking for students who would like instruction and a forum to practice. Students may sign up for individual workshops and student groups may request workshops tailored for their group. Finally, CWiC supports several extracurricular speaking opportunities, including a speaking prize. Students particularly interested in oral communication may become involved in CWiC and its activities by becoming CWiC speaking advisors. To learn more, call (215) 898-4170, email cwic@sas. upenn.edu or see the CWiC website.

The Wheel

http://www.collegehouses.upenn.edu/wheel/

The Wheel is the name given to a group of support programs in math, writing, technology, library, languages, computer science and engineering, chemistry, career services and more. The Wheel delivers tutorial help around the clock in the College Houses. Wheel support is given both in person and on-line, and specially trained student Wheel advisors reside in all the College Houses. Even in the late night and early morning hours, web- and email-based services continue.

For information on Penn's Wheel services, check the website or contact David Fox, Associate Director for Academic Services, at (215) 573-5636 or dfox@sas.upenn.edu.

Library Services

http://www.library.upenn.edu/

Learning how to find and evaluate print and electronic information is a critical part of any undergraduate's education. Many of the databases, full-text electronic journals, and reference sources that the library provides are not freely available through public search engines, yet these can be the most useful resources for research. Librarians can help to navigate the wealth of resources available on campus and beyond—both in print and on the web. Ways to learn about library resources and services include:

- Library tours: Tours are offered at the beginning of each semester. Check the library website for dates and times.
- Walk-in service: Professional librarians are available at all 15
 Penn libraries to provide on-site assistance with research
 or reference queries. Staff can offer help using Franklin,
 the libraries' catalogue, searching databases, and identifying and locating statistical data. During the fall and
 spring semesters, the Van Pelt reference desk is staffed by
 professional librarians for more than 80 hours each week.
- One-on-one appointments with reference librarians:
 Arguably the most useful service for students, meeting one-on-one with a librarian provides the opportunity to work in depth on a paper topic or research project, or to review some basics. Make an appointment at http://gethelp.library.upenn.edu/.
- Use IM for instant help: Contact a librarian without leaving your computer. Screen name: UPennLib/UPennLib@hotmail.com
- Reference by email: Students may send questions to library@pobox.upenn.edu. They will receive a response within 24 hours.
- Telephone reference service: Assistance is available daytime, evenings and weekends at library reference desks across campus including:

Van Pelt Library (215) 898-7556 Lippincott Library (215) 898-5924 Biomedical Library (215) 898-5818

- Library advisors: Each College House has its own specially trained peer advisor who works for the library. Library advisors are available to help via the web or in person, even late at night. For contact information visit http:// gethelp.library.upenn.edu/advisors/.
- PORT (Penn On-line Research Tutorial): An on-line guide to doing research at Penn, PORT serves as a guide through the research process and offers help on locating and evaluating information, avoiding plagiarism and citing sources. See http://gethelp.library.upenn.edu/PORT/.
- Research Basics: Linked from the Library website, http://www.library.upenn.edu, Research Basics is a new tool that provides good starting points for research in a variety of disciplines. Included are topic overviews, links to relevant article indexes, a guide to citing sources, and hints on navigating the research process.

The Center for Undergraduate Research and Fellowships

http://www.upenn.edu/curf/

The Center for Undergraduate Research and Fellowships (CURF) seeks to provide information, advice, resources and encouragement to all undergraduates at Penn seeking more than just a superior classroom education. Penn fosters students' individual research initiatives and encourages all undergraduates to seek prestigious fellowships to continue their scholarship at the graduate level. CURF administers many nationally coveted fellowships for graduate and undergraduate study and offers two programs for highly motivated undergraduates. The University Scholars Program (page 23) serves students pursuing a high level of independent research and course work, and the Benjamin Franklin Scholars Program (page 23) offers intellectual courses and opportunities for academically creative students working at a high level of excellence. CURF also enables Penn undergraduates to pursue independent research through personal advising and administration of competitive research grants. For more information on CURF see Further Study, pages 42-43.

Student Athletes

Student athletes at Penn have a number of often conflicting responsibilities. Their coaches may be expecting daily practices and workouts in the weight room as well as attendance at games at home or away on weekends, and their professors will be expecting steady progress with course work. If one adds work-study jobs, social life and the complicated adjustment issues involved in coming to college, these young athletes may face special challenges. The Athletic Department provides an academic coordinator to help student athletes balance their lives and manage their time. (See Athletic Eligibility, page 55.)

Help for Students with Disabilities

http://www.vpul.upenn.edu/lrc/sds/

Student Disabilities Services (SDS) in the Weingarten Learning Resources Center provides comprehensive, professional services and programs for students with disabilities to ensure equal academic opportunities and participation in University-sponsored programs. Professional staff evaluate documentation, determine program eligibility and reasonable accommodations for all qualified students with documented disabilities on an individual basis, including academic accommodations, accessible campus housing, transportation and parking, auxiliary aids, services and the loan of equipment and assistive technologies.

Student Disabilities Services also collaborates with the Office of Learning Resources to provide comprehensive academic support, including learning strategies that complement accommodations, academic adjustments and the use of auxiliary aids. Realizing that the commitment to students with disabilities is a shared responsibility, the Office of Student Disabilities Services coordinates with schools, programs and offices throughout campus to provide the best combination of services. Its professional staff is available to provide consultation to faculty and administrative staff, as well as programs for specific groups on topics of interest or concern. Phone (215) 573-9235, TDD (215) 746-6320 or email sdsmail@pobox.upenn.edu.

PRINT AND ON-LINE PUBLICATIONS

In addition to this publication, there are numerous print and on-line resources to help students successfully navigate through their College careers. Those listed below will be among the most useful.

Help with Selecting Courses

Links to the on-line versions of the publications listed below can be found on the College website at http://www.college.upenn.edu/courses/selecting_courses.html.

Course Timetable and Freshman Timetable

The *Course Timetable* lists the title, instructor, course number and meeting times for all courses offered in a given semester. It also indicates whether or not a course satisfies a College requirement. The *Course Timetable* is available in the College Office prior to Advance Registration for the fall and spring semesters. It is also available online. The *Freshman Timetable* lists all courses recommended for incoming freshmen. This publication was included in the freshman mailing and should be used during the initial summer Advance Registration for the fall term.

Course Register

The *Course Register* provides descriptions of all University courses regardless of when the course may be offered. Students may use the *Course Timetable* to see what is offered in the upcoming semester, then use the *Course Register* to read a full description of that course. Students can also browse the *Course Register* for interesting subjects and courses then check the *Timetable* to see if they are available.

Freshman Seminar Brochure

Freshman seminars are small classes taught in the fall and spring semesters by some of Penn's most distinguished faculty members. They are an excellent introduction to intellectual life at Penn, and many seminars fulfill College requirements. A brochure listing fall freshman seminars was included in the freshman mailing. A listing of spring seminars will be available in the College Office prior to spring Advance Registration. Both listings are available on-line.

Writing Program Booklet

This booklet is an introduction to Penn's rich Writing Program. It also lists writing-intensive courses designed to help develop essential writing skills. These courses are offered on a wide variety of academic subjects and many fulfill the College Writing Requirement. The *Writing Program Booklet* was included in the freshman mailing.

Course Scanner

http://www.sas.upenn.edu/scanner/ccs.html

The on-line Course Scanner helps students design their academic program with significant intellectual connections. It searches all course descriptions in the *Course Register* and allows searches by keywords for topics of interest, or by course number to find classes related to a course previously taken. Students can also search for courses that satisfy the requirements, courses in other undergraduate schools or courses at introductory, intermediate or advanced levels.

The PennBook

http://www.vpul.upenn.edu/osl/pennbook.html

Published by the Office of Student Life, the *PennBook* outlines University-wide rules and regulations governing many aspects of academic and non-academic life at Penn.

The PennPortal

The PennPortal is an electronic gateway for students into many of the University's academic resources, services and events. The PennPortal will be on the computer disc freshmen receive when they arrive on campus. The College tab on the PennPortal is designed specifically for College students, and we encourage College students to choose this tab as their default page, modify it to suit their needs and refer to it often for tips and announcements about academic life at Penn.

The College tab on the PennPortal provides information and links of particular interest and importance to College students.

The College Website

http://www.college.upenn.edu/

The College maintains an extensive website that is an outstanding resource for academic and advising questions and for important links to departments, course selection materials and other Penn offices. Some highlights include:

Freshmen

http://www.college.upenn.edu/perspectives/freshmen.html provides important links and information for incoming freshmen.

Academic Options and Choices

http://www.college.upenn.edu/curriculum/shaping.html links to information about a wide range of academic options including research, writing and speaking courses, scholars and community programs, study abroad and merit scholarships.

Course Selection

http://www.college.upenn.edu/courses/selecting_courses.html links to resources for selecting courses, including the Course Timetable, Course Register, Course and Room Roster, freshman seminars, the Course Scanner, writing seminars and more.

Requirement Courses

http://www.college.upenn.edu/courses/index.html provides links to lists of courses that can be used to fulfill the requirements of the General Education Curriculum.

Departments and Programs

http://www.college.upenn.edu/departments/index.html includes brief descriptions of, and links to, departments and programs that offer College majors.

Resources

http://www.college.upenn.edu/resources/index.html links to information about academic advising and support services.

The College Website

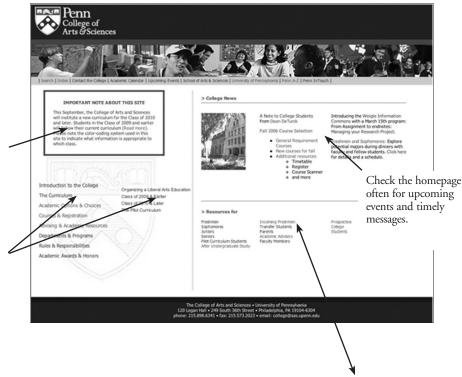
http://www.college.upenn.edu/

Incoming students are strongly encouraged to explore the College website before coming to campus, and refer to it often while at Penn. The site contains a wealth of resources for students in all phases of their undergraduate careers: from academic options and opportunities, degree requirements, regulations and responsibilities to information on study abroad, graduation and career exploration.

The College website uses a color-coding system to identify requirements and regulations specific to different College classes. Freshmen should be aware that there are pages on the College site (coded in grey) intended for students who entered the College before fall 2006. See the link from the College homepage for details.

Links to details about the General Education Curriculum, and an explanation of the website's color-coding system.

Click on the menu item (left) for notated contents and links, or sroll over the menu list for secondary menu options (right).



Incoming Freshman Page

From the College home page, link to the main resource page for incoming freshmen which includes information about:

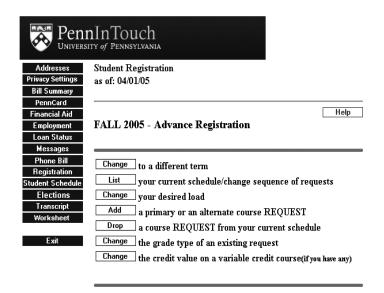
- New Student Orientation
- Placement tests
- Course selection
- Registration resources
- Academic advising
- Degree requirements
- and more.



PENN INTOUCH

https://sentry.isc.upenn.edu/intouch/

Penn InTouch is the website students use to plan their academic programs, view transcripts, advance register, drop and add courses, change grade types, review schedules and update their privacy settings. To use Penn InTouch, a PennKey and password are required. (See http://www.upenn.edu/comput-ing/pennkey/ for assistance.) See page 58-60 for more about the use of Penn InTouch for course registration. Penn InTouch can also be used to access a variety of other types of information (see below).



Addresses Change local/emergency/billing/parent/temporary addresses or effective dates. Students should be

aware that it is their responsibility to make sure that both the local and permanent addresses in the

system are correct and up-to-date.

Privacy Settings Specify individuals to whom academic and/or financial information may be disclosed.

Bill Summary View student account balance in total and by term; print a bill header for making payments.

PennCard Check status of the PennCard: Has it been authorized for charging purchases at the Penn Bookstore?

Financial Aid Check status of financial aid application, determine outstanding documents, find out when a

pending application was processed and the disbursement status.

Loan Status Check current loan status and view borrowing history by term.

Messages Read up-to-date messages and receive important information regarding student specific status.

Phone Bill Check current charges and payments to a Student Telephone Services account.

Health Insurance View options available for health insurance coverage and make selections for University insurance

coverage; designate health insurance provider.

Registration Advance Registration, add/drop enrollment during the Course Selection period, view and change

grade type or change variable credit courses.

Student Schedule View current or past term student schedule, course locations and instructors' names.

Elections Participate on-line in student organization elections.

Transcript View course and grade information by term and get cumulative g.p.a.; print unofficial copy of

transcript to local printer.

Worksheet Use the worksheet for curriculum planning, in conjunction with an advisor.

On-Line Worksheet

One of the many features available through Penn InTouch is an electronic worksheet that helps students select interesting academic options and track their progress toward completion of their degree requirements. The worksheet is particularly useful once students have completed a semester or two, but freshmen may explore this tool with the assistance of their peer advisor after Advance Registration.

In order to create a new worksheet, students should

- select WORKSHEET from the Penn InTouch menu
- click on NEW WORKSHEET
- select "Requirements for the Class of 2010 and Later"
- select CREATE
- · click on OPEN to view the worksheet.

First-semester freshmen will find two categories of courses: those in which they are currently enrolled, and those for which they have various types of advanced standing credit. (Many of these may not be immediately applicable on the worksheet.) Once the first semester has been completed, a third category will appear: completed courses.

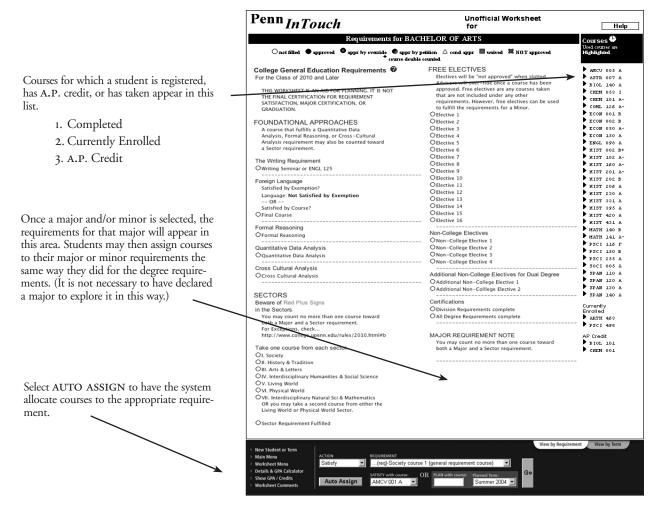
The worksheet will also permit students and their advisors to concentrate on creating a challenging academic experience rather than focusing on the mechanical aspects of selecting courses and meeting requirements.

Students should consider the following:

- After registration, students may use the AUTO ASSIGN button to allow the system to allocate courses where it can. (Note: The courses may not always fall where expected; an advisor can help sort it out.)
- The PLAN function can help students explore academic options by allowing the creation of "what if" scenarios in degree planning. The *Course Register* and the lists of requirement courses at http://www.college.upenn.edu/curriculum/requirements/2010.html can help students with this planning process.
- A prospective major may be added to the worksheet in order to view that major's requirements. The question mark at the head of each major requirement serves as a link to the department or program website, which has details about the program, faculty and courses.

Students are encouraged to explore this tool independently and with the help of their advisors. It should be noted, however, that the worksheet is not the final certification for requirement satisfaction, major certification or graduation.

Please note: The worksheet may need to be updated or changed as choices about the major are made.



RESOURCES AND SERVICES

Computing Services

Security and Privacy

http://www.upenn.edu/computing/home/menu/security.html

Please reference the above URL for a full description of computer security and privacy at Penn. A student's computer account is for his or her use only; that student is solely responsible for what is done using it. If there is evidence of unauthorized or improper use of the account, it will be temporarily disabled to protect the student's files and those of other users of the system. The password should be kept strictly confidential. It should not be shared with a friend, and students should be sure to log out when finished with a computer session.

For the mail.sas mail server, passwords and file protection are provided to afford users some level of privacy in the system. Nevertheless, no one can guarantee complete confidentiality. Penn's "acceptable use" policy provides guidelines concerning personal computer files and privacy issues: http://www.upenn.edu/computing/policy/.

PennNet is the University's computing network. Once connected, students can access various servers, browse library resources and the web, post to newsgroups, use email and more. Any connected computer on campus will access PennNet automatically, or it can be accessed remotely: http://www.upenn.edu/computing/remote/index.html.

Electronic Mail

http://www.sas.upenn.edu/computing/help/Email/create_acct. html

Email has become a staple form of communication on and beyond Penn's campus. Many courses now require students to use email for discussion between class hours, and the College Office will use email to communicate with incoming students even before they arrive on campus in the fall. For this reason, new students should obtain their PennKey Setup Code as soon as they receive instructions in late May. (Students may keep the email account as long as they are actively enrolled in the school.)

To create an email account (and to use other network resources) it will be necessary to have a PennKey and a password, which can be obtained by following the directions included in the Campus Express package. An email account can then be created by going to the website above.

Help Desk

http://www.sas.upenn.edu/computing/services/students.html

The School of Arts and Sciences has experienced staff who can assist students with most hardware and software used on campus. The Computing Help Desk is available at (215) 573-HELP or by email at help@sas.upenn.edu. For a reference page for computing resources and assistance for College students, visit the website.

Computing Resource Center

The Computing Resource Center (CRC) supports all currently marketed Macintosh computers, all currently marketed Windows platforms and most commonly used applications. They provide training and free anti-viral programs.

The CRC, as well as all of the computer labs on campus, offer self-paced tutorials. A list of these computer labs can be found at http://www.upenn.edu/computing/view/labs/.

A list of computer labs in the College Houses is located at http://www.rescomp.upenn.edu/get_labs.cfm.

The Internet and Time Management Issues

Students who are concerned about the time they are spending on the Internet or with personal emails, and the effect this might be having on their academic work, are encouraged to talk to an advisor and call the Weingarten Learning Resources Center for advice on time management at (215) 573-9235.

Health Services

Student Health Services

(215) 662-2850, http://www.vpul.upenn.edu/shs/

Student Health provides immediate medical treatment and follow-up care for acute injuries and illness, treats chronic health problems, dispenses selected prescription medication, provides an array of screening and preventative health services and coordinates outside medical care that students might require.

Office of Health Education

(215) 573-3525, http://www.vpul.upenn.edu/ohe/

The Office of Health Education (OHE) provides risk reduction and public health promotion services to the campus, which include data collection and analysis, educational workshops, health awareness events and campaigns, academic courses, training and consultations. The office coordinates and advises five peer health education groups:

DART Drug and Alcohol Resource Team

FLASH Facilitating Learning About Sexual Health

GUIDE Guidance for Understanding Image, Dieting

and Eating

RAP-LINE Reach-a-Peer Helpline

STAAR Students Together Against Acquaintance Rape.

OHE also provides secondary prevention services such as the First Step program, which addresses students at risk for alcohol and other drug use. In addition, the office provides free condoms and houses a health resource collection of brochures, books, videos, demonstration kits and training manuals available to the Penn community. The office is located at 3611 Locust Walk on the 3rd Floor.

Counseling and Psychological Services

Counseling and Psychological Services (CAPS) provides professional psychological and psychiatric services to undergraduate, graduate and professional students who are having personal problems involving social, emotional, academic and career issues. The most frequent concerns presented by clients are poor academic performance, stress management, low self-esteem, eating concerns, drug and alcohol abuse, racial/ethnic identity issues, relationship conflicts, sexual orientation and identity concerns, career conflicts and indecisiveness, loss/grief and depression.

Appointments for individual counseling can be made by phone at (215) 898-7021, or in person at the CAPS office located at 133 South 36th Street, 2nd floor. A walk-in emergency service is available Monday through Friday from 9:00 A.M. to 4:30 P.M. The CAPS clinician will review with the student his or her situation and then determine how the student can be best served. Most students are seen in time-limited individual and/or group counseling/psychotherapy at CAPS. Other services include career development counseling, evaluations for psychotropic medication, interventions in crisis situations, structured workshops, staff and paraprofessional training and consultations. All services are free and confidential to University students.

The staff consists of a multicultural group of psychiatrists, psychologists and social workers who have extensive experience in working with university students. Our goal is to assist students to meet their academic goals and to develop greater self-awareness, understanding of others, independence and initiative. Brochures and workshop flyers are available at the office and at various locations on campus.

Additional Services

Housing

(215) 898-3547, http://www.business-services.upenn.edu/housing/

The Department of Housing and Conference Services manages residential and hospitality services for students, faculty, staff and guests.

Student Financial Services

(215) 898-1988, http://www.sfs.upenn.edu/

Student Financial Services coordinates student financial assistance, loan and credit options, work-study jobs, student employment, billing and student accounts, as well as Penn InTouch.

Office of the Registrar

(215) 898-6636, http://www.upenn.edu/registrar/

The Office of the Registrar provides certification of attendance and degrees to outside institutions and agencies, publishes the inventory of courses and each term's course offerings and locations, schedules classrooms for courses and academic special events, provides registration services

to departments and students, coordinates efforts to provide better classroom facilities, creates and maintains academic records on student records and reports enrollments and grades, and maintains and issues transcripts.

Office of Student Life

(215) 898-6533, http://www.vpul.upenn.edu/osl/

The Office of Student Life has administrative responsibility for student activities and governance, student performing arts, the PENNacle and PennQuest pre-orientation programs for incoming students, University Life leadership training programs and campus-wide special events such as Family Weekend, "No Place Like Penn" Weekend, Homecoming, Spring Fling, Hey Day and Ivy Day. It serves as a primary source of information and advice about co-curricular opportunities and resources.

Greenfield Intercultural Center

(215) 898-3357/8, http://www.vpul.upenn.edu/gic/

The Greenfield Intercultural Center (GIC), established in 1984, is designed to serve as an intercultural resource and a safe space for constructive dialogue on campus. The Center's intercultural programs include PACE, cultural awareness classes, educational programs that explore the historic partnership between blacks and Jews during the civil rights era, and the Race Dialogue Project. The GIC also supports the United Minorities Council and its constituent groups, which sponsor Unity Week in the fall and Celebration of Cultures in the spring. Additionally, the GIC works with organizations such as Six Directions (on Native American issues), the Penn Arab Students Society, Salaam/ Shalom (Arab/Jewish dialogue group), and the Muslim Students organization to address contemporary intercultural issues. Staff at the GIC are available to conduct diversity or cultural competency workshops for clients on campus and in the community. Internships are also available for graduate students interested in intercultural education.

Civic House

(215) 898-4831, http://www.vpul.upenn.edu/civichouse/

Civic House promotes mutually beneficial collaborations between Penn and the West Philadelphia community and beyond. As an impetus for social change, Civic House coordinates and supports Penn's varied service efforts. By linking action with evaluation and reflection, Civic House prepares students for their roles as citizens and leaders.

Lesbian Gay Bisexual Transgender Center

(215) 898-5044, http://www.vpul.upenn.edu/lgbtcl

The Lesbian Gay Bisexual Transgender Center at Penn supports Penn lesbian, gay, bisexual and transgender students, staff, alumni and faculty and increases the general Penn community's understanding and acceptance of its sexual and gender minority members. The Center supports multiple student organizations and offers workshops and forums.

Office of the Chaplain

(215) 898-8456, http://www.upenn.edu/chaplain/

Religious life at Penn is dynamic, varied and central to the lives of many undergraduate and graduate students. As such, it reflects the "bold experiment" of William Penn to establish a settlement of religious tolerance in what is now Pennsylvania. There are more than 25 student religious groups on campus. The surrounding neighborhoods of West Philadelphia are abundant in houses of worship, and Penn students often become involved in these mosques, churches and synagogues.

The chaplain and the associate chaplain of the University work in partnership with the Penn Religious Communities Council, the organization of clergy and religious life staff from a number of communities of faith and traditions who are committed to serving the religious and spiritual needs of members of the University community.

PRISM, the umbrella group of participating student religious leaders, promotes and fosters a variety of programs throughout the year that encourage inter-religious understanding.

Office of International Programs

(215) 898-4661: International Student and Scholar Services (215) 898-9073: Penn Abroad

http://www.upenn.edu/oip/

OIP provides various services to Penn's 3,850 international students and is the University's principal source for information on semester and academic year undergraduate study abroad.

Office of the Ombudsman

(215) 898-8261 http://www.upenn.edu/ombudsman/

The Ombudsman is available to assist students and other members of the University community who have questions or complaints about academic disputes, access to resources, use of authority, compensation equity, discrimination or interpersonal tensions. All interviews are confidential.

Penn Women's Center

(215) 898-8611 http://www.vpul.upenn.edu/pwc/

The Penn Women's Center (PWC) is a women's advocacy and empowerment resource network for all women associated with the University. An active, visible force on campus, the staff of the PWC provides services pertaining to a range of issues. It is also a place where women can go with their concerns and feel confident that they will be heard as well as understood. As an advocate for women's rights, the PWC addresses individual as well as institutional equity concerns.

PWC services include confidential crisis intervention and counseling/case management with an expertise in healing from trauma and women's mental health issues. PWC can also assist with individual and group action planning related to sexual harassment, racism, homophobia/heterosexism, disability rights or violence against women.

The PWC works closely with a number of campus women's groups and provides programs to educate the community and highlight women's needs and achievements.

Looking Toward the Future

Career Services

http://www.vpul.upenn.edu/careerservices/

Career Services helps undergraduates develop skills, learn about career options and achieve their goals. Details about the services listed below are available on the website.

Career Advising: Counselors are available to discuss all aspects of career decision-making, the relationship between choice of major and career options, summer and permanent employment, job hunting, etc., through half-hour appointments or on a walk-in basis.

Internships/Summer Jobs: Career Services has listings of over 50,000 school year and summer jobs and internships ranging from advertising and financial services to teaching and the non-profit sector. Listings are maintained in over 100 different career fields for positions throughout the country, as well as some international listings. Early in the spring semester, Career Services hosts programs focused on helping students find summer internships.

Graduate and Professional School Advising: Career Services counselors advise students on application procedures, setting up a reference file and assessing schools. See http://www.vpul.upenn.edu/careerservices/gradprof/gradprof/gradprof/main.html.

Special Programs

Career Services presents career seminars and workshops throughout the year featuring panel discussions with alumni and other professionals from a variety of fields. The office also manages the Penn Career Network, which enables students to gain first-hand information about career fields, trends and specific organizations by communicating with alumni.

Resources

The Career Services library contains literature on occupations, graduate and professional schools and potential employers. The library also has information on resume-writing and job hunting, selected periodicals, and resources for students of color, alumni and other groups.

Further Study

Fellowships, Scholarships and Grants

http://www.upenn.edu/curfl

The Center for Undergraduate Research and Fellowships (CURF) prepares and supports students as they compete for national and international fellowships and awards. It is never too early to start thinking about opportunities to do graduate study here or abroad or to pursue additional study opportunities before graduation.

The Rhodes, Marshall, Gates and Thouron Scholarships will fund study in the United Kingdom in any discipline; the Mitchell Scholarship is for study in Ireland and Northern Ireland. The Churchill Scholarship is for study at Cambridge University and is limited to the sciences, mathematics and engineering.

The Fulbright and the Rotary Scholarships can be used in almost any country and in any subject area. The Luce Scholarship is an internship limited to Asia. There are also fellowships for graduate study that require application in the sophomore and junior years, as well as summer research and travel fellowships.

Graduate Study in Arts and Sciences

Too often students wait until their senior year before exploring postgraduate study. As early as their sophomore year, students should begin to think about the areas of their discipline that interest them, discuss their plans with faculty members and lay the groundwork for a postgraduate career. Some scholarships, such as the Goldwater and the Truman Scholarships, cover undergraduate and graduate study. The Goldwater is for students in the sciences, engineering and math. Application is in the sophomore or junior year. The Truman is for students committed to a career in public service. Application is in the junior year. The Beinecke is for juniors in the social sciences or humanities interested in graduate study. The Udall is for sophomores or juniors interested in careers in environmental public policy.

Financial aid for post-baccalaureate study is frequently available directly from the institution to which the student is applying.

There are two major national sources of support, the Mellon Foundation and the National Science Foundation. The Mellon Foundation program was designed to attract talented students into Ph.D. programs in the humanities. The awards, which include tuition and a stipend, may be taken to the graduate school of the student's choice.

The National Science Foundation supplies 750 fellowships for graduate study in the social and natural sciences and in engineering. The award (tuition and a stipend) may be taken to the graduate school of the student's choice.

For further information on Fellowships, Scholarships and Grants, see the Directory, http://www.upenn.edu/curfl fellowship.html, or contact Cheryl Shipman at (215) 746-6488 or shipman@pobox.upenn.edu.

Graduate/Undergraduate Mentoring Program

http://www.gsc.upenn.edu/programs/mentoring/

The Graduate/Undergraduate Mentoring Program aims to connect current Penn undergraduates with members of the Penn graduate and professional student community. The goal of this initiative is to pair each interested undergraduate with one graduate or professional graduate student of similar academic/professional interests.

Mentors will volunteer their time to listen, coach and help guide mentees. As mentees consider what life after graduation may hold for them, they will benefit by having the insight and support of a current Penn graduate/professional student. As much as possible, matches between mentors and mentees will be made with an eye for common academic interests and career goals.

Undergraduate students who are interested in becoming involved with the Graduate/Undergraduate Mentoring Program should refer to the website.

Careers in the Health Professions

Many Penn students prepare for careers in some branch of health care. Below is a list of the entrance requirements for the American medical schools to which most Penn students apply. Those for dental schools are similar. Students should be aware that many veterinary schools also require or strongly recommend advanced course work in biochemistry, genetics or molecular biology. Students should consult with a pre-health advisor in Career Services for more details. If all the requirements are not satisfied as an undergraduate, it is possible to complete them by taking post-baccalaureate courses. The basic math/science requirements include:

- One year of biology with lab (BIOL 101/102 or BIOL 121/122)*
- One year of chemistry with lab (CHEM 101/102 or CHEM 001/102, plus labs)**
- One year of physics with lab (PHYS 101/102 or PHYS 150/151); some majors require PHYS 150/151****
- One year of organic chemistry with lab (CHEM 241/242 and CHEM 245)
- One year of College mathematics (MATH 104 and a statistics course); some majors require MATH 104/114.
 A few medical schools still require a full year of calculus, but the vast majority will accept statistics and a semester of calculus.
- * If a student has A.P. credit in biology (BIOL 091), see the information on A.P. on page 67. Students planning to go to medical school need to take a full year of biology (lecture and lab) during their college years. Those who receive placement credit for biol 101, 102, 121 or 122 should consider taking a 200-level biology course after completing their introductory course work. Students may obtain any needed lab credit by taking BIOL 123 (if they do not take BIOL 121) or BIOL 124 (if they do not take BIOL 122) or by taking upper-division lab courses or conducting independent study research (see the Department of Biology website or the *Biology Major Manual*).
- ** If a student has A.P. credit in chemistry (CHEM 091), see the information on page 66.
- ***If a student has A.P. credit in physics (PHYS 091, 092, 093 or 094), see the information on page 65.

All courses must be taken for a grade, not pass/fail.

In addition to the math and science requirements, students must complete two semesters of English, writing or comparative literature course work. Most medical schools expect students to have broad training in the humanities and social sciences, and courses in these areas are an integral part of preparing for medical school. The Medical College Admissions Test (MCAT) includes a writing sample and a verbal reasoning section, and course work in the humanities and social sciences can help students perform well on these parts of the test.

Most students planning for a career in the health professions begin with calculus and one lab science (biology, chemistry or physics) in their first semester. If students have an excellent background in science, they may consider additional science courses. They should then continue with the other lab sciences in their subsequent years, finishing with organic chemistry. In addition to this pre-medical curriculum, some medical schools require upper-level course work in biology and/or biochemistry.

The sequence in which the math and science courses are completed will depend on the student's background and major. Students should consult with their pre-major advisor and with a pre-health advisor in Career Services when selecting courses.

For more information about the specific requirements of a particular medical school, students should consult the school's web page or look in *Medical School Admission Requirements*, published by the Association of American Medical Colleges.

Students need not major in a science to attend a medical, dental or veterinary school. These professional schools welcome students from all academic backgrounds. Actually, they tend to prefer students who are well rounded. This means that students who choose to major in a science or in engineering should take care to supplement their major with courses in the humanities. By the same token, it is advisable for students who major in the humanities or social sciences to take an additional course or two in biology or biochemistry, beyond the introductory science courses required by the medical schools. In addition, students—regardless of their major—will want to avail themselves of opportunities for independent study, work study or volunteer work at Penn's Schools of Medicine, Dentistry or Veterinary Medicine.

Careers in Law

There is no pre-law major or required sequence of courses. Most law school admissions committees seek students with a well-rounded liberal arts education that focuses on strong verbal skills. Throughout their college careers, students should seek balance. Thus, if their major is in science or engineering, students should be sure to take some courses requiring writing and research. On the other hand, if their major is in the humanities, they should take some classes that have a quantitative or analytical focus, such as statistics, economics or mathematics.

It is important to have a strong undergraduate transcript, so it is a good idea for students to pick a major that they find interesting rather than what they think should be chosen because it might help get them into law school. Political Science is often considered by students to be a major that positions them well for law school. However, the reality is that people with all kinds of majors, from Physics to Spanish to Anthropology, are admitted into law schools.

Careers and a Liberal Education

The careers of alumni of the College at Penn show that there are many interesting paths in the arts and sciences and many academic routes to all career fields. Students are advised to follow their true academic interests and explore fields that are new to them. Students are encouraged to come to the College Office and ask for a copy of *Careers and a Liberal Education*. This College publication profiles the academic and professional journeys of several College alumni, and gives their perspectives on choosing a course of study and, ultimately, a career.

For the Undecided

Some students may not have a clear idea of what they want to major in or what they want to do after graduation. This can actually be an advantage, since students can use courses in the General Education Curriculum to test different disciplines. Students undecided about their direction after graduation should see an advisor about ways to approach this exploration.

Students can use their four years to explore various careers and vocations through campus jobs, summer internships and jobs, volunteer work and extracurricular activities. They should also take advantage of the Career Services library, advisors and workshops to expand their knowledge of the working world.

SECTION IV

REGULATIONS AND PROCEDURES



This section is intended to provide an overview of the College's regulations and policies governing a variety of academic issues, from courses and grades to academic honors. It is important to read this section carefully and use it as a reference. Students will be expected to know the College's academic policies and understand how they apply to their program of study.

45

REGULATIONS GOVERNING REQUIREMENTS

Degree Requirements

The curriculum for the degree of Bachelor of Arts normally consists of a major program and a structured set of electives. Electives are taken in three categories:

- The Foundational Approaches
- The Sector Requirement
- Free Electives

Students normally take 4 or 5 course units (c.u.) per semester. The total number of c.u. required to complete a major varies from major to major but is never less than 12 (page 69). In addition to the major, a student must normally complete 20 electives.

The total number of credits needed for graduation therefore varies between 32 and 36 c.u., depending on the sum of courses required in the major and the electives. No student is required to complete more than 36 c.u. for graduation. Students whose majors require more than 16 courses may take correspondingly fewer electives. Students may take additional courses if they wish, and many do.

For more on degree requirements and links to courses that satisfy the requirements, see http://www.college.upenn.edu/curriculum/requirements/2010.html.

Double-Counting Courses

The term "double-counting" refers to the practice of using one course to satisfy more than one requirement. The course must be one that has been approved for both requirements. Students should read the sections below carefully, since the rules governing double-counting vary from requirement to requirement.

Foundational Approaches

With the exception of the Foreign Language Requirement, none of these requirements may be satisfied with Advanced Placement credit (including A-Levels, I.B., and other similar credit based on external examination). Courses taken to satisfy Foundational Approaches may also be used to satisfy the Major Requirement, pending approval by the major department or program. Non-College courses approved for the Foundational Approaches are considered equivalent to College electives. Courses taken to satisfy these requirements must be taken for a letter grade, not pass/fail.

Writing Requirement

Because writing instruction is central to its educational mission, the College has established the Writing Requirement. Please note that the Writing Requirement, as outlined below, is a minimum requirement. Students should take a writing seminar by the end of freshman year.

Students can fulfill the Writing Requirement in one of several ways:

- By taking one Critical Writing Seminar. Writing seminars focus on the development of writing skills in the context of a particular discipline. Information about writing seminars is available on-line, in the Writing Program Brochure sent to freshmen in the summer and in its spring supplement published in October.
- By enrolling in the year-long Collaboration and Research Writing Seminar. Designed for upperclassmen and focusing on their research writing projects, these seminars combine classroom and on-line writing instruction and collaboration. Students receive 1 c.u. upon successful completion of two semesters.
- By enrolling in ENGL 011: Writing for International Students, designed for multilingual students who need practice reading and writing in English.

In order for a course to count toward the Writing Requirement, the student must receive a grade of C- or better. Writing seminars do not fulfill the Sector Requirement.

Foreign Language Requirement

Every student is required to attain competence in a foreign language. The determination of competence will vary from department to department and even from language group to language group within a department. The Foreign Language Requirement may be satisfied in a variety of ways at the discretion of the language group concerned:

- By passing an examination administered by the language group. In some instances, students will take the examination after completing 4 c.u. (or the equivalent) of study.
- By obtaining a passing grade, after 4 c.u. of study (or the equivalent), in those languages where satisfaction of the language requirement is not based on an examination.
- As a result of achieving the required score on:
 - An advanced placement test administered in a foreign language by the Educational Testing Service (ETS)
 - An SAT II foreign language test administered by the ETS
 - A departmental placement test
 - The Cambridge A-level examination (at a grade deemed satisfactory by the language group), or
 - In the case of a bilingual student, a special test given by the appropriate department.

It is the student's responsibility to learn how the requirement is satisfied in the language group selected. It is highly recommended that students take steps to satisfy the language requirement as early as possible in their academic careers.

Students who are placed in an intermediate or advanced language course on entrance to the University may not receive credit for a lower-level course in the same language. Students are placed in first- or second-year language courses in one of two ways:

- The amount of work they have had in high school and their score on the SAT II language test (if this test has been presented in fulfillment of admission requirements), or
- Through a placement test administered by the language department concerned. Students wishing to qualify in a modern language other than those described on page 16 or which is not offered by the University should consult the Penn Language Center.

Students should complete the Foreign Language Requirement by the end of their fourth semester. Those who seek to fulfill the requirement by taking courses should begin taking language courses in their first semester. Some languages, such as Latin or Arabic, offer beginning and intermediate courses in fall-spring sequences, so that the first-semester course in that language can only be taken in the fall semester. Once students begin their language study, they are expected to continue through the sequence of courses until they have satisfied the department's criteria of a high level of competence.

Credit away and credit earned studying abroad may be counted toward the Foreign Language Requirement only when departments assign a course number equivalent to the number of a Penn course approved for the requirement. Language Requirement courses do not fulfill the Sector Requirement.

Exemptions from the Language Requirement

Students who have a documented disability that precludes learning a foreign language may petition the Committee on Undergraduate Academic Standing for an exemption from the Foreign Language Requirement. Students considering petitioning should see Dr. Alice Kelley in the College Office before assembling their dossier. Such petitions must be initiated by the end of the first semester of the sophomore year. If the petition is granted, the student will be obliged to fulfill an alternative requirement, which will be formulated on a case-by-case basis. This requirement is intended to provide a balance between a theoretical understanding of foreign languages and cultures and a more intimate acquaintance with life in a foreign society, as revealed through its literature and civilization.

Quantitative Data Analysis Requirement

All students in the College are required to complete a course that uses mathematical or statistical analysis of quantitative data as an important method for understanding another subject. To satisfy this requirement, students must take one of the designated Quantitative Data Analysis courses. A course used to satisfy the Quantitative Data Analysis Requirement may be double-counted with other requirements in the General Education Curriculum as well as Major requirements. In order for the course to count for this requirement, the student must achieve a grade of C- or better. Transfer credit and A.P. credit may not be used.

A list of approved courses for this requirement may be found through http://www.college.upenn.edu/curriculum/requirements/quantitative.html.

Formal Reasoning and Analysis Requirement

Courses approved for the Formal Reasoning and Analysis Requirement introduce students to mathematical and logical thinking and reasoning about formal structures and their application to the investigation of real-world phenomena.

To satisfy this requirement, students must take one of the designated Formal Reasoning and Analysis courses.

Credit away and credit earned studying abroad may be counted toward this requirement only when departments assign a course number equivalent to the number of a Penn course on the approved list. Students who receive A.P. credit in Calculus (BC) and who take any course at Penn that has calculus as a prerequisite or corequisite may use that course to fulfill the Formal Reasoning and Analysis Requirement.

A course used to satisfy the Formal Reasoning and Analysis Requirement may be double-counted with other requirements in the General Education Curriculum as well as Major requirements.

Cross-Cultural Analysis Requirement

By taking a course from the list of those that satisfy the Cross-Cultural Analysis Requirement, students develop the ability to understand and interpret the cultures of peoples with histories different from their own. A course used to satisfy the Cross-Cultural Analysis Requirement may be double-counted with other requirements in the General Education Curriculum as well as Major requirements.

Sector Requirement

Courses fulfilling the Sector Requirement are arranged in the following sectors:

Sector I: Society

Sector II: History and Tradition

Sector III: Arts and Letters

Sector IV: Humanities and Social Science

Sector V: The Living World Sector VI: The Physical World

Sector VII: Natural Science and Mathematics

- To satisfy the Sector Requirement, students must take one course in each of the sectors. Sector VII may be satisfied by taking one course from the Sector VII list or an additional Living World or Physical World course.
- Important note: Courses designated in the *Course Timetable* and the *Course Register* as "Distributions" may not be used to satisfy the Sector Requirement.
- The requirement may not be satisfied with Advanced Placement credit (including A-Levels, I.B., and other similar credit based on external examination). Students who receive Advanced Placement credit in a Living World or Physical World field (Physics B or C, Chemistry, Biology, Environmental Science or Psychology) and who take an additional course at Penn in that subject, may

use the additional course to fulfill the relevant sector. In Psychology, the additional course must have an odd number.

- Students may double-count no more than one course between the Major and the Sector Requirement. Biological Basis of Behavior, Biology and Biophysics majors may double-count two courses between the Major and the Sector Requirement: one each in the Living World and Physical World sectors. Students who are double majoring may double-count two courses between the Majors and the Sector Requirement, one from each major.
- No more than one freshman seminar may be used to fulfill the Sector Requirement. Two Benjamin Franklin seminars or one Benjamin Franklin seminar and one freshman seminar may be used in the Sector Requirement.
- Credit away and credit earned abroad may be counted toward the Sector Requirement only when departments assign a course number equivalent to the number of a Penn course approved for the Sector Requirement.
- Courses taken to fulfill the Sector Requirement must be taken for a letter grade, not pass/fail.
- Non-College courses approved for the Sector Requirement are considered equivalent to College Electives.

The Major

http://www.college.upenn.edu/curriculum/major.html

Students should investigate carefully their potential major (see descriptions beginning on page 70). Prior to submitting an application to the major, it is important to read the latest pertinent information on the department or program's website, all of which can be accessed from the College web page (see above). Students should meet with their pre-major advisor to discuss their overall program and then with the undergraduate chair or assigned major advisor designated to that department or program to plan their major. The minimum qualification for acceptance into a major program is a g.p.a. of 2.0 in those major and major-related courses that a student has already taken. Some majors require a higher average as well as specific course-work taken before the time of application.

The following basic regulations govern all major programs:

- Application to a major must be made by the second semester of the sophomore year prior to Advance Registration for the first semester of the junior year.
- The specific rules that govern each major are those in effect at the time the student declares the major. The most current major descriptions are posted on department websites.
- Students are usually assigned a major advisor at the time they are accepted into the major.
- Only the department or program in question can make exceptions to the regulations governing a major program.
- All courses taken for a major must be taken for a grade (i.e., they cannot be taken pass/fail).

- Only the department or program advisors determine which credits transferred from another institution can count toward the major at Penn.
- Students pursuing two majors must take at least 18 distinct course units in fulfillment of major requirements.

Free Electives

Free Electives are courses that are not applied to the primary major or toward any other College requirement. They present an opportunity for students to fill in some of the gaps in their knowledge and can be used to explore new domains outside a student's main area of focus. No more than eight Free Electives may be taken on a pass/fail basis. It is recommended that only four be taken pass/fail, with a maximum of one per semester.

Requirements for Graduation

Seniors should refer to http://www.college.upenn.edu/ perspectives/seniors.html for specific information on graduation including dates and procedures, but in general, to qualify for graduation, a student must:

- Fulfill all College and Major Requirements.
- Complete a minimum number of total credits (32 to 36 c.u., depending on the major).
- Be certified by the major department, interdepartmental committee or individualized major advisor as having met all requirements for the major.
- Meet the residency requirement (see below).
- Maintain a 2.0 overall grade point average, and a 2.0 (or better, depending on the department) in major courses.
- Clear all Incompletes, NR's and GR's from the transcript by the appropriate deadline. See the website above for dates.
- Complete the on-line application for graduation. Seniors must adhere to a graduation schedule prepared each year by the College Office. A late fee will be charged for failure to apply by the date specified.

Residency Requirement

The value of the Penn experience lies not only in courses taken but also in participation in the life of the University community both in and out of the classroom. For this reason, at least four semesters of full-time study must be completed in Philadelphia while enrolled at the University of Pennsylvania. Also, students must be registered for their last two semesters at the University, including registration through its approved programs for study elsewhere. No student may graduate with a B.A. from the University of Pennsylvania unless he or she has completed at Penn at least one-half of the total number of required course units. He or she must also complete at Penn at least one-half of the courses required for his or her major.

REGULATIONS GOVERNING COURSES

Registration

There are two phases to course registration: the Advance Registration and the Course Selection (add/drop) periods. See pages 57-59 for more information about these registration periods and the registration process.

Credit Load

Freshmen are limited to 4 or 4.5 c.u. in their fall term. (Outstanding science students may register for two laboratory sciences in their first semester.) After the first semester, students may take up to 5.5 c.u. per term (6 c.u. with the permission of their advisor or an assistant dean, a g.p.a. of 3.3 or better, and no outstanding Incompletes).

The Risks of Being Enrolled in Fewer than Four Courses

Students should understand that failure to enroll in at least 4 c.u., or dropping or withdrawing below that number of credits, may have adverse affects in a variety of circumstances. The most common concerns are for:

- Athletes: The NCAA requires that all student athletes complete 8 c.u. per year; carrying less than a full load may jeopardize athletic eligibility. Dr. Alice Kelley is the College's athletic eligibility officer.
- International students: The visas that allow most international students to study in the U.S. require carrying a full load of at least 4 c.u. per semester. Any reduction in that number may call their visa status into question. The Office of International Programs (215) 898-4661 can provide more information.
- Students with financial aid: Many aid packages require
 that the student complete an average of 4 c.u. per semester. Carrying less than this amount may cause the student
 to lose some or even all of his or her financial aid. Call
 the Student Financial Services office, (215) 898-1988, for
 more information.

Students should always speak with an academic advisor before any action is taken that would cause the student to earn less than 4 c.u. in a given term.

Special Circumstances

Probation

Students placed on probation are required to limit their rosters to 4 or 4.5 c.u. per term (page 54).

Full-time with 3 c.u.

In extenuating circumstances, students may elect to take only 3 c.u. Special permission is not needed. Full tuition is charged. However, students considering 3 c.u. should consider carefully the situations outlined above ("Risks").

Part-time status with 2.5 c.u. or fewer

College students are normally enrolled on a full-time basis. Bills are not normally adjusted when a student takes less than a full load of courses. Students may request part-time status for the last semester of the senior year if they need 2.5 or fewer credits to graduate. Students who elect to be part-time in the last semester of their senior year, when almost all requirements for graduation have been completed, must notify the College Office by the beginning of the semester so their bill can be adjusted.

Adding, Dropping, Withdrawing

Adding a Course

Students may seek to add a class until the end of the second full week of the semester. (Language classes under the 200 level and writing seminars may be added only until the end of the first full week of classes.) The Course Selection period allows students to visit classes before finalizing their schedules, but students are expected to attend all classes they may wish to add in order to keep up with assignments and material. Even during this period, instructors may choose to grant admission only to students who have been attending regularly.

Dropping a Course

Students may drop a class or change a grade type (from a letter grade to pass/fail or vice versa) before the end of the first five weeks of the semester by using Penn InTouch. Failure to attend a course does not automatically result in being dropped from the course.

Withdrawing from a Course

A student may withdraw from a course from the fifth through the tenth week of the semester with the permission of the instructor. (See an advisor in the College Office for the appropriate form.) After the tenth week, the Committee on Undergraduate Academic Standing will not permit any withdrawals without documentation of extenuating circumstances. Withdrawals will be indicated on the student's transcript by a report of W and will not affect the g.p.a.

Before making any decision to drop or withdraw from a course, students should speak with an academic advisor and consider the situations outlined above ("Risks").

Non-College Courses

A College course is any course offered by a department or program in the School of Arts and Sciences. Students may also take "non-College" courses in other schools at Penn including Engineering, Nursing, Wharton, Design, Education, Law, and Social Policy and Practice.

Some majors and minors in the College involve significant coursework from other schools. In the case of majors such as Fine Arts or Architecture, all non-College credits accepted by the major will apply to the degree.

Any credits not used in the major are considered electives. In order to satisfy College degree requirements, students must complete at least 16 c.u. of electives in the College. (Students admitted to a dual-degree program are required to complete at least 14 c.u. of College electives.)

Credits taken to satisfy a minor are considered electives. Some minors such as Photography and Nutrition involve significant coursework from other schools. These credits are considered non-College electives.

Repeating a Course

A student may not repeat for credit any course in which a passing grade (D or better) has been received. A student may, however, repeat a course in order to demonstrate his or her ability to achieve a better grade. The original course and grade will remain on the transcript as posted. The second grade will also be recorded on the transcript, but it will not be counted in the student's cumulative average, and no additional credit will be awarded for it. If a student receives an F in a course, the course may be repeated for credit in a subsequent semester, in which case the second grade is counted in the cumulative average. The original grade of F remains on the transcript and is also counted in the cumulative average. Students who fail major or major-related courses may be required to repeat these courses at the discretion of their major advisor.

Auditing

College students may not audit courses on an official basis during the academic year. They may, however, sit in on courses with the approval of the instructor. These courses will not appear on the student's record.

Graduate Courses

Courses numbered 500-599 are designated as mixed courses primarily for graduate students. Permission of the instructor is required for registration by undergraduates in these courses; however, registration for courses numbered 600 and above requires permission of the instructor, a letter from the chair of the department in which the course is offered, and the endorsement of the Dean of the College.

Class Attendance

Some professors and departments (particularly foreign language) are very strict about class attendance; others do not consider it part of the grading system. Students should understand the attendance requirements for each of their courses at the beginning of the semester.

- An instructor may place a student with excessive absences on course probation.
- Students are not required to attend class on any major religious holiday regularly observed. Faculty members make every effort to avoid scheduling papers or exams on religious holidays, but students are required to make up any missed work (see Holidays below).
- Athletes who miss work because of athletic obligations must also make up any missed work.
- If a student must miss class at the start of the semester, he or she should notify the College Office and the professor as soon as possible.
- If a student is ill or must leave campus and will miss class, he or she should call the College Office, (215) 898-6341. (See "Other Services in the College Office," page 31.)
- Failure to attend a course does not automatically result in being dropped from that course.

Holidays

http://www.vpul.upenn.edu/osl/holidays.html

The University recognizes/observes the following holidays: Martin Luther King, Jr. Day, Memorial Day, July 4, Labor Day, Thanksgiving and the day after, and New Years Day.

The University also recognizes that there are several religious holidays that affect large numbers of University community members, including Christmas, Rosh Hashanah, Yom Kippur, the first two days of Passover and Good Friday. In consideration of their significance for many students, no examinations may be given and no assigned work may be required on these days. Students who observe these holidays will be given an opportunity to make up missed work in both laboratories and lecture courses. If an examination is given on the first class day after one of these holidays, it must not cover material introduced in class on that holiday.

For the complete policy, see the website.

Final Examinations

No student shall be excused from a final examination in a course where such an examination is required. In addition, no student will be required to take more than two final exams on any calendar day. If more than two are scheduled, the student may postpone the middle exam. For additional details see http://www.college.upenn.edu/rules/finals.html.

REGULATIONS GOVERNING GRADES

Letter Grades

The following grades are used to report the standing of a student upon the completion of each course:

A (excellent), B (good), C (average), D (below average),

F (failed), S (satisfactory progress), U (unsatisfactory progress), I (short Incomplete), II (long Incomplete) and

P (pass).

A+ = 4.0 A = 4.0 A- = 3.7 B+ = 3.3 B = 3.0 B- = 2.7 C+ = 2.3 C = 2.0 C- = 1.7 D+ = 1.3 D = 1.0 F = 0.0

Note: A+ carries a point value of 4.0. There is no D-.

Pass/Fail

When registering for a course, students may choose between a letter grade and pass/fail. Most courses will be taken for a letter grade. The pass/fail option was created to allow students to explore new disciplines or take a genuinely challenging course.

In courses taken on a pass/fail basis, a passing letter grade assigned by the instructor (A, B, C, D) is converted to P by the Registrar's Office and entered on the student's transcript. P is not calculated into the cumulative average, but an F is entered as a O.O and does affect the grade point average.

- Instructors are not informed by the Registrar as to who is enrolled on a pass/fail basis.
- Changes from pass/fail to a letter grade and vice versa can be made only during the first five weeks of the semester.
- Major and minor required courses may not be taken pass/ fail. If a student selects a major or minor that requires courses previously taken on a pass/fail basis, the actual letter grade will be made available by the College Office to the department for the purpose of evaluating entrance into the major. If accepted, the letter grade will be entered on the student's transcript instead of the P at the time the student has become certified in the major.
- Students may not take any course pass/fail in fulfillment of the Sector Requirement or of any of the Foundational Approaches.
- No more than eight courses may be taken pass/fail.

Incompletes

A report of "I" indicates that a student's work in a course is incomplete with the instructor's permission. According to University-wide regulations, instructors in all courses must offer a make-up examination to all students who received their permission to be absent from the regularly scheduled final examination. Postponed examinations are normally held during the first week of the fall and spring semesters.

The following regulations apply to all undergraduates in the College in courses below the 600 level:

- If coursework is incomplete as a result of the student's unexplained failure to hand in assigned work or to take the final examination at the regularly scheduled time, the instructor should issue a grade of F for the course.
- Instructors willing to grant students additional time may grant either a short Incomplete (I) or a long Incomplete (II). The short Incomplete must be made up within the first four weeks of the next regular semester in which the student is enrolled (summer sessions excluded). The long Incomplete must be made up by the end of the next regular semester in which the student is enrolled (summer sessions excluded). In either case, if the Incomplete is not made up by the deadline, it will become an F. The Incomplete is made up only when the official grade is received by the College Office. After a grade is converted to an F, the instructor may choose to change it.
- A student shall not be graduated until all Incompletes are converted to a letter grade.
- The Incomplete designation may not be used to allow a student to repeat the course in a subsequent semester. If a student must repeat a course in order to complete the work for it, the instructor should assign a grade of F for the initial semester and the student must re-register for the course for credit in a subsequent semester. In some cases, the Committee on Undergraduate Academic Standing may permit a student to withdraw from the course. (See Withdrawing from a Course, page 49.)
- Students should be aware that receiving Incompletes can be problematic for a variety of reasons:

Because they affect the number of credits earned in the short term, Incompletes can have an impact on financial aid, athletic eligibility or visa status for international students. (See Risk of Being Enrolled in Less than Four Courses, page 49.)

Students who receive an Incomplete are rendered ineligible for the Dean's List, even if their academic qualifications would have otherwise been sufficient. (See Academic Honors, page 52.)

Students with multiple Incompletes may be placed on academic probation or even on a mandatory leave of absence. This leave of absence prevents students from earning any further Penn credit until all of the incomplete coursework has been finished and those grades reported. This frequently entails at least one semester off from school. (See Poor Academic Performance, page 54.)

Students often find that incomplete coursework from previous semesters is very difficult to finish when they also have a new roster of courses to focus on.

In general, it is a far better idea to plan ahead, use advising and academic support resources (page 33), and take other steps to ensure finishing on time. Incompletes should be requested sparingly, if at all. The decision as to whether to grant an Incomplete or not is solely that of the faculty teaching the course.

Additional Grade Types

- NR or GR: indicates that the grade has not been received by the Registrar. NR's and GR's must be cleared from the student's transcript before graduation.
- W: indicates an approved withdrawal from a course.
- S or U: indicates satisfactory or unsatisfactory progress in the first semester of those courses that require two semesters to obtain credit. Upon completion of the second semester, one grade will be issued for the two semesters of the course, replacing the S or the U given for the first semester.

Calculating Grade Point Average

To calculate a grade point average (g.p.a.), multiply the credit units for each course (usually 1 c.u.; 1.5 c.u. for science and lab courses) by the numerical equivalent of the grade received (see Letter Grades, page 51). The total for all courses is then divided by the total number of credit units taken. Averages are tabulated for each semester and on a cumulative basis.

Changing Grades

Once a grade from A+ to F has been entered on a student's transcript and has remained for one semester, it is considered permanent and changes will not ordinarily be permitted.

ACADEMIC HONORS

Dean's List

Students who achieve a grade point average of 3.70 or better over two semesters during one academic year, have no grade lower than a C, complete six or more courses for letter grades, have no Incompletes, and have no disciplinary action taken against them, are placed on the Dean's List, with a notation on their transcript.

Dean's Scholars

Each spring the Dean of the School of Arts and Sciences recognizes nine College students for their outstanding academic achievements. Dean's Scholars are nominated by the faculty from a pool of students with grade point averages of 3.70 or higher. For questions concerning Dean's Scholars, contact the College Office.

Graduation Honors

Honors at graduation are awarded as special citations to students who have achieved a cumulative grade point average at or above each of three levels:

3.80 or higher: summa cum laude 3.60 or higher: magna cum laude 3.40 or higher: cum laude

Honors in the Major

Students with excellent records may apply to their department or program for acceptance as honors majors. A minimum average of 3.0 in major and major-related courses is required for acceptance into an honors program. Some majors require a higher average. The nature of the requirements for honors majors varies from program to program. These requirements may include special courses, advanced courses, and individual research on specialized subjects

under the guidance of a faculty advisor. In some courses additional credit is authorized for special work done by candidates for honors. Students who complete an honors major will have this designation entered on their transcript.

Phi Beta Kappa

http://www.college.upenn.edu/honors/recognition.html

The Delta Chapter of Phi Beta Kappa was founded at the University of Pennsylvania in 1892. The Electoral Board meets every spring to elect new students who have distinguished themselves through undergraduate research and by breadth of study in the liberal arts. Students are notified at the end of the spring term, prior to graduation.

Students may not apply for Phi Beta Kappa. Those juniors with a 3.85 g.p.a. or higher and seniors with a 3.7 g.p.a. or higher by the end of the fall semester are automatically considered and their transcripts are evaluated by the Board, which also solicits letters of recommendation for eligible students. In addition to grades, the committee looks for independent research, participation in honors programs, advanced work in the major and in cognate disciplines, and evidence of intellectual rigor in an undergraduate program. Students who have Incompletes on their transcripts may be denied membership and students must have a minimum of 16 completed credits in order to be eligible.

It is the practice of the Delta Chapter to elect no more than 8 percent of the graduating class each year. A small number of juniors is also selected at the spring meeting. The records of students who graduated the previous year are reviewed, and a number of these students may be elected as well. Therefore, each student is granted at least two opportunities for review by the committee.

For eligibility criteria and links to national PBK see the website. Additional questions should be addressed to Dr. Janet Tighe, 120 Logan Hall, (215) 898-6341.

TRANSFERS, LEAVES AND WITHDRAWALS

Voluntary Leave of Absence

Academic Timelines

The traditional approach to college education (four consecutive years of study directly following high school and interrupted only by summer vacations) is by no means best for every student. There is a clear distinction between education and schooling: the former need not take place in a classroom and sometimes includes learning experiences as valuable to the student as any available at the University. Recognizing this, advisors in the College are prepared to speak with students about leave of absence options.

Requesting a Voluntary Leave of Absence

Students sometimes decide to leave the University for a time to work, pursue studies elsewhere or manage long-term health or family problems. A student who wishes to take a leave of absence should call the College Office at (215) 898-6341, and ask to make an appointment with an assistant dean or with a member of the College support network, CaseNet (see Other Services in the College Office, page 31). He or she will be given a leave of absence form to complete. The form should be addressed to the Director of Academic Services, the College Office. The Director of Academic Services will consider the request.

Leaves of absence will normally be granted for a period of one year. In unusual circumstances and at the written request of the student, a leave may be extended for no longer than one additional year. Written parental approval is required if the student is under 18 years of age.

If a student requests and receives a leave of absence after the first five weeks of the semester, the student will receive the notation of W (withdrawal) after each course on his or her transcript. Students requesting and receiving a leave of absence after the tenth week of the semester will also receive the notation of W after each course in which they are enrolled, and they will not be allowed to return to the University in the subsequent semester. A leave of absence beyond the tenth week of the semester will only be granted under extremely extenuating circumstances.

For a leave of absence checklist see http://www.college.upenn.edu/rules/tips_leave.html.

Return from Voluntary Leave of Absence

Students returning from a leave of absence must notify the College Office in writing no later than one month prior to the beginning of the semester of their return. In order to be returned from leave in time to advance register, students must notify the College Office by the beginning of the Advance Registration period.

Students who request a medical leave of absence may be required to obtain clearance from a treating physician before any return from leave is granted.

Tuition Refund Policy

A student who withdraws from the University (or who is requested to withdraw for failure to maintain a satisfactory scholastic standing) or who is granted a leave of absence from a full-time division of the University during either term of the academic year will be eligible for a reduction in tuition and fees in accordance with the conditions set forth below. The effective date of separation from the University is the date the student files a written request for withdrawal or leave of absence.

A student who is required to withdraw because of a violation of University regulations shall receive no tuition refund.

For all other students, term charges will be adjusted as follows:

- Leave within the first two weeks of class, 75 percent
- Leave within the third and fourth weeks of class, 50 percent
- Thereafter, O percent.

If a graduating student is due a refund, it will be sent to the latest home address on file in the Office of the Registrar.

In the case of students receiving financial aid, eligibility for the term will be redetermined based on actual charges and prorated allowances for living expenses.

For rules regarding reductions in residence and meal contract charges, see the current year's *Residential Handbook* and the terms and conditions of meal plans.

Transfers within the University

Students wishing to transfer from one school within the University to another must consult the undergraduate dean's office of the school in which they are enrolled, as well as the dean's office of the school in which they wish to enroll. Applications for transfer are normally reviewed at the end of each semester. Freshmen may not initiate a transfer until the end of the second semester (or until they have completed eight course units at Penn, whichever comes later) which means their effective date of transfer will be the third semester. Since requirements for internal transfer vary among schools, students are strongly advised to inform themselves about the curriculum of the school in which they wish to enroll.

Withdrawals from the University

A student who wishes to withdraw from the University must inform the College Office in writing. If a student withdraws after the fifth week of the semester, all courses will be reported on the transcript as W (withdrawal).

POOR ACADEMIC PERFORMANCE

Course Problem Notices

When the work of a student in a given course becomes unsatisfactory for any reason, the instructor may send a Course Problem Notice email to the student. This notice will indicate the nature of the problem and suggest an appropriate person for the student to meet with, including the instructor, a teaching assistant, or an academic advisor. Students are expected to follow the recommendations made in theese notices. The College Office also receives copies of all notices sent to College students.

General Academic Probation

Students may be placed on General Probation if:

- Their semester or cumulative average falls below a 2.0, or
- They receive two or more incomplete grades or F's in a given semester, or
- They fail to complete at least a total of 6 c.u. over a period of two consecutive semesters (summers not included).

Students on general probation are required to see their academic advisor once a month while they are on probation. Students on probation should also take advantage of support services such as those offered by the Weingarten Learning Resource Center and the Writing Center.

While on general probation, students are restricted to a roster of 4 c.u., with no more than one pass/fail course.

Deferred Drop

Students on deferred drop probation must achieve a minimum g.p.a. of 2.0 for that semester. If they do not, they may be dropped from the rolls.

Dropped from the Rolls

Students may be dropped from the rolls by the Committee on Undergraduate Academic Standing if:

- They receive two or more F's in a given semester, or
- They fail to meet the terms of recovery from general probation/deferred drop.

Students who have been dropped from the rolls may not receive credit at Penn for courses taken at another institution during the term of the drop.

Readmission

A student in the College who has been dropped for scholastic deficiencies will not be considered for readmission within the year following dismissal. Conditions for readmission are stipulated by the Committee on Undergraduate Academic Standing. All applications and supporting materials for readmission must be submitted to the Director of Academic Services by August 1 for the fall semester and December 1 for the spring semester.

Mandatory Leave of Absence

Students who accrue multiple Incompletes are sometimes placed on a mandatory leave of absence by the Committee on Undergraduate Academic Standing. Students placed on such a leave must complete all outstanding course work before they are allowed to re-enroll and continue with new work.

ACADEMIC STATUS

Class Designation

Class designation is determined according to the number of course units a student has accumulated. In addition to course work taken at Penn, this will include A.P. credit, transfer credit from other institutions and credit issued for departmental examinations. Course work in progress also will be taken into consideration in determining a student's classification for Advance Registration for a future term.

For students in the College, the classification is as follows:

Freshman less than 8.00 c.u.
Sophomore from 8.00 - 15.99 c.u.
Junior from 16.00 - 23.99 c.u.
Senior from 24.00 c.u.

Athletic Eligibility

To maintain athletic eligibility, students must maintain full-time status, complete at least 1.5 c.u. each semester, and an average of 8 c.u. between September and September in any given year and must earn a g.p.a. of 2.0 or higher. If a student falls slightly below eligibility requirements, he or she may, in some situations, be given a one-year probationary eligibility period. During this time, the student will work with the College athletic eligibility officer, Dr. Alice Kelley, to draw up an academic enhancement plan that may include required monthly meetings, attendance at athletic study halls or other structures to improve work habits and grades to standard eligibility levels. Failure to achieve full eligibility by the end of a probationary year, or a serious drop below eligibility standards in any year, will result in loss of eligibility. For details, consult Denis Elton Cochran-Fikes (decfikes@pobox.upenn.edu).

ENFORCEMENT OF ACADEMIC REGULATIONS

The authority to interpret, enforce and make exceptions to rules and regulations is vested in the Faculty Committee on Undergraduate Academic Standing of the School of Arts and Sciences. Students in the College wishing the waiver of a College regulation should first discuss the matter with an assistant dean for advising in the College Office. If that advisor is unable to resolve the matter, the student may petition the Committee on Undergraduate Academic Standing.

Petitions

Students in single degree programs should address their petitions to their schools. Dual- and joint-degree* students should address their petitions for degree requirement exceptions to the school(s) whose degree requirements are affected; in some cases, a petition to both schools will be required. All other petitions for exceptions (e.g., late drop, late add, late withdrawal, late change of grade type) should be submitted to the home school.

Any petition to the Committee on Undergraduate Academic Standing regarding graduation requirements should be submitted as early as possible in order to allow the Committee time for resolution prior to the student's expected graduation date.

* IS&B students should address their petitions for degree requirement exceptions to the IS&B program office.

Academic Grievances

The instructor who gives an evaluation, exam or course grade has sole authority for changing such evaluation, exam or course grade provided the instructor remains on the faculty (or the emeritus faculty) of the University of Pennsylvania.

In cases in which faculty appointments have terminated, or faculty have resigned or are deceased, sole authority for changing an evaluation rests with the undergraduate chair of the relevant department.

Students in the College who wish to have an evaluation, exam or course grade reviewed must first discuss the matter with the instructor who gave the evaluation unless the instructor is no longer a member of the University of Pennsylvania faculty or emeritus faculty. Should this meeting not yield a resolution that is satisfactory to both the student and the instructor, or not be possible, the student may ask the undergraduate chair of the relevant department for assistance in the matter.

Should the matter not be resolved with the aid of the undergraduate chair, the student may seek the assistance of the Dean of the College. The role of the College Dean is limited to insuring that the department has arranged for a proper review of the matter.

SECTION V

PREPARING FOR THE FIRST SEMESTER



This section presents suggestions and guidelines for course selection and first-semester registration.

Before beginning this section, we strongly recommend that students read Section I, which presents an overview of the College curriculum. Students should also review the academic options in Section II and the list of major departments and programs in the Appendix.

While decisions about majors and academic options do not necessarily need to be made immediately, thinking about them now can help inform choices about course selection and start students on a path leading to a truly individualized undergraduate career.

56

REGISTRATION OVERVIEW

Registration at Penn has two parts each semester, Advance Registration and the Course Selection period (also called add/drop).

Advance Registration

Students request courses for the upcoming semester during the Advance Registration period. For incoming freshmen, Advance Registration for fall 2006 will take place from June 26 to July 28. Advance Registration for the spring semester will be held from October 30 to November 12. The regular Advance Registration for the fall semester occurs during a two-week period in March and April.

It is very important to take part in Advance Registration. Students who do not advance register may find themselves closed out of the courses the wished to take.

During Advance Registration, students submit their preferred courses, as well as alternatives courses, using Penn InTouch, the on-line registration system. All course requests are processed at the conclusion of the Advance Registration period, regardless of when the request was submitted. There is no advantage to registering early, and there is no guarantee that students will be enrolled in all their requested courses.

Approximately three weeks after the close of Advance Registration, students may again use Penn InTouch to review the status of their enrollment.

Students who are satisfied with their courses and have been assigned a full course load (4 to 4.5 c.u.) are finished with the registration process. Students who wish to adjust their roster may do so during the Course Selection Period.

Course Selection Period

The Course Selection Period begins a few weeks after Advance Registration closes, and lasts through the second week of the new semester. Students may use Penn InTouch to adjust their course roster as desired. Unlike Advance Registration, results of course requests are immediately apparent. Courses fill as the period progresses.

Language Requirement courses (200 level or below) and Writing Requirement courses may only be added until the end of the first full week of classes (September 15, 2006). Any other class additions must be made by the end of the second full week of classes (September 22, 2006).

Courses may be dropped or a grade type changed (i.e., from normal to pass/fail or vice versa) through the fifth full week of class (October 13, 2006). The pass/fail option is not recommended for freshmen.

Students considering dropping a course after the first two weeks of class should consult with their pre-major advisor to confirm that financial aid, athletic eligibility or visa status will not be jeopardized (see page 49). Students will also want to be sure that the dropped course will not need to be taken again or the credit made up later.

Students should take advantage of tutoring and other academic support services for any course that is giving them difficulty (see page 33).

Students who do not attend a class are not automatically dropped. Students must drop any courses themselves using Penn InTouch. Instructors cannot add or drop a student from a course. If a student is still formally registered for a course at the end of the semester but has failed to attend or do the work, the professor may report an F as a final grade.

After the drop deadline students must petition through the College Office to drop a course or change a grade type.

Suggestions for First Semester Course Selection

- Freshman Seminar: While not required, freshman seminars are an excellent introduction to College academic life, and are highly recommended for first- or second-semester students (page 18).
- Language Course: It is recommended that students begin to satisfy the Foreign Language Requirement in their first semester and continue to take courses without break until the requirement is fulfilled. Students planning to continue with a language that they have studied previously, should read the section on placement examinations (pages 68). Students who decide to start a new language at Penn should anticipate that it will require four full semesters of course work to achieve competency in the language.
- Writing Seminar: Students should satisfy the Writing Requirement by taking a writing seminar sometime in their first year. For more information on the Critical Writing Program see page 17 and the Writing Program Booklet.
- Course for Exploration: The first few semesters are an excellent opportunity to be adventurous and request courses that arouse intellectual curiosity. It is wise to keep potential major interests in mind, but not be limited to a single potential field of study. For descriptions of various departments and programs, including suggested courses suitable for freshmen, see the section beginning on page 70.

THE REGISTRATION PROCESS

Preparation for Fall Registration

Discussion with the Pre-Major Advisor

Each incoming freshman must have a substantive discussion with their pre-major advisor before they can register. This conversation may be in person, by phone or via email, and is an excellent opportunity to discuss questions or ideas about academic options and goals. The pre-major advisor can help students find interesting courses, refine their schedule and select appropriate alternative courses. The advisor can also help the student complete the Advance Registration worksheet (see below).

At the end of their discussion, the pre-major advisor will remove the student from registration hold, clearing them to Advance Register.

Preparation for the Discussion

Prior to meeting with their pre-major advisor, students should:

- Carefully read all course materials sent by the College, with particular attention to the *Freshman Timetable* and the *Course Register*.
- Consult with their peer advisor for guidance about registration. Contact information is available from Ms. Katrina Glanzer, Assistant Director of Freshman Services, (215) 898-6341 or glanzer@sas.upenn.edu.
- Determine what type of academic credit they may receive for advanced placement exams. (See pages 62-68).
- Go on-line and fill out the Freshman Questionnaire.
- Consult the Freshman Timetable and Course Register for course offerings and develop a list of prospective courses with consideration given to priority classes and those of secondary interest. Penn InTouch will weight course requests by the order in which they are prioritized. It is generally recommended that students place beginning and intermediate language courses and freshman, writing, and other seminars high on their priority list, since securing a place in a small class can be more difficult than in a larger lecture course.
- Contact their pre-major advisor and request an appointment. Any student unable to contact their pre-major advisor may call the College Office, (215) 898-6341, to make an appointment with an assistant dean for advising.

Using Penn InTouch

After finalizing the Advance Registration worksheet and being removed from registration hold by their advisor, students may advance register for courses using the Penn InTouch website, https://sentry.isc.upenn.edu/intouch/.

Penn InTouch requires a student to log on using their PennKey and password. For assistance with either of these, see http://www.upenn.edu/computing/pennkey/.

Entering Courses

From the Penn InTouch main page:

- Click on REGISTRATION and then select the appropriate semester.
- Refer to the Advance Registration worksheet for course codes and priorities.
- From the drop-down menu, select the four-letter subject code for the first course on the worksheet. Each department or program is assigned a unique four-letter code that identifies its affiliated courses.
- In the space provided, type the course and section numbers as given in the Freshman Timetable.
- Click on ADD.
- For multi-activity courses, first request the part of the course (or activity) labeled 1.0 c.u. (or 0.5 for a lab). This is considered the graded section; the numbers are printed on the far right of the course listing in the *Timetable*.
- After entering the first portion of a multi-activity course, the student will be prompted to register for the remaining portions. All portions of a course (lecture, recitation and lab) must be entered. If all portions are not entered, the system will not consider the course for Advance Registration and the student will not be enrolled.
 Examples of multi-activity courses include BIOL 101 (lecture and lab), HIST O21 (lecture and recitation), and PSCI OO1 (lecture and recitation).
- Repeat this process until all course requests have been entered.

Students who have difficulty using Penn InTouch should contact Ms. Kirsten Chalfen at answers@sas.upenn.edu.

Listing "Alternates"

It is not required to designate an alternate for each course requested. This option is most useful in selecting small seminars, since it provides a greater chance of being enrolled in one of the listed courses.

The "Any Section" Option

The ANY SECTION option is set at YES for all courses except those that have section numbers that vary by topic, such as freshman and writing seminars. This means that, with the exception of these seminars, students do not need to enter an alternate request for a course that has more than one section number. The system will automatically try to find a section that fits into the student's schedule.

Time Conflicts

The system will not allow a student to enroll in two courses that are in time conflict. If there is a time conflict, the system will enroll the student in the first course requested. If that course is available, the student will be enrolled in it, and the second, conflicting course will be automatically dropped. If the first course is unavailable and the second course is available, the student will be enrolled in the second course.

Permits

Under certain circumstances special permission may be required to register for a course. Instructors or departments may enter such permits into the system, enabling the student to register for that course through Penn InTouch. If the student does not "claim" a permit (by adding the course through Penn InTouch), they will be dropped from the list will have to start over.

Revising Requests

Course requests can be changed on Penn InTouch up until the Advance Registration deadline.

Adding a Request

An alternate request may be added at any time during the Advance Registration period in the following way:

- Select the ADD function from the Registration menu
- Re-enter the course numbers for the desired classes
- Select REQUEST.

Changing the Order of Course Requests

The order of requested courses can be changed by selecting LIST from the Registration Menu, changing the preferred order of requested classes by renumbering them, and then selecting UPDATE.

Changing Grade Type

Although students may request a grade type change from normal to pass/fail, all freshman courses should have the grade type NN-Normal. The pass/fail option is not recommended for freshmen. College students are not allowed to audit courses (see page 50).

Confirming Requests

It is the student's responsibility to be certain that they are registered correctly for all parts of a course. Once courses appear on Penn InTouch (at the beginning of the Course Selection Period), students should check their schedule to make sure that they are correctly registered for the course sections they have been attending, and for all parts of any multi-activity courses including the lecture, recitation, lab and grade type.

If a student is not correctly registered for all parts of all the course, adjustments may be made during the Course Selection period.

Inability to Register

If a student is unable to register using Penn InTouch, it is their responsibility to contact the Registrar promptly at (215) 898-6636 or the College Office at (215) 898-6341 to determine the cause of the problem and resolve it in a timely manner.

Any of the following circumstances may prevent a student from accessing Penn InTouch and participating in Advance Registration:

- A freshman or a first-semester sophomore has not seen their pre-major advisor to discuss registration.
- A second semester sophomore, a junior or a senior has not declared a major.
- A student has an unpaid bursar bill. Contact Student Financial Services at (215) 898-1988.
- Student Health does not have up-to-date insurance and immunization records. Call (215) 573-3523 about insurance or (215) 349-5047 about immunization.

Course Codes

Information about courses appears in the *Freshman Timetable* (and elsewhere) using the type of code described below. This code must be understood completely, since it will be necessary to use it correctly when registering on Penn InTouch.

Multi-Activity Courses

Multi-activity courses are divided into lecture, recitation and/or a laboratory. These lectures are typically led by a professor and take place in a large group. Lectures are often, but not always, divided into subgroups called recitations that typically meet once each week in smaller groups for discussions.

When registering for a multi-activity course, students must be sure to register for all parts. If a course has several lecture sections, the recitation needs to correspond to the appropriate lecture.

Credit Bearing Component

In the case of multi-activity courses, only one part of the course actually carries the credit. In the example below, the recitation is credit-bearing. This course will earn one credit unit, written "1 CU."

When registering for such a course, the credit-bearing portion must be requested first.

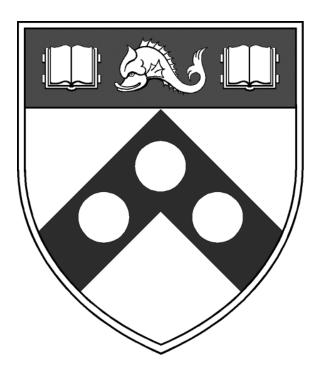
Course Times

Ten minutes of each class period are allocated for travel between classes. When consulting the *Freshman Timetable*, be aware that courses may be scheduled back-to-back (e.g., request a 9:00 A.M. and a 10:00 A.M. class on Monday, Wednesday and Friday).

The code for Thursday is "R."

Example The course number Lecture: ANTH.002.001 Recitation: ANTH.002.201 for Penn InTouch consists of the departmental abbreviation (ANTH) and the course code (OO2). ANTH-002 INTRO CULTURAL ANTHRO 0 CU REGISTRATION REQUIRED FOR LEC, REC SOCIETY SECTOR (ALL CLASSES) Indicates number of 001 LEC MW 10-11AM URBAN G credit units for the MAX: 150 Lecture code (LEC) course and which part INTRO CULTURAL ANTHRO 1 CU 201 REC M 11-12NOON of the course is credit-STAFF MAX: 25 bearing (in this case, the Recitation code (REC) 202 REC T 9:30-10:30AM STAFF recitation). MAX: 25 203 REC W 11-12NOON STAFF MAX: 25 Day codes 204 REC R 9:30-10:30AM STAFF Monday MAX: 25 205 REC F 10-11AM MAX: 25 STAFF Tuesday w Wednesday Thursday R Friday Indicates which requirement the course fulfills (if any).

APPENDIX



61

ADVANCED STANDING POLICY

The University recognizes that many incoming students have participated in special programs of study that may earn them college credit or placement. It is the student's responsibility to understand the policies governing the award of credit.

Note: Students who have already received some Advanced Placement scores can refer to pages 63-68 or http://www.admissionsug.upenn.edu/applying/advanced.php to determine what Penn credit will be awarded. Students who do not have the ETS scores before having to register for classes should estimate their scores and choose courses accordingly. Changes can be made when the scores are available.

Pre-College Credit

Some students enter Penn having already taken collegelevel courses during high school, either in competition with college students or as part of a special program taught at the high school. Penn treats these two cases differently, and students must be careful to observe the criteria below.

College and University Courses

In order to get credit for college work done before coming to Penn, a student must present their request directly to the Office of Transfer Credit and Advanced Placement, observing the following:

- Any college courses used to fulfill high school graduation requirements are not eligible for credit at Penn.
- The college or university must be fully accredited.
- The course must correspond to a course offered by Penn, or be deemed equivalent in depth and intensity.
- A grade of C or better must have been received.
- The course must be part of the normal curriculum published in the college's catalogue.
- The student needs to confirm that the Office of Transfer Credit and Advanced Placement has a current catalogue from the school where the course was taken.
- The course must be taught on the college campus by a member of the regular faculty.
- The course must be open to enrollment by, and graded in direct competition with, regularly matriculated undergraduates at that college.
- The student must request that the college send an official transcript directly to Penn's Office of Transfer Credit and Advanced Placement along with a letter stating that the course was offered on the college campus in direct competition with regularly enrolled college students.

A.P. Courses and Exams

Penn will grant either credit or placement for high achievement on most A.P. exams taken before matriculation if the student indicated on the exam registration form that the scores were to be sent to Penn. If this was not indicated, the student must have the Educational Testing Service send official score reports to the Office of Transfer Credit and Advanced Placement (see address below). The University of Pennsylvania's ETS code is 2926.

International Exams

A detailed policy statement governing credit equivalence is available from the Office of Transfer Credit and Advanced Placement. Credit is also awarded for the following on a case-by-case basis:

- G.C.E. A-Level Examinations
- International Baccalaureate (I.B.)
- French Baccalauréat
- German Abitur
- Swiss Maturité
- Canada's CEGEP Program (2nd year only)
- Italian Maturità
- Denmark's Studentereksamen
- Finland's Matriculation Examination.

Credit cannot be granted until Penn is in receipt of official exam results and official certified translations.

Additional Information

After arriving at Penn, students should check their transcript using Penn InTouch. If expected A.P. or I.B. credit does not appear, they should contact the Office of Transfer Credit and Advanced Placement and ask if Penn received A.P. or I.B.

It is wise for students to bring their student copy of any Advanced Placement credit or scores with them to campus.

Office of Transfer Credit and Advanced Placement 1 College Hall, Philadelphia, PA 19104 (215) 898-6080 xfer@admissions.upenn.edu

ADVANCED PLACEMENT EQUIVALENCE

http://www.admissionsug.upenn.edu/applying/advanced.php

The subjects and scores listed below receive the equivalencies indicated. These policies are in effect for students entering Penn during the 2006-2007 academic year. All policies remain under ongoing review and are subject to change without prior notice. Please note: All scores of 4 to 1 receive no credit or equivalency unless otherwise indicated.

EXAMINATIONS	SCORE	EQUIVALENT			
Art History	5	Waivers (no credit) for ARTH OO1 or ARTH OO2 (consult with undergraduate chair)			
Art (studio)	5	No credit (placement will be considered based on portfolio review)			
Biology *	5	BIOL 091 (1 c.u., no A.P. credit given for labs)			
Chemistry *	5	CHEM 091 (1 c.u., no A.P. credit given for labs)			
Computer Science-AB	5	CSE 120/130 (1.5 c.u.)			
Computer Science-A	5	CSE 120 (1 c.u.)			
Economics (Micro)	5	Waiver for ECON 001 (no credit)			
Economics (Macro)	5	Waiver for ECON 002 (no credit)			
English Lang./Comp.	5	English Free (1 c.u., does not fulfill the Major or Writing Requirement)			
English Lit./Comp.	5	English Free (1 c.u., does not fulfill the Major or Writing Requirement)			
Environmental Science	5	ENVS 200 (1 c.u., for non-majors only, majors must see department)			
European History	5	HIST 041 (1 c.u.)			
French Language	5	FREN 210 (1 c.u., fulfills the Foreign Language Requirement)			
	4	No credit (fulfills the Foreign Language Requirement)			
French Literature	5	FREN 220 (1 c.u., fulfills the Foreign Language Requirement)			
	4	No credit (fulfills the Foreign Language Requirement)			
German Language	5	GRMN 104 (1 c.u., fulfills	s the Foreign Language Requirement)		
	4	eign Language Requirement)			
Government and Politics	-	No credit			
Latin - Literature	5	Latin Free (1 c.u., fulfills the Foreign Language Requirement)			
	4	No credit (fulfills the For	it (fulfills the Foreign Language Requirement)		
Latin - Vergil	5	Latin Free (1 c.u., fulfills	the Foreign Language Requirement)		
	4	No credit (fulfills the For	eign Language Requirement)		
Mathematics-AB	-	No credit	No credit		
Mathematics-BC *	5	MATH 104 (1 c.u.)	Penn's ETS School Code is 2926. Scores must		
Music Theory		No credit	be received by Penn directly if credit is to be granted. For more detailed information		
Physics-B	5	PHYS 091, 092 (2 c.u.) *	** regarding the University's advanced place-		
Physics-C (Mechanics)	5	PHYS 093 (1 c.u.)**	ment policies, contact the Office of Transfer		
Physics-C (Elect. & Magnet.)	5	PHYS 094 (1 c.u.)**	Credit and Advanced Placement.		
Psychology	5	Waiver for PSYC 001 (no credit)			
Spanish Language	5	SPAN 210 (1 c.u., fulfills	SPAN 210 (1 c.u., fulfills the Foreign Language Requirement)		
	4	No credit (fulfills the Foreign Language Requirement)			
Spanish Literature	5	SPAN 220 (1 c.u., fulfills the Foreign Language Requirement) No credit (fulfills the Foreign Language Requirement)			
	4				
Statistics	5	STAT 111 (1 c.u.)			
United States History	5	HIST 042 (1 c.u.)	* An internal departmental examination is also		
World History	5	HIST 044 (1 c.u.)	available for credit. ** See http://wwwphysics.upenn.edu/ for details.		
			cee supsitude with programme and for details.		

INTERNATIONAL BACCALAUREATE POLICY

http://www.admissionsug.upenn.edu/applying/baccalaureate.php

Advanced standing credit is awarded for superior performance on the International Baccalaureate Higher Level exams. These policies are in effect for students entering Penn during the 2006-2007 academic year. In several instances evaluations have changed from previous years. All of these policies remain under ongoing review and are subject to change without prior notice. Please note: Scores of 5 to 1 receive no credit unless otherwise indicated.

EXAMINATIONS	SCORE	EQUIVALENT
Anthropology	-	No credit
Biology*	7, 6	BIOL 091 (1 c.u., does not fulfill the laboratory requirement)
Chemistry *	7, 6	CHEM 091 (1 c.u., does not fulfill the laboratory requirement)
Economics	7, 6	Waiver for ECON 001, 002 (no credit)
English A/B	7, 6, 5	English Free (1 c.u., does not fulfill the Major or Writing Requirement)
French A**	7, 6	FREN 210, 220 (2 c.u.)
	5	FREN 210 (1 c.u.)
	4	FREN 140 (1 c.u.)
French B**	7, 6	FREN 202, 210 (2 c.u.)
	5	FREN 140 (1 c.u.)
Geography	7, 6	Geology Free (2 c.u.)
	5	Geology Free (1 c.u.)
German A**	7, 6	GRMN 216, German Free (2 c.u.)
	5, 4	GRMN 212 (1 c.u.)
German B**	7, 6	GRMN 216, German Free (2 c.u.)
	5, 4	GRMN 104 (1 c.u.)
History of the Americas	7, 6, 5	HIST 042 (1 c.u.)
History of Europe	7, 6, 5	HIST 041 (1 c.u.)
Latin**	7	Latin Free (1 c.u.)
	6	No credit (fulfills the Foreign Language Requirement)
Mathematics	-	No credit
Math. w/Further Math. *	7	MATH 104 (1 c.u.)
Music	-	No credit
Philosophy	7, 6	Departmental review on case-by-case basis
Physics *	7, 6	PHYS 091, 092 (2 c.u.) Placement exam required for PHYS 093, 094 credit (2 c.u.)
Psychology	7, 6	Waiver for PSYC OO1 (no credit)
Spanish A**	7, 6	SPAN 210, 220 (2 c.u.)
	5	SPAN 210 (1 c.u.)
	4	SPAN 140 (1 c.u.)
Spanish B**	7, 6	SPAN 202, 210 (2 c.u.)
	5	SPAN 140 (1 c.u.)
Theatre Arts	7, 6, 5	Departmental review on case-by-case basis

^{*} An internal departmental examination is also available for credit.

All other Higher Level International Baccalaureate examinations will be reviewed on an individual basis. For more detailed information regarding the University's International Baccalaureate policies, please contact the Office of Transfer Credit and Advanced Placement.

^{**} All language credits fulfill the Foreign Language Requirement.

ADVANCED STANDING AND COURSE SELECTION

G.C.E. Advanced A-Level Exam Policy 2006-2007

EXAMINATIONS	GRADE OF A OR B	GRADE OF C		
Accounting	No credit	No credit		
Biology*	BIOL 091 (1 c.u.)	No credit		
Chemistry *	СНЕМ 091 (1 с.и.)	No credit		
Economics	A=Waiver for ECON 001, 002 (no credit)	No credit		
	B=No credit			
English	Departmental review	Departmental review		
History	A=Choice of HIST 041, 042 or 044 (2 c.u. limit)	No credit		
	B=No credit			
Math w/Further Math (Edexel)*	A=MATH 104 B=No credit	No credit		
Math w/Special paper w/merit (Cambridge)	A=MATH 104 B=No credit	No credit		
Physics	A=PHYS 093, 094, 050, 051 (Total 3 c.u.)	PHYS OO5		
	B=PHYS 091, 092, 011, 012 (Total 3 c.u.)			

^{*} An internal departmental examination is also available for credit.

Students must show their original A-Level certificates to the Office of Transfer Credit and Advanced Placement to have their scores evaluated for credit. For exams not listed above, and those which specify "departmental review," students will be sent to the relevant department with a transfer credit form recommending 1 or 2 c.u. for a grade of A or B, and 1 c.u. for a grade of C. Courses taken at Advanced Supplementary level (above Subsidiary level, below Advanced level) need departmental approval for possible 1 c.u. only.

Advanced Placement for Math

Students are strongly encouraged to master the basic material as early as possible. Prerequisite course requirements are waived for those students who pass a math examination. For these, a student may receive credit toward the degree (in addition to waiving of prerequisites) by:

- Earning a score of 5 on the Advanced Placement Calculus BC exam, giving them a credit for MATH 104. Lower scores on the BC exam receive no course credit. No credit is given for the AB exam regardless of score. Students taking first semester calculus, MATH 104, are expected to have completed successfully an AB Calculus course or the equivalent. It is strongly recommended that those who have not had a calculus course at the level of AB Calculus or who received a score of 3 or lower on the AB exam should take MATH 103 to prepare them for MATH 104.
- Submitting the results of their performance on the A-level Examination (through Pure Mathematics 6; any lesser examination will receive no credit) with a grade of A or International Baccalaureate (Mathematics [Higher Level] plus Further Mathematics) with a score of 7. Students with these scores will receive credit for Mathematics 104 (1 c.u.); other students submitting results from either the A-Levels or I.B. exams should consult the department or the Office of Transfer Credit and Advanced Placement or take the internal A.P. exam described in the next paragraph.
- Passing the internal Advanced Placement Examination administered in the fall by the Mathematics Department. A student may take the examination regardless of whether he or she took the external exam described under the first or second items above. Information on this exam is provided in the incoming student's registration package.

For more about advanced placement in mathematics, contact the department at (215) 898-8178. For more on transfer credit, email the transfer coordinator: transfer@math.upenn.edu. For help in incorporating A.P. credit into the Math major, see http://www.math.upenn.edu/ugrad/major.html, or contact Dr. Herman Gluck, gluck@math.upenn.edu.

Advanced Placement for Physics

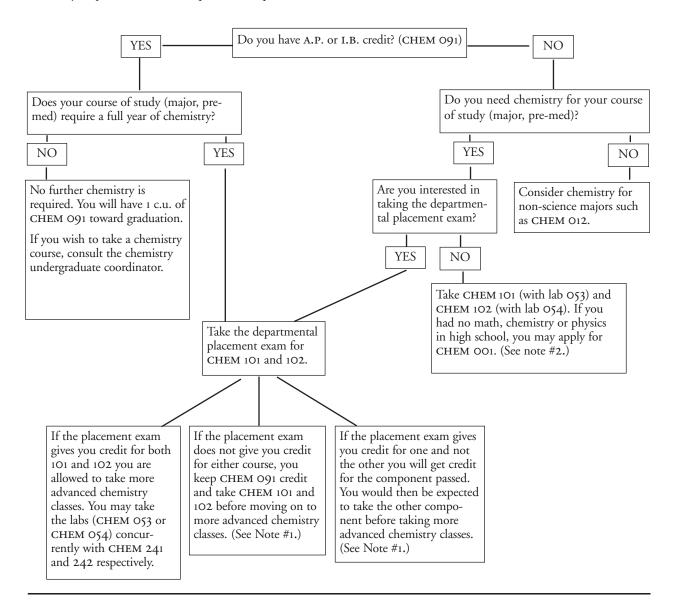
Students who wish to receive credit for prior lab experience must submit their lab reports and lab manual to the undergraduate chair. Students who do so should recognize that most high school physics courses and many courses offered at other universities do not provide a laboratory experience equivalent to that offered by a Penn course. In general, the evaluation of laboratory work performed at another institution will be based on the number of experiments performed, the perceived difficulty of each experiment, the level of analysis required (including graphical presentation of data and error analysis), and the choice and spread of topics. Students with A.P. credit who need to satisfy the lab requirements will be allowed to register for PHYS O11, O12, O50 or O51 to receive lab credit. Students may receive credit based on their performance on the A-level, International Baccalaureate or other centrally administered examinations; such students should consult the department or the Office of Transfer Credit and Advanced Placement for details. Credit will be granted to students who achieve a score of 5 on the appropriate Advanced Placement exam.

Note: A student who takes PHYS 101/102 or 150/151 at Penn will lose the physics A.P. credit.

For details, consult the Physics Department website, http://www.admissionsug.upenn.edu/applying/baccalaureate.php.

Advanced Placement for Chemistry

Advanced placement credit in chemistry can be obtained based on the ETS Advanced Placement Test, the International Baccalaureate exam, the British A-Level exams and/or the Chemistry Department Advanced Placement Exams (which are given very early in the fall and spring semesters). Credit is given only for the lecture portion of an introductory chemistry course. For example, a student who has a score of 5 on the ETS Advanced Placement Test is given 1 c.u. for introductory chemistry, CHEM 091. More complete advice and explanations of advanced placement policies can be found on the Chemistry Department website, http://www.sas.upenn.edu/chem/.



Note #1

If you plan to be a natural science major, you should take the special section of CHEM 101 in the fall with CHEM 055 (lab). Contact the Chemistry Department for details.

Note #2

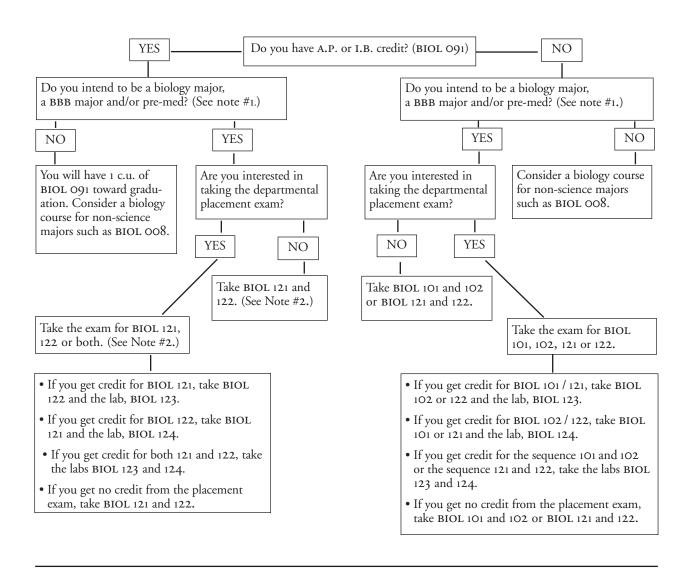
To take CHEM OO1, students must return the application form included with the registration packet and obtain a permit.

Please also note:

CHEM 015 is an advanced treatment of the CHEM 101 material. Students should have a thorough and substantial course in chemistry (A.P. or otherwise) and a considerable background in high school math and physics. A.P. credit is not required.

Advanced Placement for Biology

Advanced placement credit in biology can be obtained by earning a sufficient score on the ETS Advanced Placement Test, the International Baccalaureate exam, the British A-Level exams and/or the Biology Department Advanced Placement exams (which are given very early in the fall and spring semesters). Credit is given only for the lecture portion of an introductory biology course. To satisfy the Biology major requirement for one year of introductory biology, a student must have credit, either through the departmental placement exam or by taking the courses at Penn, for two semesters of introductory biology (BIOL 101 and 102 or BIOL 121 and 122), including the laboratory component of each. See "Information for New Students" at http://www.bio.upenn.edu/programs/undergraduate/ for details on the advanced placement policies.



Note #1

Students who intend to apply to medical school will need to complete two semesters of college-level work in biology. A.P. credit is not accepted for medical school applications.

Note #2

Students with BIOL 091 credit will lose this credit if they take BIOL 101 or 102 or pass the placement exams for either of these courses.

Advanced Placement for Languages

Incoming students who have never before studied the language they plan to take at Penn should advance register for the lowest level course in that language. These are the only students excempt from having a language placement score.

Students who plan to continue studying the language they took before coming to Penn must have a language placement score to determine their appropriate level. (Credit will not be given for a language course taken at a lower level than a student's placement score indicates.)

Students may use the score from their Achievement Exam (SAT II) to register for the proper course. (See the chart below). All others must take a language placement exam.

All foreign language departments at Penn offer placement exams (not for credit). French and Spanish offer web-based exams which should be taken during the summer before Advance Registration. (See http://ccat.sas.upenn.edu/romance/proficiency/place.shtml.) Exams for Chinese, Italian, Hebrew, Russian, Korean and German are written and should be taken upon arrival to campus. Unless otherwise indicated, students do not have to sign up in advance for a placement test, but will need to present a picture ID and bring a no. 2 pencil to the exam. (Consult the individual department for details and dates.)

Students who need to advance register before their placement scores are available should consult with their premajor advisor to estimate the appropriate course. Once the placement score is known, students can drop an incorrect course and add the correct course if necessary.

Students who may need to drop and add language courses should be aware that the deadline for adding a language course under the 200 level is earlier than the deadline for most other courses. For fall 2006, the deadline is September 15. The drop date for language classes is is the same as for other courses. (See page 49.)

Students who feel their placement scores do not accurately reflect their language level, or students who have other questions about their language study, should make an appointment to speak with the coordinator of their particular language. (See page 92-93 for department offices.)

Students who have taken languages other than those offered by departments should contact the Penn Language Center, http://www.plc.sas.upenn.edu/plc_competency.php.

Appropriate Language Courses Based on Achievement Exam Results

S.A.T. II	SCORE	REGISTER FOR	S.A.T. II	SCORE	REGISTER FOR
French	Under 380 380-440 450-540 550-640* 650 or above	FREN 110 FREN 121 FREN 130 FREN 140 Exempt	Latin	Under 450 450-540 550-590 600-640 650 or above	LATN 101 LATN 102 LATN 203 LATN 204 Exempt
German	Under 350 350-440 450-540 550-640** 650 or above	GRMN 101 GRMN 102 GRMN 103 GRMN 104 Exempt	Russian	Under 350 350-440 450-540 550-640 650 or above	RUSS 001 RUSS 002 RUSS 003 RUSS 004 Exempt
Italian	Under 380 380-440 450-540 550-640* 650 or above	ITAL 110 ITAL 120 ITAL 130 ITAL 140 Exempt	Spanish	Under 380 380-440 450-540 550-640* 650 or above	SPAN 110 SPAN 120 or 121 SPAN 130 SPAN 140 Exempt
Japanese		r above you may satisfy demonstrating oral nterview.	Hebrew	700 or above***	Exempt

- * If you score between 600 and 640 you can be exempted from the Language Requirement if you pass an oral exam. Sign up for this exam in the Romance Languages Department office before the end of the first week of classes.
- ** If you score between 600 and 640 in German, you can be exempted from the Language Requirement if you achieve a rating of intermediate or better on an oral exam. Sign up in the German Department office before the end of the first week of classes.
- *** If you score under 700 in Hebrew, you must sign up to take the placement exam in the office of the Department of Near Eastern Languages and Civilizations. A score of 70 or above on Part 2 of the Jerusalem Examination also exempts you from the Language Requirement in Hebrew.

Major Departments and Programs

Credits Required for Each Major

African Studies	12 c.u.	Individualized Major	14 c.u.
Africana Studies	12 c.u.	International Relations	16 c.u.
Anthropology	14 c.u.	International Studies	
Architecture	16 c.u.	(The Huntsman Program)	14 c.u.
Biochemistry	18 c.u.	Italian Studies	12 c.u.
Biological Basis of Behavior	18.5 c.u.	Jewish Studies	14 c.u.
Biology	16.5 to 18 c.u.	Latin American and Latino Studies	12 c.u.
Biophysics	20 c.u.	Linguistics	14 c.u.
Chemistry	17 c.u.	Logic, Information and Computation	18 c.u.
Cinema Studies	13 c.u.	Mathematics	13 c.u.
Classical Studies	12 c.u.	Music	14.5 c.u.
Cognitive Science	16 c.u.	Near Eastern Languages and Civilization	s 14 c.u.
Communication	1 4 c.u.	Philosophy	12 c.u.
Comparative Literature	14 c.u.	Humanistic Philosophy	16 c.u.
East Asian Area Studies	12 c.u.	Philosophy and Science	16 c.u.
East Asian Languages and Civilizat		Philosophy, Politics and Economics	16 c.u.
Economics	12 c.u.	Physics and Astronomy 17.5 to	19.5 c.u.
English	12 c.u.	Political Science	12 c.u.
Environmental Studies		Psychology	13 c.u.
Fine Arts	15 c.u. 16 c.u.	Religious Studies	12 c.u.
		Romance Languages (Two Languages)	18 c.u.
French Studies	12 c.u.	Science, Technology and Society	14 c.u.
Gender, Culture and Society	13 c.u.	Slavic Languages and Literatures (Russian	-
Geology (Paleo-Biology 18.5)	15 c.u.		
Germanic Languages and Literature	es 12 c.u.	Sociology	14 c.u.
Health and Societies	14 c.u.	South Asia Studies	12 c.u.
Hispanic Studies	12 c.u.	Theatre Arts	14 c.u.
History	12 c.u.	Urban Studies	14 c.u.
History of Art	13 c.u.	Visual Studies	15 c.u.

DEPARTMENT AND PROGRAM DESCRIPTIONS

African Studies

http://www.africa.upenn.edu/AS.html

The African Studies Center brings together researchers and students from all schools to gain knowledge on contemporary and historical Africa in a variety of disciplines. It is dedicated to providing undergraduate students with the tools necessary to succeed in an increasingly interdependent and complex world. Students may take African Studies courses through a number of departments and programs, including but not limited to Anthropology; English; Music; Romance Languages; History; Science, Technology and Society; Philosophy; Political Science; Sociology; and Gender, Culture and Society. The Center also coordinates 8 to 10 African language offerings that range from elementary to advanced levels. Students can pursue a major, a minor, or a concentration (social sciences or humanities) in African Studies. Major and minor candidates may apply at any time, including at the beginning of their freshman year. Applications, information and curriculum advice is available at the African Studies Center, Williams Hall 647. Inquire at (215) 898-6971 or Africa@sas.upenn.edu.

Courses that are particularly appropriate for freshmen:

AFST 018 Popular Cultures in Africa

050 World Music and Cultures

075 Africa before 1800

076 Africa after 1800

190 Introduction to Africa

225 African Language and Culture

257 Contemporary African Politics

Africana Studies

http://www.sas.upenn.edu/africana/

Africana Studies is an interdisciplinary field of study devoted to the critical and systematic examination of the cultural, political, social and historical experiences of peoples of the African diaspora. The major is designed to provide students with an integrated understanding and appreciation for the African, African-American, Caribbean and other African diasporic experiences in their diverse dimensions. The major consists of courses offered in various departments and programs including Anthropology; English; Folklore; Gender, Culture and Society; History; Linguistics; Music; Political Science; Religious Studies; Romance Languages; Sociology; and Urban Studies. In addition, select courses in the Schools of Education and Nursing and in the Annenberg and Wharton Schools may also be applied toward the major or minor. Students who wish to major or minor in Africana Studies should meet with the director or an affiliated faculty member to design a program of study.

The Center for Africana Studies oversees the Africana Studies major, which has played a critically important role in the University's academic mission for over 30 years. Both the Program and the Center place primary emphasis on the ways that the experiences and traditions of the African diaspora have functioned on a global scale.

AFRC 001 Introduction to Africana Studies

006 Race and Ethnic Relations

009 African American Literature

018 Popular Culture in Africa

050 World Musics and Cultures

071 Literatures of Africa and the African Diaspora

075 Africa Before 1800

076 Africa Since 1800

077 Jazz: Style and History

081 African-American Literature

084 Theory, Race and Ethnicity

093 Literature and Society

Religion and Secular Values: Hip Hop Culture; The American Jesus

113 Major Western Religious Thinkers: Tupac Shakur; Marvin Gaye

117 African-American Religion

120 Social Statistics

135 Law and Society

176 Afro-American History 1550-1876

177 Afro-American History 1876-Present

190 Introduction to Africa

Anthropology

http://www.sas.upenn.edu/anthro/undergrad.html

Anthropology is the study of human diversity, past and present. The Department of Anthropology integrates cultural anthropology (living peoples), archaeology (prehistoric and historical peoples), biological/physical anthropology (the interaction between culture and human biological variation) and linguistic anthropology (language variation and its relation to culture). Anthropology majors experience the full breadth of the discipline while choosing a course of study best suited to their own needs. The program includes small seminars; writing courses; community service; and laboratory, museum and field research.

Introductory courses in the Anthropology major:

ANTH 001 Introduction to Archaeology

002 Introduction to Cultural Anthropology

OO3 Introduction to Human Evolution

OO4 The Modern World and Its Cultural Background

Other courses appropriate for freshmen:

ANTH 009 Writing Seminars in Anthropology (Many sections available with a focus on exciting and contemporary topics in Anthropology; fulfills the Writing Requirement.)

012 Globalization and Its Historical Significance

024 India: Ancient and Modern

O32 The Rise and Fall of Ancient Maya Civilization (Freshman Seminar)

105 Human Adaptation

ANTH 109 Conquest and Culture of the American West

- 115 Culture Clash (An Academically-Based Community Service Course)
- 118 The Information Age: Culture, Society, and Political Economy
- 122 Becoming Human
- 123 Communication and Culture
- 137 Development Debate in India
- 190 Introduction to Africa
- 219 Archaeology Field Project (Participate in an actual archaeological dig)
- 220 Archaeology Laboratory Field Project
- 243 Human Biology

Architecture

http://www.design.upenn.edu/new/arch/bachelor.htm

The mission of the undergraduate program in architecture is to develop basic skills, knowledge, and methods of inquiry in the discipline of architecture within the context of a studio-based liberal arts education. The program provides for the study of architecture on three levels of engagement—the minor, the major and an intensive major—qualifying an undergraduate student for advanced standing in the Master of Architecture professional degree program offered by the School of Design.

The major in Architecture is a studio-based, liberal arts program offering two concentrations or tracks in the study of architecture. The Design Concentration includes a three-year sequence of design studios combined with courses in art history and architectural theory. The History, Theory, and Criticism Concentration includes a two-year sequence of design studios and courses in art history—combined with additional coursework in art history, architectural theory and related subjects.

A selected number of students may be admitted to the Intensive Major within the Design Concentration. To be admitted to the Intensive Major, a student must be in good academic standing and have a minimum 3.5 g.p.a. in ARCH 201, ARCH 202 and ARCH 301. Applications for the Intensive Major are made in the spring semester of the junior year. Students who successfully complete the Intensive Major are admitted into the second year of the three-year Master of Architecture Professional Degree Program offered by the School of Design.

The minor in Architecture is an 8 c.u. program of study. The minor consists of a two-year sequence of design studios and two courses in the History of Art (ARTH OO1 and OO2).

Please Note: Sophomore standing is required in order to enroll in ARCH 201.

Students can declare the major in Architecture upon the completion of ARCH 202. Admission into the Design concentration is dependent on earning a minimum 3.0 grade point average in ARCH 201 and 202.

Asian American Studies (minor only)

http://paachweb.vpul.upenn.edu/asamnew/

Asian American Studies is an interdisciplinary program that offers a minor and a broad range of courses. It explores the historical and contemporary experiences of Asian immigrants and of persons of Asian ancestry in North America and the relevance of those experiences for understanding race and ethnicity in national and global contexts. Some courses also explore the experiences of Asian immigrants more generally. As an interdisciplinary minor in the School of Arts and Sciences, the required and elective courses introduce students to the methods and concerns of a wide spectrum of disciplines, including English literature, history, sociology, education as well as other humanities and social science disciplines.

Asian American Studies courses appropriate for freshmen:

- ASAM 001 Asian Americans in Contemporary Society
 - 002 Introduction to Asian American Literature
 - 003 Introduction to Asian American History
 - 009 Writing About Asian American Communities
 - 009 Writing About Race and Popular Cinema
 - O13 Asian Americans in U.S. Race Relations (Freshman Seminar)

Biochemistry

http://www.sas.upenn.edu/biochem/

Most developments in today and tomorrow's life sciences rely extensively on techniques and principles of chemistry and physics. The importance of this relationship has led to the design of a major that prepares students for advanced study in biochemistry, biophysics, cell biology, genomics, molecular biology, nanotechnology, neurobiology, structural biology and genetics-based biotechnology. It can also provide the basic science background for health professional schools and for prospective science teachers.

The freshman year will usually include either basic chemistry (CHEM 101-102 or 015-016) with its lab sections and/or physics (PHYS 150-151 or 170-171) and MATH 104 or 114 (biology courses are not part of the biochemistry major requirement). Students with A.P. credit for chemistry or math should take PHYS 150-151 and CHEM 241-242 or 251. Students with three or more A.P. science and math credits should contact the undergraduate chair before their first semester at Penn for information about the Vagelos Molecular Life Sciences Scholars Program, http://www.sas.upenn.edu/biochem/vspmls.html.

An important part of the curriculum is that all majors work in faculty research laboratories, which can start as early as the freshman year. Juniors and seniors actively participate in organizing and running the Chemistry Department biological chemistry seminar series.

Biological Basis of Behavior

http://www.psych.upenn.edu/bbb/

Biological Basis of Behavior (BBB) is an interdisciplinary major in which students explore the relationship between behavior (both human and animal) and its organic bases. BBB offers courses in virtually all areas of neuroscience, ranging from cellular neurobiology to cognitive neuropsychology, and integrates these interdisciplinary courses with basic science requirements in biology, chemistry and psychology. The program successfully integrates interdisciplinary teaching and research in neuroscience through the cooperative interactions of faculty and staff in several departments in the School of Arts and Sciences and the Schools of Medicine and Veterinary Medicine.

One of the strengths of the major is the opportunity for students to pursue individualized research in the laboratories of the standing faculty at Penn. Each semester, more than 50 students are engaged in supervised research in areas as diverse as molecular neurobiology, chemical neuroanatomy, visual sciences and behavioral ecology.

Courses appropriate for freshmen interested in the major are:

PSYC 001 Introduction to Experimental Psychology BIOL 101/102 Introduction to Biology

121 Introduction to Biology: The Molecular Biology of Life

122 Introduction to Biology: The Form and Function of Living Systems

CHEM 101/102 General Chemistry

Biology

http://www.bio.upenn.edu/

The biology major provides a broad background in biology together with the opportunity to pursue specific areas of interest in greater depth. The requirements include two semesters of introductory biology, a choice of three intermediate-level courses and four additional courses selected in order to further develop a comprehensive understanding of biology or to specialize in a particular subject area. The requirements include coursework in chemistry, math and, if desired, physics or statistics. The biology major can serve as preparation for graduate study in the biological sciences, graduate training in health-related professions, teaching or employment in a laboratory or a conservation-related job.

The Biology Department offers courses in many aspects of biology, from the workings of cells and cellular components to species interactions and ecosystem function. Our curriculum keeps pace with recent developments in molecular biology and the study of evolutionary processes, including proteomics, computational genomics, molecular evolution and epigenetics.

After their introductory year, students can choose from a variety of courses to suit their individual interests and career goals. Some specialize further by choosing a concentration in molecular biology, neuroscience, ecology and evolution, computational biology or mathematical biology.

Biophysics

http://www.sas.upenn.edu/biophysics/

Biophysics is a discipline that bridges and includes both the biological sciences and the physical sciences. Biophysics is concerned with physical and chemical explanations of living processes, especially at the cellular and molecular levels. The past 20 years have witnessed a revolution in biological sciences, and biophysics has played an important role in that revolution. Detailed molecular descriptions are emerging for genetic elements and for the mechanisms that control their propagation and expression. Protein structure, nucleic acid structure, enzyme mechanisms, the phenomena underlying cellular behavior, excitable phenomena in nerve, muscle and visual cells, and integrative neural phenomena all have been subject to intense biophysical study. Physicists and other scientists with strong backgrounds in mathematics, chemistry and physics have played dominant roles in these developments; they will continue to contribute as more detailed descriptions become available and increasingly complex phenomena are studied.

The biophysics major requires the introductory courses in biology, physics and chemistry. First-year students can begin with these introductory courses in any order. Students with a very strong background in physics occasionally choose to begin with the major's main survey course, PHYS 28O.

Chemistry

http://www.sas.upenn.edu/chem/

Chemistry is concerned with the study of matter and the changes matter can undergo. The chemistry program provides a basic foundation for career opportunities in chemical research and teaching, in scientific communication and information transfer, and in the health professions. Students who desire preparation for advanced study in chemistry or allied fields where research experience is advantageous should complete the chemistry honors program.

Students who are beginning their chemistry studies at Penn without A.P. chemistry credit, but who need a general chemistry course with laboratory as part of their program, and who have taken chemistry and/or physics as well as calculus in high school should sign up for CHEM 101 – 102 and associated laboratories O53 and O54. This two-semester sequence focuses on basic chemical concepts and their application to solving problems. Elementary calculus is used for demonstrations and proofs.

Students who have taken high-school chemistry and physics but no calculus should sign up for CHEM 101 / 053 and MATH 104 simultaneously.

Those who have very little background in science and calculus may be eligible for CHEM 001 and associated lab 051. CHEM 001 is equivalent to CHEM 101 for major and prerequisite requirements, including pre-health. After successfully completing CHEM 001 / 051, the student may freely register for CHEM 102 / 054. Enrollment in CHEM

OO1 and O51 is by permit only. Students may apply for a permit by returning the application form included with the freshman mailing. Those who receive permission to take CHEM OO1 should sign up for MATH 1O3 or 1O4 simultaneously.

Students who receive a 5 on the chemistry A.P. examination will receive credit for CHEM 091. By itself, CHEM 091 is not a substitute for CHEM 101 or 102. However, the Chemistry Department offers placement exams in early September and January that can be used to receive credit for CHEM 101 and/or CHEM 102. For details on A.P. credits and the placement exams, see the chart on page 66.

A special freshmen-only section (CHEM 101.004 with lab CHEM 055) is offered for new students who are likely to major in chemistry, biochemistry, biology or physics. This section will not be more difficult or accelerated, and there will be several advantages for freshmen enrolling in this section:

- smaller class size, more individualized instruction
- no upperclassmen
- classmates who share a common interest in the sciences For more information about this special section contact chemugrad@sas.upenn.edu (please include "Freshman Science Majors Track" in the subject line).

Cinema Studies

http://cinemastudies.sas.upenn.edu/

Cinema Studies is an interdisciplinary program designed to acquaint students with the history and interpretation of cinema and to allow them to combine knowledge of the field with the traditional aims of an undergraduate arts and sciences education. The program can satisfy the needs of students who seek a general exposure to the field or who are preparing for careers in cinema scholarship, journalism, criticism, arts management or entertainment law. Students seeking employment in the filmmaking industry should know that this program does not provide professional technical training.

Recommended courses for freshmen include:

CINE 101 Film History

102 Film History and Analysis

Classical Studies

http://ccat.sas.upenn.edu/clst/

The Department of Classical Studies at Penn promotes the investigation and interpretation of all aspects of ancient Greek and Roman culture and its influence from antiquity through the Middle Ages and Renaissance up to the present day. As such it focuses not just on the ancient languages and literatures, but also on material culture, archaeology, history (political, social, economic and intellectual), philosophy, religion, mythology and the classical tradition.

At present the department offers two tracks towards the major: Classical Languages and Literature (track 1) and Classical Civilization (track 2). For a fuller description of these go to the department's website and follow the link to the undergraduate program: http://ccat.sas.upenn.edu/clst/programs/undergrad_program.html.

The Department of Classical Studies also offers a major in Ancient History. Working from a basis in the Graeco-Roman world, this major encourages students to engage in a sustained study of pre-modern cultures. This major allows students to focus on ancient languages and literatures, as well as material culture, history, philosophy, religion and mythology from a range of pre-modern cultures and civilizations.

The department offers a number of classes that are especially appropriate for freshmen. Among them, and required for the major, are:

ANCH 026 The History of Ancient Greece

027 The History of Ancient Rome

The department also offers each year a number of freshman seminars such as:

CLST 106 Dreams in Antiquity

121 Sex and Gender in Ancient Greek Culture

Cognitive Science

http://www.ircs.upenn.edu/education/

Cognitive science is the empirical study of intelligent systems, including the human mind. It is, by its very nature, an interdisciplinary science combining results from biology, computer science, linguistics, mathematics, neuroscience, philosophy and psychology. It combines the application of approaches from all of these disciplines to the study of language processing, perception, action, learning, concept formation, inference and other activities of the mind and the applications of the resulting theories to information technology and the study of artificial intelligence.

Students interested in the field should take COGS 001, Introduction to Cognitive Science, in the fall of their freshman year if at all possible. In addition to this course, all majors must complete 15 further c.u., of which six must be from the breadth areas psychology, computation, language, philosophy, neuroscience and mathematics. The following introductory-level courses in these areas are especially recommended for freshmen:

BIBB 109 Introduction to Brain and Behavior

CSE 110 Introduction to Programming

112 Networked Life

120 Programming Languages and Techniques

LING 001 Introduction to Linguistics

PHIL 004 History of Modern Philosophy

PSYC 001 Introduction to Experimental Psychology

149 Introduction to Cognitive Neuroscience

continued

Students are also strongly urged to continue their study of calculus (or to take STAT 111 Introduction to Statistics). Those intending to study cognitive neuroscience should consider taking basic courses in biology (BIOL 101, 102, 121, 122) or chemistry (CHEM 001, 101, 102, 241, 242); those interested in computation should, in addition to CSE 110 or 120, also consider CSE 260 and PHIL 005; those interested in game theory and decision processes should take ECON 001; and students interested in perception or engineering applications may also benefit from introductory physics (PHYS 101, 150).

Communication

http://www.asc.upenn.edu/asc/Application/Students/Undergrad/

The major in Communication consists of 14 courses, 11 in Communication and 3 in other departments, selected to support a student's primary interests. The curriculum has three goals:

- To expose students to major strains of communication scholarship—on media systems and their functions, the relationships of these systems to cultural, political, and economic life, and myriad influences of communication on the ways people think and behave;
- To ensure that students acquire basic familiarity with the methods of research used in communication scholarship and practice; and
- To permit flexible opportunities for advanced study in particular topics of a student's own choosing.

Areas of concentration within the Annenberg School curriculum include critical, cultural and historical media studies; research on children, family and media; health communication; and political communication. The curriculum also offers opportunities for independent study, internship experience, study abroad and—through the Communication and Public Service program—putting communication to work in the service of community.

Comparative Literature

http://ccat.sas.upenn.edu/Complit/

The undergraduate major program in Comparative Literature welcomes students interested in the study of more than one national literature viewed within the context of criticism and theory, interdisciplinary and multicultural perspectives, and philosophic modes of thought. The program fosters the study of literature and culture from a cross-national and global perspective. The core courses teach students to appreciate the variety of meanings texts acquire in different institutional and creative contexts, among them law, medicine, art and music, and different social contexts, such as gender, ethnicity, race and class. Advanced courses branch out from this beginning, from further explorations into literary theory to specific investigations of literary genres and periods within particular cultural traditions.

Comparative Literature is a challenging major given its theory and language requirements, but it is also a very flexible program, allowing students to take courses in a variety of departments in the College. Students with interdisciplinary interests in literature and other fields such as philosophy, history, political science, art, film or music, will find the requirements very congenial and well suited for a double major. The program provides students with a cosmopolitan intellectual background that will be increasingly in demand in an era of globalization. Our graduates have gone on to graduate studies and careers in an impressive variety of fields.

The following may be of interest to freshmen and those interested in the major (all readings are in English):

COMLIOO Introduction to Literature

- 104 Study of a Period: The 20th Century
- 110 Theatre, Culture, Society: Classical Athens to Elizabethan London
- 118 Iranian Cinema
- 126 The Fantastic and Uncanny
- 193 Great Story Collection
- 221 Medieval Literature: Women and Writing
- 256 Contemporary Fiction and Film in Japan
- 266 Introduction to Modern Hebrew Literature: Israeli Short Story
- 283 Jewish Folklore
- 291 Topics in Literary Theory

Comparative Literature courses are cross-listed with a variety of other departments, including Cinema Studies; East Asian Languages and Civilizations; English; Folklore and Folklife; Gender, Culture and Society; Germanic Languages and Literatures; Jewish Studies; Near Eastern Languages and Civilizations; Religious Studies; and Theatre Arts.

Creative Writing (minor only)

http://www.writing.upenn.edu/cw/

Creative writing has had a long tradition at Penn. The creative writing faculty has included some of the most important writers of their time and some of Penn's most brilliant and effective teachers, among them Philip Roth, Carlos Fuentes, John Wideman, Nora Magid, Romulus Linney, Paul Fussell, Jerre Mangione and Loren Eisley.

The emergence of a lively culture of writers at Penn in recent years, with the advent of the Kelly Writers House and the Center for Programs in Contemporary Writing, has made the minor in Creative Writing all the more attractive.

Courses recommended for freshmen include:

ENGL 010 Creative Writing

- 112 Fiction Writing Workshop
- 113 Poetry Writing Workshop
- 116 Screenwriting Workshop
- 135 Creative Non-Fiction Writing

For information about a concentration in Creative Writing within the English major see http://www.writing.upenn.edu/cw/major.html.

East Asian Area Studies

http://ccat.sas.upenn.edu/ceas/degprograms.htm#bachelorea

This interdisciplinary degree is intended to offer undergraduates a course of study that focuses on East Asia as a region of the world and human experience, and provides an integrated curriculum drawing on the approaches of the social sciences, humanities and legal studies. The program requires relevant courses in a number of departments and programs—History, International Relations, Political Science, Sociology, East Asian Languages and Civilizations, and Law—while maintaining high standards in language study. The degree is administered by the Center for East Asian Studies, an interdisciplinary institution that also facilitates interdepartmental initiatives and outreach programs.

Students interested in East Asian Area Studies should begin with the study of an East Asian language and a course introducing East Asia such as:

EALC 001 Introduction to Chinese Civilization

002 Introduction to Japanese Civilization

HIST 120 Korean History before 1860

Other courses of likely interest to freshmen include:

EALC 009 Writing About East Asia

013 Art and Civilization in East Asia

O19 Authors and Imitators: Cloning Japanese Women Writers (Freshman Seminar)

East Asian Languages and Civilizations

http://www.sas.upenn.edu/ealc/

The undergraduate program in East Asian Languages and Civilizations offers language training and courses in the history, literature, linguistics, art history, performance and gender studies, philosophy, religion and ethics of East Asia. Students may major in either Chinese or Japanese, and minor in Chinese, Japanese or Korean.

Courses recommended for freshmen include:

EALC 001 Introduction to Chinese Civilization

002 Introduction to Japanese Civilization

013 Art and Civilization in East Asia

122 Chinese Fiction and Drama

131 Introduction to Classical Chinese Thought

152 Japanese Literary Tradition

160 Introduction to Japanese Thought

Courses under the 100 level and most under the 200 level are also appropriate for freshmen.

For major and minor requirements see http://www.sas.upenn.edu/ealc/Content/ugprogram.htm.

Economics

http://www.econ.upenn.edu/

Economics is the science of choice—the science that explains the choices made by individuals and organizations. A major in economics gives training in economic principles and in their application to important problems of contemporary significance. It provides a useful background for students planning to enter any one of the professions. Students preparing for a career in law, public service or business who wish a liberal arts program rather than a more technical curriculum may find an economics major particularly rewarding.

Introductory Economics, Micro- (OO1) and Macro-Economics (OO2), are prerequisites for all other offerings of the Economics Department. In addition to these two courses, the department offers Intermediate Micro- (101) and Macro-Economics (102), Statistics for Economists (103) and a number of courses in theory and methods, industrial organization, labor, law and economics, political economy, policy analysis and international economics.

The economics major program requires Introductory and Intermediate Micro- and Macro-Economics, Statistics for Economists, five major-designated courses and two mathematics courses. While the mathematics requirement is one year of calculus equivalent to MATH 104 / 114 or 104 / 115, the department recommends that students take MATH 114 rather than 115.

The introductory courses (ECON OO1 and OO2) and the O-level courses (courses numbered above OO2 but below 100) do not have a calculus prerequisite, and so can be taken concurrently with math or before the math classes are taken. The introductory courses also count towards the Economics major, but the O-level courses do not.

ECON 001 covers micro-economics: the decisions of individual people and firms, the determination of prices and quantities of individual goods, wages for various classes of workers and the theoretical basis for international trade. Government policies, such as taxes, subsidies, tariffs, trade quotas and income distribution are discussed.

ECON OO2 is devoted primarily to macro-economics with emphasis on the determination of the aggregate level of economic activity, economic growth, analysis of government policies, short-run economic stability (the degree of unemployment and the rate of inflation), long-run economic growth and international finance. ECON OO1 is a prerequisite for ECON OO2.

For more information contact the undergraduate coordinator, Lynn Costello, at (215) 898-7702 or costello@econ. upenn.edu.

English

http://www.english.upenn.edu/

As an intellectual discipline, English provides students the opportunity to study literature and language within a major of flexible design while cultivating their reading and writing skills with care and assiduity. The English faculty are among the most decorated in the university for their excellence in teaching. Students study "core" authors while at the same time having the option of choosing a concentration suited to their own intellectual interests. English offers more than 15 distinct concentrations—including the option of an individualized concentration—and is the only department in which one can major with an emphasis in creative writing or film.

Course offerings in the department seek to go wherever the English language is or has been, and English students this year will study everything from medieval and Renaissance culture to romanticism, modernism, literary theory and film. Nearly all majors' concentrations involve some interdisciplinary study, and, indeed, English majors are encouraged to understand English and American history in international perspective and in relation to other cultural and expressive forms.

Any course between ENGL 100 and 104 provides a good introduction to the major for freshmen. Also, the survey courses, ENGL 020, 040, and 060, count as core courses for the major and are also good introductions for freshmen.

Environmental Studies

http://www.sas.upenn.edu/earth/eesmajor/programs/environment.html

Many contemporary problems of environmental quality are so complex that modern society and technology have not yet been able to coordinate efforts to reach satisfactory solutions. There is thus an urgent need for individuals to be well versed in one discipline (e.g., geology, ecology, political science, history, etc.) and to be able to apply that discipline directly to environmental problems by being sensitized to the contributions that other disciplines can make.

The program in Environmental Studies is designed to lead students to that awareness through a series of courses focused on environmental systems and issues, while ensuring that each student pursues a purposeful course of study in some traditionally defined area of scholarship.

Graduates of this curriculum are prepared for professions directly or indirectly involved with problems of environmental quality; they may go on to further study, either in their areas of concentration, in formal programs of environmental studies, or in medical, law or other professional schools. In many cases, a student's career objectives are best realized by taking a double major in environmental studies and a specific area of concentration. Such a program need not represent a significant increase in total course units.

Freshmen interested in Environmental Studies should begin with ENVS 200: Introduction to Environmental Analysis.

European Studies (minor only)

http://www.college.upenn.edu/curriculum/minors/europe.html

European Studies at Penn is an interdisciplinary minor and an ideal addition to the study of many disciplines in the humanities and social sciences. It supplements majors in History, Political Science, Sociology and History of Art as well as in French, German, English, Spanish, Italian and Slavic languages. It is designed to give students access to an understanding of Europe as a historical and cultural entity and its world leadership in business, politics and culture. It encompasses a great variety of countries, cultures and languages whose interaction with each other and the United States is an essential part of transatlantic culture. Students also learn about the institutions of the new Europe—Union, Council of Europe, European Court reflecting the largest experiment in building a global system of governance in history. The minor in European Studies is designed to intensify interdisciplinary studies by integrating the humanities and social sciences and to prepare students to live and work in Europe.

Fine Arts

http://www.design.upenn.edu/ugfnar/index.htm

Visual thinking is as integral to the life of the mind as verbal and numerical discourse. The major in Fine Arts is based upon the premise that an education in liberal studies should include the challenge of learning to see. Further, the education of the artist is dramatically improved by an education in liberal studies.

The Department of Fine Arts has designed a program that provides students with opportunities for intellectual growth through studies in visual formulation and visual articulation. It is a large program with sequenced courses in painting, drawing, photography, printmaking, sculpture, ceramics, animation, graphic design, filmmaking and multi-media.

Any student at Penn is welcome to take courses in the department. Only senior seminars are restricted to the majors. Courses that provide students with a good introduction to the art and design fields and count toward the Fine Arts major, the Fine Arts minor and the Visual Studies major include:

FNAR 061 Film/Video I

065 Cinema Production

123 Drawing I

142 3-D Design

145 Sculpture I

211 Color

222 Big Pictures: Mural Art

231 Painting I

243 Figure Sculpture I

251 Printmaking: Intaglio

252 Printmaking: Relief and Screen Printing

257 Printmaking: Mixed Media

FNAR 260 Beginning Ceramics: Handbuilding

- 261 Clay Wheel Throwing I
- 264 Digital Design Foundations
- 271 Photography I
- 280 Figure Drawing I

No prior training is required for any of these courses. Career pursuits for majors in the Fine Arts include the fine arts practice; architecture; education; medicine and all of the design industries, such as industrial design, fashion design, graphic design, multi-media design; the presentation industries; and the entertainment industries.

Students considering the Fine Arts major may consult the Department of Fine Arts for general information. The Undergraduate Director, Julie Schneider, is available at (215) 898-6757 or at saecker@design.upenn.edu to answer questions pertaining to the major and the minor, prerequisites and the sequencing of courses.

Folklore and Folklife (minor only)

http://www.sas.upenn.edu/folklore/index.html

The discipline of folklore emerged in the 19th century and was forged by the scholarly and intellectual trends and the social and political conflicts of the 20th century. Folklore is the study of human expression in languages, images, music and food, and of movements in traditional societies and the representation of these forms in the world of modern technology, literature and the arts. Folklore's reach is global, ranging from villages, towns and cities in Africa, Asia, the Americas, Australia and Europe to migrant and immigrant communities in the megalopolitan and rural regions of the world, and spanning divergent population groups as well. The field of study is vast, cross-cultural and interdisciplinary.

FOLK 100 Freshman Seminar

- 101 Introduction to Folklore
- 103 Performing History
- 109 Writing About Gender
- 120 Money in Society and Culture
- 145 Comparative Medicine
- 154 Modern Jewish Literature in Translation
- 158 Music of Latin America
- 201 American Folklore
- 203 Afro-American Folklore
- 213 Introduction to Folklore and Literature
- 217 Folk Music and Folk Song
- 223 Folk Religion
- 228 Ballads and Folk Poetry
- 229 Myth in Society
- 231 American Popular Culture
- 233 African Folklore
- 236 Gossip, Rumor and "Urban" Legend
- 240 Fairy Tales
- 241 Great Story Collections
- 247 Gender, Genre and Power

FOLK 250 Urban Environments: Philadelphia

252 Themes in Jewish Tradition

253 Music and Performance of Africa

270 Folklore and Sexuality

280 Jewish Folklore

French Studies

http://ccat.sas.upenn.edu/roml/french/french.html

The French language and French civilization have long been dominant influences on world culture and France has played a major role in world history. French is spoken not only in Europe (France, Belgium, Switzerland) but also in North America, the Caribbean, South America, Africa, Southeast Asia and the Pacific. France exerts a strong cultural influence throughout the world and is a leading trading nation, excelling in such areas as aviation, public transportation, military hardware, food, wine and fashion, to name only the most highly visible. France is also a leader in the fields of science and medicine. A sound knowledge of the French language and of French culture is therefore of great advantage to students majoring in diverse areas (political science, international relations, literature, cinema, art history, psychology). French is, after English, the second truly global language.

Courses appropriate for first year students are:

FREN 212 Advanced Grammar and Composition

221 Introduction to French Literature

Please note: Students must complete FREN 140 or the equivalent through A.P. or placement testing before taking 200-level courses in French.

Gender, Culture and Society

http://www.sas.upenn.edu/wstudies/

Gender, Culture and Society is an interdisciplinary major and minor within the Women's Studies program that offers exciting intellectual opportunities to study the role of gender and sexuality in human societies. There are four concentrations within the major: Women's Studies, Sexuality Studies, Global Gender Studies, and Gender and Health. Over 100 faculty members across the University teach and do research on these topics and over 50 courses are offered each year that may be counted toward the major, including courses cross-listed with a range of departments and schools.

Particularly recommended for first-year students are:

GSOC 002 Gender and Society

- 090 Topics in Women and Literature/Gender, Sexuality and Literature
- 122 The Sociology of Gender
- 149 Women, Gender, Sexuality and the Law
- 235 Education and Social Psychology of Women

Geology

http://www.sas.upenn.edu/earth/eesmajor/programs/geology.html

Geology is a dynamic and rapidly evolving physical science. The theory of plate tectonics gives new meaning and new impetus to areas of investigation such as mineralogy, petrology, volcanology, stratigraphy, economic geology and paleontology. Due to its interdisciplinary nature, geology includes subjects as varied as environmental geology, evolutionary biology, solid-state chemistry, oceanography, mineral economics and geochronology. A student may major in geology in preparation for graduate work, for a professional career in a branch of geology, or to obtain background for further studies in medicine, environmental law, oceanography or city and regional planning. Intermediate and advanced classes are small, and students work in close contact with the faculty. Excellent library facilities, laboratories and rock and mineral collections offer students ample opportunities to pursue special interests. Field trips are required as integral parts of several courses.

Courses appropriate for freshmen include:

GEOL 003 Evolution of the Physical World

100 Introductory Geology

111 Introductory Geology Lab

Germanic Languages and Literatures

http://ccat.sas.upenn.edu/german/

Over the centuries, German art, literature, music, philosophy, religion and research in the sciences have profoundly influenced the cultural traditions of other countries. The political events of Germany's past frequently affected the entire world. The increasingly dominant role in international affairs and the global economic environment played by a unified Germany will be of critical importance to all of us. The study of German culture and literature enables students to understand the spirit of Germany, to trace its roots in the past, to comprehend the cross-currents in its thinking, and to experience the contributions of German poets, novelists, film-makers and authors.

The Department of Germanic Languages and Literatures offers language courses in German, Yiddish, Dutch and Swedish, and a wide array of exciting courses in German and in English that deal with German literature and culture in the European context, as well as Yiddish literature both in Yiddish and in English translation.

Courses appropriate for freshmen include:

GRMN 003 Censored!

008 Superstition and Erudition (Freshman Seminar)

010 Translating Cultures (Freshman Seminar)

242 The Fantastic and Uncanny in Literature

258 German Cinema

Health and Societies

http://ccat.sas.upenn.edu/hsoc/

The Health and Societies Program capitalizes on Penn's traditions of excellence in both the health sciences and the social sciences, and offers students a coherent interdisciplinary course of study that combines a variety of academic and practical approaches to critical contemporary issues. A major in Health and Societies encourages students to explore serious intellectual questions, while helping them acquire the skills necessary to participate in 21st-century health care and public health policymaking.

The Health and Societies major is part of the University's response to the global nature of modern health problems and to the steadily expanding reliance on a multidisciplinary approach to their solution. It is recommended to students preparing for careers in the health professions; for a healthcare specialization in fields such as law, government, journalism and business; and for any student seeking a solid liberal arts perspective on disease, health and medicine in changing socio-historical contexts. By bringing together scholars from medicine, the humanities and the social sciences, this major provides an exciting, intellectually cohesive and practical education. Course offerings are drawn from such departments and programs as Anthropology; Bioethics; Economics; Environmental Studies; Gender, Culture and Society; History; Science, Technology and Society; Sociology; and Urban Studies. Other Health and Societies courses are offered through the Wharton School and the Schools of Nursing and Medicine.

Courses appropriate for freshmen include:

HSOCOO2 Medicine in History

010 Health and Societies

145 Comparative Medicine

Hispanic Studies

http://ccat.sas.upenn.edu/roml/spanish/spanish.html

The demographic, economic and political realities of the United States, the articulation of a mainstream English culture with an ever-increasing diversity of Hispanic and Latino cultures, and the ongoing forging of strong cultural and economic ties throughout the Americas have moved Spanish out of the bounds of the category of "foreign" language and culture in this country. There are many instances that point to the fact that Spanish will become—de facto, if not officially—a second national language and culture of the United States. Furthermore, in Europe, Spain is assuming an ever-more significant role in the European Union.

Hence, the knowledge of Hispanic cultures gives students much more than the ability to communicate in the third-most-spoken language of the world. It prepares them to account for an entirely different national, continental and global reality in all its complexity. Since culture is the controlling category in this field of studies, the major orients itself to the types of knowledge generated by new disciplines such as cultural studies, new historicism, ethics and postcolonial studies.

History

http://www.history.upenn.edu/

The Department of History offers a variety of courses dealing with the political, social, diplomatic, intellectual, economic and cultural history of the Americas, Europe, Asia and Africa, from the early medieval period to the present. The department seeks to give undergraduates both specific mastery of particular times, places and aspects of the human condition and the critical skills to think historically about both long-term and modern phenomena, emphasizing the dynamics of change and continuity over time.

The History Department offers a range of courses in all fields that are appropriate for freshmen and provide a useful introduction to studying history at the college level. Freshmen and sophomores who might be considering a history major would also benefit from sampling the wide variety of subjects taught in the History Department.

The department offers introductory survey courses in:

HIST 001, 002	European History
003, 004	Asian History
010, 011	World History
020, 021	American History

There are also introductory courses that cover other regional areas such as:

hist 048, 049	Russian History
050, 051, 053	British History
070, 071	Latin American History
080, 081	Middle Eastern History
088	Indian History
090, 091	Japanese History
096, 097	Chinese History
120, 121	Korean History
126, 127, 128	European History
133, 134	French History

Students should remember that high-school survey courses they may have taken in a particular area are not remotely equivalent to the level of introductory surveys in the history department at Penn.

Students who want to explore particular topics might consider a range of departmental offerings, including:

HIST	139, 140, 141	Jewish History
	155	Asian American History
	168, 169	History of American Law
	170, 171	The American South
	176, 177	African American History
	345, 346	American Women's History

While upper-level seminars are generally reserved for majors and upperclassmen, the history department encourages freshmen and sophomores to take advantage of the full range of courses offered for studying history at Penn.

History of Art

http://www.arthistory.upenn.edu/

The Department of the History of Art invites students to explore the connections between the forms and meanings of visual media as part of the histories of human civilizations. As a humanistic discipline, history of art emphasizes the scholarly investigation of the visual arts rather than technical training. The program provides a solid foundation for a general arts and sciences education and for careers in communications, public relations and other fields where engagement with images and texts is paramount. Courses in the history of art also complement majors in literature, history, religion, area studies, cinema studies, studio art and others.

Freshmen are encouraged to take ARTH OO1 and/or ARTH OO2, two integrative gateway courses that take advantage of all of the resources of a great university and the vibrant artistic city of Philadelphia.

International Relations

http://www.sas.upenn.edu/irp/

International relations is a multidisciplinary course of study on the ways in which governments, private groups and individuals relate to one another in the global political and economic systems. The major provides a solid grounding in the methodologies of political science, history and economics but also allows students maximum flexibility to pursue special interests in terms of approach and regions of the world. The curriculum draws on the best courses relevant to world politics, offers a well-rounded liberal arts education and helps prepare students for law or business school, Ph.D. programs and international careers in government service, international organizations or with non-governmental organizations.

The major does not require foreign language training beyond the College's Foreign Language Requirement, except for honor's candidates, who must complete at least one course of foreign language beyond the level required by the College. An extra semester of foreign language is strongly encouraged for all other majors. Many International Relations majors spend a semester or a year abroad. All prospective majors are required to have a pre-admission interview and advising session with an International Relations Program advisor and must complete four prerequisite courses prior to declaring the major.

International Studies and Business (The Huntsman Program)

http://www.upenn.edu/huntsman

The Huntsman Program in International Studies and Business is a unique, four-year interdisciplinary undergraduate course of study that integrates business education, advanced language training and a liberal arts education.

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Huntsman students specialize in the area of the world in which their target language is spoken and graduate with a professional education and an understanding of the political, economic and cultural complexities in the world. Huntsman graduates earn two degrees, a Bachelor of Arts in International Studies from the School of Arts and Sciences and a Bachelor of Science in Economics from the Wharton School.

Admission to the Huntsman Program is highly competitive. In addition to the usual Penn requirements, applicants are expected to demonstrate proficiency in one of eleven foreign languages and are typically enrolled in Advanced Placement calculus. Students apply to the Huntsman Program when they apply to Penn; it is not possible to transfer into the program after matriculation.

Italian Studies

http://ccat.sas.upenn.edu/roml/italian/italian.html

The Italian Studies section of Romance Languages offers a major or minor with courses in language, literature, film, linguistics, cultural studies and civilization for students with or without a background in Italian. At the core of our program is the study of the Italian language, understood not only in the narrow sense of verbal communication but also in the larger sense of textual messages—literary, cinematic, historical, art-historical and mass-cultural. Courses offered at the 200- and 300-level traverse both Italy's classic literary and artistic heritage—Dante, Petrarch, Boccaccio—and more contemporary cultural produtions, from globally-noted Italian cinema to studies of Fascism. Majors and minors may select from a range of courses taught in Italian in the Department of Romance Languages, with which they may combine interdisciplinary offerings in art history, architecture, music and history. Study abroad is strongly encouraged; it provides cultural and linguistic immersion, easily transferable credits towards the major or minor, and the option of direct enrollment in Italian universities. A Penn program in Florence and University-affiliated academic-year programs in Bologna, Florence and Padua are available. Most majors are double majors and find that their work in Italian studies prepares them not only for further work in Italian, but also gives them a unique vantage point for careers in economics, law, science, medicine, international relations and education.

Jewish Studies

http://ccat.sas.upenn.edu/jwst/

Jewish Studies is an interdepartmental program that allows students to study the Jewish experience from several different perspectives. Course offerings range over diverse aspects of the Jewish experience: language (Hebrew and Yiddish), literature in translation and in the original language, the history and culture of the Jewish people from biblical Israel to 20th-century America and modern Israel, the exploration of Jewish law and the role of women and feminism in contemporary Judaism. These courses apply a variety of disciplinary approaches to the study of Jewish civilization.

The goal of the major is the acquisition of the knowledge and skills necessary to integrate these perspectives and varieties of knowledge in order to understand the Jewish experience.

In addition to the major and minor within the Jewish Studies Program, students may pursue:

- The Jewish History concentration within the History Department
- The Hebraica/Judaica concentration within the Department of Near Eastern Languages and Civilizations
- The Judaism concentration within the Department of Religious Studies.

For further information on these options consult the individual department listings or the Jewish Studies website.

Courses appropriate for first-year students include:

JWST 100 Rewriting the Bible

- 101 Translating Cultures (Freshman Seminar)
- 150 Introduction to the Bible
- 152 Jewish Law and Ethics
- 156 History of Jewish Civilization I
- 157 History of Jewish Civilization II
- 158 History of Jewish Civilization III
- 162 Women and Jewish Literature
- 187 Jewish American Literature
- 257 Studies in Rabbinic Literature (Knowledge of Hebrew required)
- 280 Jewish Folklore

The major has a second-year language proficiency requirement in either Hebrew or Yiddish. Majors should begin language study as soon as possible. Majors are also required to take a two-semester survey of Jewish history and a senior research seminar.

Latin American and Latino Studies

http://www.sas.upenn.edu/lals/

This program allows students to approach Latin American and Latino cultures in all their diversity of expression—not only "high culture" but also folk and other forms, from pre-Columbian times to the present, from Rio de Janeiro to New York and beyond. Ibero-America is a focal point from which undergraduates may reach out toward scholarly research on the pre-Columbian societies of the Americas, Spain and Portugal, the non-Hispanic Caribbean, and Latino communities in the United States. The Latin American and Latino Studies major is an interdisciplinary major, in which a student's credits are spread across three course clusters: social science, cultural criticism and history.

Courses appropriate for first-year students:

LALS 213 Latin American Politics

240 Topics in Brazilian Culture

254 Archaeology of the Inca

307 Gender in Latin America

Life Sciences and Management

http://www.upenn.edu/lsm/

The Vagelos Program in Life Sciences and Management (LSM) is an innovative undergraduate course of study administered jointly by the School of Arts and Sciences and the Wharton School. Through an integrated curriculum that combines bioscience and business studies, as well as internships in laboratory and business settings, the program prepares students for intellectually and managerially exciting careers related to the Life Sciences sector, including the pharmaceutical, biotechnology and biomedical industries. LSM students have the option of pursuing a Bachelor of Arts in one of the life sciences with a concentration in a business discipline, or a Bachelor of Science in Economics with a concentration in a life science discipline.

Students apply to the LSM program when they apply to Penn. Admission to the program is very selective. In addition to the standard Penn requirements, applicants must demonstrate high achievement in math and science and an active interest in both scientific discovery and business decision-making, as well as an appreciation of the ways in which life science and management issues intersect.

Linguistics

http://www.ling.upenn.edu/undergrad/ugrad.html

The major in Linguistics is intended to acquaint students with the methods and findings of the scientific study of human language and its relationships to cognition, society and history. It serves as a preparation for graduate training in linguistics or related areas, and as part of a rigorous general education. Linguistic training is relevant to work in anthropology, philosophy, psychology, and language and literature, as well as to careers in such fields as education, computer science and law.

Students considering a major in Linguistics and with no prior study in the field are encouraged to take LING OO1, Introduction to Linguistics, in the freshman year. This is offered in both the fall and spring terms. Alternatively, a student may approach the subject by enrolling in a freshman seminar such as LING 054, Bilingualism in History or LING 058, Language and Cognition.

Although LING OO1 is recommended, it is not a formal prerequisite for other courses in the department, nor is it specifically required of majors, so interested students may also wish to consider starting with one of the following:

LING 102 Introduction to Sociolinguistics

- 103 Language Structure and Verbal Art
- 105 Introduction to Cognitive Science
- 106 Introduction to Formal Linguistics
- 110 Introduction to Language Change
- 115 Writing Systems
- 135 Psychology of Language
- 160 Introduction to African American and Latino English (Academically Based Community Service Course)

Logic, Information and Computation

http://logic.sas.upenn.edu/

The Logic, Information and Computation Program offers students the opportunity to engage in a systematic, integrative program of study within the School of Arts and Sciences. Logic is one of the core disciplines in investigations of information and computation. Indeed, logic is playing a major role in advances in computer security, database technology, networking and software engineering. Moreover, logic has expanded its role within mathematics beyond foundational studies and now enjoys rich connections with areas as diverse as algebra, analysis and combinatorics. In light of the current importance of the investigation of computation and information from a scientific, as well as from a technological point of view, the major and minor provide students with a strong background to pursue computational aspects of the natural, biological and social sciences, as well as preparing them for careers in information technology.

Mathematics

http://www.math.upenn.edu/

Mathematics is at the core of modern theoretical science. For centuries, it has provided an expressive language as well as a theoretical framework for advances in the physical sciences, and it has more recently become central in the life and social sciences. Most recently, computer science has provided fertile ground for the development of new mathematical ideas and techniques. Mathematics at Penn is a lively, wide-ranging discipline taught in a highly ranked department by internationally known mathematicians. The traditional core areas of mathematics are well represented, as are developing areas; Penn is one of the world's leading centers in the application of logic to theoretical computer science. This area considers the problem of proving that a computer program will perform its intended function correctly.

Mathematics majors enjoy a high degree of flexibility to pursue specialized mathematical subjects or to study how mathematics is used in other disciplines. Some mathematics majors interact with the graduate students and take several graduate mathematics courses. Others pursue double majors or dual degrees in other sciences, engineering or business. Still others work toward a career in mathematics education. This diversity is reflected in the variety of paths followed by the program's majors after graduation: some go on to some of the nation's best graduate schools in mathematics or other scientific disciplines, some to professional schools and others to work in the finance industry (where mathematical simulations of financial markets have become increasingly important), the insurance industry (as actuarial scientists), the computer industry (as hardware or software developers), government, other high-tech industries (communications, electronics, etc.) and the teaching profession.

From the first semester on, the mathematics faculty is on the lookout for talented students and tries to encourage their interest in mathematics. There are freshman and more advanced courses offered in a small seminar setting where students learn to think and speak mathematically. Our students also participate in a very active chapter of Pi Mu Epsilon, the national mathematics honor society. The honors program in mathematics gives some students an opportunity to do their own research in mathematics.

Prospective majors should register for the analysis seminar (MATH 200) or the algebra seminar (MATH 204) concurrently with their first- or second-year calculus classes. These seminars provide a theoretical balance to the more pragmatically taught calculus classes and help prepare students for the theoretical core of the major. (See http://www.college.upenn.edu/courses/fresh_math.html for details.) It is important to contact the undergraduate chair as soon as possible, by email or in person, and to get on the department's email list.

Music

http://www.sas.upenn.edu/music/

The Department of Music offers a flexible approach to the study of music. As a humanistic endeavor, music can serve as the central focus of a general liberal arts education. And for students who aspire to graduate training in music history, theory, ethnomusicology, American music or composition, the department also offers a more thorough introduction to the history and theory of music and to its meanings in different cultures around the world.

In addition to a broad array of courses, the department also enriches the intellectual life of the University community through its sponsorship of student performing ensembles, its MUSC 010 program of applied music for credit, its program of music lessons in the College Houses, and its presentation of both student and professional concerts.

Broadly introductory music history courses that do not require the ability to read music include:

MUSCO21 Introduction to the History of Western Music 050 World Musics and Cultures

More specialized courses—still of an introductory nature, with no knowledge of music notation required—include:

MUSCO30 History of Opera

040 History of the Symphony

075 History of Jazz

Additional courses suitable for non-majors are also offered by the department, covering such topics as Beethoven, Caribbean Music and Songwriting in the 20th Century.

Students wishing to learn to read music and gain a knowledge of beginning theoretical topics, as well as those wishing to begin the required theory courses for the major should take MUSC 070, Theory and Musicianship I. This course is also the one required course for the Music minor, along with elective courses.

After beginning the sequence of four required theory courses with MUSC 070, those wishing to become Music majors may begin taking the required music history courses (MUSC 130, 131, 140, 150) as well as elective courses numbered 090 or above.

Near Eastern Languages and Civilizations

http://www.sas.upenn.edu/nelc/

The Department of Near Eastern Languages and Civilizations (NELC) focuses on the study of the ancient and modern civilizations of the Near/Middle East. Teaching and research in NELC addresses the civilizations of Mesopotamia/Iraq, Egypt, Israel, Syria, Arabia, Persia/Iran and Anatolia/Turkey. The undergraduate program offers broad-based, culturally integrated general education courses on Near Eastern cultures, literatures, religions and history. NELC is committed to making the study of the Near East accessible to non-specialists.

Understanding of any culture requires profound knowledge of its language(s), and a central emphasis of the NELC department is language teaching. The department offers courses in the following ancient and modern languages: Sumerian, Akkadian, Egyptian, Aramaic (listed under Ancient Near Eastern Languages, (ANEL); Hebrew (listed under HEBR); Arabic (ARAB); Persian (PERS); and Turkish (TURK).

Undergraduates may major in Hebrew and Judaica, Arabic and Islamic Studies, Ancient Near Eastern Studies (Assyriology, Egyptology), and Hebrew and Arabic Studies.

Students interested in pursuing a major or minor in NELC are strongly encouraged to begin language study as soon as possible while they explore the major through both introductory courses and more specialized courses relevant to their field of interest.

For students majoring in other departments, NELC offers a double major, a minor and a language certificate in Hebrew and Arabic.

Non-language courses recommended for freshmen include:

- NELC 009 Critical Writing Seminar in Near Eastern Languages and Civilizations (Topics Vary)
 - O32 The Middle East in the 20th Century
 - O37 People of Modern Egypt (Freshman Seminar)
 - 038 Narrative Journeys: Africa and Asia
 - 046 Myths and Religions of the Ancient World
 - O47 Magical Science: Sages, Scholars and Knowledge in Babylon and Assyria (Freshman Seminar)
 - 049 Myths of Ancient Mesopotamia
 - O51 History of Jewish Civilization I
 - 061 Literary Legacy of Ancient Egypt
 - O62 Land of the Pharaohs:
 Introduction to Ancient Egyptian Civilization
 - 066 Lords of the Nile: Rulership and Government in Ancient Egypt (Freshman Seminar)
 - 101 Introduction to the Ancient Near East
 - 102 Introduction to the Middle East
 - 130 Introduction to the Qur'an

- NELC 132 Origins of Islamic Political Thought
 - 133 Muhammed
 - 136 Islam: Religion and Institutions
 - 145 Ancient Iraq: Mesopotamian Culture and its Legacy
 - 152 Jewish Law and Ethics (Freshman Seminar)
 - 155 Archaeology and the Bible
 - 156 Great Books of Judaism

Philosophy

http://www.phil.upenn.edu/

Philosophy seeks to illuminate fundamental aspects of the world, of our relation to and knowledge of the world, and of our own nature as rational, purposive and social beings. The study of philosophy aims at an appreciation of the ways this enterprise has been, is and might be approached. Such approaches are many and varied. They differ not merely in the accounts they offer but, more importantly, in the questions they deem significant and the terms in which their answers are couched. A philosophical education is, in large measure, intended to furnish some grasp of what is involved in developing and defending questions and positions of a general and fundamental nature.

Philosophy is not then a practical subject; philosophical expertise does not especially suit one for any particular office or occupation. Nonetheless, a number of generally applicable intellectual skills and habits are cultivated through its study. A student of philosophy is practiced in the close reading of texts, in the extraction from them of positions and arguments, and in the construction and criticism of lines of reasoning. While the chief value of studying philosophy is intrinsic, the development of these skills helps equip one for any profession in which creative thought and critical discrimination are called for. The University of Pennsylvania's philosophy majors have gone on to advanced study and careers in any number of areas, including medicine, business, journalism and government. A major in philosophy provides particularly good preparation for law school.

The Philosophy Department offers three majors:

- A general major in philosophy
- A major in humanistic philosophy
- A major in philosophy and science.

Philosophy is divided into a number of areas—epistemology, philosophy of science, logic, metaphysics, moral and political philosophy, and aesthetics. None of these areas can be pursued in complete isolation from the others.

Courses especially appropriate for freshmen are:

PHIL OO1 Introduction to Philosophy

- 002 Ethics
- 003 History of Ancient Philosophy
- 004 History of Modern Philosophy
- 005 Formal Logic
- 008 The Social Contract

Philosophy, Politics and Economics

http://www.sas.upenn.edu/ppe/

Philosophy, Politics and Economics is an interdisciplinary program involving faculty and courses from the Departments of Philosophy, Political Science and Economics and from the Law School. The program allows undergraduates to study a variety of comprehensive analytical frameworks that have been developed to understand and justify political and economic structures, particularly constitutional democracy and the market system.

The major is intended to prepare its graduates for careers in public policy, public service, business and law. It also offers valuable preparation for graduate study in any of the participating disciplines.

Physics and Astronomy

http://www.physics.upenn.edu/

Physics and astronomy are fundamental sciences aimed at discovering the basic principles that govern our universe. Physicists study the interplay between space, time, matter and energy. Complex behavior in nature is explained in terms of elementary relations between constituent elements and the forces that bind them. The phenomena examined by physicists occur over distances ranging from subatomic scale, as in nuclear and elementary particle physics, to human scale, as in condensed matter physics, to cosmic scale, as in astrophysics and cosmology. The subject matter of astronomy encompasses the entire physical universe beyond the Earth: the solar system, stars, galaxies, galaxy clusters and superclusters, quasars and the large-scale structure of the universe. In both physics and astronomy, new instruments and technologies are revealing unexpected phenomena that present exciting scientific challenges.

The basic tools in physics and astronomy are mathematics and experimental investigation and observation of the world around us. The forte of a physicist or astronomer is the ability to analyze and reduce a complex problem to basic concepts. Learning to do this provides the major with an intellectual versatility that can serve well in a variety of future activities ranging from research and/or teaching in physics or astronomy and related sciences to careers in law, health, commerce, etc.

Courses that are appropriate as an introduction to the major are the PHYS 15O/151 sequence. Students interested in the Astrophysics concentration are also encouraged to enroll in ASTR 011/012.

Requirements for the major can be found at: http://www.physics.upenn.edu/undergraduate/physmajor.html#physmajor.

Political Science

http://www.ssc.upenn.edu/polisci/

The Political Science major is designed to explore systematic approaches to understanding politics. These include a wide range of topics, from American political institutions to the politics of various countries or world regions, the study of order and change in international relations, and ancient and modern political thought. These topics are addressed in courses typically classified under the four standard fields of American politics, comparative politics, international relations and political theory. Students either declare a general major or a major with a concentration in one of the four subfields or in the area of political economy. In addition, students may select a world region for an area studies concentration or pursue specialized concentrations on particular topics (such as political leadership or gender and politics), although these require the student to meet more substantial specific requirements. The major also has an honors program in which qualified seniors may write an honors thesis in order to be considered for departmental honors.

Freshmen seeking to explore courses in political science may take general introductory courses to the discipline or its main subfields (PSCI OO1, O5O, 11O, 13O, 15O, 18O or 181) as well as freshman seminars. In addition, freshmen are regularly admitted to more specialized courses that do not require any prerequisites (this is true of most courses through the 2OO level) and sometimes even to more advanced seminars by permission of the instructor.

<u>Psychology</u>

http://www.psych.upenn.edu/

The psychology major provides an opportunity to study the principal areas of scientific psychology. It is designed to introduce students to contemporary understandings of how organisms perceive, learn, think and interact with one another, how they develop, how they are motivated and how, individually and as members of species, they may be compared with one another. The major program provides a balanced treatment of the central phenomena of the field, taking into account the particular methods of inquiry from which our knowledge is derived and the conceptual frameworks that organize the factual basis of the discipline.

At Penn, psychology may be studied as a scientific discipline in its own right or in conjunction with many other fields of inquiry, including cognitive science, biology, philosophy, linguistics, anthropology and sociology. The major program is designed to provide a coherent and integrated intellectual experience that can serve as a foundation for advanced graduate work or as a basis for careers in many fields. Many students who complete the psychology major at Penn go on to further training as scientists and scholars. Others undertake professional training in clinical, counseling, industrial or educational psychology, in the legal or medical professions, in schools of business, or enter directly into the workplace.

All students begin their psychology studies with PSYC 001, Introduction to Experimental Psychology. Students interested in further study should be aware that, at Penn, psychology is divided into three content areas:

- Cognitive Basis of Behavior
- Neural Basis of Behavior
- Clinical/Social Aspects of Behavior

Students interested in psychology study after PSYC OO1 should next take one course in at least two of the content areas above. (Lists of courses in these areas are available at http://www.psych.upenn.edu/ugrad/majminreq.php.)

It is particularly important not to take more than two courses in any one area before taking courses in the others. Although the different areas of psychology focus on different approaches and contents, they optimally strengthen the understanding of each other if they are taken in intermixed order.

Before taking any additional courses in psychology beyond those noted above, students should consult with the director of undergraduate studies or the director's assistant. (Hours are posted at http://www.psych.upenn.edu/undergraduate_advising.php.)

Religious Studies

http://ccat.sas.upenn.edu/rs/

Religion is a complex network of ideas and actions (ethical and ritual) that express a group's sense of the ultimate meaning of life. The academic study of religion examines how the beliefs and values of contemporary and historical cultures shape and are shaped by societal factors, long-standing traditions, and distinctive forms of literary and artistic expression. Religion scholars ask not whether certain beliefs are true but what they mean to those who hold them to be true, how they came to have a particular form and content, and what impact they have on their intellectual and social environments.

Skill in close reading of texts and critical analysis of concepts and historical relationships are among the benefits of such study, which has been found helpful by many preparing for careers in law, medicine, journalism, international business and government, and which can be useful as a foundation for graduate work in many disciplines of the humanities and social sciences.

Religious Studies has a half dozen courses that are designed to be introductory, and four of them will be given in 2006-2007:

RELS 001 Religions of Asia

002 Religions of the West

005 Women and Religion

006 Religious Cults and Violence

Romance Languages

http://ccat.sas.upenn.edu/roml/

In this age of global communications and multiculturalism, the study of Romance languages and the ever-evolving cultures they represent is a particularly timely pursuit. The Department of Romance Languages offers Catalan, French, Italian, Portuguese and Spanish. On the most basic level, the activity of foreign language study is articulated around the essential skills of communication. The discipline of learning how to communicate in a foreign language not only makes the student able to interact with other cultures but also, because of the comparative and contrastive exercise that language learning entails, sharpens his or her English communication skills as well. The Department of Romance Languages offers a wide variety of courses in French, Italian, Portuguese and Spanish language, literature, culture and film.

Acknowledging the need for experiencing a culture contextually, the Department of Romance Languages has established several study abroad programs. Some of the sites offer business-oriented programs of study, while others offer more humanities-based options. The department works closely with the Office of International Programs to make foreign study an attainable possibility for Penn students—majors and non-majors alike. The Modern Languages House (which offers French-, Italian- and Spanish-speaking residential experiences, weekly conversation hours, film series and other cultural events open to both residents and non-residents) provides further opportunities for practical language experience.

Beyond the inherently valuable intellectual benefits gained from the study of language, the department's faculty is deeply committed to the exploration of literature and film as they pertain to broader issues of cultural self-representation. A literary or visual text tells a great deal not only about the writer or artist who produced it, but also about how a society thinks or represents itself. The study of a text not only tells us about the cultural climate in which a given text was produced, it also reveals our own cultural values and myths as we engage in the process of interpretation. The department offers a wealth of courses in literature and culture, both canonical and non-canonical, that address European classics from specific periods as well as texts produced in contemporary cultural circumstances such as the French- and Spanish-speaking Caribbean or Italian-American life. Courses on film are also an increasingly important part of our curriculum.

Students in satisfactory academic standing are invited to apply for a major or minor in French, Hispanic or Italian Studies, or the dual major in Romance languages, once they have satisfactorily completed two courses beyond the Language Requirement.

Science, Technology and Society

http://ccat.sas.upenn.edu/hss/

The structure of the modern world is based on a complex foundation of science and technology. Understanding how science works, how technological innovation happens, and how both relate to larger social, political and economic developments is an essential skill for professionals in almost every occupation.

Students who major in Science, Technology and Society (STSC) will pursue a broad and highly interdisciplinary program of study that includes courses in the history of science, technology, medicine and related fields in the natural and social sciences. In doing so they will acquire both a broad liberal arts education as well as specific preparation for careers in knowledge-based occupations such as law, public policy, business, medicine and journalism.

Students interested in the STSC program might want to consider the following introductory survey courses:

STSC 001 The Emergence of Modern Science

002 Medicine in History

003 Technology and Society

Slavic Languages and Literatures

http://ccat.sas.upenn.edu/slavic/

The Department of Slavic Languages and Literatures offers a major, a minor and a language certificate in Russian. Additionally, with the support of the Penn Language Center, the department offers courses in the Ukrainian, Czech and Polish languages. The department also offers a series of courses for students who have spoken Russian at home and wish to gain literacy and/or improve their language skills or to pursue the study of Russian literature and culture in Russian.

Students of Russian are encouraged to participate in a broad variety of extracurricular activities sponsored by the department that supplement class work in a pleasant, congenial atmosphere. They are also encouraged to spend a semester of study abroad and may choose to live in the Russian House, which brings together students interested in improving their command of spoken Russian.

The Russian major provides a framework that can be adapted to meet the needs of a wide variety of students, ranging from those oriented toward the study of language and literature to those interested in any of a variety of interdisciplinary approaches. The major and minor in Russian are flexible and well suited to students wishing to pursue a double major (or minor) with a complementary field of study, such as politics, economics, international relations, anthropology, history or comparative literature. The major and minor in Russian are well suited to students preparing for law or medical school, as well as those contemplating careers in international business, teaching, governmental and foreign service, or journalism.

continued

The following courses may be of interest to first-year students and those interested in the major (all readings and discussions are in English):

RUSS 125 The Adultery Novel In and Out of Russia

- 130 Russian Ghost Stories (Freshman Seminar)
- Russian Literature in Translation I (1800-1870)
- 155 Russian Literature in Translation II (1870-present)
- 165 Russian and East European Film
- 190 Terrorism: Russian Origins and 21st-Century Methods
- 197 Madness and Madmen in Russian Culture Students with no prior study in the language may consider:

RUSS 001 Elementary Russian I/II

SLAV 501 Elementary Polish I

530 Elementary Czech I

590 Elementary Ukrainian

Students who spoke Russian at home while growing up may consider:

RUSS 360/361 Literacy in Russian I/I*

460 Post-Soviet Russia in Film

369 Russian Utopia

Sociology

http://www.ssc.upenn.edu/soc/

The study of sociology provides an understanding of how societies, communities and smaller groups are organized and maintained and how individual behavior is related to group experiences. It also introduces students to the concepts and methods that characterize social science research and provides them with the tools for a critical analysis of the varied types of human relations in which all are involved. Sociology can help students understand their place in the family, the community, the nation and work and other group situations. It also provides a background for careers in teaching, theoretical and applied social research, social work, journalism, demography, criminology, management, law and medicine.

Requirements for the major can be found at: http://www.ssc.upenn.edu/soc/undergrad/main_undergrad.htm.

Recommendations of courses that are appropriate for freshmen or which provide a good introduction to the major or minor:

SOCI OO1 Introduction to Sociology

004 The Family

006 Race and Ethnic Relations

010 Social Stratification

O11 Urban Sociology

South Asia Studies

http://www.southasia.upenn.edu/

The Department of South Asia Studies offers students a multi-disciplinary exposure to the cultures and languages of India, Pakistan, Bangladesh, Sri Lanka, Afghanistan and Nepal as well as the South Asian diaspora. The department also offers courses in a wide range of disciplines, such as archaeology, history, philosophy, religion, art, music, folklore, anthropology, sociology, politics and economics, as well as in the major classical and modern languages of the subcontinent. Majoring in the department involves three closely intertwined skills: a familiarity with the cultural history of the subcontinent, sound linguistic expertise and the ability to think about South Asia from a variety of disciplinary positions.

The department offers a major and a minor. Double majors seeking to combine training in a discipline with an area competence and students in dual-degree programs from the professional schools are particularly welcome. Students may fulfill the Foreign Language Requirement with a modern South Asian language. In addition to regular academic work, undergraduates are invited to participate in the rich extracurricular activities of the department. Films, musical performances and presentations by visiting lecturers are a regular feature of each semester. The department also conducts a summer program in Pune, India.

Courses recommended for freshmen include:

SAST 010 Indians Overseas

012 India in the Traveler's Eye

020 Classical Indian Epics

024 India: Ancient and Modern

086 India and South Asia

Theatre Arts

http://www.sas.upenn.edu/theatrearts/

The Theatre Arts program offers a comprehensive 14-course major in theatre studies. Students may choose from a wide range of courses in all aspects of theatre, including acting, directing, design, playwriting, dramatic literature, theatre history and theories of performance. Students may also receive academic credit by acting in or working on theatre productions mounted by the program. Theatre Arts welcomes students who wish to major and make theatre the primary focus of their academic careers at Penn, as well as students who wish to take a course or two to enrich their educational experience. Advanced students are encouraged to do a senior honors thesis, often an acting, design or directing project.

Theatre Arts graduates often enter professional training programs in acting, film directing, theatre management or dramaturgy. Some pursue a master's or doctoral degree in theatre studies. Others go on to study law or business.

Courses recommended for freshmen and students interested in the major include:

^{*} Fulfills Language Requirement

THAR 100 Introduction to Theatre

110 Theatre, History, Culture I

111 Theatre, History, Culture II

120 Fundamentals of Acting

125 The Play: Structure, Style, Meaning

Prospective majors with an interest in practical theatre should begin to work in the cast or crew of programsponsored production activities as soon as they arrive at Penn. Contact Stephen Hungerford, 518 Annenberg Center, (215) 898-2546.

Urban Education (minor only)

http://www.gse.upenn.edu/degrees_programs/ugprog.php

The Urban Education minor provides students with opportunities to explore the interrelationships between urban issues and educational practice, research and policy in order to work toward equity and excellence in the education of students in city schools. The program reflects current national demands for education professionals to make instructional, curricular, assessment, administrative, policy and research decisions that are not only grounded in understanding of local communities and educational theory, but also informed by a liberal arts-based background.

The Urban Education minor offers students a wide variety of options in the study of urban education: students can pursue non-certification options that may lead to work in a variety of practice or policy areas, submatriculate into the one-year Master's in Education degree program in elementary or secondary education with certification in the Graduate School of Education, or take the necessary certification courses for teaching in elementary or secondary schools that, combined with an appropriate major and a semester of student teaching typically taken in a 9th semester, prepares students to enter into a classroom teaching position. This minor, with its emphasis on urban studies and academically based community service in addition to methods of teaching, provides students with an intellectual and practice-based experience for this challenging, but rewarding work.

There are three concentrations within the minor:

- urban education policy, research and practice
- elementary education
- secondary education.

Interested freshmen should begin with URBS 202, Urban Education, as their first course. URBS 202, a child or adolescent development course and a capstone requirement are the three core courses for all three concentrations.

Other courses of interest to freshmen include:

PSYC 180 Developmental Psychology

EDUC522 Psychology of the African-American

513 Development of the Young Child

561 Adolescent Development

Urban Studies

http://www.sas.upenn.edu/urban/

Urban Studies is an interdisciplinary major that offers students an opportunity to think and learn about cities in an informed, disciplined and integrated way. Majors take courses that introduce them to a variety of perspectives on the origins, development and nature of cities. The program stresses the application of theory to practice with an internship for credit in which students work closely with a community group, public agency, non-profit or private organization in the city. Majors also gain competence in a discipline area and in conducting research.

The Urban Studies Program offers two freshman seminars:

URBS 100 Homelessness and the Urban Crisis (fall)

110 Crime and Punishment (spring)

Other courses recommended for freshmen are:

Fall

URBS 078 Urban University-Community Relations

103 Emerging Industrial Metropolis

139 Ancient Civilizations of the World

Spring

URBS 104 The Urban Crisis

205 Power of Place: Introduction to Urban Environmental Design

210 The City

252 Urban Journalism

Visual Studies

http://www.arthistory.upenn.edu/vlst/

We live in an increasingly visual culture. The visual studies major prepares students for acting in and interpreting this culture through a multidisciplinary course of study, connecting the theory, practice and culture of seeing. The major serves as a liberal arts preparation that develops visual literacy, studio skills and knowledge of visual science and visual theory. It provides strong and distinctive preparation for continuing on to graduate or professional training in several fields, including philosophy, perceptual psychology, history of art, fine arts and architecture.

VLST 101 Eye, Mind and Image

102 Two Dimensions: Form/Meaning

103 Three Dimensions: Time/Space

INDEX

A	Advising (see Academic Advising)
	African Studies 69, 70
Academic Advising	Languages Offered 16
Advising in the College Office 6, 30-31	Africana Studies 69, 70-71
Assistant Deans for Advising 6, 26-27, 30-31	Anthropology 69, 70
Benjamin Franklin and University Scholars 31	Architecture 69, 71
CaseNet 27, 31	Asian American Studies 71
Choosing a Major 27	Assistant Deans for Advising (see Advising)
College Houses 32	Athletes
Help Desk in the College Office 27	Academic Support 35
Major Advising 27	Athletic Eligibility 55
Major Advising Program (MAP) 27	Attendance, Class 50
Mentoring Programs 43	Auditing a Course 50
Peer Advisors 26	,
Pre-major Advising 26-27, 58	В
Academic Calendar i	
Academic Framework 8-11	B.A./J.D. Submatriculation Program in Arts and Sciences and Law 22
Academic Goals 6	
Academic Grievances 55	Benjamin Franklin Scholars Program 23
Academic Honors 52	Advising for Benjamin Franklin Scholars 31
Academic Integrity 12-13	Benjamin Franklin Seminars 18
Academic Probation 49, 54	Bio-dental Submatriculation Program 22
Academic Support (also see Advising)	Biochemistry 69, 71
Center for Undergraduate Research and Fellowships 35	Biological Basis of Behavior 69, 72
Department of Academic Support Services 33	Biology 69, 72
Library Services 34	Advanced Placement Credit 67
Office of Learning Resources 33	Biophysics 69, 72
Penn Mentoring 33	C
Students with Disabilities, Help for 35	<u>C</u>
Tutoring 33	Career Services 42-44
The Wheel 34	Internships 19
The Writing Center 34	Career Advisors 42
Academic Timeline 28-29	Careers in Health Professions 43-44
Academically Based Community Service Courses 19	Careers in Law 44, 22
Adding a Course 49	Careers and a Liberal Education 44
Advanced Standing (Advanced Placement)	CaseNet 27, 31
A-Level Exam Policy 65	Center for Undergraduate Research and
Advanced Placement Equivalence 63	Fellowships 19, 23, 35, 42
for Biology 67	Chaplain, Office of the 42
for Chemistry 66	Chemistry 69, 72-73
Educational Testing Service (ETS) 63	Advanced Placement Credit 66
ETS Code 63	Cinema Studies 69, 73
International Baccalaureate Policy 64	Civic House 41
International Exams 62	Class Designation 55
for Languages 68	Classical Studies 69, 73
for Mathematics 65	Languages Offered 16
Office of Transfer Credit and Advanced Placement 62	Cognitive Science 69, 73
for Physics 65	College Office, The (references throughout this handbook)
Pre-College Credit 62	Assistant Deans for Advising 6, 26-27, 30-31
SAT II 68	College 99 18
Advance Registration (see Registration)	College Houses 32
Author Agistration (see registration)	College House Programs 19

College of General Studies 18	Dropped from the Rolls 54
Summer Study Abroad 24	Readmission 54
College Undergraduate Research Electronic Journal	Dropping a Course 49
(CUREJ) 19	Dual Degree 21
College Website 36-37	East Asian Area Studies 69, 74
Communication 69, 74	East Asian Languages and Civilizations 67, 74
Communication Within the Curriculum 18, 34	Languages Offered 16
Community Service Courses, Academically Based 19	Economics 69, 75
Comparative Literature 69, 74	Education
Computing Services 40	Secondary Education Submatriculation 22
Confidentiality 7	Urban Education 86-87
Counseling and Psychological Services 41	ETS (Educational Testing Service) School Code 63
Course Register 36, 39	Email 40
Course Scanner 34	English 69, 76
Course Selection Period (see Registration)	Environmental Studies 69, 76
Course Timetable 36	European Studies 76
Course Codes 60	•
Courses (also see Registration and Grades)	F-G
Advanced Standing and Course Selection 65-68	Followshine Scholarshine and Create 12, 12
(also see Advanced Standing)	Fellowships, Scholarships and Grants 42-43
Adding 49	(also see the Center for Undergraduate Research and Fellowships)
Auditing 50	Final Examinations 50
Course Codes in the Course Timetable 60	Financial Services, Office of Student 41
Course Load (Credit Load) 49	Fine Arts 69, 76-77
Course Listings (Publications) 36	First Semester Course Selection 36, 57
Course Selection 6, 57-59	
Course Scanner 36	Folklore and Folklife 77
Dropping 49	Foundational Approaches 9-11, 46
Final Examinations 50	Foreign Language Study
Graduate Courses 50	Advanced Placement 68
Repeating 50	Foreign Language Requirement 8-9, 11, 46-47
Withdrawing 49	Language Certificate Program 16
Creative Writing Minor 74	Languages Offered by Departments and Programs 16
Credit Away (Study Away) 24	Penn Language Center 16
Credit Load (Course Load) 49	Waiver of the Language Requirement 47
Cross-Cultural Analysis Requirement 8-10, 11, 47	Formal Reasoning and Analysis Requirement 8-9, 11, 47
1, , , , , , , , , , , , , , , , , , ,	Free Electives 11, 48
D-E	French Studies 69, 77
	Freshman Seminars 18, 36, 57
Dean Dennis DeTurck 2	Gender, Culture and Society 69, 77
Dean's List 52	General Education Curriculum 8, 11, 46-47
Dean's Scholars 52	Geology 69, 78
Deferred Drop 54	Germanic Languages and Literatures 69, 78
Degree Requirements	Languages Offered 16
Academic Framework 8-11	Grades 51-52
Regulations Governing Degree Requirements 46	Graduate Study in Arts and Sciences 43
Dental School, Submatriculation into 22	Graduation
Departments and Programs (also see Majors)	Honors 52
Contacts for Departments and Programs 92-93	Requirements 48
Department and Program Descriptions 70-87	Greenfield Intercultural Center 41
Disabilities, Help for Students with 35	·

Double-Counting Courses 46

<u>H</u>	Return from Leave of Absence 53
Health and Societies 69, 78	Tuition Refund 53 Voluntary Leave of Absence 53
Health Services	Lesbian Gay Bisexual Transgender Center 41
Counseling and Psychological Services 41	Library Services 34
Office of Health Education 40	·
Student Health Services 40	Life Sciences and Management 69, 81
Health Professions	Linguistics 67, 80
Advanced Placement for Biology 67	Languages Offered 16
Bio-dental Submatriculation 22	Logic, Information and Computation 69, 81
	14.0
Careers in the Health Professions 43-44	M-O
Help Desk, College 27	Majors
Hispanic Studies 69, 78	Advice About Choosing a Major 27
History 69, 79	Course and Majors Fair 27
History of Art 69, 79	Credits Required for Each Major 69
History of the College of Arts and Sciences 14	Double Major 20
Holidays 50	Honors in the Major 52
Honors, Academic 52	Individualized Major 20, 69
Housing, Office of 41	Major Advising Program (MAP) 27
Huntsman Program (see International Studies and Business)	Major Advising 27
	Major Department and Program Contacts 92-93
J-K	Major Department and Program Descriptions 70-87
Incompletes 51 54	Major Dinners 27
Incompletes 51, 54 Individualized Major 20, 69	
	Major Requirement 11, 48
International Baccalaureate (see Advanced Standing) 64	Mathematics 69, 81-82
International Programs, Office of 42	Advanced Placement 63
International Relations 69, 79	Minors 20 (also see listings included on pages 70-87)
International Studies and Business 69, 79-80	Mission of the College of Arts and Sciences 14
Internet	Music 69, 82
College Website 36-37	Non-College Courses 49
Computing Services 40	Near Eastern Languages and Civilizations 69, 82-83
Email 40	Languages Offered 16
Penn InTouch 38-39, 58-60	Ombudsman, Office of the 42
PennPortal 36	
Time Management Issues 38	<u>P</u>
Internships 19, 42	Paleo-Biology (See Geology)
Italian Studies 69, 80	Part-time Status 49
Jewish Studies 69, 80	• •
	Pass/Fail 59 Peer Advisors 26
L	
	Penn InTouch 38-39, 58-60
Language Requirement (see Foreign Language Study)	PennBook, The 36
Language Study (see Foreign Language Study)	PENNCAP 33
Latin American and Latino Studies 69, 80	PennKey 38, 40, 58
Law	PennPortal 36
B.A./J.D. Submatriculation Program in Arts and	Petitions 55
Sciences and Law 22	Phi Beta Kappa 52
Careers in Law 44	Philosophy 69, 83
Learning Resources, Office of 27, 31	Philosophy, Politics and Economics 67, 83
Leave of Absence	Physics and Astronomy 69, 83
Advising (CaseNet) 27, 31	Advanced Placement in Physics 65
Mandatory Leave of Absence 54	Political Science 69, 84

Pre-College Credit (see Advanced Standing) Pre-Major Advising (see Academic Advising) Theatre Arts 69, 86-87 Preceptorials 18 Transfer Credit (see Advanced Standing) Probation, Academic 49, 54 Transfer Credit and Advanced Placement, Office of 62 Psychology 69, 84 Transfers within the University 53 Tuition Refund Policy 53 O-R Tutoring (see Academic Support) Quaker Consortium 24 Quantitative Data Analysis Requirement 8-9, 11, 47 U-V Readmission from Drop 54 University Scholars 23 Registrar, Office of the 41 Advising for University Scholars 31 Registration (also see Courses) Urban Education 87 Advance Registration 57 Urban Studies 69, 87 Course Selection Period 57 Vagelos Scholars Program 23 Penn InTouch 58-60 Vagelos Science Challenge Award, Roy and Diana 22 Religious Studies 69, 84 Visual Studies 69, 87 Requirements Academic Framework 8-11 W Degree Requirements 46-48 Requirements for Graduation 48 Washington Semester 24 Residency Requirement 48 Website, The College 36-37 Research Withdrawals from the University 53 Center for Undergraduate Research Withdrawing from a Course 49 and Fellowships 19, 35, 42 Women's Center, Penn 42 Women's Studies (see Gender, Culture and Society) College Undergraduate Research Electronic Journal 19 Research Directory 19 Worksheet, On-line 39 Residency Requirement 48 Writing Romance Languages 69, 85 Center for Programs in Contemporary Writing 17, 74 Languages Offered 16 Creative Writing Minor 74 Creative Writing Program 17 Russian (See Slavic Languages and Literatures) Critical Writing Seminars 17, 46 Kelly Writers House 17 Writing Center 34 S.A.T. II (see Advanced Standing) Writing Seminars 17 Scholars Programs 23 Writing Requirement 8-9, 11, 46 Science, Technology and Society 69, 85 Writing Tutors 34 Secondary Education 22 Sector Requirement 8, 10-11, 47-48 Slavic Languages and Literatures 69, 85 Languages Offered 16 Sociology 69, 86 South Asia Studies 69, 86 Languages Offered 16 Spanish (See Romance Languages and Hispanic Studies) Student Life, Office of 41 Study Abroad 23-24 Study Away (see Credit Away) Submatriculation 21-22

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