PRINCETON
Woodrow Wilson School of Public and International Affairs

The Woodrow Wilson School of Public and International Affairs is Princeton's memorial to an alumnus and professor who became president of the University, then governor of New Jersey, and eventually president of the United States. The purpose of the school's undergraduate program is to promote Woodrow Wilson's idea of preparing Princetonians for leadership as public officials or as private citizens with an active concern for public and international affairs.

The Woodrow Wilson School undergraduate program offers students the opportunity to study major problems of contemporary public policy by means of an interdisciplinary program rooted in the social sciences. The program is unusual in its emphasis not only on the empirical study of social and political reality but also on normative analysis. The program thus combines the study of "what is" with "what should be" in the context of domestic and international affairs.

Concentration in the Woodrow Wilson School is equivalent to majoring in any department of instruction. The undergraduate concentration in the school has three main curricular components: junior independent work, done in the context of the policy exercises; departmental course work; and the senior thesis.

Undergraduates in Professor Paul Volcker's policy task force on U.S.-Mexican economic relations capped their task force with a report attended by Manuel Suárez-Mier, minister for economics at the Mexican embassy.

Policy Exercises

The most distinctive aspect of undergraduate study is the policy exercises—the policy conference in the fall and the policy task force in the spring of junior year. In these exercises, a limited number of juniors (about 16 per conference and eight per task force) work together with a faculty director and one or more senior "commissioners" to find solutions to social and political problems. Each junior conducts research on a topic chosen because it sheds light on the larger problem central to the group. Students complete their junior projects as part of this cooperative effort. Topics for independent work are therefore derived from the overall needs of the policy conference or task force. The tools students use in their conferences and task forces are also a function of the topics the group's work addresses. Woodrow Wilson School students consequently use many skills—languages, statistics, ethical reasoning, economic theory, engineering—in solving problems.

In the policy exercises faculty directors and guest lecturers provide background information, bibliographic references, and ideas on possible interviewees, but the juniors and senior commissioners take responsibility for the organization and outcome of the exercise. Each junior paper is read in draft by the faculty director and by other students; it is presented and discussed collectively; and then it is rewritten to form one product of the group's effort. The principal product, however, is a report, with policy recommendations, that is drafted after debate within the entire group.

The topics of policy conferences and task forces change yearly. Recent topics have included:

U.S. policy toward South Africa
Future uses of space
Latin American debt
National goals for education
Banking regulation
White collar crime
Global warming
Urban poverty
Legal responses to AIDS
A security regime for Europe
Sharing Nile waters

Departmental Course Work

The second component of a Woodrow Wilson School student's academic program is course work. Every student must declare a "focus area," a framework for further study that may be as broad as domestic

economic policy or as narrow as recent Sino-Soviet relations. The focus area serves as an educational principle underlying the student's choice of courses. Students then take upper-level courses in politics, history, economics, sociology, and/or anthropology that are appropriate to their focus, as well as a course in ethics and one in quantitative analysis. Woodrow Wilson School students are also required to take a course or otherwise demonstrate (for example, through an employment experience or an internship) that they have thought in a systematic way about the perspective of disadvantaged groups in contemporary societies—those whom public policy decisions are likely to affect. All student programs are developed with the advice and approval of a faculty adviser.

Robert M. Gates, deputy director of the Central Intelligence Agency, spoke with students in a policy conference on the U.S. intelligence community.

Senior Thesis

The senior thesis is the culminating experience of a student's work in the school. The thesis typically deals with an issue of public policy—sometimes a specific program, more often a general issue in public or international affairs. The topic depends on the student's interest. The school has several endowments to support thesis research, either during the summer or during the senior year.

Careers of Graduates

The careers of graduates are as diverse as the interests students bring to the school. Graduates have entered the fields of teaching, journalism, law, medicine, business, politics, religion, and nongovernmental organizations, among many others.

Admission to the School

Students apply for admission to the Woodrow Wilson School during the spring semester of their sophomore year. Applicants are accepted on the basis of their scholastic records, their demonstrated experience and interest in community service, and other evidence of their capacity to benefit from the school's program. Each class is currently limited to 80 students.

The school attracts students with a wide variety of interests. While there are no specific requirements for admission, it is highly recommended that candidates have taken courses in disciplines such as economics, politics, history, sociology, and anthropology that both reflect their interests and demonstrate they can do good work in the social sciences.

Certificate Program

In addition to those students it admits as concentrators, the Woodrow Wilson School also admits a select number of undergraduates concentrating in other departments who demonstrate serious policy interests related to their primary fields of study. Students concentrating in any of the science or humanities departments, or in engineering or the School of Architecture, may simultaneously enroll in the Woodrow Wilson School and will be awarded a certificate upon completion of the school's degree requirements in addition to the requirements of their home department. The admissions process is the same as for students planning to concentrate in the school.

Further Information

For further information, contact the Administrative Director, Undergraduate Program, Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, New Jersey 08544-1013, or phone (609) 258-4817.

Admission Office
Princeton University
Box 430
Princeton, New Jersey 08544-0430
(609) 258-3060

PRINCETON UNIVERSITY
Department of Politics
201 Nassau Street
Princeton, NJ 08542
Fax #(609)258-4772
Office #(609)258-4757

TO: Ms. Carol Blymire FAX#: 202-456-6218

COMPANY: The White House

FROM: R. Douglas Arnold

SENDER'S PHONE#: 609-258-4757

DATE: 4/29/91

Number of Pages (including cover sheet): 7

ABOVE INFORMATION MUST BE COMPLETED BEFORE DOCUMENT CAN BE SENT!

COMMENTS/MESSAGE:

DEPT. CHARGE X RESEARCH ACCOUNT _____ Personal _____

Princeton University
Department of Politics
Corwin Hall
Princeton, New Jersey 08544-1012

Office of the Chairman

TEL: (609) 258-4757
FAX: (609) 258-4772

VIA FAX: 202-456-6218

April 29, 1991

Ms. Carol Blymire
The White House

Dear Ms. Blymire:

Enclosed are excerpts from the Wilson School's annual reports focusing on the School's Program in Leadership Studies.

I hope they are useful.

Please let me know if there is anything else I can do.

Sincerely,

R. Douglas Arnold
Chairman

Enclosures (6)

PRESIDENCY AND LEADERSHIP STUDIES

The Presidency and Leadership Studies Program is designed to provide students and faculty of the Woodrow Wilson School and the larger Princeton community with a general intellectual perspective on and direct exposure to leaders and leadership, with special but not exclusive emphasis on leadership in the nine "modern" American presidencies beginning with the expansion of the chief executive's obligations and responsibilities in the Franklin Roosevelt presidency and continuing through the presidency of Ronald Reagan.

The 1985-86 program focused in depth on a close examination and comparison of the interconnections among presidential leadership styles and the composition and organization of presidential advisors in two decision-making processes which posed leaders in different Administrations with dilemmas that had a number of important comparable components. These are the decisions about how to respond to the incipient collapse of the American-supported regimes in Indo-China/Vietnam, in 1954 and 1965. The 1954 process led to a negotiated settlement, and the option to inject American military support was rejected. The 1965 process led to an open-ended commitment to employ United States troops in Vietnam, with force levels that were to reach a half million in 1968. Presidential styles, decision processes and advisory practices were strikingly different in the two sequences and illuminate variations possible in leadership in the modern presidency.

The year was marked by an extensive series of original interviews and successes in obtaining declassification of key documents and by significant progress toward synthesizing and interpreting the findings. Various states of the inquiry were reported at colloquia at the Russell Sage Foundation, in New York; the American Political Science Association Meeting, in New Orleans; the Princeton Center of International Studies; and Ohio State University. The Center of International Studies contributed MacArthur Foundation funds toward completion of the study.

The other major activity of the year was initiation of a systematic comparison of the leadership of all nine modern presidents from Franklin Roosevelt to Ronald Reagan. Former editor-in-chief of Time and aide to President Jimmmy Carter, Hedley Donovan, was a guest of the Woodrow Wilson School and the Program and made himself available to discuss his report in his book Roosevelt to Reagan, of his own encounters with the modern presidents. Greenstein prepared an extended working paper reviewing the leadership of the nine modern presidents and the interaction of presidential leadership with social and political change, including changes in the presidency itself over the half century since FDR took to this comparative study and provided funds which will enable the Program to commission papers by leading historians and political scientists on the leadership of the modern presidents. These will be the basis of a 1986-87 Woodrow Wilson School Bicentennial Conference on the Modern Presidency and a conference volume.

PRESIDENCY AND LEADERSHIP STUDIES

The Presidency and Leadership Studies Program is designed to provide students and faculty of the Woodrow Wilson School and the larger Princeton community with a general intellectual perspective on and direct exposure to leaders and leadership, with special but not exclusive emphasis on leadership in the nine "modern" American presidencies beginning with the expansion of the chief executive's obligations and responsibilities in the Franklin Roosevelt presidency and continuing through the presidency of Ronald Reagan.

The centerpiece of the 1986-87 program was a study, consummated in an April 3-4, 1987 conference held at the Woodrow Wilson School, analyzing and comparing the leadership of each of the presidents from Roosevelt to Reagan. The conference, which was attended by members of the Princeton community, presidency scholars from throughout the nation, and respresentatives of the mass media, took the form of six roundtable discussions in which scholars summarized papers they had prepared and circulated on each of the presidents, and former or present presidential associates made comments. In addition, there was a general plenary session the evening of April 3, at which Vice President George Bush spoke on the challenges of contemporary presidential leadership and an April 4 plenary session in which the previous day's roundtables and plenary address were discussed, assessed, and expanded on.

The scholars who spoke on April 3 and prepared papers and former presidential aides who participated in the roundtables were:

William E. Leuchtenburg, William Rand Kenan Jr. Professor of History, University of North Carolina at Chapel Hill (Roosevelt)

Alonzo L. Hamby, Professor of History, Ohio University (Truman)

Fred I. Greenstein, Professor of Politics, Princeton University (Eisenhower)

Carl M. Brauer, Director of the Public/Private Careers Project at the John F. Kennedy School of Government, Harvard University (Kennedy)

Larry Berman, Professor of Political Science, University of California at Davis (Johnson)

Joan Hoff-Wilson, Professor of History, Indiana University (Nixon)

Roger B. Porter, faculty chairman of the Program for Senior Managers in Government, Harvard University (Ford)

Edwin C. Hargrove, Professor of Political Science in the College of Arts and Sciences, Vanderbilt University, and Director of the Center for the Study of Leadership and Institutions, Vanderbilt Institute for Public Policy Studies (Carter)

William K. Muir Jr., Professor of Political Science, University of California at Berkeley (Reagan)

The discussants were:

Wilbur J. Cohen, a member of the Social Security Board from 1935 to 1956 (Roosevelt)

Ken Hechler, assistant to President Truman from 1949 to 1952

General Andrew J. Goodpaster, U.S. Army (ret.), staff secretary to President Eisenhower

Nicholas deB. Katzenbach, President Kennedy's deputy attorney general

John P. Roche, White House Special Consultant to President Johnson

H.R. Haldeman, President Nixon's chief of staff

Richard B. Cheney, assistant to President Ford

Jack H. Watson, President Carter's chief of staff

Edwin Meese III, current attorney general and close adviser to President Reagan

Richard Wirthlin, pollster and consultant to President Reagan

All of the conference sessions were videotaped and broadcast by C-Span. The revised conference papers will be published in 1988 by Harvard University Press in a volume edited by Fred I. Greenstein, Director of the Presidency and Leadership Studies Program, entitled Leadership in the Modern Presidency.

PRESIDENCY AND LEADERSHIP STUDIES

The Presidency and Leadership Studies Program is designed to provide students and faculty of the Woodrow Wilson School and the larger Princeton community with a general intellectual perspective on and direct exposure to leaders and leadership, with special but not exclusive emphasis on leadership in the nine "modern" American presidencies beginning with the expansion of the chief executive's obligations in the Franklin Roosevelt presidency and continuing to the present.

The centerpiece of the 1987-88 program was a major conference to reassess and analyze the leadership of Princeton alumnus, John Foster Dulles, Secretary of State from 1953 to 1959. The conference, which is described in detail in the Public Affairs Programming section of this report, was organized around commissioned papers by leading diplomatic histories and commentary by Mr. Dulles' contemporaries. Professor Richard Immerman, Visiting Fellow at the Woodrow Wilson School, is editor of the volume that will ensue from the conference.

During the 1987-88 academic year, the Program also was responsible for the publication of a set of analytic essays on leadership style and White House organizations in the FDR through Ronald Reagan presidencies. The essays, which evolved from papers given at a Woodrow Wilson School conference on April 3 and 4, 1987, appear in Fred I. Greenstein (ed.), Leadership in the Modern Presidency (Harvard University Press, 1988). Contributors include William E. Leuchtenburg, University of North Carolina at Chapel Hill (FDR); Alonzo L. Hamby, Ohio University (Truman); Greenstein (Eisenhower); Carl M. Brauer, Harvard (Kennedy); Larry Berman, University of California, Davis (Johnson); Joan Hoff-Wilson, Indiana University (Nixon); Roger Porter, Harvard (Ford); Erwin Hargrove, Vanderbilt (Carter); William K. Muir, Jr., University of California, Berkeley (Reagan).

The Program has assembled an archival and oral history reference collection on various aspects of presidential leadership since the 1930's. The collection was used extensively during the year by students and faculty at Princeton and elsewhere with the guidance of program staff.

PRESIDENCY AND LEADERSHIP STUDIES

The Presidency and Leadership Studies Program is designed to provide students and faculty of the Woodrow Wilson School and the larger Princeton community with a general intellectual perspective on and direct exposure to leaders and leadership, with special but not exclusive emphasis on leadership in the nine modern American presidencies beginning with the striking expansion of the chief executive's obligations in the Franklin Roosevelt presidency and continuing to the present.

The program is closely linked with the John Foster Dulles Program for the Study of Leadership in Foreign Affairs. A center-piece of the two program's activities in 1988-89 was a conference held in Washington at the State Department on the history, status and prospects of America's relations with Western Europe in the post-World War II period. A full account of that conference appears in the Public Affairs Programming section of this report.

The program has assembled an archival and oral history reference collection on various aspects of presidential leadership since the 1930's, which is maintained in Room 18 Woodrow Wilson School, along with a core library of works on leadership. That collection was used extensively during the year by students and faculty at Princeton and elsewhere with the guidance of the program staff.

The principal scholarly accomplishment of the year was the completion of a comprehensive study of how American presidents and their associates deliberated about whether to intervene in Vietnam at the time of the French collapse in Indochina in 1954 and that of the incipient defeat of the government of South Vietnam in 1965, with a theoretical focus on the extent to which presidents and their aides are able to make effective use of advice and information in decision making. The study, which was conducted over a six-year period under Russell Sage Foundation sponsorship, drew on nearly-complete declassified archival sources and extensive interviews with participants in the decisions. It appeared in the summer of 1989 under the title of How Presidents Test Reality: Decision on Vietnam, 1954 and 1965. The authors are Fred I. Greenstein (Princeton) and John P. Burke (University of Vermont), with the collaboration of Larry Berman (University of California-Davis) and Richard Immerman (University of Hawaii).

PROGRAM IN LEADERSHIP STUDIES

The Program in Leadership Studies is designed to provide students and faculty of the Woodrow Wilson School and the larger Princeton community with a general intellectual perspective on and direct exposure to leaders and leadership with a particular but not exclusive emphasis on the American presidency in the era since the striking expansion in the chief executive's obligations and impact beginning in the 1930s.

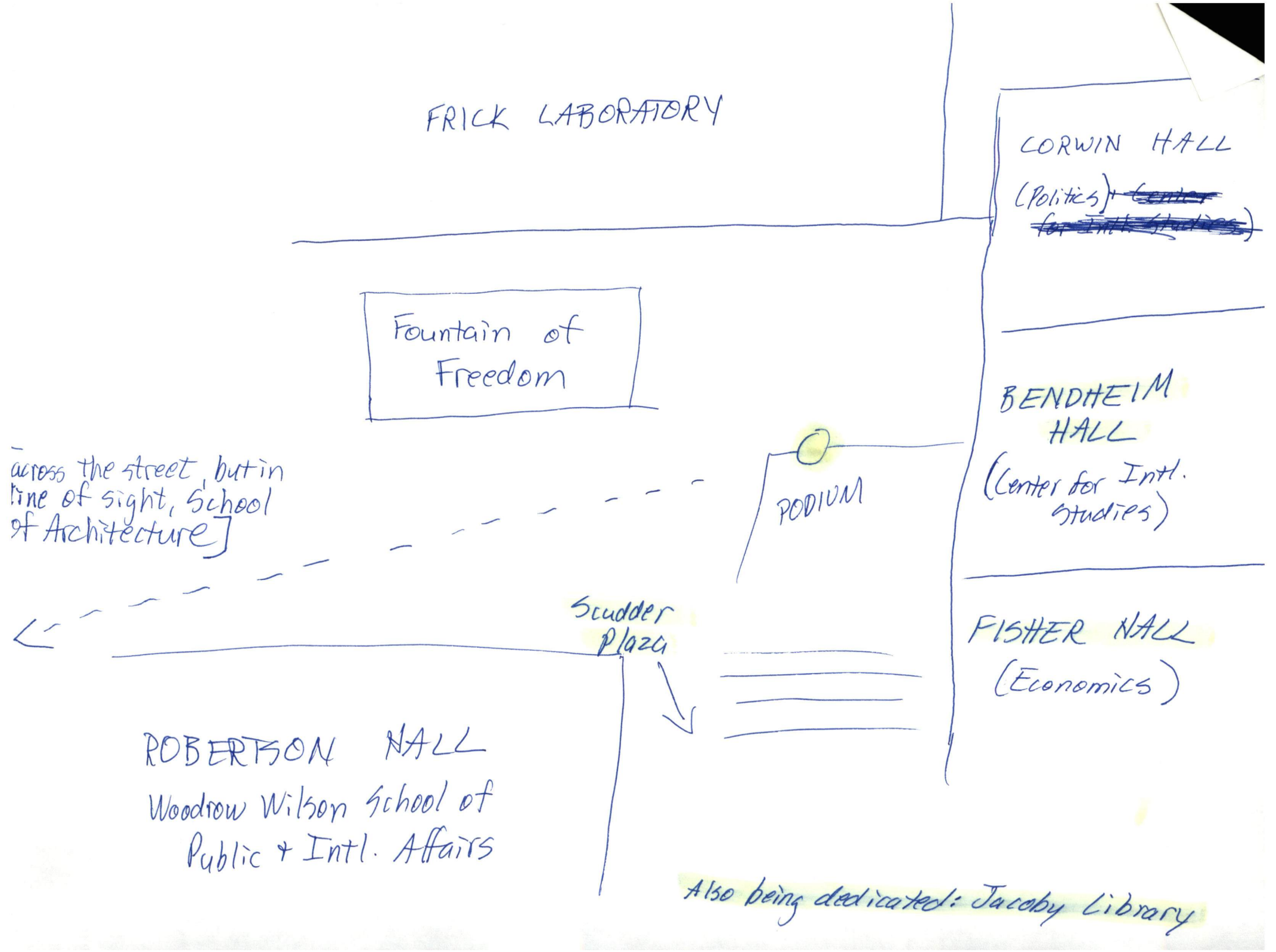
The Program in Leadership Studies is closely linked with the John Foster Dulles Program for the Study of Leadership in Foreign Affairs. (Both programs are directed by Professor Fred I. Greenstein.) In 1989-90 the Dulles Program sponspored research by Professor Charles Kupchan on the relationship between John Foster Dulles and Konrad Adenauer in the 1950s, drawing on funds provided by the German Marshall Fund. The Dulles Program also planned a conference examining the period of the Cold War in the perspective of the drastic world changes that occurred in 1989, to be held in the summer of 1990. This conference was designed to complement the program's June 1989 conference examining the Western alliance and East-West relations in the Cold War period, which immediately preceded the collapse of the Communist regimes in Eastern Europe later that year.

The Program in Leadership Studies maintains an archival and oral history reference collection on various aspects of modern presidential leadership, which is available for use by students, faculty and scholars from outside of Princeton. In 1989-90 the program's holdings were drawn on by various Princeton undergraduates and graduate students, by Professor Greenstein for an ongoing study of the impact on public affairs of the leadership of the presidents since Roosevelt and by several non-Princeton scholars.

The program periodically conducts and makes available oral histories of public figures who held significant leadership positions or had significant vantages on contemporary political leadership. In 1989-90 the oral history of C. Douglas Dillon was conducted and made available to scholars. Mr. Dillon was Ambassador to France in the first Eisenhower administration and Deputy Secretary of State in Eisenhower's second term. He served as Secretary of the Treasury under Presidents John F. Kennedy and Lyndon B. Johnson, stepping down in 1965. Mr. Dillon analyzed and compared the leadership styles of the three presidents under whom he served, providing new insights into such episodes as the U-2 incident in the final year of the Eisenhower presidency, the abortive Bay of Pigs invasion (1961), the Cuban Missile Crisis (1962) and the introduction of American ground force in Vietnam in 1965. Copies of his oral history are available from the Program.

Princeton, NJ 4/24/91

NAME	AFFILIATION	Phone #
Patricia Conrad	WH Advance	202-456-7385
Leo Tormey	"	"
Brian Montgomery	"	"
Lucy Muckerman	"	"
Lee Hill	Director of B.S.	258-3713
H. KIRK UNRUH	DIRECTOR OF DEVELOPMENT RELATIONS	609-258-3305
JOE WATKINS	WH PUBLIC LIAISON	202-456-7845
AL BATES	PRINCETON U - MANAGER SF	609-258-3580
Wm. V. LoneHi	U.S Secret Service	201-645-2334
RAY McBRIDE	" "	609-989-2008
STEVEN SMITH	WH COMMUNICATIONS AGENCY-LEAD	202-395-5206
LARRY LANDRUM	WH COMM AGCY - OPERATIONS	(202) 395-4040
JERROLD WITSIL	PUBLIC SAFETY - PRINCETON UNIV	609-258-5040
Ingrid Reed	Woodrow Wilson School PU	609-258-4819
LYNN LAWSON	WH Political Affairs	202 456 6570
Peggy Dooley	WH Speechwriting	202/456-7750
Fred Anderson	MARINE ONE Advance	703/640-2364
WAYNE JUSTICE	COAST GUARD AIDE TO PRESIDENT/MILITARY OFFICE	202 395 1747
DOUG ADAIR	WH OFFICE OF CABINET AFFAIRS	202/456-2800
Ann Halliday	Secretary's office, PU	609-258-3151
Jim Ferrante	Stirling Audio (Sound Co.)	(908) 647-0327
Justin Harmon	office of Communications, PU	609-258-5729
Alison Cook	Development Relations, PU	609-258-6448
BRUCE BOWEN	U.S. SECRET SERVICE/PRESIDENTIAL PROT. DIV.	(202) 395-4011
Bob Durkee	Vice President for Public Affairs	609-258-6425
Justi — Harmon	Director of Communications, P.U.	609-258-5732


FRICK LABORATORY
CORWIN HALL
(Politics) + ~~Center for Intl. Studies~~)
Fountain of Freedom
BENDHEIM HALL
(Center for Intl. Studies)
across the street, but in line of sight, School of Architecture]
PODIUM
Scudder Plaza
FISHER HALL
(Economics)
ROBERTSON HALL
Woodrow Wilson School of Public + Intl. Affairs
Also being dedicated: Jacoby Library

April 29, 1991

MEMORANDUM FOR BETH HINCHLIFFE
CAROL BLYMIRE

FROM: PEGGY DOOLEY

SUBJECT: PRINCETON UNIVERSITY -- BUILDING DEDICATION

I know you've already received a fair amount of information from Bob Durkee. He gave me a lot of additional material. The only other tidbits I can offer are:

- Famous Princeton grads (many, many others listed in books attached): Woodrow Wilson and James A. Baker III

- In front of the first President's house (a beautiful old yellow house that you pass on your way into the campus -- it now houses the Alumni Council) are two sycamore trees planted to commemorate the Boston Tea Party.

- The event is to dedicate Bendheim Hall, Fisher Hall, Scudder Plaza, and Jacoby Library. I have attached a map of the speech site.

- The Fountain of Freedom -- to the left of the podium -- was dedicated when President Johnson dedicated the Robertson Building (a.k.a. the Woodrow Wilson School) in 1966. It is called the Fountain of Freedom in keeping with the goals of the Woodrow Wilson School of Public Policy: world harmony and the spreading of democracy. (see map) Also: in the lobby of the Woodrow Wilson School there is a sculpture of a globe, and anywhere you touch it, it sets off vibrations over the rest of the surface -- analogous to whatever happens in one spot of the world affects the rest of it.

- The Princeton fight song is "Crash Through the Line of Blue" (Yale joke?)

# # #

CAMPUS

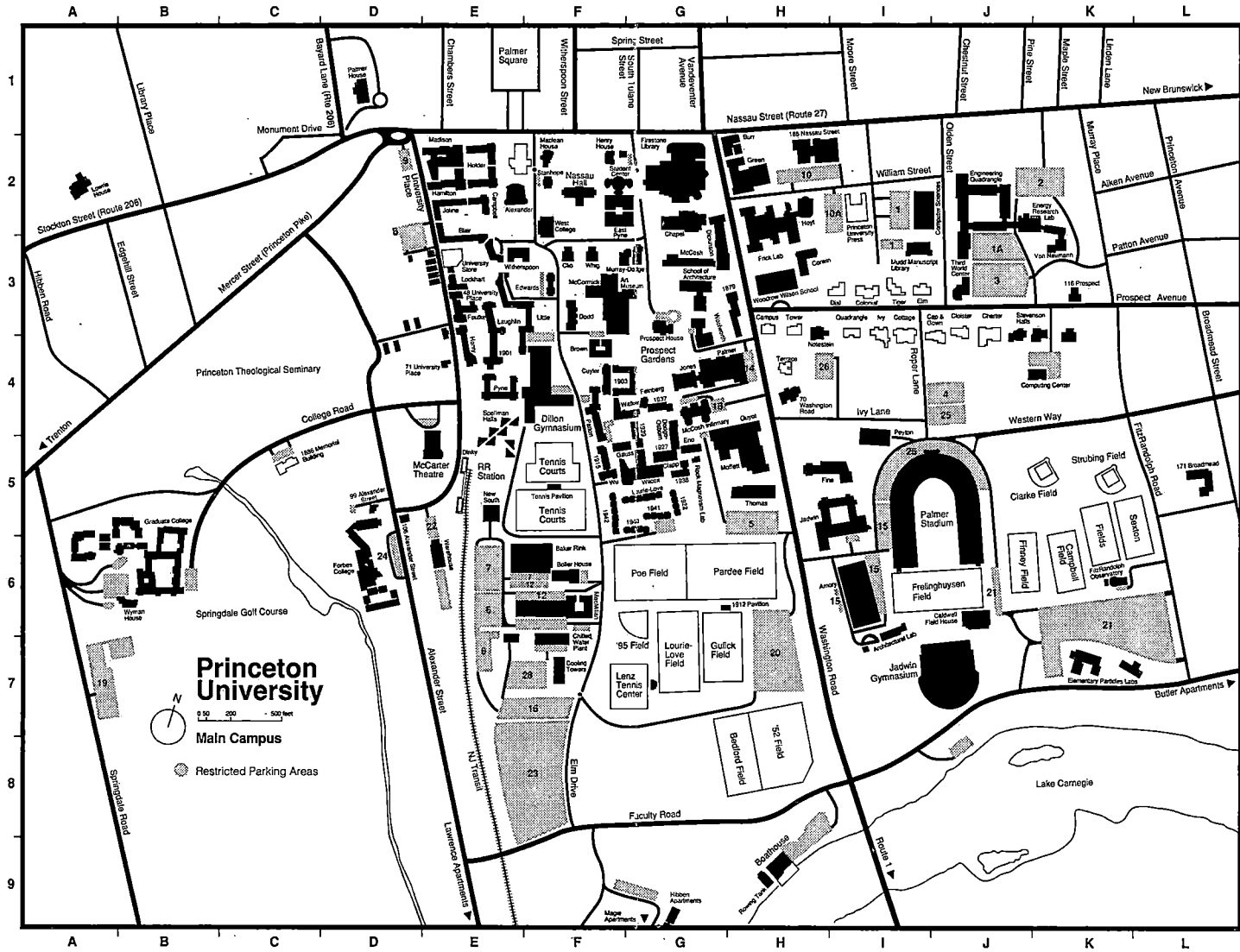
A GUIDE TO PRINCETON UNIVERSITY

CAM-PUS (kam´pes) *n., pl.* -puses.
1. The grounds of a school, college, or university. [Latin *campus*, field, plain (first used at Princeton University).]
From *The American Heritage Dictionary of the English Language*

The information in this publication has been compiled with the assistance of *A Princeton Companion* by Alexander Leitch '24 (Princeton University Press, 1978), the Orange Key Guide Service's *Guide for Guides: Facts and Traditions of Princeton University,* and the late Frederic E. Fox '39, who was a special assistant in public affairs and keeper of Princetoniana.

Published by the Office of Communications/Publications, Stanhope Hall, Princeton University, 1989.

Cover photograph: Nassau Hall, William Choi '82
Back cover: Carnegie Lake, J. T. Miller '66;
Wu Hall, J. T. Miller '66;
Chapel interior, Office of Communications/Publications;
Robertson Hall (Woodrow Wilson School), J. T. Miller '66;
Prospect House and Garden, Nat Clymer



Admission Office (West College), F2
Alexander Hall (Richardson Auditorium), E2
Architecture Building, G3
Architecture Lab, I7
Armory, I6
Art Museum, F3
Baker Rink, F6
Blair, E3
Boathouse, H9
Brown, F4
Burr, H2
Butler Apartments, L7
Caldwell Field House, J6
Campbell, E2
Chancellor Green (Student center), F2
Chapel, G2
Clapp, G5
Class of 1901, E4
Class of 1903, F4
Class of 1904–Henry, E4
Class of 1905–Foulke, E3
Class of 1915, F5
Class of 1922, G5
Class of 1927–Clapp, G5
Class of 1937, G4
Class of 1938, G5
Class of 1939, G5
Class of 1940, G5
Class of 1941, G5
Class of 1942, F5
Clio, F3
Computing Center, K4
Computer Sciences, I2
Corwin, H3
Cuyler, F4
Dickinson Street Housing, D3
Dickinson, G3
Dillon Gym, F4
Dinky (Railroad station), E5
Dod, F3
Dodge–Osborn, G5
East Pyne, F2
Edwards, F3
Elementary Particles Labs, K7
Energy Research Lab, J2
Engineering Quadrangle, J2
Eno, G5
Feinberg, G4
Fine, H5
Firestone Library, G2
FitzRandolph Observatory, K6
Forbes, D6
48 University Place, E3
Foulke, E3
Frick Lab, H3
Gauss, F5
Graduate College, residential and dining complex, B6
Green, H2
Guyot, H5
Hamilton, E2
Henry, E4
Hibben Apartments, G9
Holder, E2
Hoyt, H2
Jadwin Gym, J7
Jadwin Hall, H5
Joline, E2
Jones, G4
Laughlin, E3
Lenz Tennis Center, G7
Little, E3
Lockhart, E3
Lourie–Love, G5
Lowrie House, A2
Maclean House, F2
MacMillan, F6
Madison, E2
Magie Apartments, G9
McCarter Theatre, E5
McCormick, F3
McCosh Infirmary, G4
McCosh, G3
Mestres (Madison), E2
Moffett, H5
Mudd Manuscript Library, I3
Murray–Dodge, F3
Nassau Hall, F2
New South, E5
Notestein Hall, H4
116 Prospect, K3
171 Broadmead, L5
185 Nassau Street, H2
1879, H3
Orange Key Tours (Maclean House), F2
Palmer House, D1
Palmer Stadium, I5
Palmer, G4
Patton, F4
Peyton, I5
Prospect House, G3
Pyne, E4
Richardson Auditorium (Alexander Hall), E2
Robertson (Woodrow Wilson School), H3
Rock Magnetism Lab, G5
Railroad station, E5
70 Washington Road, H4
Spelman, E5
Stanhope, F2
Stevenson, J4
Student center (Chancellor Green), F2
Tennis Pavilion, F5
Third World Center, J3
Thomas Lab, H5
Train station, E5
University Store, E3
Von Neumann, K3
Walker, F4
West College, F2
Whig, F3
Wilcox, G5
Witherspoon, E3
Woodrow Wilson School (Robertson), H3
Woolworth Center, G3
Wu, F5
Wyman House, B6

Undergraduate Residential Colleges

BUTLER COLLEGE
Class of 1915, F5
Class of 1922, G5
Class of 1940, G5
Class of 1941, G5
Class of 1942, F5
Lourie–Love, G5
Patton, F4
Wu, F5

FORBES COLLEGE
D6

MATHEY COLLEGE
Blair, E3
Campbell, E2
Hamilton, E2
Joline, E2

ROCKEFELLER COLLEGE
Blair, E3
Holder, E2
Madison, E2
Witherspoon, E3

WILSON COLLEGE
Class of 1927–Clapp, G5
Class of 1937, G4
Class of 1938, G5
Class of 1939, G5
Dodge-Osborn, G5
Feinberg, G4
Gauss, F5
Walker, F4
Wilcox, G5

Graduate College

Residential and dining complex, B6
Wyman House, B6

Eating Clubs

Campus Club, H3
Cap and Gown Club, J4
Charter Club, J4
Cloister Club, J4
Colonial Club, I3
Cottage Club, I4
Dial Lodge, I3
Elm Club, I3
Ivy Club, I4
Quadrangle Club, I4
Terrace Club, H4
Tiger Inn, I3
Tower Club, H4

Campus Tours

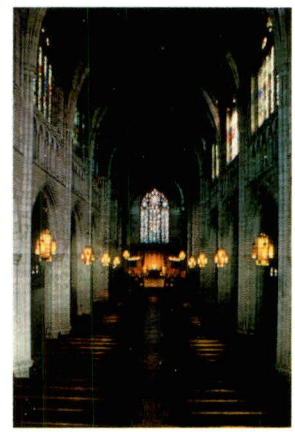
Tours of the campus are offered by undergraduates through the Orange Key Guide Service during the academic year, Monday through Saturday at 10:00 a.m., 11:00 a.m., 1:30 p.m., and 3:30 p.m., and on Sundays at 1:30 p.m. and 3:30 p.m. No tours are offered on Saturday afternoons during home football games or on Christmas or New Year's Day. Summer tour hours vary, so please check before you visit.

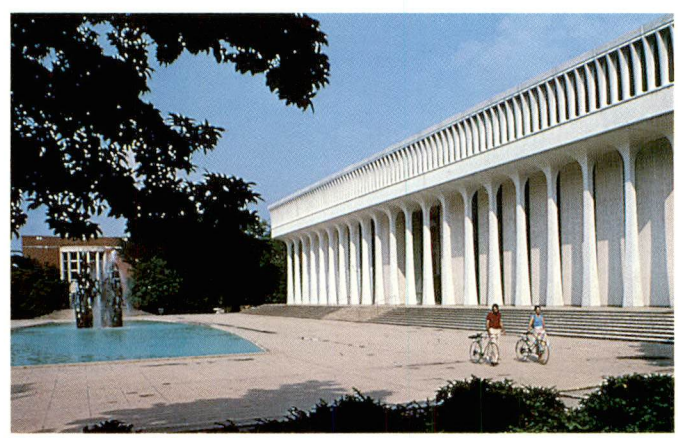
Reservations are not needed except for large groups. All tours originate from Orange Key Guide Service, Maclean House (F2 on the map). For more information about tours call 609-258-3603.

You are also welcome to get acquainted with the campus on your own. Among the places on campus of special interest are Nassau Hall, the University's oldest building and one-time seat of the Continental Congress, the Harvey S. Firestone Memorial Library, the University chapel, the Art Museum, and the Natural History Museum in Guyot Hall.

Frequently Called Telephone Numbers

Main campus information	(609) 258-3000
Admissions	
graduate	258-3034
undergraduate	258-3060
Alumni Council	258-5813
Annual Giving	258-3373
Athletics	
Fan Phone (game scores)	258-3545
Jadwin ticket office	258-3538
Communications/Publications	258-3600
Community and State Affairs	258-3018
Daily Princetonian	258-7570
EMERGENCY	258-3333
Employment	258-6130
Firestone Library	258-3180
Lost and Found	258-5771
McCarter Theatre	683-9100
McCosh Health Center	
9-5 weekdays	258-3129
evenings, weekends	258-3139
Museum information	
Art Museum	258-3787
Natural History Museum	258-4101
Plasma Physics Laboratory	683-2555
President's Office	258-6100
Princeton Alumni Weekly	258-4885
Princeton Weekly Bulletin	258-3600
Public Safety	258-3134
Tours	
Art Museum	258-3043
Orange Key Guide Service	258-3603
School of Engineering and Applied Science	258-4554
University Store	258-3647





ceilinged front hall. The next is the Hibben Nave, named for President John Grier Hibben, the largest area of the chapel. The widest section is the crossing, with the Marquand Transept (named for Henry G. Marquand) on the left and the Braman Transept (for Chester Alwyn Braman) on the right. The fourth part, reached by the steps between the high pulpit and the lectern, is the Milbank Choir or Chancel (for Elizabeth Milbank Anderson). This intimate area, the site of many weddings, is illuminated by windows showing scenes from four great works of literature: Bunyan's *Pilgrim's Progress*, Dante's *Divina Commedia*, Malory's *Le Morte Darthur*, and Milton's *Paradise Lost*.

The chapel's four great windows, depicting Endurance, Love, Truth, and Hope, are located at the building's extremities and are all visible from the crossing. The North Window (Endurance), in the Marquand Transept, has Christ at the center surrounded by martyrs of the Church, including Joan of Arc. Above the Holy Table in the chancel is the East Window (Love), showing Christ at the Last Supper with his disciples, surrounded by parables and scenes from his ministry. The South Window (Truth), in the Braman Transept, portrays Christ and other teachers of the truth, including John Witherspoon (in the lower right corner), Princeton's sixth president and the only clergyman to sign the Declaration of Independence. Over the entrance is the West Window (Hope), with Christ in glory above the four rivers of Paradise. Other windows in the main body of the chapel illustrate the life and teachings of Christ as recorded in the Four Gospels and rooted in the Old Testament.

University Store

Built: 1958
Designed by: Eldredge Snyder '22

The Princeton University Store is an outgrowth of an undergraduate enterprise now run as a cooperative society. Although founded as a bookstore headquartered in West College, the University Store is now a small department store at 36 University Place.

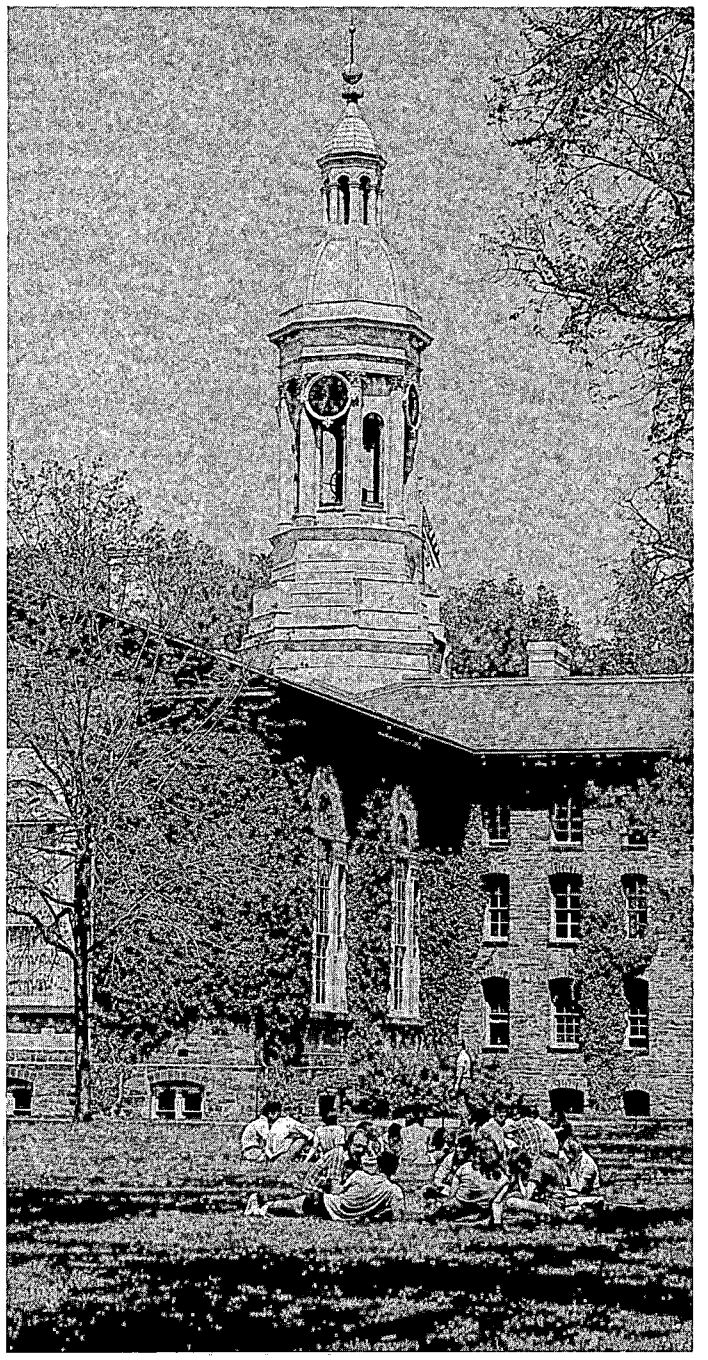
Woodrow Wilson School

(See Robertson Hall, page 26)

Woolworth Center

Built: 1963
Named for: Frank Winfield Woolworth
Designed by: Moore and Hutchins
Use: Houses the record library, rehearsal hall, practice rooms, classrooms, and offices of the Department of Music.

Contents



Nassau Hall

Blair Hall

Whig and Clio Halls

Built: 1893
Named for: Their original occupants, the American Whig Society and the Cliosophic Society, the nation's oldest college literary and debating clubs. The two groups merged in 1929 to form the American Whig-Cliosophic Society (commonly known as Whig-Clio), the University's largest undergraduate organization. Whig-Clio's activities include sponsorship of speakers involved in contemporary issues and student debates and conferences.
Designed by: A. Page Brown
Use: Whig Hall is home to Whig-Clio; Clio Hall houses Career Services and the Office of Human Resources.

The two marble buildings, modeled after a Greek temple, had predecessors made of wood and stucco (built in 1837) that stood approximately where they stand today.

A fire gutted the interior and east wall of Whig Hall in 1969; they were redesigned by the architectural firm of Gwathmey and Siegel. Whig's new interior, completed in 1972, contains a large meeting room for speeches, debates, and conferences as well as several smaller rooms for gatherings of student groups.

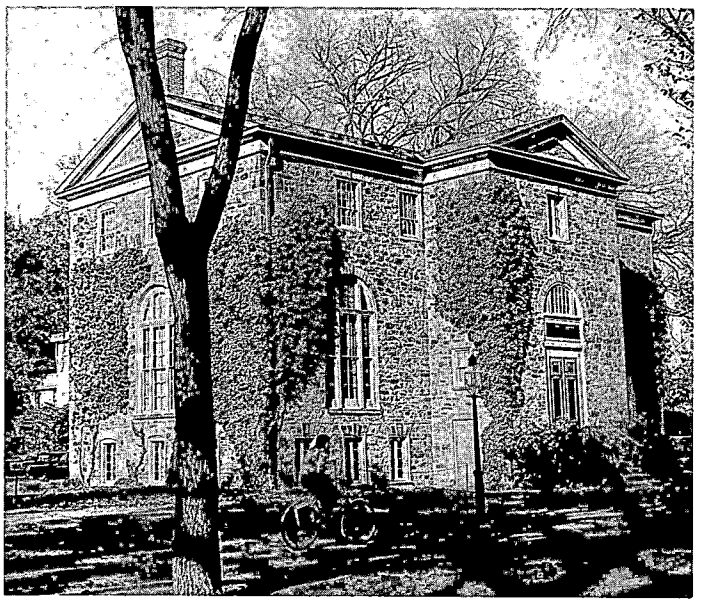
University Chapel

Built: 1925–28
Designed by: Ralph Adams Cram

The chapel, modeled after the chapel of King's College, Cambridge, seats more than 2,000 people on pews made from army surplus wood originally designated for Civil War gun carriages. The chancel's oak paneling was carved in England from Sherwood Forest trees, the source of wood for the bows and arrows of Robin Hood and his men.

Built after the Marquand Chapel (built in 1882) was destroyed by a fire in 1920, Princeton's chapel contains more than 1,000 memorials to donors who made its construction possible. In accordance with the traditions of Gothic architecture, the chapel is divided into four parts. The first of these is the narthex, a low-

The University chapel



Stanhope Hall

Stanhope Hall

Built: 1803
Named for: Princeton's seventh president, Samuel Stanhope Smith (1794–1812)
Former Names: The Library, Geological Hall
Original Use: Housed the College's book collection and its debating and literary societies, the American Whig and the Cliosophic
Current Use: Home to the Office of Communications/ Publications and the Office of Public Safety

Stanhope is the third oldest building on campus. It once had an identical twin, called Philosophical Hall, on the opposite side of Nassau Hall. Philosophical Hall was demolished in 1873 to make room for the Chancellor Green Library, which is now the student center (page 7)

Third World Center

Built: 1890
Former Name: Osborn Club House; given by Henry Fairfield Osborn 1877
Designed by: Thomas Oliphant Speir 1887
Use: Contains the offices and social facilities of the Third World Center

Thomas Laboratory

Built: 1986
Named for: Research scientist and writer Lewis Thomas '33
Designed by: Robert Venturi '47, GS'50 and Payette Associates
Use: Houses part of the Department of Biology

West College

Built: 1836
Designed by: (probably) John Notman
Original Use: Dormitory
Current Use: Offices, including those of the dean of the college, the dean of students, undergraduate financial aid, undergraduate admissions, and student employment.

West College was originally the twin of East College, Princeton's first dormitory, which stood next to Cannon Green, where East Pyne (page 9) now stands. East College was razed in 1896 to make room for East Pyne.

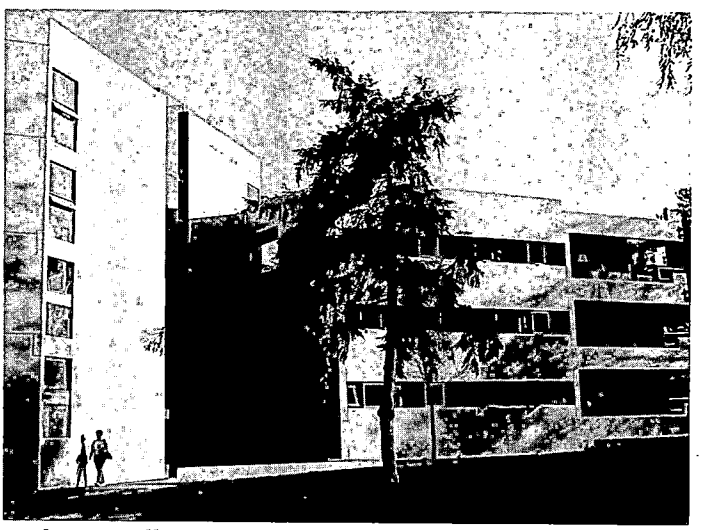
PRINCETON

The University

Princeton University, chartered in 1746 as the College of New Jersey, was British North America's fourth college. Originally located in Elizabeth and later in Newark, the College moved to the town of Princeton in 1756 to occupy the newly completed Nassau Hall (see page 18), which housed the entire College for nearly half a century. Nassau Hall was one of the largest buildings in the colonies and played an important part in their early history, serving as the home of the Continental Congress in 1783 and surviving bombardment during the Battle of Princeton on January 3, 1777. Today Nassau Hall is home to many of the University's administrative offices.

Princeton has expanded considerably since its early years in physical size, enrollment, and breadth of instruction. The campus now covers more than 2,000 acres, of which 600 comprise the main campus. Its buildings exemplify a wealth of architectural styles, ranging from colonial buildings to predominantly Gothic dormitories to modern structures by such eminent architects as Edward Larrabee Barnes, Lew Davis, I. M. Pei, Robert Venturi '47 GS'50†, and Minoru Yamasaki. The student body numbers approximately 4,500 undergraduates and 1,600 graduate students in more than 60 departments and programs. The University offers instruction in the liberal arts and sciences and in the professional programs of the School of Architecture, the School of Engineering and Applied Science, and the Woodrow Wilson School of Public and International Affairs.

† GS follows the name of alumni of Princeton's Graduate School.



Spelman Halls

The Town

Beyond Princeton University is the town of Princeton, a community of 30,000 people. Its earliest inhabitants were Quakers, encouraged by William Penn to settle the area he had purchased in 1693. A short walk around Princeton reveals streets named for these first families—FitzRandolph, Olden, Stockton. The Historical Society of Princeton, located across Nassau Street in the colonial Bainbridge House, two blocks from the University's main gate, offers information on the town's early years. Princeton conscientiously preserves its historically and architecturally important buildings, making the town an unofficial museum of American architecture from colonial times to the present.

Within this historic setting, many institutions and individuals, including writers, artists, scientists, and business executives, create an intellectual and cultural climate of unusual diversity. In addition to the University, Princeton is the home of the Institute for Advanced Study (where Albert Einstein spent the last 22 years of his life), Princeton Theological Seminary, Westminster Choir College, and Educational Testing Service. The community supports a resident repertory theater, three orchestras, a ballet, chamber music, and several choral groups. Cultural activities approach the number and variety ordinarily found only in large cities, as do recreational opportunities in Princeton and the surrounding area.

Princeton University's Forrestal Center, one of the nation's largest office and research parks, is located on a wooded site three miles north of the main campus on U.S. 1. Among the major corporations with offices at Forrestal are RCA, Mobil, IBM, Xerox, Exxon, and Dow Jones. Also at Forrestal is the University's Plasma Physics Laboratory, a research center designed to test the feasibility of using nuclear fusion to produce electricity.

Albert Einstein's Princeton home on Mercer Street

Sir Henry Moore (British, 1898–1986). *Oval with Points*, bronze, 1968-70, located between Stanhope Hall and West College.

Masayuki Nagare (Japanese, 1923–). *Stone Riddle*, dark granite, 1967, located in Voorhees Court at the Engineering Quadrangle.

Louise Nevelson (American, Russian-born, 1900–88). *Atmosphere and Environment X*, Cor-ten steel, 1969–70, located between Nassau Street and Firestone Library.

Isamu Noguchi (American, 1904–89). *White Sun*, white marble, 1966, located in the main lobby of Firestone Library.

Eduardo Paolozzi (British, Scottish-born 1924–). *Marok-Marok-Miosa*, welded aluminum, 1965, located in the main lobby of the Architecture Building.

Antoine Pevsner (French, Russian-born, 1886–1962). *Construction in the Third and Fourth Dimension*, bronze, 1962, located in the courtyard of Jadwin Hall.

Pablo Picasso (Spanish, 1881–1973). *Head of a Woman*, cast concrete, 1971, located in front of the Princeton University Art Museum.

Arnaldo Pomodoro (Italian, 1926–). *Sphere VI*, polished bronze, 1966, removed for conservation. Future location undetermined.

George Rickey (American, 1907–). *Two Planes Vertical Horizontal II*, stainless steel, 1970.

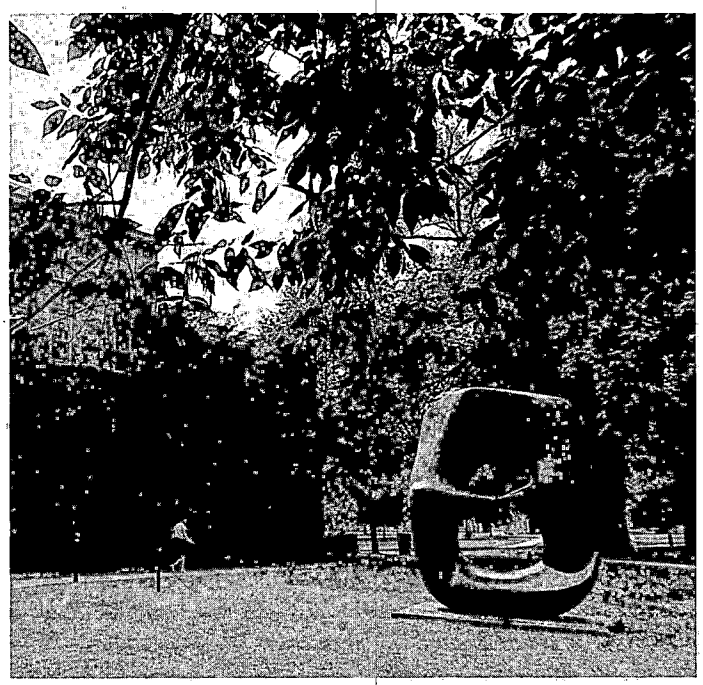
George Segal (American, 1944–) *Abraham and Isaac: In Memory of May 4th, 1970*. Commissioned as a monument to the tragic deaths of four students at Kent State University, the work was donated to the University by the Mildred Andrews Foundation.

David Smith (American, 1906–65). *Cubi XIII*, stainless steel, 1963, located in front of the west facade of the new wing of the Art Museum.

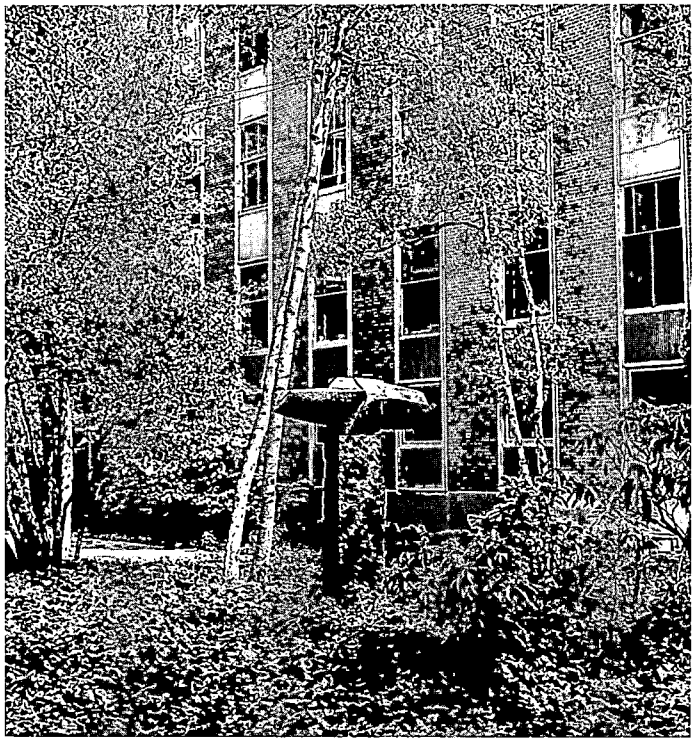
Tony Smith (American, 1912–). *Moses*, painted steel, 1969–70, located on the lawn in front of Prospect.

Kenneth Snelson (American, 1927–). *Northwood II*, stainless steel, 1970, located in Procter Court at the Graduate College.

Christopher Wilmarth (American, 1943–87). *Gnomon's Parade (parting)*, glass and steel, 1980, located in the lobby of the Woodrow Wilson School. It was purchased by the University with funds from the National Endowment for the Arts and the Mildred Andrews Foundation.



Oval with Points, *by Sir Henry Moore, located between Stanhope Hall and West College*



Stone Riddle, *by Masayuki Nagare, located in Voorhees Court at the Engineering Quadrangle*

SCULPTURE

The Putnam Collection

Beyond the walls of the Art Museum is Princeton's largest sculpture gallery: its campus. The Putnam Collection of Contemporary Sculpture, a memorial to Lieutenant John B. Putnam, Jr. '45 from an anonymous donor, consists of works by some of the best known sculptors of the 20th century displayed in courtyards, plazas, lawns, and lobbies all over campus. Alumni who were past or present directors of American art museums, including Alfred H. Barr, Jr. '22 (Museum of Modern Art), Thomas P. F. Hoving '53 (Metropolitan Museum of Art), P. Joseph Kelleher GS'47 (Princeton University Art Museum), and William M. Milliken '11 (Cleveland Museum of Art), formed the committee that selected the sculptures during 1969 and 1970.

Sculptors represented in the Putnam collection, along with locations and notes on their works, are listed below.

Reg Butler (British, 1913–81). *The Bride*, bronze, 1954–61, located in Hamilton Court.

Alexander Calder (American, 1898–1976). *Five Disks: One Empty*, painted steel, 1970, located in the plaza between Fine and Jadwin halls.

Jacob Epstein (British, American-born, 1880–1959). Professor Albert Einstein, bronze, 1933, located in Fine Hall Library.

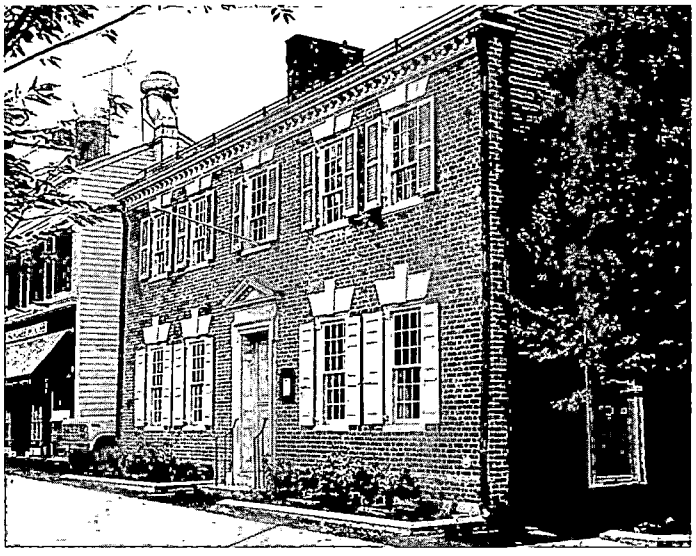
Naum Gabo (American, Russian-born, 1890–1977). *Spheric Theme*, stainless steel, 1973–74, located in front of the Seeley G. Mudd Manuscript Library.

Michael David Hall (American, 1941–). *Mastodon VI*, bronze and aluminum, 1968, located in front of the MacMillan Building.

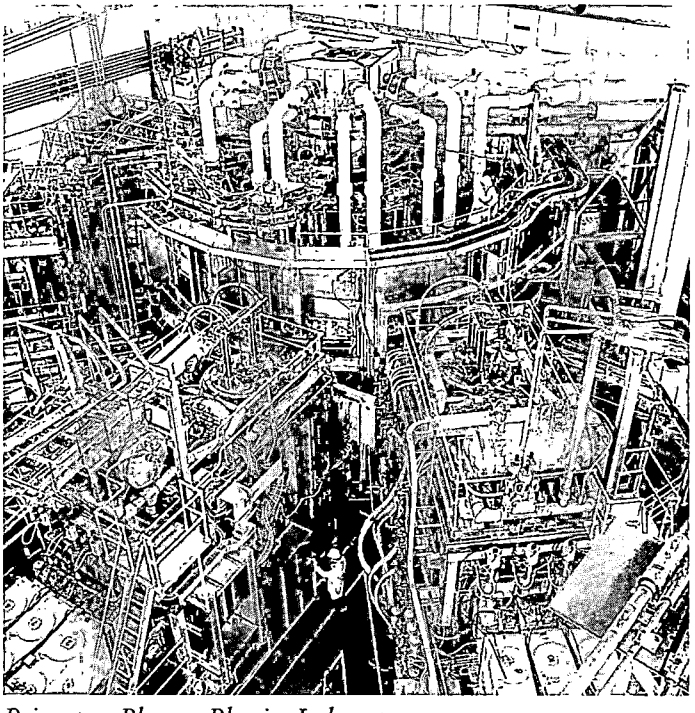
Gaston Lachaise (American, French-born, 1882–1935). *Floating Figure*, bronze, 1927, located in Compton Court at the Graduate College.

Jacques Lipchitz (American, Lithuanian-born, 1891–1973). *Song of the Vowels*, bronze, 1931–32, located in the plaza between Firestone Library and the University chapel.

Clement Meadmore (American, Australian-born, 1929–). *Upstart 2*, painted Cor-ten steel, 1970, located in front of the Engineering Quadrangle.



Bainbridge House, home of the Historical Society of Princeton



Princeton Plasma Physics Laboratory

Although the Princeton community is small and semirural, it is far from isolated. Both New York City and Philadelphia are about 50 miles away and are readily accessible by either bus or train. Princeton also frequently plays host to traveling art shows, dance and musical groups, and solo performers by virtue of its convenient location along the Boston–Washington, D.C., corridor.

The history of Princeton University and the town of Princeton is reflected in the University's buildings and grounds. The following pages will serve as introduction to the Princeton of the past and the present.

Alexander Hall, used for commencement exercises from 1892 to 1922, was also the location of Woodrow Wilson's inauguration as president of the University

Alexander Hall

Built: 1892
Named for: Charles B. Alexander 1870, his father Henry M. Alexander 1840, and his grandfather, Archibald Alexander hon. D.D. 1810, all of whom served as Princeton trustees. It was a gift from Charles B. Alexander.
Designed by: William A. Potter
Use: Public lectures, concerts, and University convocations

The building, which was renovated in 1984 when its interior was dedicated as Richardson Auditorium in honor of David B. Richardson '33, is decorated with sculptures by J. Massey Rhind and mosaics by J. A. Holzer.

Art Museum

Built: 1966. The museum is housed in an addition to McCormick Hall (page 17); other parts of the hall were built earlier.
Designed by: Steinmann and Cain
Hours: Tuesday through Saturday from 10:00 a.m. to 4:00 p.m.; Sunday from 1:00 p.m. to 5:00 p.m. The museum is closed on Monday and major holidays.

Pablo Picasso's *Head of a Woman* stands at the entrance (see page 28 for information about the Putnam Collection of Contemporary Sculpture); the collection includes Egyptian, Greek, and Roman antiquities; medieval paintings, sculpture, and works of art, including a stained glass window from Chartres; a number of paintings from the Renaissance period; a collection of French works from the 18th and 19th centuries; and a group of American paintings and sculpture. Because it is a teaching museum and an integral part of the Department of Art and Archaeology, its exhibits are timed to coincide with related course offerings.

Aaron Burr Hall

Built: 1891
Former Names: Green Hall Annex, Chemical Engineering Laboratory
Named for: Princeton's second president (1715-57)
Use: Houses the Department of Anthropology and various offices

school's home. Formerly known as the Woodrow Wilson School, the building was renamed in honor of the Robertsons in June 1988.

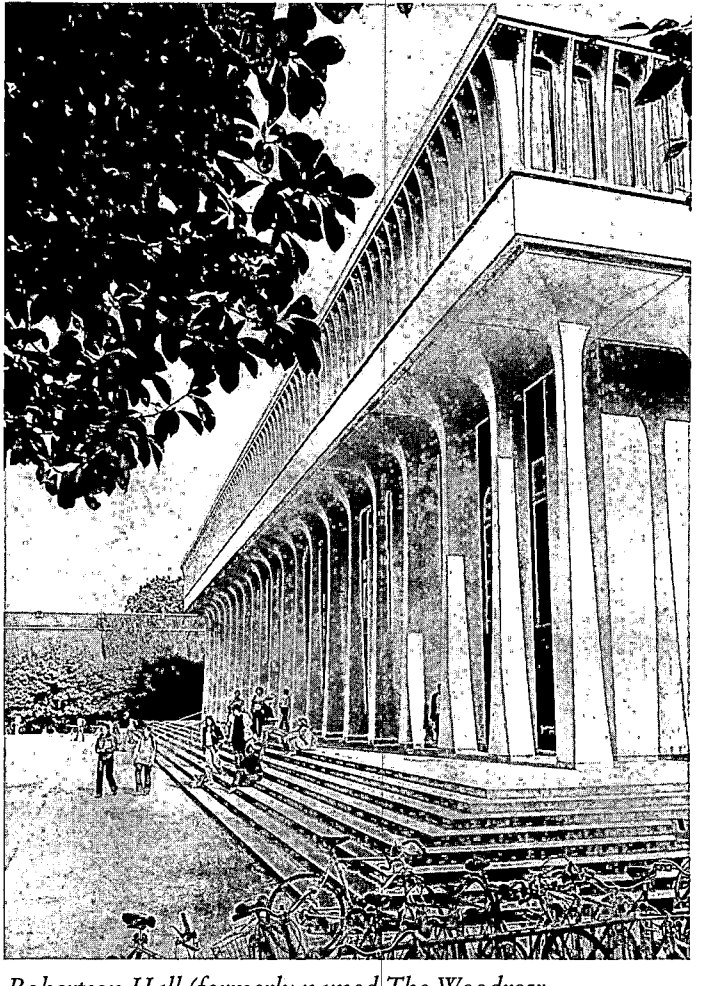
The building's exterior is surrounded by 58 quartz-surfaced concrete columns that support the bulk of its weight. Architect Minoru Yamasaki sought to embody the ideals of the school in the soaring open spaces of the building, which was dedicated in 1966 by President Lyndon B. Johnson and Princeton President Robert F. Goheen '40. Sculptures in the lobby include *The World*, 1964, by Harry Bertoia, a bronze bust of Woodrow Wilson by Jo Davidson, and one of Adlai E. Stevenson '22 by Ellen Simon. On the plaza in front of the building, James Fitzgerald's *Fountain of Freedom* serves as the centerpiece of the reflecting pool.

Robertson Hall contains facilities for both the undergraduate program and the graduate master in public affairs and doctoral programs, including a library with study carrels, conference rooms, classrooms, and offices.

School of Architecture

Built: 1963
Designed by: Fisher, Nes, Campbell, and Partners (L. McLane Fisher '23 and Charles Nes '28 are graduates of Princeton's School of Architecture)

Princeton's School of Architecture, founded in 1919, was originally housed in McCormick Hall (page 16), which it shared with the Department of Art and Archaeology. Its present headquarters contains classrooms, drafting studios, a gallery, and the School of Architecture Library. The school also maintains the Architectural Laboratory.



Robertson Hall (formerly named The Woodrow Wilson School)

Designed by Day Brothers and Klauder.

Witherspoon Hall (1877). Contains rooms for 144 students; named in honor of John Witherspoon, sixth president of Princeton. Woodrow Wilson 1879 spent his senior year here. Designed by R. H. Robertson.

Wilson College

Woodrow Wilson College, founded in 1957, is the oldest of the residential colleges. It is housed in a group of six dormitories (along with portions of two others) occupied by nearly 500 students. Wilson's dining and social center is Wilcox Hall, which also houses the college's Julian Street Library, named for an author and Princeton resident. Wilcox Hall was designed by the firm of Sherwood, Mills, and Smith; the college's dormitories are listed below.

Class of 1927–Clapp Halls (1987). A two-dormitory complex that houses 80 students; given by the Class of 1927 and a trust created by John H. Clapp '02. Designed by Koetter, Kim, and Associates.

Class of 1937 Dormitory (1960). Houses 91 students. Designed by Sherwood, Mills, and Smith.

Class of 1938 Dormitory (1960). Houses 73 students. Designed by Sherwood, Mills, and Smith

Class of 1939 Dormitory (1960). Houses 72 students. Designed by Sherwood, Mills, and Smith.

Dodge-Osborn Hall (1960). Houses 69 students; given by members of the Dodge and Osborn families and the Cleveland H. Dodge Foundation in memory of Cleveland H. Dodge 1879 and William Church Osborn 1883. Designed by Sherwood, Mills, and Smith.

Feinberg Hall (1986). Houses 40 students; given by David Feinberg '63 and his wife, Carol. Designed by Tod Williams '65.

Gauss Hall (1960). Houses 39 students; named in honor of Christian Gauss, preceptor, first Class of 1900 Professor of Modern Languages, and third dean of the college. Designed by Sherwood, Mills, and Smith.

Patton Hall (1906). The Wilson College portion of Patton Hall houses 23 students; given by the 10 classes from 1892 to 1901 in honor of Francis L. Patton, Princeton's 12th president (1888–1902). Designed by Benjamin W. Morris.

Walker Memorial Dormitory (1929). Houses 95 students; given by the family of James Theodore Walker '27. Designed by Charles Z. Klauder.

Wilcox Hall (1960). Houses 19 students; given by T. Ferdinand Wilcox 1900. Designed by Sherwood, Mills, and Smith.

Robertson Hall

Built: 1965
Named for: Charles S. Robertson '26 and his wife, Marie
Former Name: The Woodrow Wilson School
Designed by: Minoru Yamasaki
Use: Houses the Woodrow Wilson School of Public and International Affairs

The Woodrow Wilson School of Public and International Affairs serves as the University's primary memorial to the alumnus and 13th president of Princeton who went on to become governor of New Jersey and the 28th president of the United States. Founded in 1930 as a joint effort of the Departments of Economics, History, and Politics, the school was officially named in 1948 for Woodrow Wilson 1879. A graduate program was also established at that time and was expanded in 1961 through the generosity of Charles S. Robertson '26 and his wife, Marie. The Robertsons' gift also provided for the building of the school's new headquarters, replacing Corwin Hall (formerly Woodrow Wilson Hall) as the

Chancellor Green

Built: 1873
Named for: Chancellor of New Jersey Henry W. Green 1820; given by his brother, John C. Green
Designed by: William A. Potter
Original Use: Library
Current Use: Campus social center

Computing Center

Built: 1968
Designed by: Walker O. Cain
Use: Contains offices, lecture rooms, and operating space for the Office of Computing and Information Technology

Computer Science Building

Built: Scheduled for completion in the fall of 1989
Designed by: Kliment and Halsband
Use: Houses the Department of Computer Science.

The lower floors are devoted to undergraduate instruction and contain classrooms, an auditorium, computing laboratories, and an innovative demonstration classroom. The upper floors provide common areas for the department; administrative space; offices for faculty members, graduate students, and associated staff; and laboratories with experimental computer equipment for research projects in software systems, computer architecture, distributed systems, parallel computing, VLSI design systems, databases, and computer graphics. The building's design allows flexibility to change the computer network as technological developments dictate.

Corwin Hall

Built: 1952
Former Name: Woodrow Wilson Hall
Named for: Renamed in 1963 in honor of Edward S. Corwin, McCormick Professor of Jurisprudence and first chairman of the Department of Politics
Designed by: Voorhees, Walker, Foley, and Smith
Use: Houses the Department of Politics and the Center for International Studies

The Marquand, Mather, Wright Court, in the Art Museum

Dickinson Hall

Built: 1930
Named for: Jonathan Dickinson, first president of the College
Use: Home of the Departments of Economics and History

Dickinson was built as an extension of the wing of McCosh Hall along Washington Road. Connected to the University Chapel by the Rothschild Arch, it is one of three buildings bordering McCosh Court. Dickinson replaced an earlier recital and lecture hall of the same name, which stood for 50 years at the southwest corner of the site now occupied by Firestone Library (page 11). That building was destroyed by fire in 1920.

Dillon Gymnasium

(see Recreational and Athletic Facilities, page 22)

Dormitories (Upperclass)

Princeton's upperclass dormitories represent a rich variety of architectural styles, ranging from elaborately Victorian to starkly modern.

Room configurations in these dormitories vary widely, with suites occupied by two to eleven students, double and single rooms, and the Spelman Halls apartments. Cooperative living groups are an alternative to dormitory life.

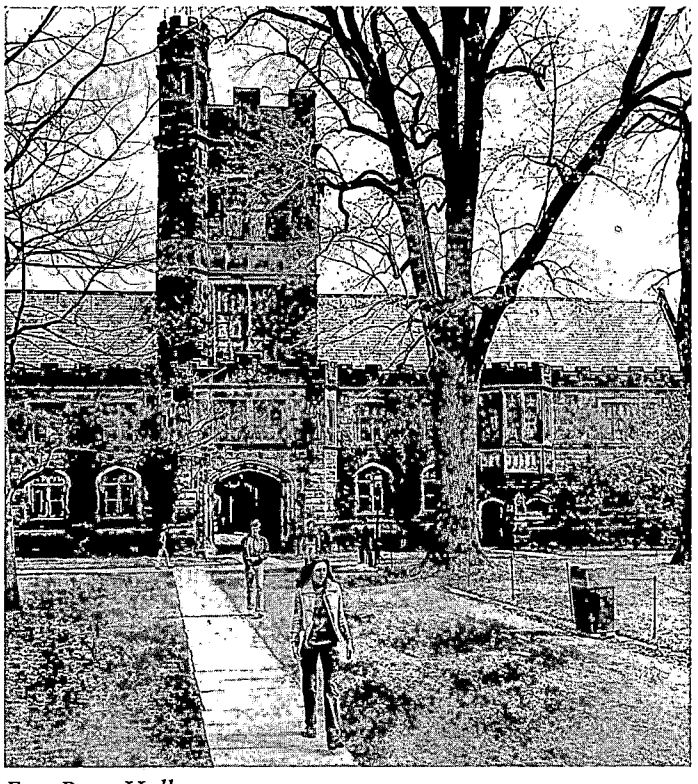
The University's upperclass dormitories are listed below.

Brown Hall (1891). Modeled after a Florentine palace; designed by John Lyman Faxon.

Class of 1901 Dormitory (1926). Houses 147 students. Designed by Day and Klauder.

Class of 1903 Dormitory (1929). Houses 133 students. Designed by Charles Z. Klauder.

Class of 1904–Howard Henry Memorial Dormitory (1923). Houses 142 students; given by the class, family, and friends of Howard Houston Henry '04 and Samuel Franklin Pogue '04, both killed in World War I. Designed by Zantzinger, Borie, and Medary.



East Pyne Hall

The college's main dining room is **Ricardo A. Mestres Hall,** named for a member of Princeton's Class of 1931 who served as the University's principal business and financial officer from 1953 to 1972. Other college facilities include a lounge, a television room, a private dining room, and a coffee house. Mathey College residents share the use of the Laurance S. Rockefeller '32 Library with Rockefeller College residents. The college's dormitories are listed below.

Blair Hall, west of the tower (1897). The Mathey College portion of Blair Hall houses 193 students; the hall was given by John Insley Blair. Designed by Cope and Stewardson.

Campbell Hall (1909). Houses 118 students; given by the Class of 1877 in honor of their president, John A. Campbell. Designed by Cram, Goodhue, and Ferguson.

Hamilton Hall (1911). Houses 69 students; given by the Classes of 1884 and 1885 in honor of John Hamilton, acting governor of the Province of New Jersey (1746–47), who granted the college its charter in the name of King George II. Designed by Day and Klauder.

Joline Hall (1932). Houses 109 students; given by Mary E. Larkin Joline in memory of her husband, Adrian H. Joline 1870. Designed by Charles Z. Klauder.

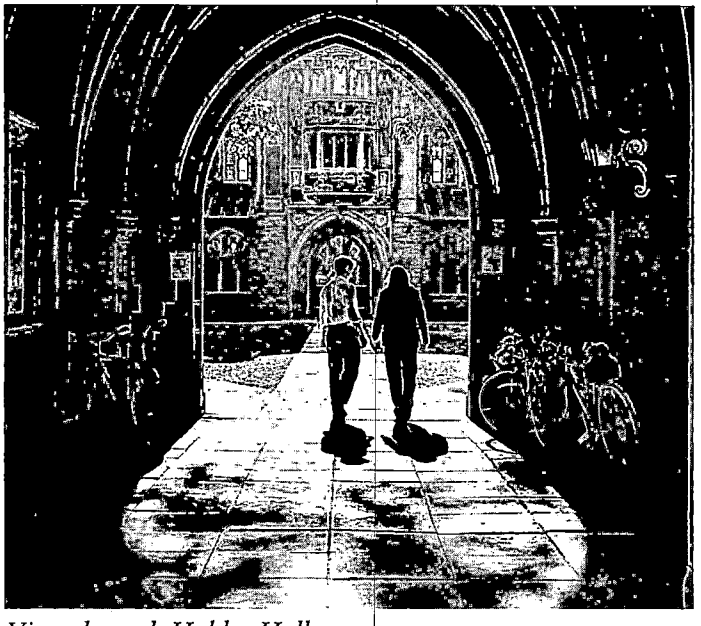
Rockefeller College

Rockefeller College is named for John D. Rockefeller 3rd, one of America's leading philanthropists and a member of Princeton's Class of 1929. College members live and dine in a group of the University's most beautiful buildings, adjoining those of Mathey College in the northwest corner of the campus. The restoration and modification of the buildings were undertaken by Robert Venturi '47, GS'50.

The main dining room of Rockefeller College is **Madison Hall,** originally part of the complex known as Commons. Next to it is the Peter S. Firestone '62 Common Room, a central space for informal gatherings and special events. The Laurance S. Rockefeller '32 Library is shared with residents of Mathey College. The college's dormitories are listed below.

Blair Hall, east of the tower (1897). The Rockefeller College portion of Blair Hall houses 68 students; the hall was given by John Insley Blair. Designed by Cope and Stewardson.

Holder Hall and Tower (1910). Houses 290 students; given by Mrs. Russell Sage in memory of an ancestor, Christopher Holder.



View through Holder Hall

Residential Colleges

All freshmen and sophomores at Princeton live in one of five residential colleges along with 450 to 500 other members. Two of these colleges—Woodrow Wilson and Forbes College (formerly Princeton Inn)—have existed for a number of years; the other three began full operation in 1983-84. Each college has a faculty master, a director of studies, faculty fellows, and upperclass resident advisers. The colleges sponsor programs ranging from intramural athletic activities to trips and dances to lecture and film series.

The residential colleges and the buildings associated with each are described below.

Butler College

Butler College was made possible by a gift from Lee D. Butler '22 and his wife, Margaret. Its dining and social center is **Gordon Wu Hall**, given by Gordon Y. S. Wu '58; designed by Robert Venturi '47, GS'50. Wu Hall also houses the Matthew T. Mellon '22 Library, a reference and study library named in honor of its donor, a classmate of Mr. Butler. The college's dormitories include:

Class of 1915 Dormitory (1949). Houses 63 students; designed by Aymar Embury 1900.

Class of 1922 Dormitory (1964). Houses 41 students; designed by Hugh Stubbins.

Class of 1940 Dormitory (1964). Houses 69 students; designed by Hugh Stubbins.

Class of 1941 Dormitory (1964). Houses 80 students; designed by Hugh Stubbins.

Class of 1942 Dormitory (1964). Houses 101 students; designed by Hugh Stubbins.

Lourie-Love Hall (1964). Houses 91 students. Given by Charter Trustees Donold B. Lourie '22 and George H. Love '22; designed by Hugh Stubbins.

Patton Hall (1906). Houses 40 students. Given by the 10 classes from 1892 to 1901 in honor of Francis L. Patton, Princeton's 12th president; designed by Benjamin W. Morris.

Forbes College

Formerly the Princeton Inn College, Forbes College was renamed in 1984 to honor Malcolm S. Forbes, Jr. '70, president and chief operating officer of Forbes Inc. and deputy editor-in-chief of *Forbes* magazine.

The second of the University's two original residential colleges, **Forbes College** is located at the southwestern edge of campus overlooking the Springdale Golf Course and Graduate College (page 12). The college's main building was designed as a hotel by Andrew J. Thomas in 1924 and converted by the University in 1970. Students are housed in the inn and in an annex designed by J. Robert Hillier '59 and completed in 1971.

The 1984 renovation of Forbes College was undertaken by architect Robert Venturi '47, GS'50. In addition to extensive dining and social facilities, the college maintains the Norman Thomas '05 Library, named for the six-time Socialist candidate for the presidency.

Mathey College

Mathey College is named for Dean Mathey, a member of Princeton's Class of 1912 who served as a trustee under Princeton Presidents Hibben (1912–32), Dodds 1933–57), and Goheen (1956–72). The college's central dining and social facilities are located in buildings formerly known as **Commons**. These buildings, designed by Day and Klauder and erected in 1916, have been called the best examples of the collegiate Gothic style of architecture in the country. They were restored and modified to accommodate their new roles by Robert Venturi '47, GS'50.

Class of 1905–Walter L. Foulke Memorial Dormitory (1923). Houses 118 students; given by the class, family, and friends of John Baird Atwood '05, Walter Longfellow Foulke '05, and Henry Steele Morrison '05, all killed in World War I. Designed by Zantzinger, Borie, and Medary.

Cuyler Hall (1912). Houses 119 students; named in honor of Cornelius C. Cuyler 1879. Designed by Day Brothers and Klauder.

Albert B. Dod Hall (1890). Houses 133 students; given by Mrs. David Brown in memory of her brother, Albert Baldwin Dod 1822, Professor of Mathematics (1830–45). Designed by John Lyman Faxon.

Edwards Hall (1880). Houses 79 students; named in honor of Jonathan Edwards, third president of Princeton (January–March 1758). Designed by E. D. Lindsey.

Laughlin Hall (1926). Houses 71 students; given by James Laughlin 1868. Designed by Day and Klauder.

Stafford Little Hall (1899–1902). Houses 227 students; given by Henry Stafford Little 1844. Designed by Cope and Stewardson.

Lockhart Hall (1927). Houses 97 students; given by James H. Lockhart '87. Designed by Charles Z. Klauder.

Patton Hall (1906). Houses 120 students (some in Butler college); given by the 10 classes from 1892 to 1901 in honor of Francis L. Patton, Princeton's 12th president. Designed by Benjamin W. Morris.

Pyne Hall (1922). Houses 208 students; named in honor of M. Taylor Pyne 1877, trustee of Princeton (1885–1921). Designed by Day and Klauder.

Spelman Halls (1972). Contain apartment-like suites. Designed by I. M. Pei.

East Pyne Hall

Built: 1897
Named for: Moses Taylor Pyne 1877; given by his mother, Mrs. Percy Rivington Pyne
Designed by: William A. Potter
Original Use: Library
Current Use: Houses offices and classrooms for language departments

Eating Clubs

Closely allied to the campus, although not officially part of the University, are the undergraduate eating clubs along Prospect Avenue. A distinctive feature of nonacademic life at Princeton, most of these dining and social organizations sprang up in the late years of the 19th century or the early years of the 20th. Thirteen of the original 20 eating clubs are still in operation.

Proceeding down Prospect Avenue from Washington Road, they are, on the right: **Campus Club** 1900, **Tower Club** 1902, the former **Cannon Club**, **Quadrangle Club** 1901, **Ivy Club** 1879, **Cottage Club** 1886, **Cap and Gown Club** 1890, **Cloister Inn** 1912, **Charter Club** 1901, and the former **Court and Key** and **Seal** clubs. On the left side of the street are: **Dial Lodge** 1907, **Colonial Club** 1891, **Tiger Inn** 1890, and **Elm Club** 1895. Around the corner from Prospect Avenue on Washington Road is **Terrace Club** 1904.

1879 Hall

Built: 1904
Named for: Its donors, the Class of 1879
Designed by: Benjamin W. Morris
Use: Houses offices and classrooms for the Departments of Philosophy and Religion

Engineering Quadrangle

Built: 1962
Designed by: Voorhees, Walker, Smith, and Haines
Use: Houses the School of Engineering and Applied Science

In 1921 the School of Engineering and Applied Science was organized as Princeton's second professional school, even though engineering courses had been part of the college's curriculum since 1875 when John C. Green, founder of the School of Science, endowed a chair in civil engineering. The school spent its first years in various campus locations before getting a home of its own in 1928, the John C. Green Engineering Building (now Green Hall, page 13).

By the 1950s the school's quarters had become cramped, and new facilities became a major focus of a capital fund drive that supported the construction of the Engineering Quadrangle in 1962. At the same time, the school's name was changed to the School of Engineering and Applied Science to reflect its true orientation.

The Engineering Quadrangle, or E-Quad, consists of a complex of seven connected buildings around a central court and contains 120 laboratories, 25 classrooms, a library, a machine shop, a convocation room, and more than 125 faculty offices and graduate study spaces. Of the 7 units, 5 are named for faculty and alumni: George Erle Beggs (professor of civil engineering 1915–39); Cyrus Fogg Brackett (professor of physics 1873–1908, head of the Department of Electrical Engineering 1889–1908); John Thomas Duffield 1841 (professor of mechanics and mathematics 1854-98); James E. Hayes (professor of civil engineering 1895, electrical engineering 1897); and John Maclean, first professor of chemistry in the United States and father of Princeton's tenth president. The sixth unit is the library, named for its principal donor, the Class of 1900.

The seventh building is the Energy Research Laboratory, completed in 1979, whose construction was made possible by gifts from alumni, foundations, and corporations. It was designed by Sert, Jackson, and Associates and is devoted to fundamental engineering research on problems of energy conversion, conservation, and resources. The central court is a memorial to Stephen F. Voorhees 1900, architect and University trustee.

Eno Hall

Built: 1924
Named for: Henry Lane Eno, research associate in psychology and principal donor of the building
Designed by: Day and Klauder
Original Use: "The first laboratory in this country, if not in the world, dedicated to the teaching and investigation of scientific psychology," according to Professor Howard Crosby Warren, first chairman of the psychology department and a major donor to the building fund.
Current Use: Houses offices and laboratories of the Department of Biology

Carved above the front door of Eno Hall is the motto originally carved over the Oracle of Delphi in ancient Greece: Gnothi Sauton (Know Thyself). The Department of Psychology was moved to larger quarters in John C. Green Hall (page 13) in 1963.

Fine Hall

Built: 1968
Named for: Henry Burchard Fine 1880, Dod Professor of Mathematics (1898–1928), dean of the faculty (1903–12), and dean of the Department of Science (1900–28)
Designed by: Warner, Burns, Toan, and Lunde
Use: Houses the Departments of Mathematics and Statistics

those for such solitary pursuits as fitness training and jogging.

The 46,000-seat **Palmer Stadium** (1914), home of football and track at Princeton, is the second oldest college arena in the country. Designed by H. J. Hardenbergh, it was given in memory of Stephen S. Palmer, a University trustee (1908–13), by his son Edgar Palmer '03. At the horseshoe stadium's open end is Caldwell Field House, designed by the firm of Steinmann, Cain and White and named in honor of Charles W. Caldwell '25, varsity football coach (1945–56). It provides locker and training facilities for the stadium, nearby playing fields, and its mammoth neighbor, **Jadwin Gymnasium**. Completed in 1968 with funds from the bequest of Ethel S. Jadwin and named for her son L. Stockwell Jadwin '28, the building by Steinmann and Cain contains the University's main basketball floor, large indoor practice spaces for field sports, playing areas for winter sports, tennis courts, a track, and office space for the Department of Athletics.

Other prominent buildings are **Baker Rink** and the **Class of 1887 Boathouse.** The rink was designed by the firm of Coy and Rice as a memorial to one of Princeton's finest athletes, Hobart A. H. Baker '14, who was killed in World War I. It is used for intercollegiate and intramural hockey and for recreational skating. The Boathouse, designed by Pennington Satterthwaite 1893, is located on the north shore of Lake Carnegie and accommodates locker rooms, a workshop, and 32 shells. The adjoining rowing tank, designed by Louis T. Klauder '30 and completed in 1972, contains practice spaces for 16 oarsmen.

Athletic fields, along with their donors, uses, and locations, are listed below:

Bedford Field (1934). Used for intramurals; given by Paul Bedford 1897. The Bedford Field name was given to its present location in 1986; the field now known as Lourie-Love is the site of the original Bedford Field.

Brokaw Field (1893). Contains 27 tennis courts given by alumni and a pavilion given by Dean Mathey '12 and designed by Ballard, Todd, and Snibbe (1961).

Campbell Field (1909). Used for football and lacrosse; given in memory of Tyler Campbell '43, killed in World War II.

Clarke Field (1961). Used as the varsity baseball diamond; given in honor of William J. Clarke, varsity baseball coach (1909–44).

Class of 1895 Field (1929). Used for women's softball; given by the class.

Class of 1952 Field (1986). Used for intramurals; given by the class.

Finney Field (1962). Used for football and lacrosse; given in memory of Dr. John M. T. Finney 1885, charter trustee (1910–42).

Frelinghuysen Field. Used for 150-pound football and varsity football practice. Given in memory of Peter H. B. Frelinghuysen '04.

Gulick Field (1952). Used for women's lacrosse and intramurals. Given by Archibald A. Gulick 1897, University trustee (1939–59).

Lenz Tennis Center (1983). Used for varsity tennis matches. Given in memory of Robert Hamilton Southard 1899.

Lourie-Love Field (1986). Used for men's soccer, women's field hockey, women's soccer, and women's lacrosse. Given by George Love '22. This site was originally known as Bedford Field.

Pardee Field. Used for women's varsity field hockey, soccer, and intramurals. Given in memory of Ario Pardee 1897.

Poe Field (1916). Used for intramurals. Given in memory of John Prentiss Poe 1895, killed in World War I.

Sexton Field (1962). Used for football practice. Given in memory of Herbert Bradley Sexton.

Strubing Field (1962). Used as the freshman baseball diamond. Given in memory of John Kelley Strubing, Jr. '20.

Of the domestic trees in the garden, 19 are native to the Eastern United States, four to the Pacific Northwest, two to the Rockies, and one to California. The many foreign trees are native to such diverse areas as China, India, and Spain. Included among these are Japanese dogwood (actually native to China), Himalayan pine, and European beech, a pair of which stand on the north lawn. At least one example of each variety of tree is labeled with the botanical and common names.

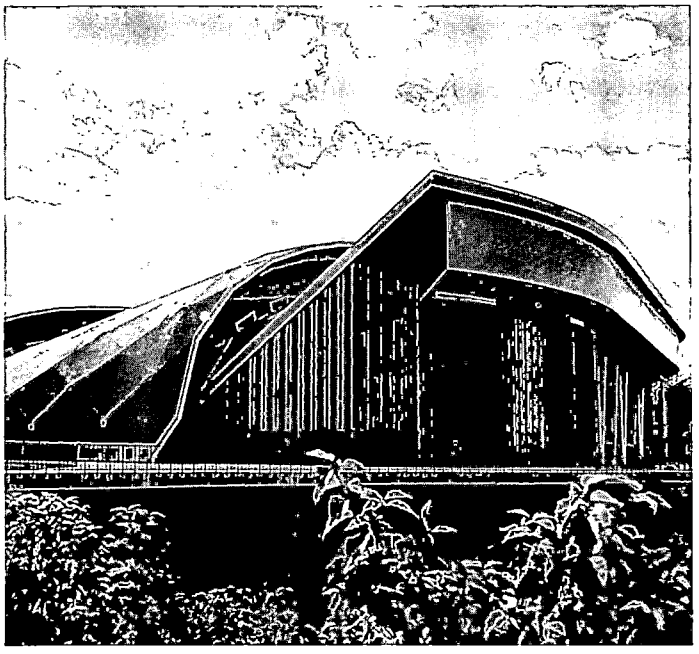
The flower garden at the rear of Prospect was laid out in approximately its present form by Mrs. Woodrow Wilson after her husband had the iron fence erected around the garden's perimeter to control student traffic in 1904. Mrs. Wilson also supervised the planting of the evergreens, predominantly Canadian hemlock, that serve as a backdrop for the flower garden. The flowers are changed at regular intervals throughout the growing season.

Recreational and Athletic Facilities

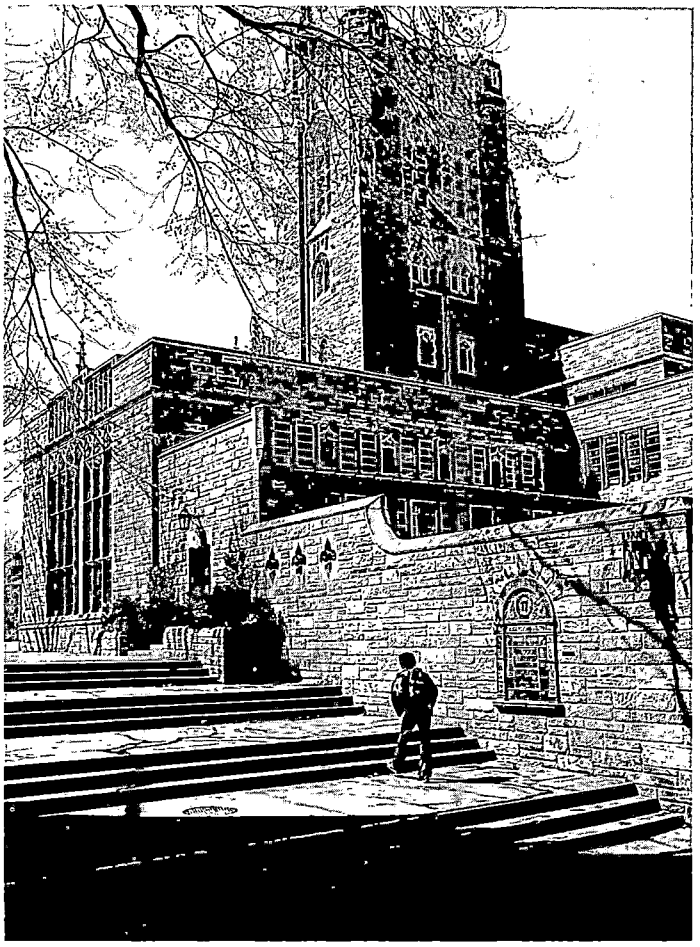
Princeton's first playing fields were its lawns. Cannon Green (behind Nassau Hall) was especially popular for intramural football games in the middle years of the 19th century. At the time of the world's second intercollegiate football game in November 1869 (the first had been played at Rutgers a week earlier), the college had no official football field or gymnasium. Unfortunately, the first gym (actually no more than a shed) had to be burned in 1865 after a tramp infected with small pox spent the night in it.

A gym was erected on the present site of Campbell Hall in 1870 and was replaced by University Gymnasium, at the time the largest in the country, in 1903. After the University Gymnasium was devastated by a 1944 fire, **Dillon Gymnasium** was erected on its site in 1947. Constructed through the generosity of Herbert Lowell Dillon '07, the building was designed in the gothic style by Aymar Embury 1900, who took the opportunity to adorn the building's exterior with gargoyles resembling helmeted football players. Included in Dillon are basketball and squash courts; rooms for general exercise, gymnastics, wrestling, karate, and fencing; a Health Fitness Center; the University's swimming pool; and locker facilities.

Dillon is only part of the University's network of athletic and recreational facilities, ranging from those for major team sports to



Jadwin Gymnasium



Firestone Library

Firestone Library

Built: 1948
Named for: Harvey S. Firestone
Designed by: R. B. O'Connor, GS'20 and W. H. Kilham
Use: Houses the University's extensive collection of books, manuscripts, and microforms; provides reading and study areas for students.

The library has had more homes over the years than any other department or office of the University. The first was a room on the second floor of Nassau Hall, to which two large boxes of books were brought from Newark in 1756. The library was moved in 1803 to Stanhope Hall, where it remained until 1860, when it was returned to Nassau Hall to occupy the building's new rear wing, now known as the Faculty Room. The library acquired the first real home of its own in 1873 with the completion of the Chancellor Green Library (now a campus social center). This was soon outgrown, however, and began serving as the reference room for the adjoining Pyne Library (now East Pyne) built in 1897.

While Pyne Library functioned admirably for a number of years, the rapidly expanding collection required a larger building by the 1940s, when gifts from the Firestone family, other groups, and individuals made it possible to plan and build the Firestone Library.

The Firestone Library makes the majority of its volumes accessible to the University community. The library's collections now include more than four million books in addition to microforms, manuscripts, and other materials. There are reading spaces for 2,000 students, study carrels for 500, and a number of offices and conference rooms. The library maintains a number of special collections of rare books and manuscripts both in Firestone and in other campus locations.

FitzRandolph Observatory

Built: 1934

Home to a 36-inch reflecting telescope installed in 1966 as well as computing rooms and laboratory facilities.

48 University Place

Built: 1901

Contains offices for the *Daily Princetonian* (student-run daily newspaper); the *Nassau Herald* and *Bric-a-Brac* (yearbooks), the *Tiger* (humor magazine), and other publications and clubs.

Frick Laboratory

Built: 1929
Named for: Its donor, Henry C. Frick, a Pittsburgh steelmaker
Designed by: Charles Z. Klauder (a 1963 addition was designed by O'Connor and Kilham)
Use: Houses the offices, Kresge Auditorium, lecture and recitation rooms, laboratories, and library of the Department of Chemistry

Geological and Geophysical Science Library

Built: 1981
Designed by: Mitchell/Giurgola Architects as an addition to Guyot Hall

Graduate College

The Graduate College, a complex of residential and dining areas for Princeton's graduate students at the western edge of campus overlooking Springdale Golf Course, was the first facility of its kind in the United States. Its gothic refectory, soaring tower, and dormitory courts were designed by Ralph Adams Cram, architect of the University chapel. Cram worked on the plans for the college in collaboration with Andrew Fleming West 1874, the first dean of the graduate school (1900–28), who is memorialized in R. Tait McKenzie's statue in the main quadrangle.

The Graduate College was dedicated in 1913, with its various parts named for its founders and benefactors. **Thomson College**, the main quadrangle, is a memorial to U. S. Senator John R. Thomson 1817 from his wife, Mrs. J. R. Thomson Swann; **Procter Hall**, the dining room, was given by William C. Procter 1883 in memory of his parents; **Pyne Tower**, home of the master-in-residence, was named for M. Taylor Pyne 1877, chairman of the Graduate School Committee at the time of the college's construction; and **Wyman House**, home of the dean of the graduate school, is a memorial to the school's first benefactor, Isaac C. Wyman 1848.

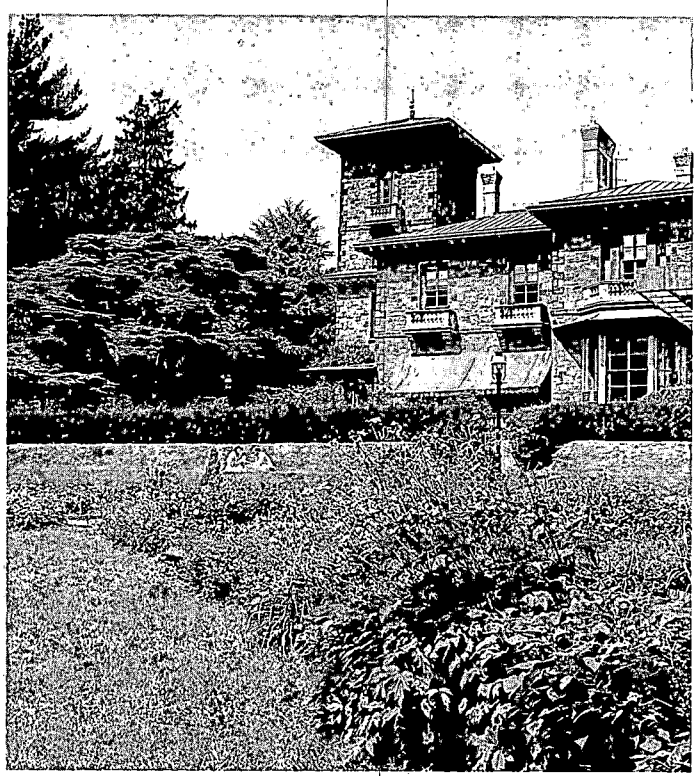
Cleveland Tower, which rises 173 feet above the ground, is one of the Princeton area's most prominent landmarks. It was erected by public subscription as a memorial to Grover Cleveland, the 24th president of the United States and a University trustee (1901–08), who spent his retirement years in Princeton. The tower's belfry features a 67-bell carillon with a range of more than five octaves, a gift of the Class of 1892.

A quadrangle known as the North Court was added in 1927 with a further gift from William C. Procter. One of the modern quadrangles built in 1963 is named for Procter, while the other serves as a memorial to three distinguished graduates of the school: Karl T. Compton GS'12, Wilson M. Compton GS'15, and Arthur H. Compton GS'16.

bushes, plants, and flowers, from the commonplace to the exotic. Planting in the garden began shortly after the house was completed in 1849, with the help of an Englishman named Petrey who brought in the cedar of Lebanon, the hawthorn, and the yew that stand near the tower on the west side. The cedar is a magnificent specimen and one of the highlights of the garden. Its bark ranges in color from black to gray to almost lavender at the base; its evergreen, matted needles are deep green; its profuse lichens are bright yellow-green.

While the garden has been shaped and changed over the years by Prospect's various owners and residents, many of its trees predate the house, notably the tulip trees and American beech, which are native to the area. The tulip trees are the largest in the garden, reaching more than 100 feet into the air and measuring six feet in diameter at their thickest points. One stands on the north lawn; the other shelters the glass-enclosed dining room to the south. The trees are members of the magnolia family and produce rather inconspicuous green, tulip-like flowers each June. The 70-foot American beech near the entrance to the garden has high branches extending over the roof of the neighboring Art Museum. It is especially handsome in the fall when its foliage turns deep bronze.

The native trees and the cedar are the oldest in the garden, but others are much older in origin. The dawn redwood and ginkgo are descendants of trees that have existed, according to fossil evidence, for millions of years. Prospect's redwood was planted in 1948 from a seed brought from China, and is over 75 feet tall with a span of more than 30 feet. Unlike West Coast redwoods, its blue-green leaves turn the same rust-red as the bark in autumn, then drop. The redwood is surrounded by smaller Douglas fir and hemlock on the west side of the garden. The ginkgo (or maidenhair) trees are slow-growing and free of pests, factors that have undoubtedly contributed to their hardiness and longevity. These tall, straight-trunked trees, which were favorites in Chinese and Japanese temple gardens, are easily identified by their fan-shaped leaves and horizontal leaf veins in the summer and by the leaf spurs on the branches in the winter.



Prospect House and Garden

Palmer Hall

Built: 1908
Named for: Stephen S. Palmer, University trustee (1908–13)
Designed by: H. J. Hardenbergh (the statues of Benjamin Franklin and Joseph Henry that stand at the entrance were sculpted by Daniel Chester French)
Use: Houses the Department of Physics, the Program in Science in Human Affairs, and the Princeton-in-Asia program

Palmer House

Built: 1823; acquired by the University in 1968
Named for: Edgar Palmer, charter trustee; it was bequeathed to the University by his widow
Designed by: Charles Steadman
Use: The University's guest house
Location: The northeast corner of Nassau Street and Bayard Lane

Palmer Stadium

(see Recreational and Athletic Facilities, page 22)

Peyton Hall

Built: 1966
Named for: One of its donors, William Charles Peyton, father of Bernard Peyton '17
Designed by: Minoru Yamasaki
Use: Houses offices, classrooms, and laboratories for the Department of Astrophysical Sciences

Prospect House

Built: 1849; acquired by the University in 1878
Named for: Its commanding views of the surrounding countryside
Designed by: John Notman
Original Use: Home to Princeton's presidents
Current Use: A dining and social facility for faculty and staff

Prospect is one of the few University buildings not originally a part of the campus. The Florentine-style mansion was designed as the centerpiece of the 30-acre estate of Colonel George Morgan, an explorer of the western United States and an Indian affairs agent. Morgan's estate, a popular stopping off place in Revolutionary times, was visited by such diverse groups as a delegation of Delaware Indians, 2,000 mutinous soldiers of the Pennsylvania Line, and the Continental Congress.

The mansion was presented to Princeton in 1878 by Alexander and Robert L. Stuart, Scottish-American merchants, philanthropists, and devout Presbyterians. Its first resident, President James McCosh (1868–88), thought the house was the finest in the world for a college president, and that its grounds were like Eden. As the campus enlarged, however, students began to take shortcuts across the lawns and gardens, depriving Prospect of some of its Eden-like qualities. After a particularly flagrant instance of trespassing by a rampaging football crowd, President Woodrow Wilson erected an iron fence enclosing five acres of the grounds in 1904.

Prospect Garden

There's a story about a Harvard alumnus asking a Princeton man whether, lacking a law school and medical school, Princeton at least had an arboretum. "Our entire campus is an arboretum," was the Princetonian's reply.

That point is nowhere more evident than in Prospect Garden. The grounds surrounding the house present an array of trees,

Green Hall

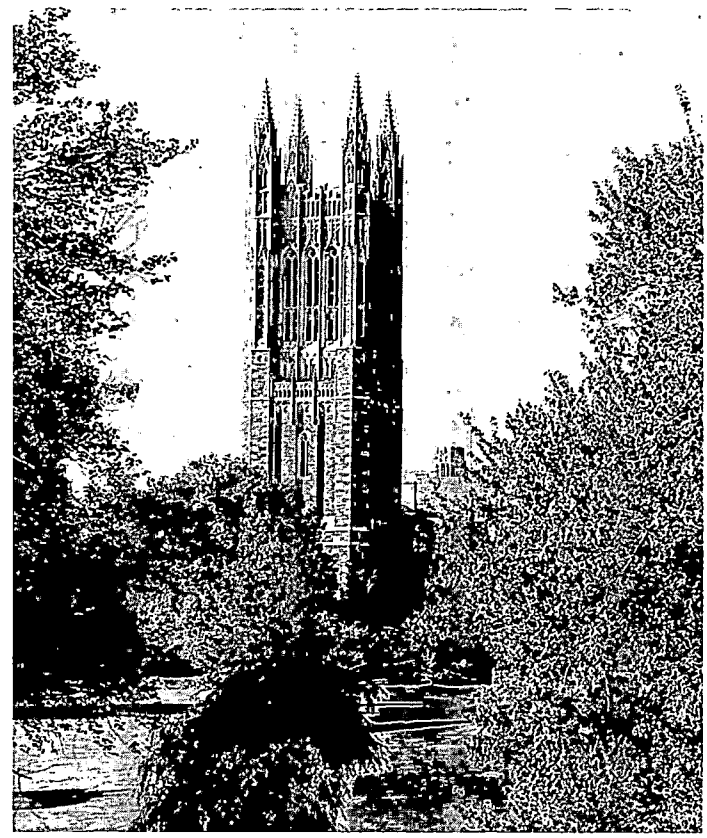
Built: 1927
Named for: John C. Green, founder of the University's School of Science
Designed by: Charles Z. Klauder; remodeled in 1963 by Francis W. Roudebush
Use: Houses the Departments of Psychology and Sociology

Guyot Hall

(The Natural History Museum)
Built: 1909
Named for: Arnold Guyot, Princeton's first professor of geology and geography (1854–84)
Designed by: Professor William Berryman Scott, then-chairman of the biology and geology departments; Parrish and Schroeder
Use: Home to Princeton's Natural History Museum and the biology and geology departments

When Arnold Guyot founded the Natural History Museum in 1856, his small collection of specimens was displayed in what is now the Faculty Room of Nassau Hall. Today, the museum contains archaeological, biological, and geological specimens, and is located on the ground floor of Guyot Hall. Among the museum's most popular displays are skeletons of a saber-toothed tiger, a three-toed horse, a giant pig, the Antrodemus dinosaur, and a 75-million-year-old baby duckbill dinosaur, one of 15 found in a nest in Montana in 1978.

Guyot's exterior features stone carvings of extinct and living animals and plants on the molding of the building—some 200 of them, according to a survey conducted by students in the 1950s. These ornaments were created in the studio of Gutzon Borglum, sculptor of Mount Rushmore.



President Grover Cleveland's association with Princeton is commemorated by the Cleveland Tower of the Graduate College

Henry House

Built: 1837
Named for: Physicist Joesph Henry, a Princeton professor who later became the first secretary of the Smithsonian Institution
Designed by: Joseph Henry
Original Use: Home to Henry; later home to the dean of the college
Current Use: Home to the dean of the faculty

Henry House, originally built on the south side of Stanhope Hall (page 30), was moved three times before coming to rest in its present location at the front of the campus, across from Maclean House.

Hoyt Laboratory

Built: 1979 (renovated 1985)
Named for: Henry Hoyt '17
Designed by: Davis Brody and Associates
Use: Houses teaching and research facilities for chemistry and biochemistry

Jadwin Gymnasium

(see Recreational and Athletic Facilities, page 22)

Jadwin Hall

Built: 1968
Named for: Stanley P. Jadwin; given by his wife, Ethel S. Jadwin (see Jadwin Gymnasium, page 23)
Designed by: Hugh Stubbins Associates
Use: Contains the laboratories, classrooms, and offices of the Department of Physics

Jones Hall

Built: 1931
Former Name: Fine Hall
Named for: Its donors, Thomas D. Jones 1876 and Miss Gwethalyn Jones, who gave the building in honor of Henry Burchard Fine 1880, first chairman of the Department of Mathematics. When the new Fine Hall was completed in 1969 (see page 10), this building was renamed in honor of its donors.
Designed by: Charles Z. Klauder
Original Use: Home to the mathematics department
Current Use: Home to the Departments of East Asian and Near Eastern Studies

Room 209 served as Albert Einstein's office from 1933 until 1939, when he moved to the newly erected Fuld Hall of the Institute for

Maclean House

FitzRandolph Gate

The Surrounding Area

The area north of Nassau Hall, known as the Front Campus, is part of the parcel of land given to the college in 1753 by Nathaniel and Rebecca FitzRandolph. To the west are Stanhope Hall (page 30) and Maclean House (page 15); to the east are the Chancellor Green Student Center (page 7) and Joseph Henry House (page 14).

Behind Nassau Hall is Cannon Green, a quadrangle also bounded by West College (page 30) to the west, East Pyne (page 9) to the east, and Whig and Clio halls (page 31) to the southwest and southeast. In the center of the green is the Big Cannon, a veteran of the Revolution and the War of 1812 and now the focal point of football bonfires and Class Day festivities. The Little Cannon, which stands between Whig and Clio, was used in the Revolution.

FitzRandolph Gate

FitzRandolph Gate, the campus's main entrance, was erected in 1905 in fulfillment of a bequest by Augustus van Winkle in memory of his ancestor Nathaniel FitzRandolph, who donated the land on which Nassau Hall stands.

New South

Built: 1965
Designed by: Edward Larrabee Barnes
Use: Home to administrative offices, including Annual Giving, Development, and Printing Services

Named "New South" to distinguish it from "Old North" (Nassau Hall)

Notestein Hall

Acquired by University: 1974
Former Name: Cannon Club
Use: Home to offices and research facilities for the Office of Population Research

185 Nassau Street

Built: 1912 (originally a public school, it was acquired by the University in 1966)
Use: Houses classrooms, offices, and studios for the Programs in Creative Writing, Theater and Dance, and Visual Arts

Nassau Hall

Built: 1756
Named for: King William III, Prince of Orange-Nassau
Designed by: Robert Smith and William Shippen
Original Use: Housed the entire College
Current Use: Houses the president's and other administrative offices

A fire in 1802 left only the walls standing; Benjamin Henry Latrobe was engaged to rebuild it along its original lines. After an 1855 fire, John Notman (who was also the architect for Prospect House (page 20) and Walter Lowrie House (page 15), made a number of exterior changes to the building, including the staircases at the ends of the building and the arched front doorway.

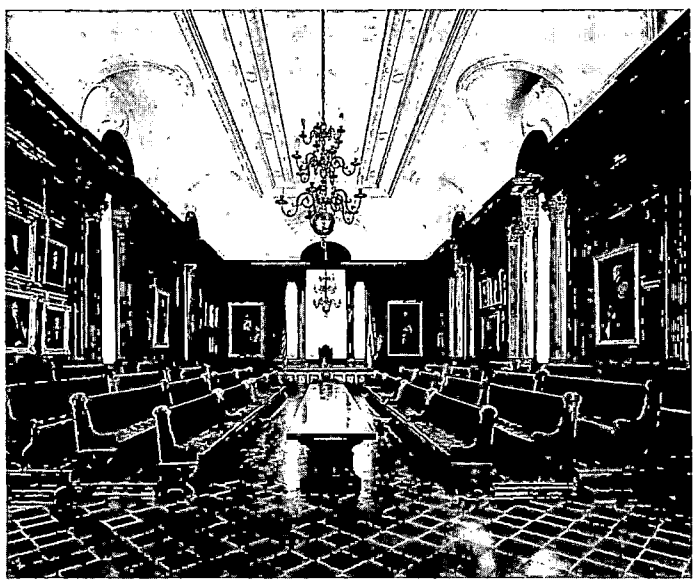
The sturdy stone structure has survived bombardment during the American revolution (a cannonball scar is visible on the exterior south wall of the west wing), occupation by troops of both sides during the war, and two fires. George Washington drove the British from Nassau Hall in 1777 and visited it again in 1783 to receive the thanks of the Continental Congress for his conduct of the war. Its momentous early history has been recognized by the federal government with both national landmark status and a commemorative postage stamp issued to celebrate its 1956 bicentennial.

The Entrance

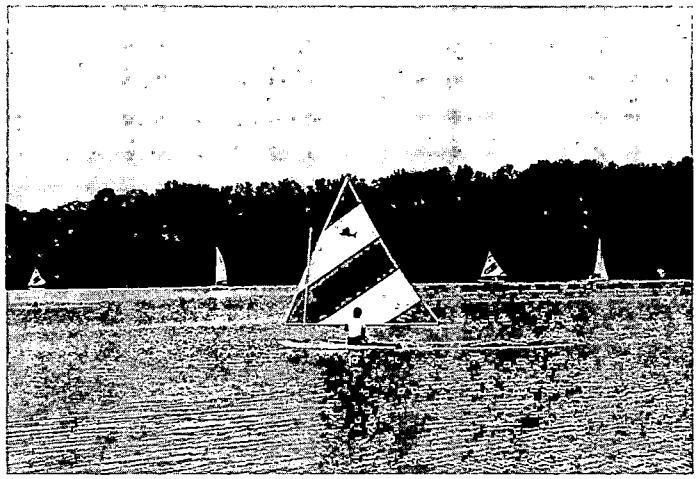
The two bronze tigers that flank the doorway were modeled by A. P. Proctor and presented to the University in 1911 by Woodrow Wilson's classmates, replacing the lions that they had given on their graduation in 1879.

Memorial Hall

Behind Nassau Hall's massive front doors is Memorial Hall, designed in 1919 by the firm of Day and Klauder to commemorate Princeton's war dead. Beyond the hall is the Faculty Room, which served successively as a chapel, library, and portrait gallery. The room, remodeled in 1906 along the lines of the British House of Commons, is now used for meetings of the faculty and trustees. On its walls are Charles Willson Peale's portrait of Washington at the Battle of Princeton and paintings of King George II, William III, Princeton's presidents, and illustrious 18th-century graduates. Two presidents of the United States, Princeton alumni James Madison 1771 and Woodrow Wilson 1879, are also included in the collection.



The Faculty Room in Nassau Hall



Lake Carnegie

Advanced Study. The building contains serveral tributes to Einstein—his relativity equations appear in the motifs in the leaded windows, and his comment, "God is subtle, but He is not malicious," appears carved in the original German over the fireplace in the common room.

Lake Carnegie

Officially known as Carnegie Lake, this three-and-one-half-mile-long body of water was a gift to the University from industrialist and philanthropist Andrew Carnegie in 1906. The lake was formed by damming the confluence of Stony Brook and the Millstone River at Kingston. At the time of its dedication, Carnegie, who was appalled by the injuries suffered by football players, expressed the desire that rowing should surpass football in popularity. President Woodrow Wilson, however, noted with good humor that he had hoped for a more practical gift, saying, "We needed bread and you gave us cake."

The lake's 2,000-yard straightaway rowing course, one of the finest in the East, is sheltered from crosswinds by virtue of its location and the surrounding trees. The lake is a popular recreational setting for students and community residents, providing a place for rowing, canoeing, sailing, skating, and fishing.

Lowrie House

Built: 1845 (acquired by the University in 1960)
Named for: Walter Lowrie 1890, a Kierkegaard scholar; given by his widow, Barbara Armour Lowrie
Designed by: John Notman
Original Use: University guest house
Current Use: Home of the president of the University

Maclean House

Built: 1756
Former Names: President's House, Dean's House
Named for: John Maclean, Jr., founder of the Alumni Association (1826) and president of Princeton (1854–68)
Designed by: Robert Smith
Original Use: President's home (Aaron Burr, Sr., was its first occupant)
Current Use: Home of the Alumni Council, administrative offices for the Education Center at Blairstown, and the Orange Key Guide Service

The two trees on the front lawn nearest Nassau Street are the "Stamp Act Sycamores," planted in 1765 to commemorate the repeal of the Stamp Act, one of the most onerous instruments of British colonial oppression.

MacMillan Building

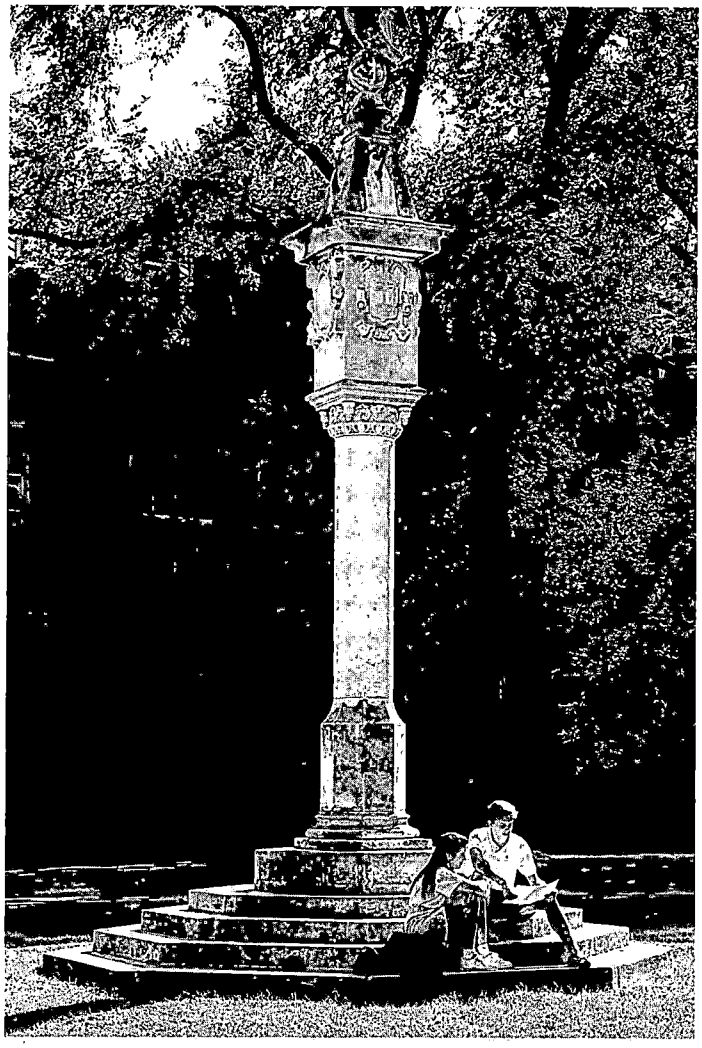
Built: 1962
Named for: Edward A. MacMillan '14, superintendent of grounds and buildings (1921–57)
Designed by: John P. Moran '51
Use: Houses the offices and shop of Physical Plant, Physical Planning, and Real Estate. A 1981 addition, by Design/Builders of Philadelphia, contains the Housing Office

McCarter Theatre

Built: 1929; acquired by University 1950
Named for: Thomas N. McCarter 1886
Designed by: D. K. Este Fisher, Jr. 1813
Use: Home to Princeton's Triangle Club and a full range of cultural events

Princeton's Triangle Club has been staging musical comedies since 1893. Booth Tarkington 1893 persuaded the club, originally known as the Princeton College Dramatic Association, to adopt the name of "that sometime musical instrument" and to concentrate on a unique brand of college musicals and revues written by undergraduates, including F. Scott Fitzgerald '17. The club's name was confirmed by a favorite student ramble, the "Triangle Walk" along Mercer Street to either Lovers' Lane or Quaker Road and then across to Stockton Street and back into town.

The theater's premiere production was *The Golden Dog* featuring Joshua Logan '31 and James Stewart '32.



Mather Sun Dial in McCosh Court

McCormick Hall

Built: 1922
Named for: Its donor, Cyrus H. McCormick 1879
Designed by: Ralph Adams Cram
Original Use: Home to the School of Architecture and the Department of Art and Architecture
Current Use: Home to the Department of Art and Architecture, the Marquand Library, and the Art Museum (see page 6)

McCosh Hall

Built: 1907
Named for: James McCosh, Princeton's 11th president (1868–88)
Designed by: Raleigh C. Gildersleeve
Original Use: Housed lecture halls and smaller meeting rooms for preceptorials, or small classes, a system introduced by Woodrow Wilson in 1905
Current Use: Home to the Department of English and a variety of lectures, meetings, and classes

When it was built, McCosh was the largest building on campus. Its walls are made of the same gray Indiana limestone used in the construction of the adjoining University chapel (page 31) and Dickinson Hall (page 8).

A major crossroads of student traffic at Princeton is McCosh Court, formed by McCosh and Dickinson halls on the south and east and the University chapel on the north. The Mather Sun Dial in McCosh Court, a replica of the Turnbull Sun Dial at Oxford's Corpus Christi College, was a gift from Sir William Mather, governor of Victoria University, Manchester, England, "to symbolize the connection between Oxford and Princeton [and] . . . Great Britain and America." The sun dial has a column more than 20 feet tall and topped by a pelican, the symbol of Corpus Christi.

McCosh Infirmary

Built: 1925
Named for: Isabella McCosh, the wife of President James McCosh (1868–88), who often cared for sick students
Designed by: Day and Klauder

A fully accredited health care facility, McCosh is staffed by full-time physicians, nurses, and psychologists. It has 21 beds in its infirmary and offers walk-in outpatient care. The center has a two-room suite where parents may stay if their son or daughter is in the infirmary or a nearby hospital.

Moffett Laboratory

Built: 1960
Named for: George M. Moffett '04, founder of the Whitehall Foundation; given by the Whitehall Foundation and the National Institutes of Health
Designed by: O'Connor and Kilham
Use: Contains research facilities, laboratories, animal facilities, aquariums, and a greenhouse for the Department of Biology.

Murray-Dodge Hall

Built: 1879 and 1900, respectively
Named for: Donor Hamilton Murray 1872 and William E. Dodge, Jr. 1879 (given in his memory by his father, William E. Dodge, and his grandson, Cleveland Dodge)
Designed by: H. S. Harvey (Murray) and Parrish and Schroeder (Dodge)
Use: Contains a small auditorium (Theatre Intime) in Murray and offices for religious and social services in Dodge.

calories and/or cholestoral, they can be steamed or boiled—in only four minutes. The Chive Beurre Blanc is a rich sauce, but a light coulis of tomato or roasted peppers can be substituted.

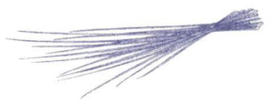
Three dumplings make a perfect first course; six make a satisfying main course. Shapes of dumplings may vary. The round won-ton skins make semi-circular dumplings that can be arranged beautifully on a round platter. Square won-tons will make triangular dumplings. They can also be formed into small pouches for hors d'oeuvres.

Smoked Salmon Dumplings

1/4 pound smoked salmon
12 won-ton skins
1/4 bunch chives (long cut)
1 egg
1 tablespoon water
(Mix egg and water to make an egg wash.)

Layer the won-ton skins on a flat surface; brush the edges with the egg wash. Fold a thin slice of smoked salmon; place it on one side of the won-ton with a couple of long-cut chives. Fold the skin in half; press the edges together; trim if necessary. Steam, boil, or fry for four minutes or until done.

Chive Beurre Blanc



1 cup white wine
1 teaspoon white wine vinegar
1 shallot, chopped
1 bay leaf
4 sprigs of fresh thyme
1/2 teaspoon whole white peppercorns, cracked
2 tablespoons heavy cream
1/3 pound butter
1 tomato, peeled, seeded, finely diced
3/4 bunch chives, finely cut

Combine the white wine, vinegar, chopped shallot, bay leaf, thyme, and cracked peppercorns in a saucepan. Simmer on medium-high heat until reduced to approximately 1/4 of a cup. Add the heavy cream and boil for one minute. Reduce the heat to a very low setting; add butter slowly, one small piece at a time, stirring constantly. After adding all the butter, remove from the heat, and strain. Add diced tomato and chives. Serve with the dumplings.

Join us at Prospect House for our

St. Patrick's Day Party

and Traditional Irish Supper

6:30–10:30 p.m.

Saturday, March 9, 1991

Our fun-filled evening of Irish music, mood, and food starts with Irish beer on tap, to be followed by parsley and sorrel soup; Michaelmas salad of beets, eggs, potatoes, parsley, and dill; a main course of Guiness and beef; traditional root vegetables (that is, turnips and rutabagas) with cabbage and potato pancakes. Dessert will be a walnut-caramel tartlet along with Irish soda bread and Irish coffee.

The evening's entertainment will be capped by a raffle with host Dan Martin; prizes gathered so far include tickets to Princeton athletic events and gift items from local Princeton merchants.

Cost is $19.95 per person. Call 258-3455 to reserve your table now.

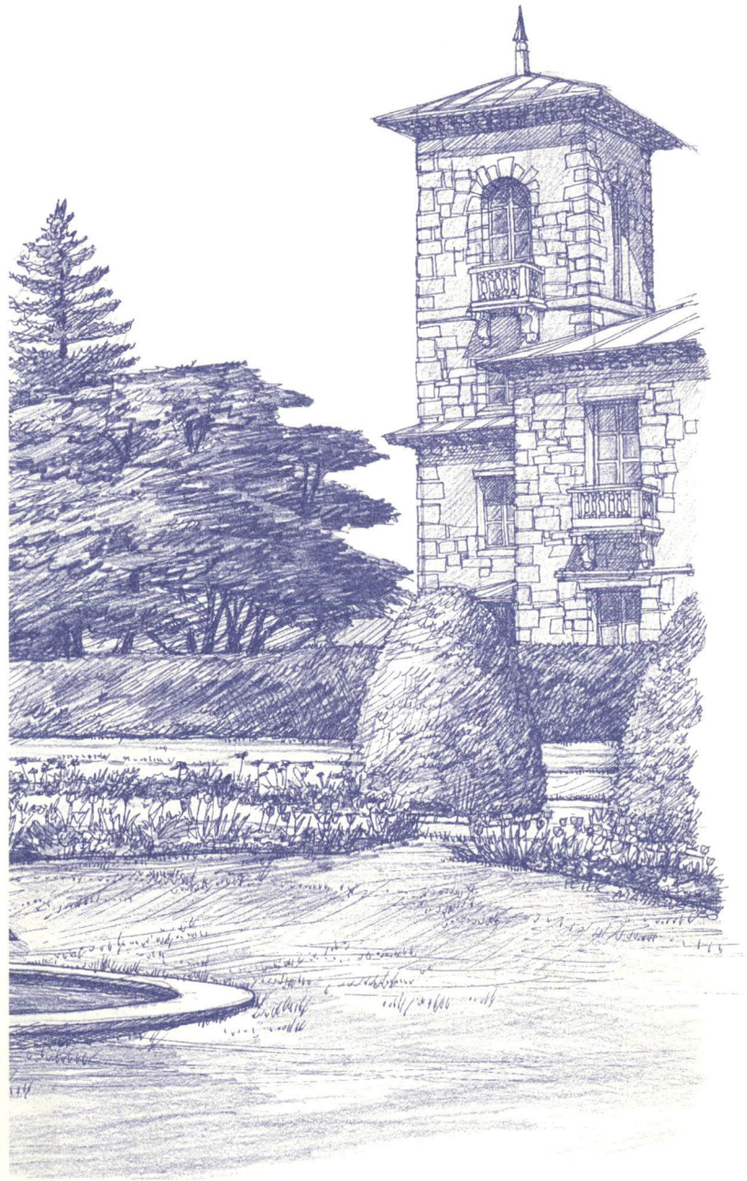
What's Next?
Another Prospect Contest!

Help us plan our next special event at Prospect for fall or spring of 1991-92. We need interesting and exciting ideas—and we're willing to reward such creativity. Share it with us; and, if we decide to host an event based on your suggestion, you and your party of four will be our celebrated guests.

By the way—No one has discovered the portrait of Woodrow Wilson hidden somewhere in Prospect House. Many have looked but Wilson eludes them. Finding his miniature visage entitles the lucky archaeologist to lunch or brunch for four. Good luck!

PROSPECTUS

The Newsletter of the Faculty and Staff Club at Princeton University
Spring 1991



Prospect Membership Offers Benefits at Other Schools

If you are traveling for business or pleasure to another college or university in the U.S. or Canada, consider dining or spending the night at the school's faculty club. Your Prospect Association membership entitles you to privileges at more than 100 clubs that are members of the Association of Faculty Clubs (AFC).

On a trip to Louisiana, Annual Giving Associate Director John Healy spent a night at the Louisiana State University Club. "It was great," says Healy. "A beautiful Spanish style building with modest but comfortable rooms and a dining room that serves the best Gumbo around," Healy says about his stay on the LSU campus. He arranged for the visit over the phone and paid for accommodations and meals at the club with his VISA card.

Other clubs that provide overnight accommodations include: University of British Columbia, University of California–Santa Barbara, University of Chicago, University of Colorado, Harvard University, Hebrew University of Jerusalem, University of Maine-Orono, University of Virginia, and Wellesley College. A Princeton ID card may be sufficient proof of membership in an AFC member club, but official ID cards and a complete list of clubs and their telephone numbers are available from Judd Newman (258-3455) at Prospect House.

The next time you're traveling to a college town, don't get stuck in an airport hotel or restaurant when you could be right on campus.

Note from the President of the Prospect Board

I am happy to announce that Prospect Director Judd Newman has been named "Manager of the Year" by Restaurant Associates, the company that operates Prospect House. Judd was selected from among managers at many outstanding properties operated by the company worldwide. Congratulations Judd!

—Michael Beahan

❦ **A note to coffee-lovers:** Prospect's Coffee Station (in the Parlour between the Drawing Room and the Library) will continue to offer complimentary coffee and tea between 10:30 a.m. and 3:30 p.m. until the end of the semester.

Prospect Staff
Judd Newman, Director
Andrew Guimes, Executive Chef
Walter Griffin, Assistant Director
Dana Osterman, Sous Chef
Colleen S. Hargraves, Controller/Dining Room Manager
Ken Goodfellow, Catering Manager

From the Director

As the 1991 year begins, the staff of Prospect House has taken on the commitment to provide the highest level of service and customer satisfaction in our history. In taking on this challenge, we have looked for ways to create "added value" through superior products, extra attention to detail, and flexibility in planning for our members' needs and wishes.

Eatership Survey Results—We recently designed a new Garden Room menu with more mid-priced items. Our new banquet menus have many lower and mid-priced items also.

While no clear patterns or overwhelming preferences emerged from the results of the Eatership Survey we printed in the last issue of *Prospectus,* I extend my thanks to all members who filled out our questionnaire. We are carefully considering and including many of your thoughtful suggestions in planning better service. We will continue to expand vegetarian selections and lighter fare. In the meantime, it is gratifying to know that most members who use Prospect regularly are happy with our efforts.

Your ideas are always welcome, and I invite all members to write or call me with any future comments.

—Judd Newman

New Banquet Menus

Our new banquet menus are now in effect. Lunch and dinner selections have been expanded. If you would like to receive a copy, please call Ken Goodfellow at 258-3455, and he will be happy to mail you one.

New Garden Room Menu

Here are some of our new items:
Smoked Salmon Dumplings with Tomato, Chive Beurre Blanc
Tempura Rolled Tuna with Seasonal Vegetables
Grilled Duck Breast over Lentils and Arugula
Linguini with Sun-Dried Tomatoes, Artichoke Hearts, and Pecorino Romano

Sunday Brunch Resumes

Brunch is one of our most popular events. We serve a sumptuous buffet every Sunday from March through May; the price is $15.50 per adult and $7.75 per child under 10. Please call 258-3455 early in the week to assure your reservation.

Items from our Sunday Brunch Buffet include:
Belgian waffles and toppings
Custom-made omelettes
Smoked salmon, bagels, and cream cheese
Croissants and fresh pastries
A large variety of freshly made salads
Three to four hot entrées

Historic Preservation magazine praises Prospect House restoration

"Extensive decorative painting in Prospect, John Notman's 1851 Italianate villa on the Princeton University campus, has been re-created. In the first-floor room beneath the villa's rotunda, the wide, wood door surrounds were painted in imitation of wood and marble, the appearance of wainscoting was re-created as raised panels of matched grain, and chair rails and sidelight frames were regrained," says an article in the January 1991 issue of *Historic Preservation* magazine.

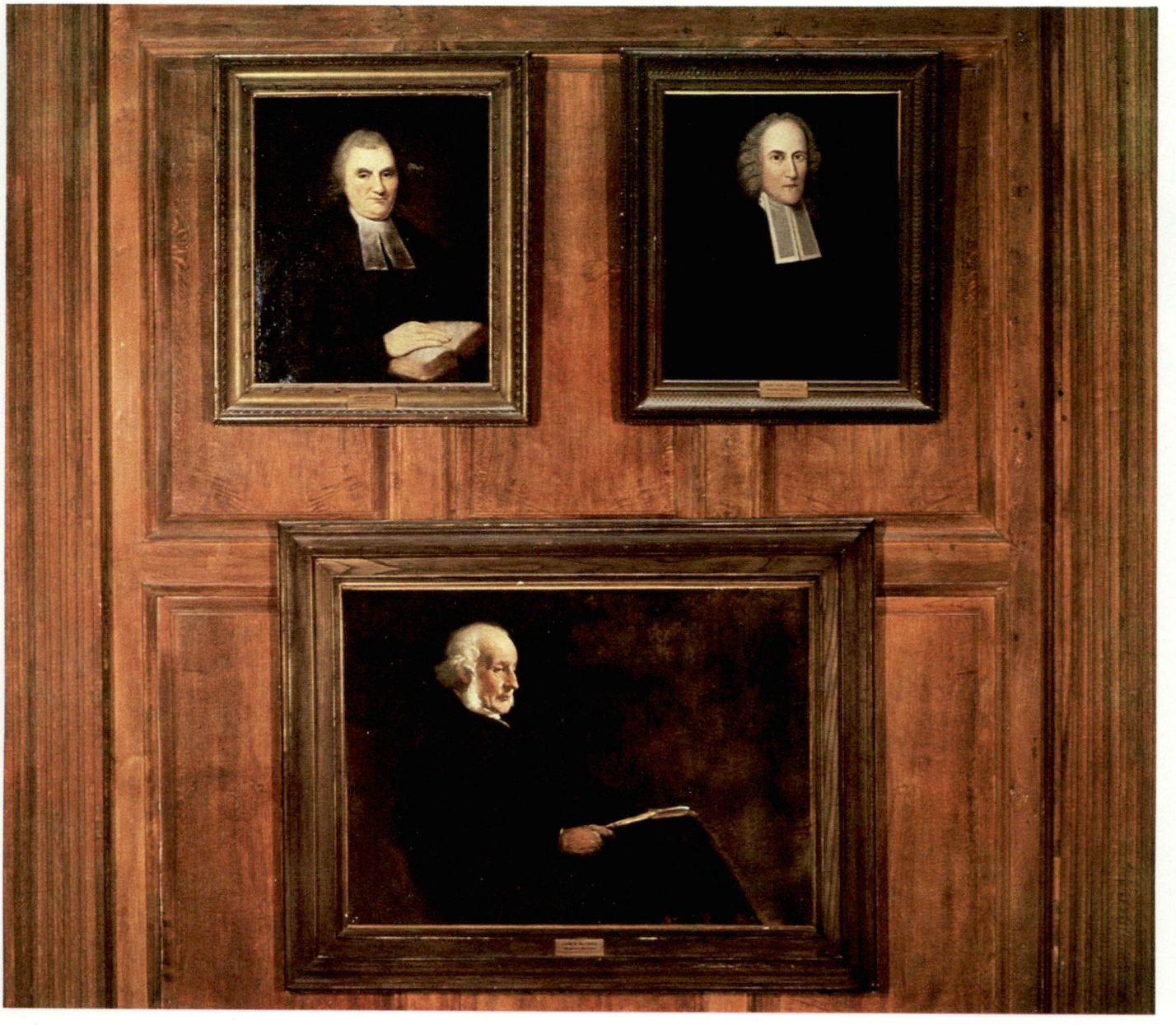
"The art of the imitative finish dates back to civilizations long past. Decorative painting in imitation of wood and stone has been practiced for centuries, ennobling objects in ancient Egypt, China, and Japan; augmenting the baroque qualities of 17th-century European churches and palaces; and enriching American interiors from colonial times through the Victorian age.

"Those considering the commission of painted finished are advised to learn as much as possible about the craft and its practitioners. The recent restoration of rooms in John Notman's Prospect villa . . . [is] important in this revival, for . . . the restoration of imitative decorative finishes has proved instructive and illuminating."

Chef's Corner

Prospect House is presenting a new menu in the Garden Room. One of the selections is Smoked Salmon Dumplings with Tomato and Chive Beurre Blanc. The dumplings are very similar to the Chinese dish Dim Sum, and they are very easy to prepare. In order to reduce

Princeton's Presidents
An Historical Sketch of the University



Compiled by:
Frederic Fox '39, Keeper of Princetoniana, based on sketches by Carlos Baker *40, W. Frank Craven, David W. Hirst, Arthur S. Link, James McLachlan, and Joseph R. Strayer '25 in *A Princeton Companion* (Princeton University Press, 1978) by Alexander Leitch '24.

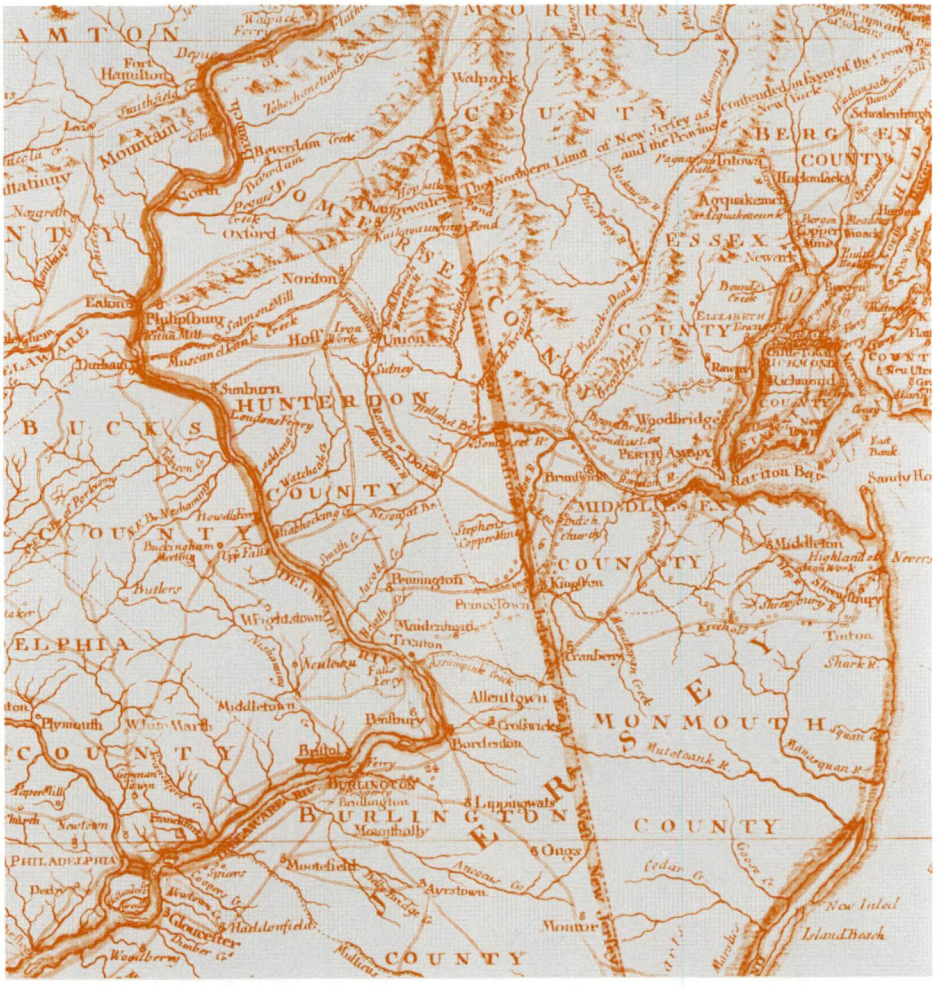
Production coordinated by:
Princeton University Publications Office
Tom Stamp, Editor
Stanhope Hall
Princeton, New Jersey 08544

Illustrations from:
The Archives, Art Museum, Chapel, and Library of the University

Cover:
Portraits of three presidents in the Faculty Room of Nassau Hall: John Witherspoon (upper left), Jonathan Edwards (upper right), and James McCosh. Photograph by Clem Fiori.

Acknowledgments:
Editorial assistance in the development of this publication has been provided by Eleanor Berkheiser, Earle Coleman, Robert K. Durkee '69, Carol P. Herring, William McCleery, and Cynthia A. McClelland.

1980 Edition



Detail from a map drawn by Major Holland, Surveyor General of the Northern District of America, corrected and improved from the original materials by Governor Pownall, Member of Parliament, 1777.

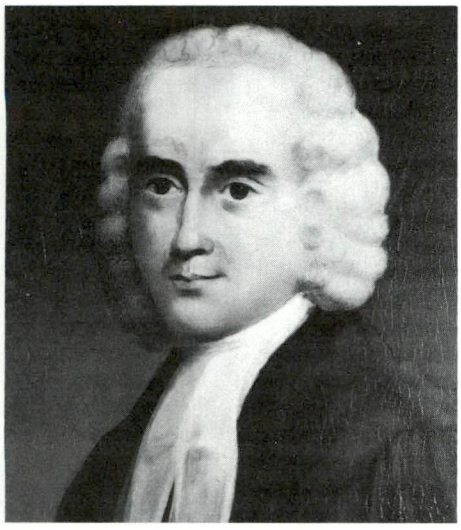
Princeton's Presidents: An Historical Sketch of the University

Preface

Princeton University is an academic institution. It has a charter, a budget and a board of trustees. Its story can be told in institutional terms—enrollment, curriculum, endowment—and is so told, year in and year out.

But Princeton is more than an institution. It is a very human place. Telling its story is like telling the story of an old family, a saga of hope and achievement, joy and sorrow—with enough mistakes along the way to keep it modest.

The campus is the family homestead. Many generations have lived and studied here. Each has added to the heritage, each is part of the story, a story here told briefly in terms of the lives and times of 17 individuals who have been most closely identified with it: the 17 presidents of Princeton.



Jona Dickinson

Colonial Times

1746-1747: "A Seminary of Learning"

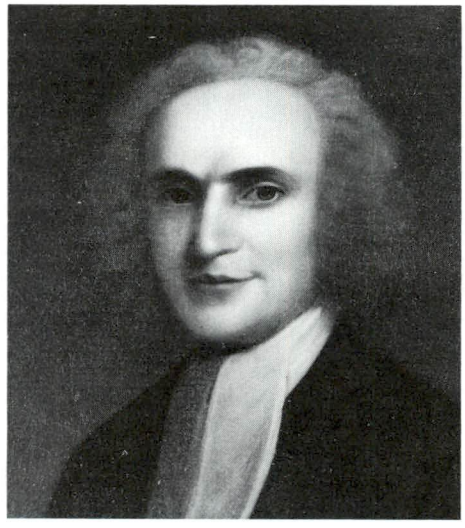
Jonathan Dickinson was the leader of the little group which, in his words, "first concocted the plan and foundation of the College."

After graduation from the Collegiate School of Connecticut (which later changed its name to Yale), Dickinson studied theology and became minister of the Presbyterian Church in Elizabeth, New Jersey. He served this church all his life, ministering to his flock as pastor, lawyer, physician and, in later years, as an instructor of young men preparing for professional careers.

In 1739, Dickinson became one of the leaders of a movement to found a "seminary of learning" for the middle colonies. He was disappointed by Harvard's and Yale's opposition to the "New Lights" of the Church and by Yale's harsh treatment of his young friend, David Brainerd, a student who was dismissed because of outspoken opposition to the faculty's conservative religious views. He considered the only other college in the Colonies, William and Mary of Virginia, too Anglican and too far away. So, with the help of three fellow pastors (Ebenezer Pemberton, Aaron Burr Sr., and John Pierson) plus three laymen from New York City (William Smith, Peter Van Brugh Livingston, and William Peartree Smith), he secured a Royal Charter for the College of New Jersey dated October 22, 1746.

Unlike those of the three earlier colleges, Princeton's founding charter made no reference to any specific faith or denomination. From the beginning, the College was open to students of all persuasions so "those of every religious denomination may have free and equal liberty and advantages of education in the said college, any different sentiments in religion notwithstanding."

Classes began in Elizabeth, with a student body of eight or ten members. The parsonage served as the College. The only decent library in town was Dickinson's; his parlor was probably the classroom and his dining room, the refectory. Upon his death, the College moved to the parsonage of his neighbor, Aaron Burr Sr., in Newark.



Aaron Burr

1747-1757: A Permanent Home

Aaron Burr Sr. moved the College from Elizabeth to Newark. During his decade, a curriculum was devised, the student body was enlarged tenfold, and a permanent home was established in Princeton with the building of Nassau Hall.

On November 9, 1748, Burr presided over the first commencement exercises in his Newark Church. As reported in the *New York Gazette*, the president spoke to the graduating class in Latin, reminding them of "the manifold Advantages of the liberal Arts and Sciences, in exalting and dignifying the humane Nature, enlarging the Soul, improving its Faculties, civilizing Mankind, qualifying them for the important Offices of Life, and rendering them useful Members of Church and State."

Of the six members of the Class of 1748, five went on to become Presbyterian ministers and the sixth, Richard Stockton, became a lawyer and signed the Declaration of Independence.

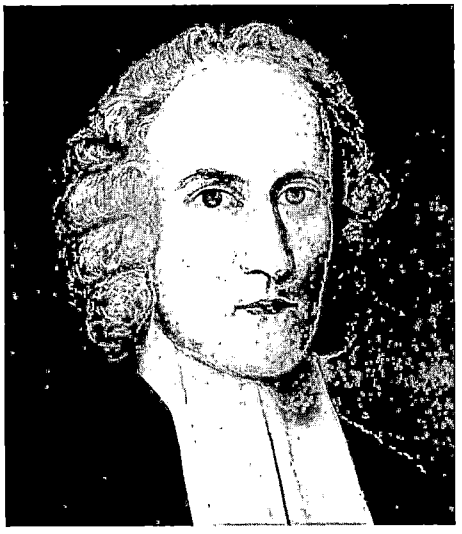
Burr served for three years without salary. He filled the offices of both pastor and president until finally, at the request of the Church, he was relieved of his pastoral duties to devote full time to the College. He drew up the first entrance requirements, the first course of study, the first set of rules and regulations, and, in 1756, he led the move to Princeton, into the College's first building, Nassau Hall.

Nassau Hall was named for King William III, Prince of Orange-Nassau. At that time, it was the largest stone building in the colonies, providing space for all the needs of the College: classroom, dormitory, chapel, library, and refectory, It became a model for subsequent buildings at Harvard, Brown, Dartmouth, Rutgers, and North Carolina.

A commemorative stamp issued by the Federal Government marked the 200th anniversary of Nassau Hall. Now designated a national landmark—because it once served as the Capitol of the United States (1783)—it is still in daily use as the administrative center of the University. President Burr occupied Room Number 1 and his successors still do.

Sadly, Aaron Burr did not long enjoy the fruits of his endeavors. Borne down

by the multiple duties of administrator, teacher, and fund-raiser, he died at the age of 41, a year after moving into Nassau Hall. His son, Aaron Jr., graduated from Princeton in 1772 and became the third vice-president of the United States.



Jonathan Edwards

1757-1758: "Light and Instruction"

Jonathan Edwards was elected president five days after the death of his son-in-law, Aaron Burr Sr. He was a popular choice. He had been a friend of the College since its inception and was the most eminent American philosopher-theologian of his time. But he shrank from taking on "such a new and great business in the decline of life," saying he felt himself deficient in health, in temperament, and in some branches of learning.

As author of the celebrated work, *The Freedom of the Will,* he was respectfully received by the undergraduates who spoke of the "light and instruction" he communicated.

Only two months after taking office, he died of fever following inoculation for smallpox. He was buried in a special corner of the Princeton cemetery called "the President's Lot."

Sam'l Davies

1759-1761: "A large and well-sorted collection of books"

Samuel Davies came from Virginia where he was widely known as an advocate of civil and religious liberties. Patrick Henry, who as a boy had frequently heard him preach, acknowledged Davies' influence on his own oratory.

At the age of 28, Davies was called to the service of the College of New Jersey, then in the process of raising funds for the move from Newark to Princeton. His first assignment was a trip to Great Britain and Ireland in search of donations. During that 11-month mission, he helped raise enough money to build Nassau Hall and a house for the president—with enough left over to endow a charitable fund "for the education of pious and indigent youth."

One of the first students to benefit from this fund was James Leslie, Class of 1759. After graduation, Leslie became a school teacher in New York City. When he died, he left his frugally guarded savings to the College to endow a permanent scholarship in his name. Since then, Princeton has received capital gifts for more than seven hundred "named" scholarships.

Davies' election to the presidency was greeted with much joy. "I believe there was never a College happier in a president," said one trustee. "You can hardly conceive what prodigious, uncommon gifts the God of Heaven had bestowed on that man." But the joy was short lived. Eighteen months later, Davies died of pneumonia—having been bled for "a bad cold"—and his death spread gloom over the country.

During his brief tenure, Davies drew up the first catalogue of the college library, then housed on the second floor of Nassau Hall: 1,281 books in all. He was an ardent promoter of the library. As he said, "A large and well-sorted collection of books is the most ornamental and useful furniture of a college." He urged students to go beyond the "narrow limits" of their assigned reading. After graduation, he hoped they would continue to read widely and well, so they could continue to "investigate Truth; and guard against the stratagems and assaults of Error." Moreover, he felt that reading good books by authors with differing points of view would keep them modest.

Sam'l Finley

1761-1766 "Useful members of society"

Samuel Finley was a Scots-Irishman who came to this country with his parents when he was 19. He attended the "Log College" in Neshaminy, Pennsylvania, a school for ministers (1726-1745) and a

precursor of Princeton.

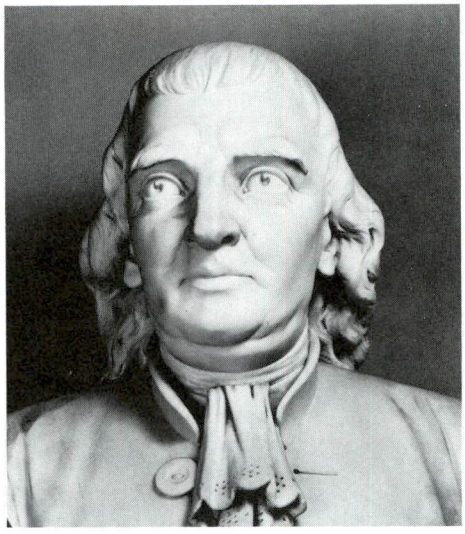
His early career as an evangelical preacher was marked by an energetic, contentious, and sometimes acrimonious spirit that was not uncommon in the eighteenth-century religious revival known as "The Great Awakening". As one of his students said later, his sermons "were calculated to inform the ignorant, to alarm the careless and secure, and to edify and comfort the faithful."

During his pastorate in Nottingham, Maryland, he also conducted an academy renowned for its standards of scholarship. His interest in higher education led him to become one of the original trustees of the College of New Jersey. In recognition of his work, he was given an honorary degree by the University of Glasgow, the second American divine to receive an honorary degree abroad.

Finley's presidency was marked by steady growth in enrollment. He hoped his students would grow up to become "good Scholars and useful members of society"—and many did, including the Rev. James Manning, Class of 1762, founder and first president of Brown University; William Paterson, Class of 1763, governor of and first senator from New Jersey, and Oliver Ellsworth, Class of 1766, chief justice of the United States.

The two sycamores he planted in front of the President's House (now called Maclean House) are still growing.

In his academic gown, James McCulloch, Class of 1773, strikes a debating posture. After graduation, he became a leading merchant and public official in Baltimore.



The Revolutionary War

1768-1794: Signer of the Declaration of Independence

John Witherspoon was the only clergyman and the only college president to sign the Declaration of Independence.

A graduate of the University of Edinburgh, Witherspoon gained a reputation in the Church of Scotland as a leader of the left-wing "Popular Party". By his works, he became well-known in the American colonies. At first, he declined the call to Princeton but then, with his family of five children and 300 books for the college library, he took sail for Philadelphia. The students celebrated his arrival by "illuminating" Nassau Hall with a lighted tallow dip in each window.

Despite the warmth of his reception, Witherspoon soon found a number of disturbing conditions in the college. Many students were inadequately prepared; the enrollment from the southern colonies had declined; and, most worrisome of all, the exchequer was in a sorry state.

Witherspoon moved to shore up the place. He began a series of highly successful trips throughout the colonies, preaching, recruiting, and gathering funds. He made Princeton known as a national center of learning. While traveling through Virginia, he encouraged the Madisons of Montpelier to enroll their son James. Later, he persuaded his friend George Washington to give 50 gold guineas to the College. (Washington was a longtime advocate of the place. "No college has turned out better scholars or more estimable characters than Nassau," he said in a letter to his adopted son, a member of the Class of 1799.)

Pleased with Princeton's pastoral setting, Witherspoon began calling the college property a "campus," thereby introducing that word into the American vocabulary.

In addition to managing the College's affairs and preaching twice on Sundays, Witherspoon bore a heavy teaching load. Beginning with a faculty of five (three tutors and two professors), he added a professor of mathematics and natural philosophy. This left him responsible only for instruction in moral philosophy, divinity, rhetoric, history, and French.

He quickly broadened and enriched the curriculum of the College. He introduced English grammar and composition. He added to the teaching equipment of the College, especially books for the library and laboratory apparatus for instruction in the sciences.

He saw no conflict between faith and reason; instead he encouraged students to test their faith by experiment and experience. His inclination was to apply the test of common sense to any proposition; to reduce it to its simplest terms. His name is rightly identified with certain attitudes and assumptions, known as the "Common Sense Philosophy," important in the development of our national character.

Though a man of strong convictions, he showed no inclination to protect students from exposure to ideas with which he disagreed. The many books he added to the library gave access to a wide range of contemporary literature, including authors with whom he had engaged in public dispute.

Witherspoon's administration was a major turning point in the life of the College. He put fresh emphasis on the need for a broadly-educated clergy. He did not hesitate to teach both politics and religion, apart and together. With his strong sense of liberty, he gave wholehearted support to the national cause. He became a leading member of the Continental Congress and many of his students en-

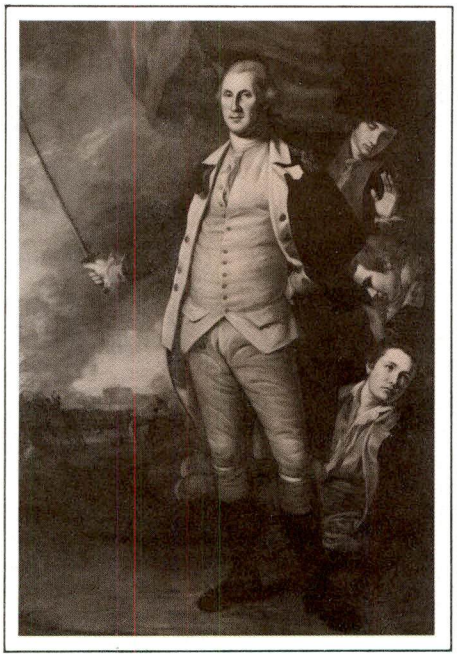
tered government service. In addition to a president and vice-president of the United States, he taught nine cabinet officers, 21 senators, 39 congressmen, three justices of the Supreme Court, and 12 state governors.

Largely because of him, Princeton became known as the "seed bed" of revolution. Six months after he signed the Declaration of Independence, the College became the site of a strategic victory as Washington surprised the British in the Battle of Princeton. Six years later, Washington was again in Princeton, at the invitation of Congress assembled in Nassau Hall, to accept the official thanks of the nation for the successful conclusion of the war. At that time, he also attended commencement exercises for the Class of 1783.

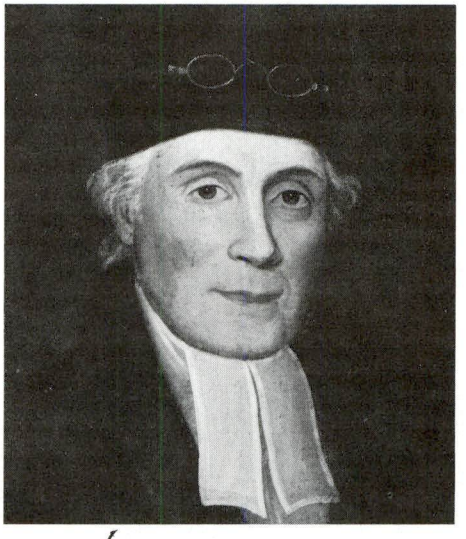
"Washington at Princeton" (below) was commissioned by the trustees of the College and painted from life. For over two centuries, it has hung in the Faculty Room of Nassau Hall.

Washington sent a formal letter to Witherspoon, praying that "every temporal and divine blessing may be bestowed on the President and Faculty of the College of New Jersey, and that the usefulness of this Institution in promoting the interests of Religion and Learning may be universally extended."

Witherspoon's later years were filled with sorrow and difficulty. During the war, the College suffered extensive damage to its buildings and instructional equipment. Its finances were in disarray. He had lost his son James, Class of 1770, at the Battle of Brandywine. Two years before his own death he became totally blind. But till the end, the reputation he had won as a clergyman, educator, and patriot remained—and remains today—a noble part of Princeton's heritage.



"Washington at Princeton" was commissioned by the trustees of the College and painted from life. For over two centuries, it has hung in the Faculty Room of Nassau Hall.



Early Nineteenth Century

1795-1812: The Compatibility of Science and Religion

Samuel Stanhope Smith was the first alumnus of the College to hold the office of president. He was salutatorian of the Class of 1769.

After graduation, Smith became a teacher and preacher in Virginia and, while there, took a leading part in the founding of the two academies which became Hampden-Sydney College and Washington and Lee University. In sermons and writings, he also helped prepare the way for the "separation of church and state," a radical doctrine then being advanced by his fellow Princetonian, James Madison, Class of 1771.

Smith returned to Princeton as professor of moral philosophy and as President Witherspoon's son-in-law. Fifteen years later, on Witherspoon's death, there was no question as to who should succeed him.

While president, Smith increased his reputation as a scholar. Elected to the American Philosophical Society, he delivered "An Essay on the Causes of the Variety of Complexion and Figure in the Human Species" in which he argued that all mankind belongs to the same family, and attributed diversity within the species to environmental influences. Throughout his life, he reiterated his firm belief in the compatibility of science and religion.

At Princeton, without challenging the fundamental place of classical languages and literature as disciplines important to training for the ministry, Smith promoted the study of science and modern languages. Among his early appointments to the faculty was a graduate of Edinburgh, John Maclean, the first professor of chemistry to teach on a college campus in the United States.

Smith was fond of describing Princeton as a mecca for students drawn from the Hudson River south to Georgia. The enrollment for 1805 reveals the accuracy of his description. There were 32 students from New Jersey, 31 from Pennsylvania, 28 from Maryland, 22 from Virginia, 13 from South Carolina, and 9 from Georgia. Of the other states, only New York had as many as Georgia.

Princeton's quick recovery after a disastrous fire in 1802 was testimony to the strength of his standing among alumni and friends. The constituency of the College rallied to his call. Funds were raised not only for the reconstruction of Nassau Hall, but also for a new building to house the library. (A hundred years later, this building was named Stanhope Hall in his memory.)

Although President Smith's standing with the public was secure, he slipped badly in the estimation of students and trustees. The students resented his accusation that they had set fire to Nassau Hall. In a clumsy effort to assert his authority, he expelled over a hundred of them. (He had previously expelled the adopted son of George Washington "for meanness and irregularity.")

The trustees felt Smith's educational reforms had gone too far. They were concerned that Princeton was becoming too secular in its curriculum and that its general climate was not conducive to the ministry. In 1812, many directed their support toward the newly-founded Princeton Theological Seminary. In that same year, Smith and four members of the faculty resigned. It was the beginning of a bleak period for the College.

Ashbel Green

1812-1822: "Not a happy administration"

Ashbel Green was the second alumnus to serve as president. Valedictorian of the Class of 1783, he delivered his commencement oration before George Washington and members of the Continental Congress then assembled in Princeton. In later years, he often recalled the commendation he received on that day from the general.

Green entered the ministry and soon rose to a position of prominence. In addition to being minister of the Presbyterian Church in Philadelphia, he was chaplain to the United States Congress in Washington, D.C.

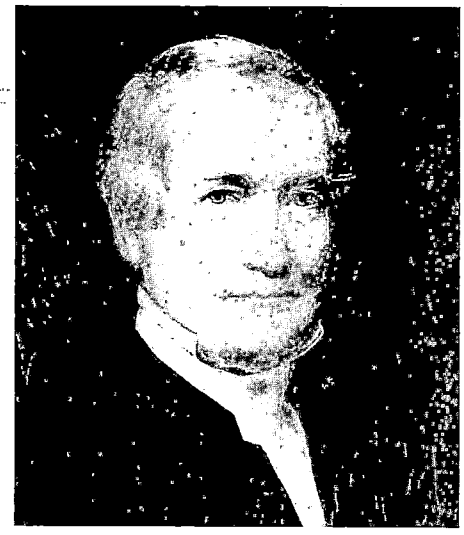
He became a trustee of the College, representing the conservative "Old Side" and taking a leading role in opposing the liberal drift in the faculty and curriculum. In 1812, he became president, having helped engineer the removal of his predecessor. In the same year, believing that Princeton was no longer serving the Church as it should, he was a prime mover in establishing a theological seminary next door.

Green approached his presidential duties as a stern but kindly pastor. He introduced vigorous disciplinary rules and imposed a heavy religious tone on the College. From his raised dais, he took a lordly view. As he was wont to say, "I consider every member of the faculty a younger brother, and every pupil a child."

"My first address to the students," he later wrote, "produced a considerable impression, insomuch that some of them shed tears. This greatly encouraged me; but the appearance was delusive or fugitive. Notwithstanding all the arrangements I had made, and all the pains I had taken to convince them that their own good and the best interests of the institution were my only aim, I had the mortification to find that the majority of them seemed bent on mischief."

The reaction to his authoritarian regime was not long in coming. Several major student outbursts occurred during his presidency. In one of them, a charge of gun powder was set off in the main entrance of Nassau Hall, cracking the walls from top to bottom. In this case, instead of retaining jurisdiction, Green asked the criminal court of the state to prosecute the suspects. The following year, he was heartened by a religious revival that swept through the College but he was cast down again by a riot of unprecedented proportions called the "Great Rebellion". Nassau Hall became a fortress of discontent. Students barricaded themselves within it for several days. The militia was called out to besiege them, but luckily they failed to appear.

It was not a happy administration. After a dispute with the trustees over the tenure of his son, a member of the faculty, Green finally resigned.



James Carnahan

1823-1854: "The lowest ebb"

James Carnahan served Princeton longer than any other president. He also served during the time when the College reached its lowest ebb.

After graduation in 1800, Carnahan stayed on as a tutor in the College and then went out to preach for six years. He left the pulpit because of a throat ailment that troubled him all his life. He established a classical seminary in Georgetown, D.C., and was there when notified of his election to the presidency of the College.

Having lost touch with developments at Princeton, Carnahan was unprepared for what he found on assuming office. A courtly schoolmaster, he didn't know what to make of the near anarchy which had resulted from the conflicting views of students, faculty, and trustees. He watched sadly as the enrollment dropped from 148 to 66. He became so discouraged that he considered closing the institution, and might have done so save for the intervention of his young vice president, John Maclean, who saved the day by proposing a plan for strengthening the faculty with the help of the alumni.

Under this plan, the venerable James Madison, Class of 1771, was invited to become the first president of the alumni association. In his reply, Madison ex-

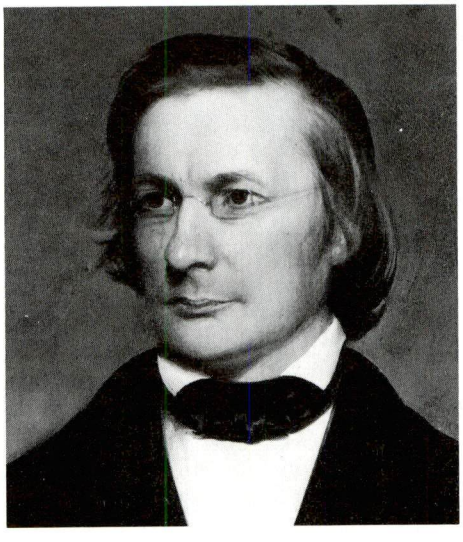
The James Madison medal is awarded annually to an outstanding graduate of the Graduate School. It is named for the fourth president of the United States, who, after receiving his bachelor's degree from the College in 1771, remained another year to continue his studies under John Witherspoon.

pressed "best wishes for the prosperity of the College, of which I am one of the most grateful Alumni, and for the success of every measure that may add lustre to its reputation, and enlarge the scope of its usefulness." Many years later, remembering that Madison had stayed on for a year of graduate work, the Alumni Council gave his name to a medal awarded annually to an outstanding graduate of the University's graduate school.

With funds raised by the alumni, Carnahan was able to strengthen the faculty with the addition of three distinguished professors: Albert B. Dod, the mathematician; John Torrey, professor of chemistry and botany; and Joseph Henry, the inventor and physicist who later became the first head of the Smithsonian Institution in Washington, D.C.

Modern languages became permanent features of the curriculum during Carnahan's administration, but the study of law —introduced with much fanfare at the centennial celebration of the College— withered on the vine for lack of funds. Only eight Princetonians were granted the degree of Bachelor of Laws.

With the strengthening of the faculty, the College began to prosper again. Student enrollment doubled and the faculty tripled. Two dormitories were built, East and West Colleges. The two literary and debating societies, which had long provided the only extracurricular outlet for undergraduates, were housed in their own halls, Whig and Cliosophic. With heightened confidence in their own abilities, the students founded the *Nassau Lit*, the second oldest college literary magazine in the United States. For the first time, they began to show evidence of "college spirit," a form of chauvinism peculiar to campus life, as they marched to Rutgers to recapture the Revolutionary cannon which had been dragged away during the War of 1812. Back in Princeton, they planted it muzzle down in the center of the quadrangle behind Nassau Hall where it remains to this day.



John Maclean

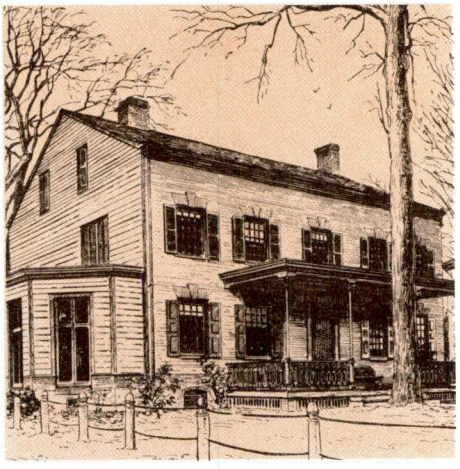
The Civil War

1854-1868: "What a good man"

John Maclean Jr. was the son of America's first professor of chemistry. Born in Princeton, he served the College all his life.

He never married; he was Princeton's only bachelor president. The time and energy ordinarily expended by a father on his children, he gave to the students of the College, for whom he stood, quite literally, *in loco parentis*.

Among his many duties, he undertook the role of proctor, patrolling the campus, vigilant in detecting wrongdoing. But



The President's House, now named for John Maclean Jr., was built in 1756 alongside Nassau Hall. For over a hundred years, it housed the president of the College—until James McCosh moved into Prospect and it became the home of the Deans of the Faculty. It is now the headquarters of the Alumni Council.

then, after making an arrest, he was always sympathetic. Frequently, he would intercede on behalf of the culprit, asking the faculty to allow him simply to withdraw for a time to a nearby farm, a rather light and pleasant sentence. One student reported he had spent the weeks of his confinement fishing in a stream and "thinking what a good man Doctor Maclean was."

Students recalled seeing "Johnny" in his long cloak, carrying teakettle and food, on his way to visit a sick boy. In case of serious illness the patient was brought to the President's House. One student, who broke his leg in a fall from the window of his dormitory room after a boisterous Senior Ball, was taken in for six weeks. No wonder that house is now named for Maclean.

Maclean was not without muscle. He was the one who outlawed Greek fraternities which, in his opinion, had begun to have an injurious effect on campus life. At his urging, the faculty issued an ultimatum that any student joining a secret society would be dismissed. Freshmen were required to sign a non-fraternity pledge before entering the College. A few "Greeks" who continued to operate underground were rooted out by the next administration.

When the Civil War began, Maclean was anguished by the sight of students

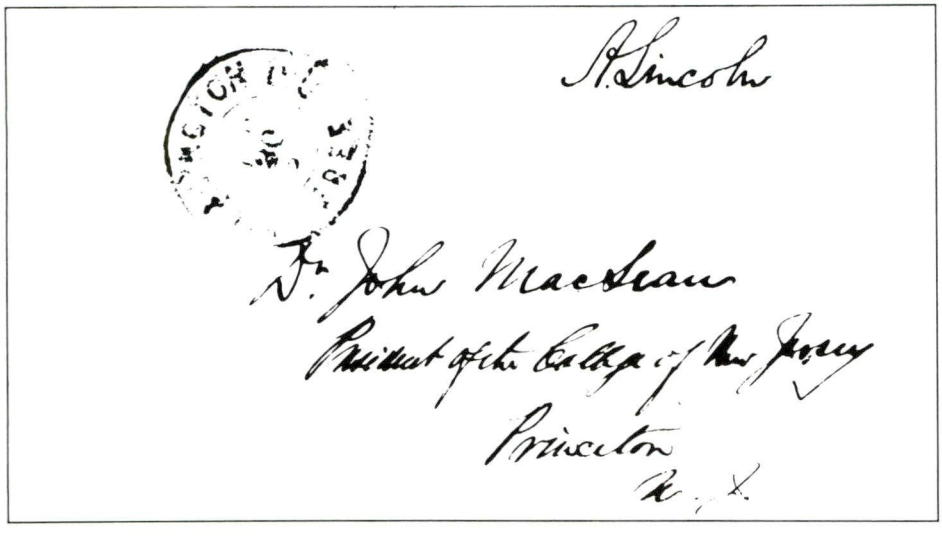
leaving the campus to join the armies of the North and South. The toll of 70 Princetonians lost in battle was borne equally by the Federals and Confederates —and borne doubly by Maclean because he knew and loved each one. In this bitter time, Princeton offered the degree of Doctor of Law to Abraham Lincoln. In accepting the degree, Lincoln wrote Maclean: "The assurance conveyed by this high compliment that the course of the government which I represent has received the approval of a body of gentlemen of such character and intelligence in this time of public trial is most grateful to me."

Before the war, Maclean added some distinguished scholars to the faculty, including the Swiss geographer, Arnold Guyot. As a general policy, he sought a balanced curriculum, believing there was a fundamental body of cultural studies which every educated person should be required to pursue before preparing for a chosen profession.

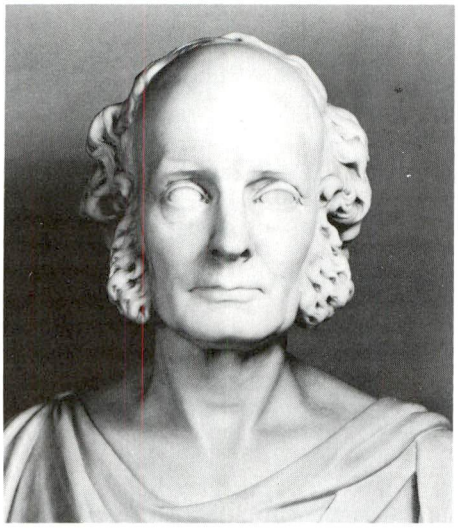
Just before the war began, after Nassau Hall had been gutted by fire a second time, Maclean rallied alumni and friends to contribute funds toward rebuilding it. He augmented these funds by operating the College on an austerity budget during the war years, and helped liquidate the debt that remained by giving up part of his own salary.

Although his main concern was the College, its faculty and students, Maclean is credited with a major role in the founding of New Jersey's public school system. The state legislature adopted his plan for a state normal school, local boards of education, and a non-sectarian common school system supported by public taxation. He also took an active interest in the state's penal system. As a member of the New Jersey Prison Association, he sometimes walked ten miles to Trenton on Sundays to conduct services in the State Prison.

When he retired, Maclean wrote a two-volume history of the College. (Typically, he assigned the royalties to a fund "for the aid of indigent and worthy students engaged in seeking a liberal education.") Since that history does not cover the years of his own administration, it does not mention the fact that he saw the beginning of baseball at Princeton; heard the first singing of the alma mater, "Old Nassau"; and voted to adopt orange as the official color of the College—soon to be joined with black. (In his wildest dreams, he never could have imagined these colors would be carried to the moon a century later by Charles F. ("Pete") Conrad '53, Commander of the Apollo XII.)



The franked envelope which carried Abraham Lincoln's letter of December 27, 1864, to Dr. John Maclean Jr., accepting an honorary degree offered by the College of New Jersey.



James McCosh

Nineteenth Century Expansion

1868-1888: "An electric shock"

James McCosh took office exactly a hundred years after his fellow Scot, John Witherspoon. He came to Princeton from Queens College, Belfast, and was already well-known throughout the English-speaking world as an author, philosopher, and Free Churchman.

As the Revolutionary War had attenuated the student body and impoverished the College, the Civil War threatened to inhibit its further growth. McCosh's 20-year presidency changed all that. One alumnus, who had been a freshman in 1870, compared the new president's influence to "an electric shock, instantaneous, paralyzing to the opposition, and stimulating to all who were not paralyzed."

McCosh gathered a distinguished faculty; revised and modernized the plan of study; developed elective course-options, and instituted graduate work. He founded schools of science, philosophy, and art, and entered upon an ambitious program of building and planting that greatly enhanced the hitherto bare campus. And withal he found money in large quantities to support his enterprises.

"I remember," wrote McCosh, "that some critics found fault with me for laying out too much money on stone and lime; but I proceeded on system, and knew what I was doing. I viewed the edifices as means to an end, at best as outward expressions and symbols of an internal life."

A strong proponent of the Greek ideal, "sound body, sound mind," he included a gymnasium and a library in his building program.

He was a teaching president, holding regular classes in the history of philosophy and in psychology. He conducted seminars in "Prospect," the new presidential mansion. When Darwin's *Origin of Species* threatened to overturn age-old beliefs in God's creation and government of the world, McCosh stood out almost alone among American clergymen in defending evolutionary doctrine, insisting that the Darwinian hypothesis, far from denying the existence of God, only served "to increase the wonder and mystery of the process of creation."

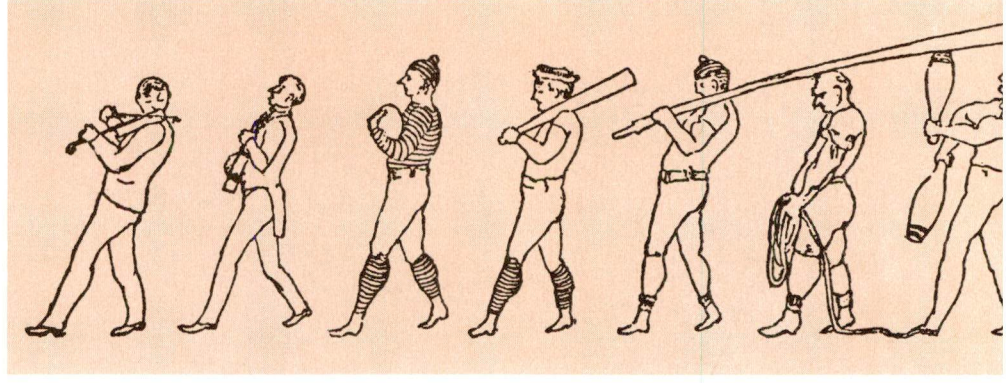
Like John Witherspoon, McCosh took a common-sense position on the curriculum of the College, liberal yet firm. He wanted to reject "all that was factitious and pretentious," and to continue "the good old solid course of study handed down from our fathers." At the same time, he recognized the enormous advances being made in the physical sciences, as well as in philology, history, and psychology. From these branches of knowledge, students were encouraged to choose a wide range of electives to be taken side by side with obligatory and disciplinary courses, mathematics "to solidify the reasoning powers" and classics "to refine the taste."

An energetic campaigner, McCosh made an extraordinary impress on the American thought of his day. He and his great opponent, President Eliot of Harvard, were the two dominating figures in American education. In the winter of 1885, the two of them met in New York to conduct a debate on the ideal college curriculum. McCosh was highly critical of Eliot's scheme which allowed students to choose, virtually *ad libitum*, among some 200 courses. This, said McCosh, encouraged dilettantism, everything being "scattered like the star dust out of which worlds are said to have been made." Matters were more sensibly ordered at Princeton, he argued.

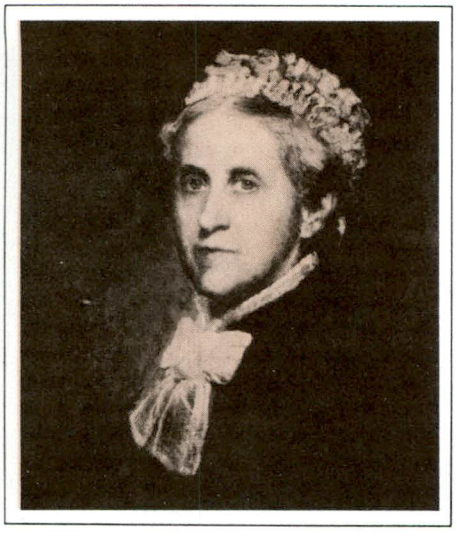
Most Princetonians believed McCosh won the debate handily.

McCosh enriched the extracurricular life of the campus, making the "four long years" more enjoyable. During his time, many undergraduate activities began to assume their present form. Three publications were established: an independent, student-run campus newspaper, *The Daily Princetonian*; a humorous magazine, *The Tiger*; and the *Bric-a-Brac*, a supplement to the senior yearbook, *Nassau Herald*. The Glee Club, the Dramatic Association (subsequently called the Triangle Club), and the first intercollegiate football team were born under his benevolent gaze. And, although he disapproved mightily of secret Greek letter fraternities, he allowed a group of upperclassmen to form the first permanent eating club.

Eating clubs came into being because the College was unable to provide adequate dining facilities for its growing student population. Most students had to take their meals in village boarding-houses. Some of these formed tempo-



A frieze of athletes—led by two musicians and followed by a professor of mathematics with his nose in a book—is taken from the Class of 1883's *Bric-a-Brac*.

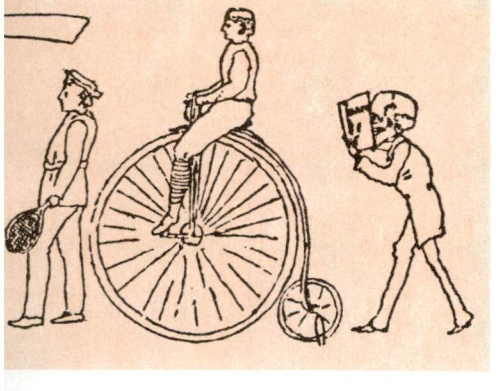


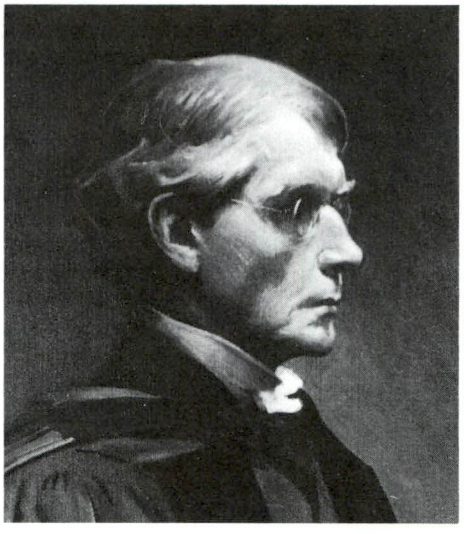
Isabella Guthrie McCosh, college nurse during the administration of her husband, James McCosh. The University's infirmary is named in her memory.

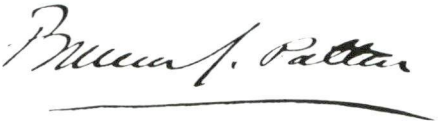
rary associations and took on sporting names like "Knights of the Round Table," "Knickerbockers", and "Epicureans". (Woodrow Wilson '79 ate with the "Alligators".) In the autumn of 1879, a group of upperclassmen rented Ivy Hall on Mercer Street—the erstwhile home of Princeton's law school—and four years later, calling themselves "The Ivy Club," they built a permanent clubhouse on Prospect Avenue, becoming the first of 20 private eating clubs which eventually settled on the edge of the campus.

Throughout his life, McCosh shared credit with his wife Isabella. "She advised and assisted me in all my work," he said. Daughter of an eminent physician, Mrs. McCosh was Princeton's unofficial nurse, the one and only medical presence on the campus. Later, when the trustees built an infirmary, they named it for her.

In his parting words to the College, McCosh said "I am reminded keenly that my days of active work are over. But I take the step firmly and decidedly. The shadows are lengthening, the day is declining. My age, seven years above the threescore and ten, compels it, Providence points to it, conscience enjoins it, the good of the college demands it. . . I leave it with the prayer, that the blessing of Heaven and the good-will of men may rest upon it, and with the prospect of its having greater usefulness in the future than even that which it has had in the past."







The Golden Nineties

1888-1902: "A wonderfully poor administrator"

Francis Landey Patton, a native of Bermuda, began his teaching at McCormick Theological Seminary in Chicago. A conservative Presbyterian, he achieved national recognition in a much-publicized heresy trial. He was called to the seminary in Princeton where his reputation as a teacher and theologian grew rapidly—as did his popularity as an after-dinner speaker. Even those who disagreed with his rigid orthodoxy admired his platform brilliance and trenchant wit.

When he was elected to succeed McCosh as president of the College, his arrival on the campus did not enthuse everyone. Many had hoped not only for a devout educator, but also for an experienced administrator who would bring efficiency and system to the expanding College.

Faculty accounts indicate that Patton lacked initiative in important policy matters, resisted meaningful curriculum reform, was lax in matters of discipline and in scholarly standards—in short, as one colleague put it kindly, was "a wonderfully poor administrator."

But students of the nineties were unanimous in their affection for him. After becoming alumni, they built Patton Hall as a tribute to him. They appreciated his willingness to trust them in examinations through the "Honor System" introduced in 1893, and they sang his praises in their first faculty song:

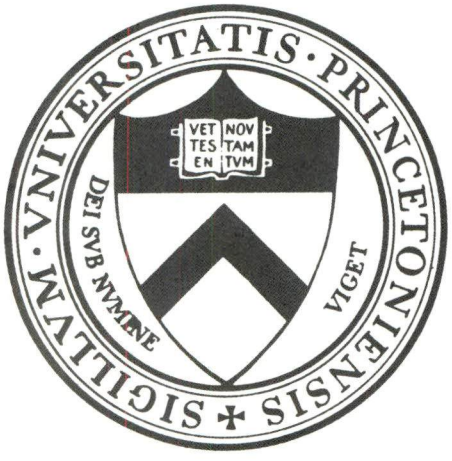
"Here's to Patton, our President
In Princeton College he pitched his tent,
And now he's boss of this wonderful show
Here's to Francis Landey O."

During the "golden 'nineties," the social life of the students changed as eating clubs proliferated. These clubs, together with the surging interest in athletics, particularly football, created a new campus atmosphere, augmented by the glamor of Gothic towers. There was an emphasis on "college life" rather than college studies.

In 1896, four members of the track team sailed for Athens to take part in the revival of the Olympic Games. They were the first college athletes to represent the United States abroad and alone they outscored most of the nations represented.

In the fall of that year, Patton proclaimed a three-day holiday to celebrate the Sesquicentennial of the College and to confirm its new official name, "Princeton University." In the process, he changed the wording of the seal from *Collegii Neo-Caesariensis* to *Universitatis Princetoniensis*, retaining the open Bible at the center and returning to the ancient motto: *Dei sub numine viget* (under God's power, may she flourish).

The new name, hailed as the beginning of a new era, marked the beginning of the end for the Patton administration, for it brought sharply into focus the president's failures as an administrator.

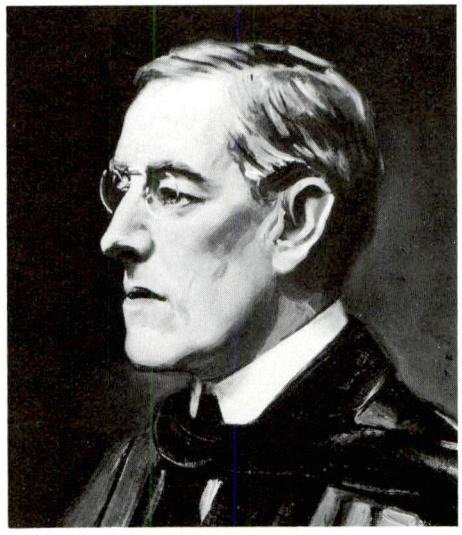


The original seal of the College of New Jersey (top) and the present seal of Princeton University adopted at the time of the Sesquicentennial.

The time was at hand to take concrete measures toward making Princeton in fact what she now claimed to be in name. With little help from the president, the University took an important step forward with the establishment of the Graduate School. In the School's administrative structure, the president was effectively circumvented, with the dean, Andrew Fleming West, given nearly autonomous powers. In the undergraduate college, the faculty labored in vain to reform the curriculum. Patton shunted all proposals aside.

Eventually, the efforts of the faculty reformers gained the attention of the trustees who, though they continued to admire Patton as a teacher, preacher, and public speaker, worried about his leadership and administrative inadequacies. This concern reflected a change in the board of trustees itself as the traditional clerical majority was reduced by the election of more alumni in business and professional fields.

The climax came during the spring of 1902 when several trustees and members of the faculty proposed an executive committee be formed to assume many of the president's powers. Patton protested, but even his friends on the board gave him scant encouragement. Finally, after some negotiation, he resigned. The trustees immediately chose Woodrow Wilson to succeed him, and Patton moved back to the seminary.



Woodrow Wilson

The Twentieth Century

1902-1910: "Princeton in the Nation's Service"

Woodrow Wilson entered Princeton as a member of the Class of 1879. In college, "Tommy," as he was known to his classmates, was an eager student and a recognized leader. Not satisfied with the course fare then offered by the College, he supplemented the formal curriculum with an ambitious program of independent reading. Still feeling not fully occupied, he became managing editor of the *Daily Princetonian* and organized a student club for discussion of public affairs. His classmates elected him speaker of the American Whig Society, one of the two principal campus groups. Pursuing athletic interests, he became secretary of the Football Association and president of the Baseball Association.

After graduation, he went to law school at the University of Virginia and practiced in Atlanta. Disillusioned by the tedium and materialism of legal damage suits, he returned to the academic world for graduate work in political science and history at Johns Hopkins. His doctoral dissertation, "Congressional Government," led to appointments at Bryn Mawr, Wesleyan, and finally Princeton.

As professor of jurisprudence, Wilson built up a strong pre-law curriculum. He was soon voted most popular teacher and became friend and counselor to numberless students attracted by his warmth and highmindedness. He wrote two best-selling books, a biography and a history, and he spoke to audiences far and near. During the sesquicentennial celebration of 1896, he delivered the keynote address: "Princeton in the Nation's Service."

When President Patton was persuaded to retire, the trustees with one accord elected Wilson. In his first report to them, he presented a $12.5 million program to transform Princeton into a full-scale university. At that time, this was a staggering sum, almost 25 times greater than the annual budget. Yet the trustees approved it straightaway.

He began by creating an administrative structure—departments of instruction with heads directly responsible to him—and later arranged the creation of new deanships and took over the effectual power of the faculty nominations from the trustees.

These innovations were a prelude to more far-reaching changes. He soon led the faculty in sweeping curricular reforms. In place of the aimless elective system which had prevailed under Patton, he substituted a unified curriculum of general studies during freshman and sophomore years, capped by concentrated study in one discipline (the academic "major") during junior and senior years. There was the added provision of an honors program for able and ambitious students.

Wilson tightened academic standards so severely that enrollment declined sharply until 1907.

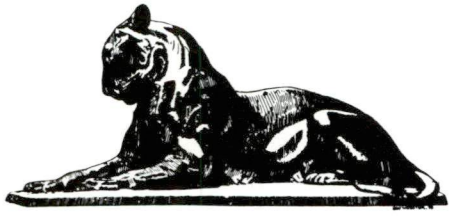
He revolutionized the teaching system. Supported by the first, all-out alumni fund-raising campaign in Princeton's history, he doubled the faculty overnight by the appointment of almost 50 young assistant professors, called "preceptors," charged with aiding students through guided reading and small-group discussion. With a remarkable eye for quality, he assembled a youthful faculty of unusual talent and zest for teaching.

In strengthening the science program, Wilson called for basic, unfettered, "pure" research. In the field of religion, he made biblical instruction a scholarly subject. He broke the hold of conservative Presbyterians over the board of trustees, and appointed the first Jew and the first Roman Catholic to the faculty.

In terms of bricks and mortar, he was instrumental in the addition of three buildings for instruction (McCosh Hall, Palmer Laboratory, Guyot Hall), four dormitories (Seventy-Nine, Patton, Campbell, and Holder Halls), the gymnasium, Lake Carnegie, the Faculty Room in Nassau Hall, FitzRandolph Gateway, and the Mather Sundial. In his time, the University acquired the Springdale Golf Course, 221 acres of greensward on the west side of the campus.

Before the end of his term, he authorized his classmates of 1879 to cast two heroic bronze tigers for the front steps of Nassau Hall. (As the Princeton mascot, the tiger first appeared during the McCosh era.)

Having modernized the administration, curriculum, and teaching methods, Wilson next took on the social life of the undergraduates which, in his opinion, was detrimental to the intellectual and democratic spirit of the University. About two-thirds of the upperclassmen belonged to the eating clubs on Prospect Avenue and he felt these clubs were becoming an unhealthy preoccupation, for those who joined them and for those who did not. The clubs, in his view, encouraged snobbishness and false values among their members, while those who were left out lived in isolation, and frequently felt ostracized and humiliated.



The 1879 Tiger was dedicated to the typical Princetonian, combining "the massive strength, the alertness, the brawn of the Athlete, with the gentleness, poise, and repose of the Scholar."

"Every nation is full of loafers, and its universities have been established for no other purpose than that of counteracting and neutralizing the influence of this vicious class. The prime object of every College is to furnish young men with a solid foundation, upon which to base a broader career—to send forth, in all directions, men who can raise the people to the level of right and truth." *Daily Princetonian* (January 10, 1878), Thomas W. Wilson '79, Managing Editor

To improve the situation, Wilson proposed the creation of quadrangles, or "colleges," in which undergraduates of all four classes would live with their own recreational facilities and resident faculty masters. Membership would be by assignment or lot, and the clubs would either be absorbed into the quads or abolished.

The trustees approved the quad plan in principle, but it aroused considerable opposition among alumni. Many said it would deprive undergraduates of freedom of social choice and destroy class spirit. As opposition grew, benevolence declined. Bowing to the storm, the trustees withdrew their approval but Wilson did not give up the fight. Indeed, it heightened his awareness of social injustice and moved him in the direction of more political activism.

Soon he was embroiled in another controversy. This time his antagonist was Andrew Fleming West, Class of 1874, founding dean of the Graduate School.

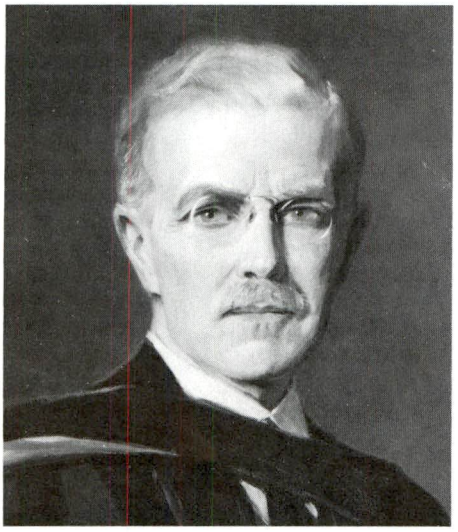
Dean West had a dream. It was almost an obsession. He wanted to erect a graduate college of medieval splendor. At first, he seemed willing to have the buildings located at the center of the campus, and Wilson heartily concurred. The president believed the graduate community should be the energizing force in the intellectual life of the University. To this end, he had been working hard, and successfully, to add distinguished professors to enrich the graduate area of the teaching program.

Relations between Wilson and West deteriorated abruptly as West changed his mind about the location of his graduate college and decided to gather his gentlemen scholars on the other side of the golf course, a mile west of Nassau Hall. Wilson disapproved such a distant site but capitulated when West found financial support for his plan.

Thwarted on two counts, Wilson turned a receptive ear to political leaders who had been urging him to run for governor of New Jersey. He accepted the nomination, won the governorship in 1910, and the presidency of the United States in 1912.

In the passage of time, the antagonisms Wilson engendered gave way to a recognition of his lasting impact on the life of the campus, both intellectual and social. Twenty-five years after his death, the trustees gave his name to the School of Public and International Affairs. Sixty years after the defeat of his "Quad plan," they carved out an area of the campus—six dormitories and a dining and social center—as a distinct residential complex known as Woodrow Wilson College.

The highest honor the University can bestow upon an alumnus in recognition of distinguished public service is the annual Woodrow Wilson Award.



1912-1932: "A singularly happy choice"

John Grier Hibben came to Princeton from Peoria, Illinois, and graduated in 1882, president and valedictorian of his Class. He continued his studies in Berlin and at Princeton Theological Seminary. After four years as a parish minister, he returned to the University as a graduate student in philosophy. Later, he became professor of logic and also taught psychology and the Bible.

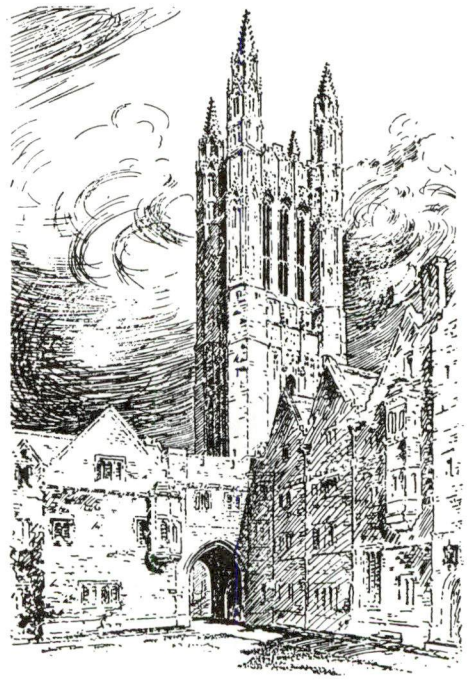
The search for a successor to Woodrow Wilson was long and painful. The University had become sharply divided during the Graduate School controversy, and Hibben's election came at the hands of trustees who had most resisted Wilson's reforms. This posed a special problem for the new president. His most urgent task was to bring the factions together.

"My administration must make for peace," he said. "I represent no group or set of men, no party, no faction, no past allegiance or affiliation—but one united Princeton!"

Hibben practiced what he preached. One of his first acts was to seek out faculty members of the Wilson faction and urge them to cooperate with him in continuing the work begun by Wilson. In time, even Wilson's strongest supporter, Professor of Mathematics Henry B. Fine, came to feel that Hibben was a "singularly happy choice." In style, he was more the coordinator and mediator than the dynamic leader.

Soon after taking office, he presided over the opening of the new Graduate College, the monastic compound for scholars set on a hill beyond the golf course. At the dedication ceremony, he made special reference to the high-soaring Gothic tower built by popular subscription as the nation's memorial to Grover Cleveland—who, after leaving the White House, retired to Princeton and became a trustee of the University.

When America entered the Great War, Hibben, a strong advocate of preparedness, placed the University's resources at the disposal of the government. Army, Navy, and aviation training schools started functioning on the campus. Laboratories and other facilities were used for research and operational programs. Princeton men flocked to the colors. By the fall of 1918, all but 60 undergraduates were in uniform. In all, more than 6,000 Princetonians—faculty, alumni, graduate and undergraduate students—served in some branch of the armed forces. Of these, 151 died in uniform and their names are inscribed in the atrium of Nassau Hall along with those who have died in all the nation's wars.



Cleveland Tower at the Graduate College was built by popular subscription as a memorial to the 22nd and 24th President of the United States, Grover Cleveland.

During the booming post-war years, Hibben was distressed by what he called the "hypocrisy attending the Eighteenth Amendment (prohibiting the sale of liquor), by false standards of living growing out of our period of fictitious prosperity and by a skepticism toward old concepts of morals and religion."

To combat these unhappy influences, he banned automobiles, enlarged the residential capacity of the campus by building ten more Gothic dormitories, tried to lessen the dominance of the eating clubs, and drew up plans for a student center.

The special quality of Hibben's leadership emerged slowly over the years. It was his practice to look to the faculty for initiative in new programs. Their most significant curriculum reform was the "four-course plan," which gave students more freedom during their upperclass years for independent reading. In lieu of taking a fifth course, each was required to prepare a senior thesis and take a comprehensive examination. The program quickly proved successful and was widely emulated elsewhere. It endures in substance to this day.

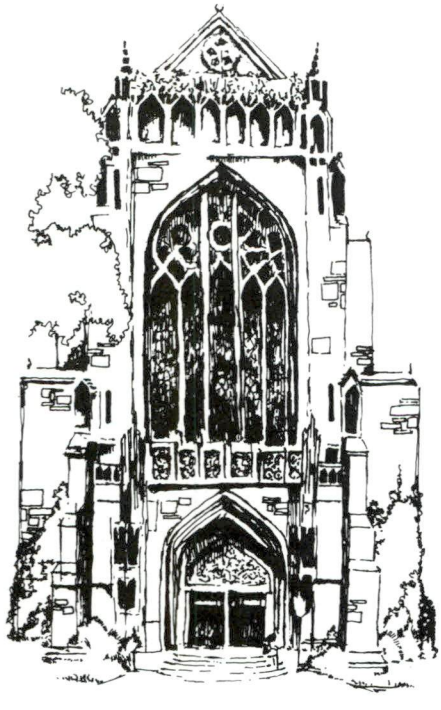
Hibben sought to draw the faculty into closer relation with the president and trustees in the conduct of University affairs. He created a Committee on Appointments and Advancements consisting of three members of the faculty chosen by that body and charged with conferring with the president regarding his recommendations to the trustees on faculty appointments and promotions. The "Committee of Three," later enlarged and still in effect, became one of the most important groups on campus. The faculty also benefited from a successful fund drive to raise their salaries and provide a new system of retirement pensions, insurance, and housing built especially for them.

Growth of the faculty was impressive. Hibben managed to retain most of the luminaries of the Wilson era and to add other accomplished or promising scholars. At the same time, the student body nearly doubled, despite a policy of selective admission.

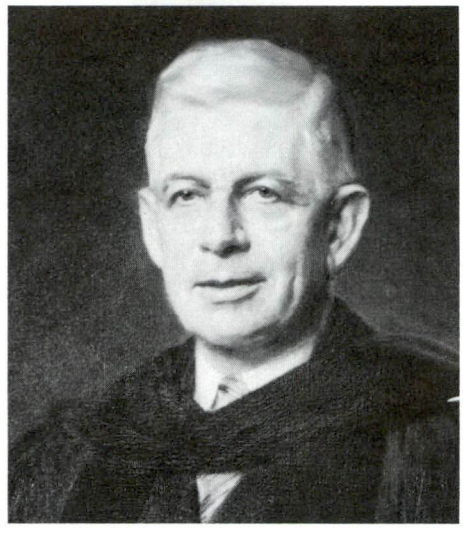
The years after the war brought a steady increase in the University's facilities for instruction and research, including the establishment of a Department of Oriental Languages and Literatures, and three new Schools: Architecture, Engineering, and Public and International Affairs.

During the Hibben years, the University profited from the burgeoning national economy and grew in step through the support of alumni. With their help, the campus doubled in size and the endowment quadrupled. Besides the ten new dormitories, there were five new dining halls, six new buildings for instruction and research (McCormick, Eno, Green, Frick, Dickinson, and Fine), three for athletics and the arts (Palmer Stadium, Baker Rink, and McCarter Theatre), and two for physical and spiritual health (McCosh Infirmary and the chapel). As a memorial, the trustees gave Hibben's name to the nave of the chapel.

His administration has been characterized as the "flowering and harvest of Wilson's plantings." He was a faithful steward.



The chapel of the University, opened on Memorial Day, 1928, is a "house of prayer for all people."



Harold Dodds

1933-1957: "Princeton enters her third century"

Harold Willis Dodds, son of a professor of Bible at Grove City College in Pennsylvania, grew up in the company of teachers and students. After receiving his bachelor's degree at Grove City and teaching public school for two years, he went on to graduate work in politics at Princeton and Pennsylvania. During World War I, he served in the U.S. Food Administration, and afterwards became secretary of the National Municipal League under Charles Evans Hughes.

As an expert in the problems of local government, with experience as a troubleshooter in Latin America, Dodds joined the Princeton faculty in 1925 as professor of politics. Later, he was appointed the first chairman of the School of Public and International Affairs (now the Woodrow Wilson School). He had been a leader in the establishment of the School, a cooperative enterprise of the history, politics, economics, and later sociology, departments.

Dodds became president in the depths of the Great Depression and served through the Second World War and the Korean Conflict. Not until close to the end of his administration did he have what might be called a normal year, with adequate budget, sufficient faculty, and neither too few nor too many students.

During the war years, Princeton adopted an accelerated program to give students an opportunity to graduate before entering the armed forces. At the same time, the Army and Navy sent hundreds of young men to the campus for general or specialized training. The number fluctuated widely from month to month. A faculty depleted by enlistments or calls to government service had to teach unfamiliar subjects at top speed. When peace came, the University absorbed the flood of students returning under the "G.I. Bill."

The two-hundredth anniversary of the founding of Princeton was celebrated over a two-year period (1946-1947) with an almost continuous series of scholarly conferences and three major convocations. Over a thousand scholars and men of affairs from all parts of the world attended, including three presidents of the United States (present, past, and future): Truman, Hoover, and Eisenhower.

"Princeton enters her third century with certain convictions," said Dodds at the final bicentennial convocation. "We shall strive for quality rather than quantity.

"As a residential university, we shall emphasize the community of students and teachers, believing that the life of the campus is a potent supplement to formal study.

"We shall always see to it that our students represent a democratic cross-

The Bicentennial medal struck in 1946 marked Princeton's 200th anniversary. Its obverse side portrays Nassau Hall; the reverse, the official seal of the University.

section of American youth, geographically and with respect to economic circumstance.

"We shall not forget that moral proficiency must be cultivated as well (as intellectual).

"We shall seek to advance learning as well as disseminate it."

As a continuing memorial of the anniversary, Bicentennial Preceptorships were established to enable promising young members of the faculty to spend a year in uninterrupted research.

Despite wars and depression, Dodds doubled the size of the faculty, adding 30 endowed professorships. This permitted an increase in the size of the student body (graduate and undergraduate) by over a thousand while maintaining the University's distinctively high ratio of faculty to students.

During the Dodds years, music and the creative arts were introduced into the curriculum. The Office of Population Research was established. Three new departments were added: Religion, Aeronautical Engineering, and Near Eastern Studies.

Although physical construction was curtailed, there were two noteworthy additions to the campus: Princeton acquired a large tract of land southeast of the main campus—comparable to a "Louisiana Purchase"—subsequently named for James Forrestal '15, first secretary of defense. This second campus, symbolic of the postwar expansion in research sponsored by the federal government, has since been developed into one of the nation's major research centers for plasma physics and fusion energy. It is also the site of a government laboratory for meteorology and oceanography. (In recent years, the acreage has been doubled to include an office, research, and housing complex.)

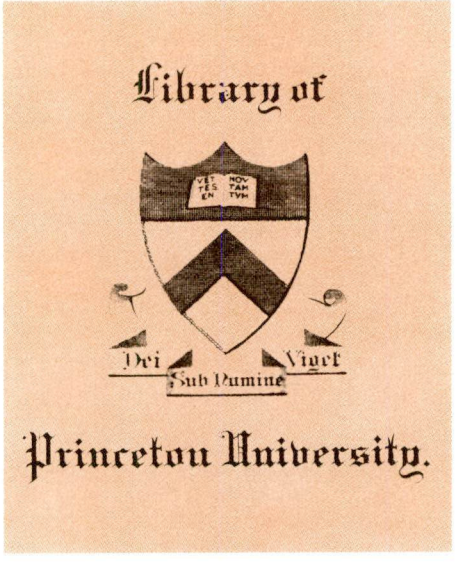
A new intellectual center for the University, the Firestone Library, was opened in 1948 as a "laboratory for the humanities and social sciences." In Princeton's "open stack" tradition, it brought books and readers together with particular grace and efficiency. Over the years, it has with relative ease adjusted to changing requirements; its exterior walls have been opened four times for new additions.

Not forgetting the constraints and uncertainties of the Depression years, Dodds felt the need for an additional, on-going source of funds. Beginning in 1940, with his encouragement, Princeton alumni began to go out to their classmates each year seeking "unrestricted" funds for the University. Their first appeal netted $80,000 in cash. Their sixteenth appeal—the year of Dodds' retirement—netted 16 times as much. Since then, Annual Giving has continued to increase to a point that, by the end of the 1970s, it had begun to approach a level of $6 million annually.

Though he could never be called a revolutionary, Dodds led the University through some swift-changing times. He was proud of Princeton's past; but resting on it, he warned, "would lead only to decay and destruction." So he kept moving forward.

Not without some pain. As he used to say about higher education: "When young people start to think for themselves, they always cause pain to their elders."

Each year at commencement, the name of Harold Willis Dodds gives meaning to the award presented to the senior who best embodies his qualities of "clear thinking, moral courage, a patient and judicious regard for the opinion of others, and a thoroughgoing devotion to the University and to the life of the mind."



The library bookplate represents a collection of more than three million printed works, five million manuscripts, and one million nonprint items—increasing at a rate of 6,000 volumes per month.

Robert F. Goheen

1957-1972: "An exploding, booming, shifting world"

Robert Francis Goheen came to Princeton from India, where his father was a medical missionary. He graduated with the Class of 1940, Phi Beta Kappa, with Highest Honors in the Humanities. Scholar, athlete, and campus leader, he was co-winner of the Pyne Prize, the highest general distinction conferred upon an undergraduate.

After completing a year of graduate study in the Department of Classics, Goheen entered the army. He served in the Pacific with the First Cavalry Division, reaching the rank of lieutenant-colonel.

When the war was over, Goheen returned to Princeton to continue his studies in classics. After further work at the American Academy in Rome, he became a member of the Princeton faculty and, at the same time, director of the Woodrow Wilson Fellowship Program, a nationwide effort to encourage young men and women to undertake careers in higher education.

In 1956, while an assistant professor of classics, he was elected to the presidency by unanimous vote of the trustees. When he assumed office at the age of 37, he was the third youngest president in the history of the University (after Aaron

Burr Sr., and Samuel Davies).

Goheen's administration was, in his own words, a period of "growth and change . . . in almost every part of the University." It was also a period of severe challenge as Princeton, along with her sister institutions across the land, reflected the tumult of a national community coping with civil strife, emerging social forces, and the agonies of the war in Vietnam.

Although he repeatedly disclaimed any ambition to be known as a "building president," Goheen saw more added to the physical plant during his administration than any of his predecessors. During his first years in office, backed by a spirited campaign for capital funds, all the pent-up energies of Princeton—long constrained by depression and war—were released in a massive program of expansion. The sound of hammers filled the campus. Some 25 buildings were eventually constructed on the main campus, still others at the Graduate College and Forrestal. All told, Goheen nearly doubled the square footage under roof.

Among the more important additions were the Art Museum, the Woolworth Center of Musical Studies, the Architecture Building, the Woodrow Wilson School, the Engineering Quadrangle, the Jadwin Gymnasium, the Computer Center, and the complex of Fine, Jadwin, and Peyton Halls constructed for the mathematical, physical, and astrophysical sciences. With these came a parallel growth in student housing: dormitories in the new quad, the new new quad, and Princeton Inn College.

To provide space for a faculty and staff social center, the Goheens moved out of "Prospect," the old presidential mansion at the center of the campus, and moved into "Lowrie House," a quarter mile down Stockton Street.

Physical expansion was accompanied by a proportionate increase in the financial resources of the University. The annual budget grew four times, from approximately $20 million to $80 million. More than 20 endowed chairs were added.

The faculty grew from just under 500 to more than 700. Applicants for admission to the College in Goheen's last year were more than two and a half times the number who applied during his first. Undergraduate enrollment increased by a third, from nearly 3,000 to almost 4,000.


The Daily PRINCETONIAN

Vol. XCIII. No. 51 PRINCETON, NEW JERSEY, MONDAY, APRIL 21, 1969 Entered as Second Class Matter Post Office, Princeton, N.J. 10 Cents

Trustees okay administration coed plan; undergraduate women to enroll in fall

The number of graduate students more than doubled.

Goheen was committed to Princeton's traditional emphasis on the integration of teaching and research. "Pursued together," he observed, "they generate an atmosphere of learning that invigorates and gives added point to both."

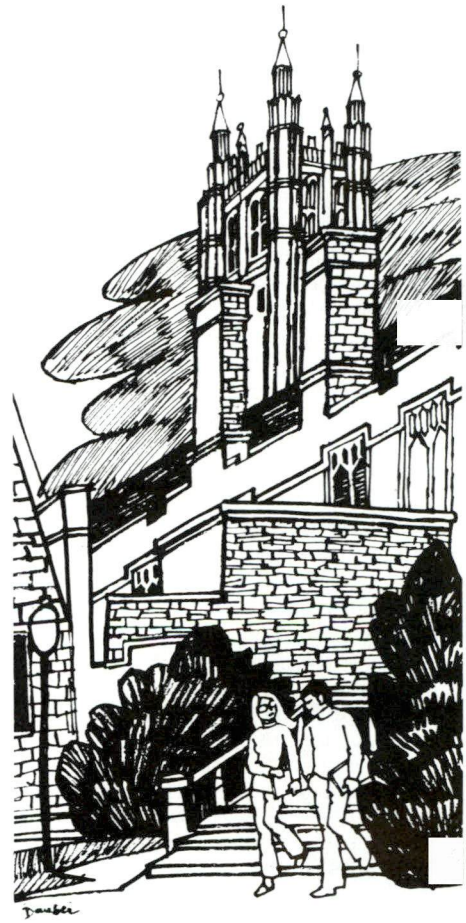
The undergraduate program of study responded to what the president described as "an exploding, booming, shifting world of knowledge and ideas." Provision was made for sophomore concentration, a reading period at the end of each term, a University Scholar Program which offered exceptional flexibility to carefully selected undergraduates, and student-initiated seminars. New interdepartmental opportunities were introduced, among them programs in the History and Philosophy of Science; Science in Human Affairs; Comparative Literature; and East Asian, Latin American, Russian, African, Afro-American, Urban, and Medieval Studies.

In the area of student life, a number of social facilities were established to complement existing options. One of the new facilities combined two former club buildings into one University-managed hall named for Adlai Stevenson '22. (It became the home of the first kosher kitchen on the campus.) Two major residential "colleges," Princeton Inn and Woodrow Wilson, featured dormitory, dining and social facilities for 400 to 500 students each.

And Princeton became coeducational. For the first time in history, women were admitted as undergraduate candidates for a degree.

In the late nineteenth century, an effort had been made to provide Princeton with a quasi-coordinate college called Evelyn. Located on Nassau Street east of the campus, Evelyn prompted *Harper's Bazaar* to comment hopefully of the day when "our country shall come to speak with equal pride of the sons and daughters of Princeton." But the new college closed its doors in the hard times after the "Panic of 1893".

A modest extension of Princeton's educational opportunities for women came in World War II when 23 were admitted to a government-sponsored defense course in photogrammetry. More significant changes occurred in the 1960s



Students entering Hamilton Court with Holder Tower in the background. (Illustration by Elizabeth Dauber.)

with the admission of women graduate students (the first Ph.D. was awarded in 1964), and the admission each year of several dozen undergraduate women from other colleges for a year of concentrated study in "critical languages".

The decision to become fully coeducational followed a 16-month study which concluded that the University should open its doors to women as well as men and that—in Goheen's words—"the presence of talented young women at Princeton would enhance the total educational experience and contribute to a better balanced social and intellectual life."

A special trustees' committee was appointed to test the findings of the study. After broad consultation with students, faculty, administrators—at Princeton and other campuses—and alumni across the land, the trustees approved coeducation in January of 1969 and instructed Goheen to develop plans for its implementation. Later in the spring, when he announced coeducation would become a reality, the *Daily Princetonian* congratulated him and the trustees for their "courage, foresight, and ability to change with the times." Student radio station WPRB concluded its broadcast of the news with the "Hallelujah Chorus".

Another major change in the composition of the student body began—before the study of coeducation—when Princeton started seeking talented applicants from the nation's minority groups. Although there had been isolated instances of minority students attending Princeton in the distant past—such as John Chavis, a black freeman in the Class of 1796, and George Morgan White Eyes, a Delaware Indian who studied under President Witherspoon—there were very few until the Second World War. Even then, it was not until the 1960s that the University began actively to encourage minority students to attend. Its long-range commitment to ethnic and racial diversity was symbolized in the creation of a Third World Center on Prospect Avenue which Goheen dedicated in 1971.

In that same year, he presented the first Frederick Douglass Service Award given annually in memory of the nineteenth century black leader who "epitomized in his life the revolution in the status of his race."

As first president to preside over the Council of the Princeton University Community (CPUC), Goheen made it a positive meeting ground for all the forces that shape the University: students (both undergraduate and graduate), faculty, alumni, staff, and senior officers of the administration. When he left office, the *Daily Princetonian* put out a special issue hailing him as "a superlative example of what a university president should be." At his last commencement, the trustees cited him with words that could well describe the Princetonian par excellence:

> "In his eyes the function of the intellect is so lofty that it becomes a form of morality. Patient, always humane and trustworthy, he is personally humble at the very time that he is rockily steadfast (an unsympathetic witness might say stubborn), not because he fails to understand and respect the views of others but because he refuses to compromise his own enduring values. By never seeking popularity, by never worrying about his own image in the eyes of others, he has gained the affection and respect of the entire University and led it to new achievement, new unity."

The Third World Center, dedicated in 1971, was formerly the Osborn Club House. A new wing was added two years later, almost doubling the Center's size.

William G. Bowen

1972 - : "A center of learning"

William Gordon Bowen came to Princeton Graduate School from Denison University, where he was Phi Beta Kappa, co-chairman of the student government, and Ohio Conference tennis champion. After taking his Ph.D., he joined the faculty as a member of the Department of Economics.

In addition to teaching several courses, including Introductory Economics 101, he continued his scholarship and research. He prepared a definitive report on the effects of Princeton's involvement with the government, *The Federal Government and Princeton University*. Following a research trip to England, he published *Economic Aspects of Education*, an analysis of university financing in the United States and Great Britain. With Professor William J. Baumol, he began a study of the economic foundations of American theatre, opera, orchestra, and dance. Their book, *Performing Arts: The Economic Dilemma*, is a landmark study of the economics of culture. Finally, on leave of absence before taking over the recently established office of provost, he joined T.A. Finegan of Vanderbilt University in writing *The Economics of Labor Force Participation*.

As provost, Bowen was general deputy

to Goheen. During his five-year term—five tumultuous years for America and American higher education—he became involved in every concern of the University, old and new. He played a leading role in planning and overseeing the move to coeducation, in efforts to reach out to minority students, and in the defense of open inquiry and free speech.

Under his guidance and as part of the CPUC, a broadly representative Priorities Committee was formed to study the manifold needs and capabilities of the University in an age of financial restraint. The recommendations of the Priorities Committee were prudent, firm, and effective: the University would concentrate on its traditional areas of strength; the cuts would be selective. Some of the amenities would go so the essentials could remain. The budget was brought back into balance, thanks in part to increased financial support from alumni and friends.

Princeton's approach became a model for other educational institutions in the private sector. The American Council on Education circulated Bowen's reports across the land. He was widely respected for his commitment to quality as well as economy, and for his strong devotion to the special characteristics of Princeton. He was a natural successor to Goheen.

Bowen was sworn into office on June 30, 1972. In his remarks at his installation he talked about the strengths and responsibilities of the University whose leadership he had just assumed:

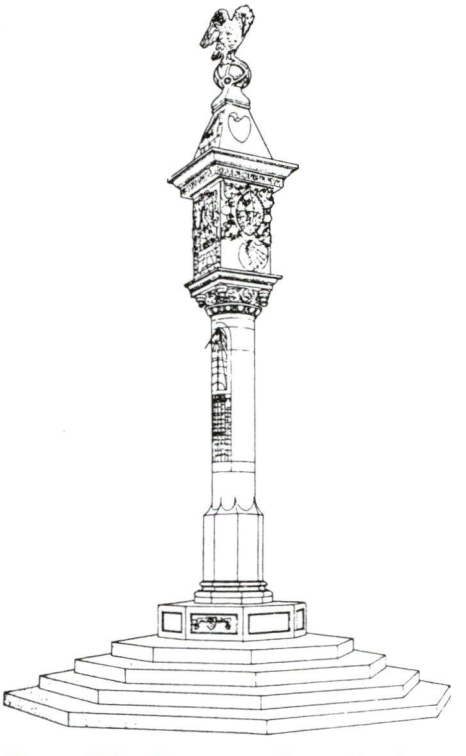
> "We are now, as we have long been, a center of learning—a place to which new students, with new enthusiasms and new perspectives, come again each year to work with scholars who are engaged in the age-old pursuit of knowledge. It is our conviction that in this process of learning and of discovery much more is gained than command of disciplines and intellectual power, as important as they are. The fostering of personal values, a sense of continuing obligation to others—these too are parts of the idea of this University. Of course there are limits on what we, as an institution, can accomplish, . . . and we need to avoid the arrogance that can afflict university communities no less than other groups. But those things that we *can* do, those contributions that we can make, are as important now as they ever have been."

Afterword

"The mere lapse of time by itself does nothing," said Charles Darwin in his *Origin of Species*. "Lapse of time is only so far important, that it gives a better chance of beneficial variations arising, and of their being selected, accumulated, and fixed."

As Princeton has come down to us through the ages—adapting itself to the changing demands and conditions of life—it has taken on certain "beneficial variations" which have improved its ability to serve a changing world. Created in freedom, with a generous intent to advance "the liberal arts and sciences," the University has evolved over time into a very special community. Each President, in his time, has contributed to it. But, as Darwin noted, the evolutionary process is never finished, never "absolutely perfect."

So the story of Princeton continues.



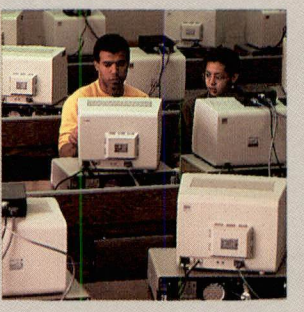
The sundial in the courtyard formed by the chapel and Dickinson and McCosh Halls has measured the daylight hours on the Princeton campus since 1907. Its counterpart, in the courtyard of Corpus Christi College, Oxford, was constructed in 1551.

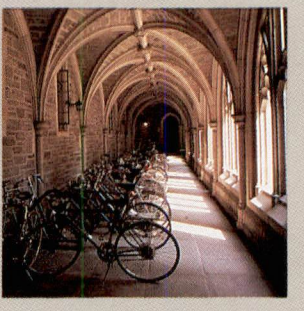
1990-91

ADMISSION INFORMATION

Princeton University

Contents





On the cover: worn steps in Nassau Hall, home of the president's office and other central administration offices. Photograph by John W. H. Simpson '66.

Princeton University (USPS 403-660) Volume XVI, Number 3. Second class postage paid at Princeton, NJ 08540.
Issued at Princeton, NJ, once in November, once in April, twice in July, once in August, and twice in September.

PRINCETON UNIVERSITY **Admission Office**
110 West College
Princeton, New Jersey 08544-0430
609–258–3060

To All Prospective Applicants:

The weathered sign outside a famous old bookstore in New York City reads "Wise Men Fish Here." An updated version of that sign ("Wise Men and Women Fish Here") would be particularly appropriate hanging over the entrance to a college or university. It suggests exactly the right approach for students to take toward their college education, particularly at a place like Princeton.

If you believe that a first-rate education is not something that happens to you, but rather is something you yourself make happen, then one way to think about Princeton is to see it as a community—faculty, staff, classmates—and as a set of resources—courses, libraries, labs, dorms, theaters, athletic facilities, student organizations—that you will use to shape your own education (albeit with a healthy dose of faculty advice and within a general structure) over the course of four years.

In the following pages, we attempt to provide you with a glimpse of the campus community and a brief overview of the resources offered at Princeton. We tell you about the framework (for example, the "precept" method of instruction and the required senior thesis) that is the hallmark of a Princeton education. What we are unable to do adequately is describe all of the ways in which individual undergraduates use these resources in a single day, let alone over the course of four years.

This bulletin will be most helpful to you if you try to imagine how you would make use of the opportunities described here. In fact, you will be better able to evaluate what Princeton has to offer if you take time and give some thought to what you hope to experience and gain from college.

If you can visit Princeton, I hope you will. There's a special ambience to this campus. Its activities and its architecture provide its inhabitants with a sense of the past while challenging them to shape the future. Faculty meetings continue to be held in Nassau Hall, now 234 years old and once the temporary capitol of the United States when the Continental Congress met there in 1783. And students move back and forth between classrooms and dorms that range in style from the traditional Gothic (complete with arches and gargoyles) to those designed by eminent modern architects.

Lastly, depending on the day, or even time of day, you visit, Princeton can appear to be either all work (just about *everyone* seems to be heading to Firestone Library), or all play (the air above Cannon Green is filled with frisbees). It might be a day in the fall when the leaves have turned their brilliant colors, a day in the winter when the campus is blanketed with snow, or a day in the spring when brilliant sunshine gives way to a sudden rainfall. As you might guess, over the course of a year Princeton is the sum of all of these things.

In any event, we hope the information that follows gives you a good idea of the range of opportunities available to Princeton students. Good luck in your college search. And let us know if you have any questions.

Fred A. Hargadon
Dean of Admission

PRINCETON: THE PLACE

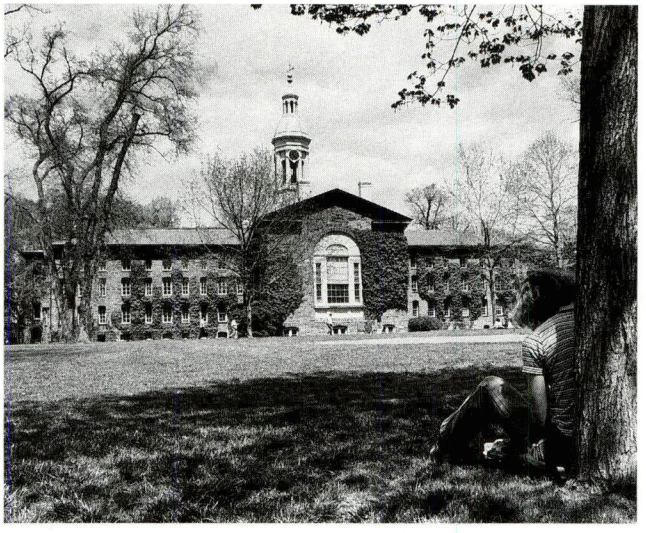
"The Situation of the College is in a very populous, agreeable & healthy Country, upon an elevated tract of Ground, in a clear and wholesome Air: the latter appears from the uncommon state of Health which hath always been remarkable among the Students & Inhabitants of the Village."

—Trustee William Peartree Smith, 1766

Now, more than 220 years after Smith's letter to the then-new University president, John Witherspoon, Princeton retains its historic appeal to an interesting and diverse population of "students & inhabitants."

Originally founded as the College of New Jersey in 1746, Princeton is the fourth oldest college in the country, with roots deep in America's past. More delegates to the 1787 Constitutional Convention were graduates of Princeton than of any other American or British university. Since then, the University has produced two presidents, 80 United States senators, and, on a per capita basis, more cabinet members (including the current secretary of state) than any other American university.

Visitors to Princeton can see its ties to the past in the buildings bearing plaques that explain their historic significance. Among them is Nassau Hall, completed in 1756. Now home to University administrative offices, Nassau Hall originally provided space for the entire college, including classrooms, dormitories, dining hall, library, and "prayer room." During the Battle of Princeton in the Revolutionary War, Nassau Hall changed hands three times. When the British were in possession, an American cannonball came through the window, destroying



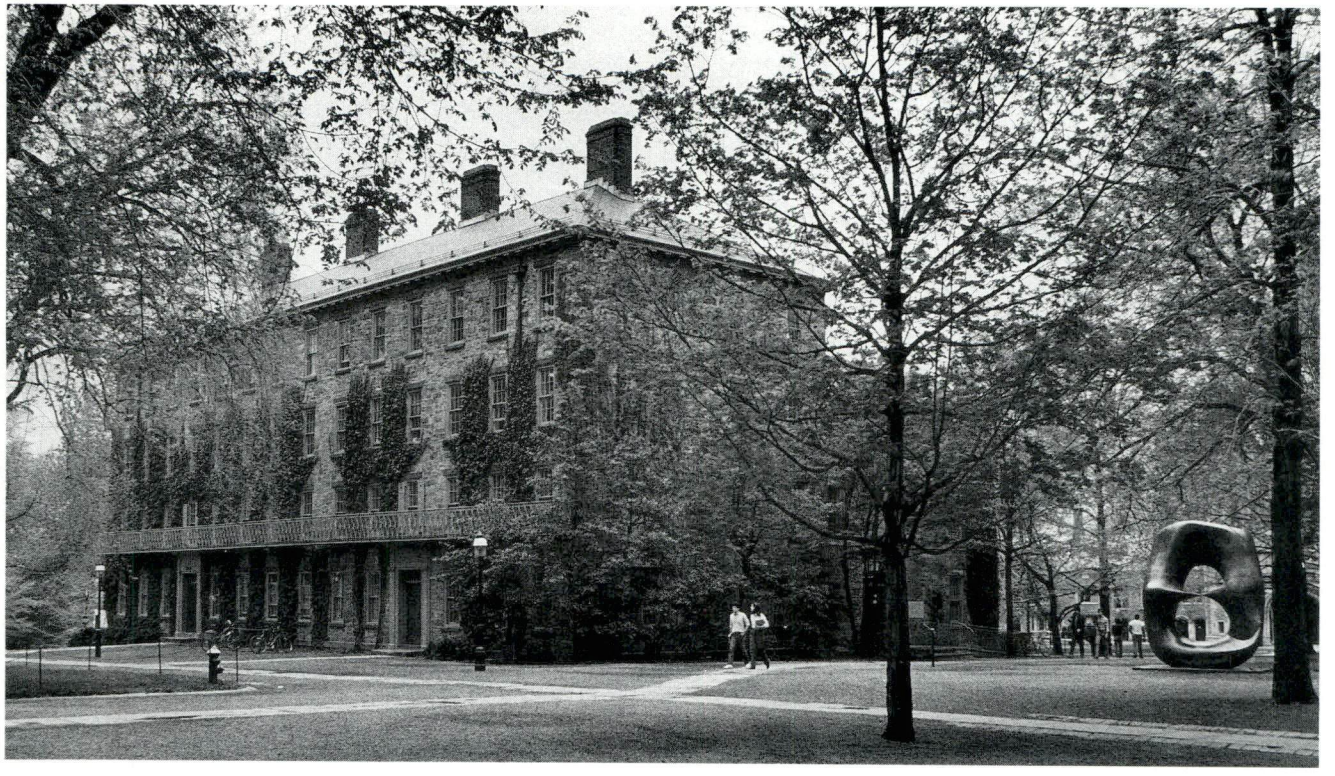
a portrait of King George II. Another hit the south wall of the west wing, leaving a scar that is visible today. Later, Nassau Hall served as a temporary capitol for the Continental Congress.

Princeton's past adds flavor to contemporary campus life. Students are aware of it, whether they live in a 19th-century Gothic dormitory, where generations of Princeton students have carved their initials on any available wooden surface, or eat in the very modern Wu Hall, designed by the Princeton alumnus Robert Venturi.

Within walking distance of the campus is the Delaware and Raritan Canal, built in 1830 to connect the Delaware and Raritan rivers and now a linear state park. Next to it is Lake Carnegie, a three-and-a-half-mile-long lake that provides an Olympic course where Princeton crews train and race.

The town of Princeton has approximately 30,000 residents and offers a number of shops, restaurants, and theaters, including McCarter Theatre, one of the nation's busiest regional performing arts centers.

Trains leave regularly for New York and Philadelphia, each 50 miles away. A shuttle train (called the Dinky) goes back and forth between the campus and Princeton Junction, a Northeast Corridor station with regular New Jersey Transit service. The University subsidizes many student trips to concerts, theater, opera, and athletic events in the two cities. Amtrak, which also serves Princeton Junction, can carry students to Boston, which is six hours north, and to Washington, D.C., which is three hours south. Princeton is about equidistant from the Newark International and Philadelphia International airports (roughly an hour's drive). There is regularly scheduled limousine service from Princeton to the Newark airport.



Students at Princeton University are part of an institution with an international reputation for excellence. Many choose Princeton for the strength of its academic program, its relatively small size combined with the resources of a major research university, and the personal attention its undergraduates enjoy. Men and women who seek a quality education in the liberal arts, architecture, engineering, or public and international affairs will discover that Princeton has a lot to offer.

Princeton's academic program fosters intensive interaction between students and faculty. Small discussion groups, called preceptorials (usually referred to by students and faculty as "precepts"), and special opportunities like the freshman seminars offer chances to explore subjects in depth. Working closely with a faculty adviser, every Princeton senior writes a thesis or prepares an independent project.

Despite its small size, Princeton attracts its primary resources—faculty and students—from around the globe. Its faculty includes some of the world's leading scholars.

Princeton's 4,500 undergraduates are an unusually talented and diverse group. They come from all 50 states and from more than 50 foreign countries. They represent a wide variety of economic, ethnic, social, cultural, and religious backgrounds. Minority students make up 24 percent of the current freshman class. Since the University became coeducational 20 years ago, the proportion of women in the student body continues to grow, comprising 43 percent or more of the incoming freshman class in recent years.

The University makes its admission decisions without regard to applicants' financial circumstances, and it provides financial aid to all admitted students who need it. (Financial aid for international students, excluding Canadians, is limited because of restrictions on University scholarship funds.)

Princeton students are asked to make a significant commitment of their own resources, time, and energy. In return, the University provides them with an abundance of opportunities from which to grow and learn.

ACADEMIC LIFE

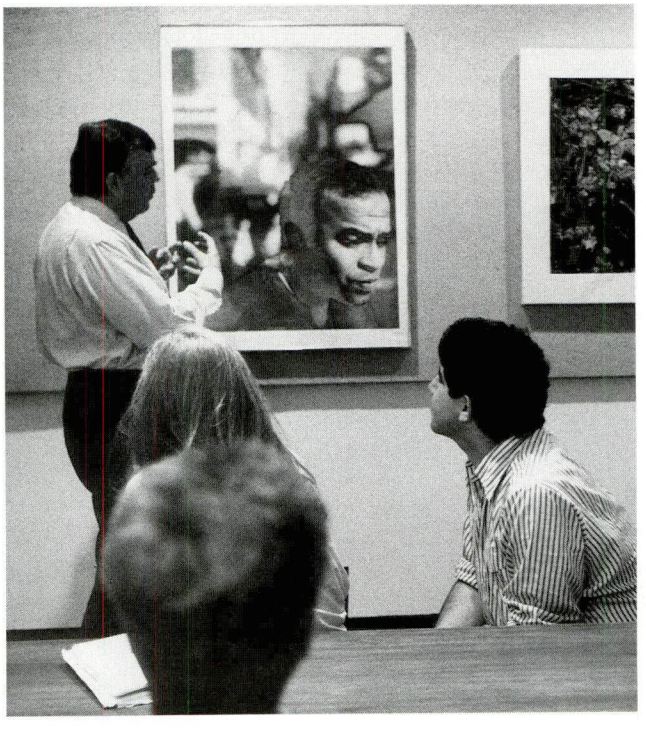
The Faculty

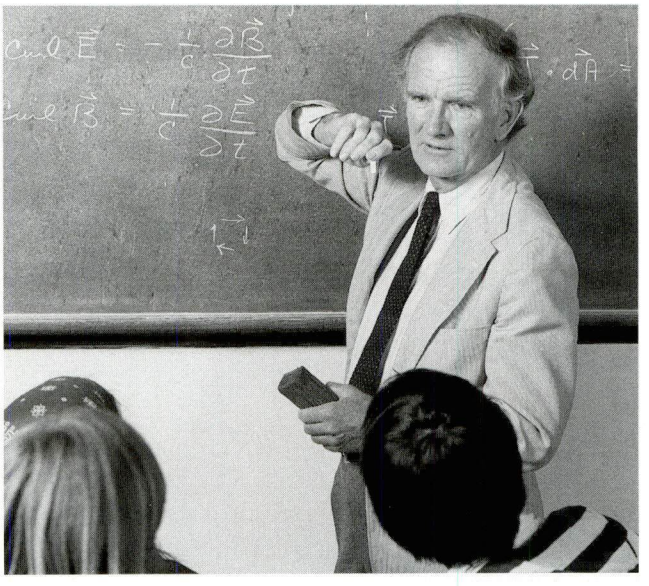
The faculty is undoubtedly Princeton's greatest resource. Professors, many of them leading authorities in their fields, are uncommonly accessible to undergraduates. It is almost impossible to graduate from Princeton without forming a close working relationship with at least one faculty member.

Because Princeton has three times as many undergraduates as graduate students, and because the same faculty teaches both undergraduates and graduate students, it is not unusual for students to come in contact with Nobel laureates, MacArthur fellows, or scholars of national and international reputation. Nor is it unusual for undergraduates to engage in research projects sponsored by the faculty.

Faculty members are advisers as well as teachers. Professors associated with each of the five residential colleges help freshmen and sophomores plan their academic programs. A faculty adviser in an upperclass student's area of concentration helps the student plan his or her courses and carry out independent projects.

Most faculty members live in the town of Princeton and participate in the social and cultural life of the residential colleges and the campus. Students and teachers meet informally in the residential colleges and other dining facilities, which have faculty associated with them.





The outstanding teachers and scholars on Princeton's faculty have a profound effect on the quality of undergraduate education. Professor of Physics (and former Dean of the Faculty) Aaron Lemonick once remarked that the exploratory nature of scholarship on the frontier of human knowledge is lonely but "achingly, quietly, utterly exhilarating." Princeton students have the opportunity to share in that excitement.

The Academic Program

The academic unit at Princeton is a semester and not a single course. Students complete eight semesters (unless they have advanced standing) before graduation. Freshmen and sophomores in the A.B. (bachelor of arts) degree program complete four courses each term and 16 courses by the beginning of the junior year. Students in the B.S.E. (bachelor of science in engineering) program complete nine courses by the end of the freshman year and 17 courses by the beginning of the junior year. In any given semester, students may take one or more optional courses in addition to the standard course load.

Honors work is not limited to a small, select group of students. Every Princeton senior writes a senior thesis or works on a special project, and every Princeton student is eligible to graduate with honors.

The University offers a great deal of freedom in course selection and many special options so that students have flexibility in creating their own academic programs.

A.B. candidates

During their first two years, A.B. candidates explore courses in the humanities, social sciences, and the natural sciences while investigating areas for possible concentration (major). In the spring of the sophomore year, students choose an area of concentration to pursue during their junior and senior years. They may concentrate in any one of 29 academic departments and at the same time enroll in one or more of the 15 interdepartmental programs. See page 11 for a list of departments and programs.

All A.B. candidates:

1. Demonstrate proficiency in English composition. Entering undergraduates select one of several courses that require the regular writing of essays.

2. Demonstrate proficiency in a foreign language. Many students do this either by earning high scores on the College Entrance Examination Board's achievement or advanced placement tests or on the placement tests offered during orientation week. Students have a choice of 15 foreign languages at Princeton, including Arabic, Chinese, German, Greek, Hebrew, Japanese, Romance languages, Slavic languages, and Turkish.

3. Fulfill area distribution requirements. Students complete two semester-long courses in each of four general areas:

- laboratory science
- social science
- arts and letters
- history, philosophy, and religion

B.S.E. candidates

By the end of sophomore year, engineering students complete the equivalent of:

- four semesters of mathematics
- two semesters of physics
- one semester of chemistry
- one semester of computer programming

Students complete these requirements in regularly graded courses.

Students also satisfy the University's English writing requirement. A minimum of 36 courses is required for the B.S.E. degree; freshmen normally take four courses one semester and five the other. Independent work, where students work side-by-side with graduate students and faculty on research problems, is encouraged in the junior and senior years.

Engineering students may concentrate in one of five departments or five interdepartmental programs.

School of Engineering and Applied Science

Engineering and applied science education at Princeton offers unusual versatility and breadth. Engineering students study mathematics, physical sciences, and engineering, but they normally take at least a quarter of their courses in the humanities and social sciences. As a result, some engineering undergraduates prepare for careers and graduate study in business, law, and medicine as well as in science.

Undergraduates may concentrate in one of the following five departments or five interdepartmental programs:

Departments
Chemical Engineering
Civil Engineering and Operations Research
Computer Science
Electrical Engineering
Mechanical and Aerospace Engineering

Programs
Architecture and Engineering
Engineering Biology
Engineering and Management Systems
Engineering Physics
Geological Engineering

In addition, the following topical programs are available to students enrolled in any of the above curricula:

Topical Programs
Energy and Environmental Studies
Robotics and Intelligent Systems
Transportation

School of Architecture

Undergraduate courses in the School of Architecture offer opportunities for all Princeton students to study buildings, landscapes, and cities. For students who concentrate in architecture, the plan of study provides an introduction to the discipline of design and physical planning in response to human needs and cultural values.

The four-year undergraduate program leads to the B.A. degree with a concentration in architecture, not a professional degree. It offers a balanced program of liberal studies that is a good basis for professional and advanced studies on the graduate level in a number of fields, including architecture, landscape architecture, city planning, engineering, law, social sciences, and public affairs.

Undergraduate concentrators in architecture pursue one of two programs:

- Program in Architecture and Design, which emphasizes studio design work involving the investigation of a range of architectural problems; or
- Program in Architectural History and Theory, which stresses the study of architecture as a historical and cultural pursuit.

In addition, a B.S.E. program in engineering and architecture is offered through the School of Engineering and Applied Science.

Woodrow Wilson School of Public and International Affairs

The Woodrow Wilson School prepares students for leadership in public affairs on the local, national, and international levels. No other American university offers a comparable undergraduate concentration in public and international affairs.

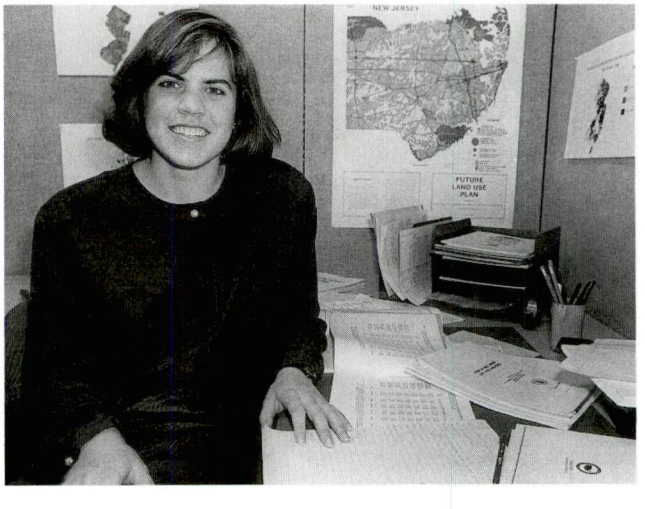
Princeton's only selective area of concentration, the Woodrow Wilson School limits its enrollment to 80 students each year. It is among the largest departments at Princeton.

The school's curriculum is policy-oriented and emphasizes problem solving within domestic, comparative, and international contexts. Every student who enters the school must declare a "focus area," a framework for further study that may be as broad as domestic economic policy or as narrow as recent Sino-Soviet relations. The focus area serves as an educational principle underlying the student's choice of courses from the University's offerings.

Students in the Woodrow Wilson School take most of their courses in the history, politics, economics, anthropology, architecture, and sociology departments. Many students elect courses in natural science, engineering, and the humanities. The school itself offers several courses, open to any Princeton student, that focus on ethical, historical, statistical, and other types of analysis in relation to public policy.

Woodrow Wilson School students engage in independent projects unique to the school. In the first semester of the junior year, students participate in an undergraduate policy conference on public affairs that aims to solve a current, controversial policy problem. Subjects have ranged from beach erosion to the bailout of savings and loan associations, from United States policy in the Middle East to literacy in America. The policy conference is complemented in the second semester by a policy task force that also analyzes a public policy issue and recommends action.

During the senior year each Woodrow Wilson School student prepares a thesis. In addition, each senior may enroll in a special seminar that applies alternative approaches of public policy analysis to critical decisions in national and international affairs.



Academic Opportunities

Advanced placement and advanced standing

Princeton grants advanced placement in most areas of study. About two-thirds of each entering class earn advanced placement in at least one field. Students use advanced placement to enroll in appropriate upperclass courses or to satisfy all or part of the University's language and distribution requirements.

Academic departments, working with the dean of the college, make decisions on advanced placement, usually on the basis of the College Entrance Examination Board's achievement or advanced placement tests, British A-level examinations, the French Baccalauréat, the International Baccalaureate-Higher Level, or placement tests given during orientation week at Princeton.

An A.B. candidate who earns advanced placement in at least three subjects, including a science or foreign language, or in four subjects without a science or a foreign language, may apply for advanced standing. B.S.E. candidates who earn two semesters of advanced placement in mathematics and physics and one semester in chemistry may also apply for advanced standing.

The honor system

Princeton holds the principles of personal and communal integrity in high regard. The honor system has promoted these ideals since its inception in 1893.

At Princeton, students take all written examinations under the honor system—that is, without a faculty proctor. They assume full responsibility for honesty and conclude each examination with a written pledge that they have not violated the honor code. Eleven undergraduate students on the Honor Committee administer the honor system.

Matriculation is contingent upon the student's understanding and acceptance of the honor system, which is fully described in the *Undergraduate Announcement*.

Preceptorials

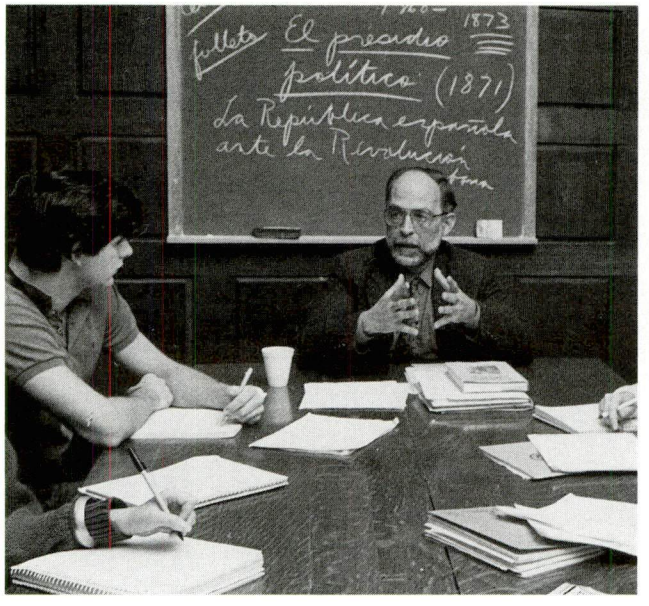
The preceptorial system began at Princeton in 1905 at the suggestion of Woodrow Wilson, the University's president. The precept (from the Latin *praecipere*, "to teach") is a small discussion group in which the instructor promotes stimulating discussion. The preceptor (a professor or an advanced graduate student) and the members of the preceptorial come to each session prepared to work together to discuss a specific problem, theme, or idea.

The value of the precept lies in its encouragement of an exchange of ideas. Most humanities and social science courses at Princeton include two lectures and one preceptorial a week.

Freshman and senior seminars

In 1986 the University initiated freshman seminars in the residential colleges. Enrollment in each seminar is limited to 15 students, chosen for their demonstrated interest in the subjects offered. Recent topics have included: "Exchange and Conflict: A Study of Cross-Cultural Contact," "Economics and Foreign Policy: America in the World of the 1990s," "Dostoevsky's *Brothers Karamazov:* A Multidisciplinary Approach," "Dreams," and "Writing the Female Self: Women's Autobiographies."

A special set of seminars in the social sciences, open by application to departmental seniors only, was initiated in 1989-90. Some topics include: "Ethics and International Relations," "Contemporary Race Relations: Legacies and Transformations," "Economic and Political Development in Asia," and "The Culture of Science in China and Europe."



Student-initiated seminars

Princeton offers two or three student-initiated seminars each year. Students designing a seminar develop a reading list and a formal course structure in consultation with a faculty sponsor who will teach the course. They submit the proposal to the faculty and student Committee on the Course of Study. Subjects of student-initiated seminars have included:

- sociobiology
- the transition from paganism to Christianity through Latin authors
- women in literature: exploring the female experience through the works of modern women writers
- the consumer movement as a social movement
- solar energy technologies
- readings in Jewish midrash
- the law and the Hispanic community in the United States
- the geology of New Mexico

Independent work
(The "J.P." and the senior thesis)

Juniors and seniors do independent work that may lead them beyond the libraries or classrooms of Princeton into the surrounding community, across the country, or around the world.

Junior independent work in the A.B. program may be a single long paper or project due in the spring, a paper due at the end of each semester, or a series of essays and projects throughout the year. A student chooses a topic, learns to organize time and material, and enjoys the excitement of working one-to-one with a faculty member on a project that is challenging and interesting to them both. The junior paper, which students call a "J.P.," is a valuable preliminary exercise for the senior thesis, since it provides most students with their first experience of significant independent or original research in a specialized field.

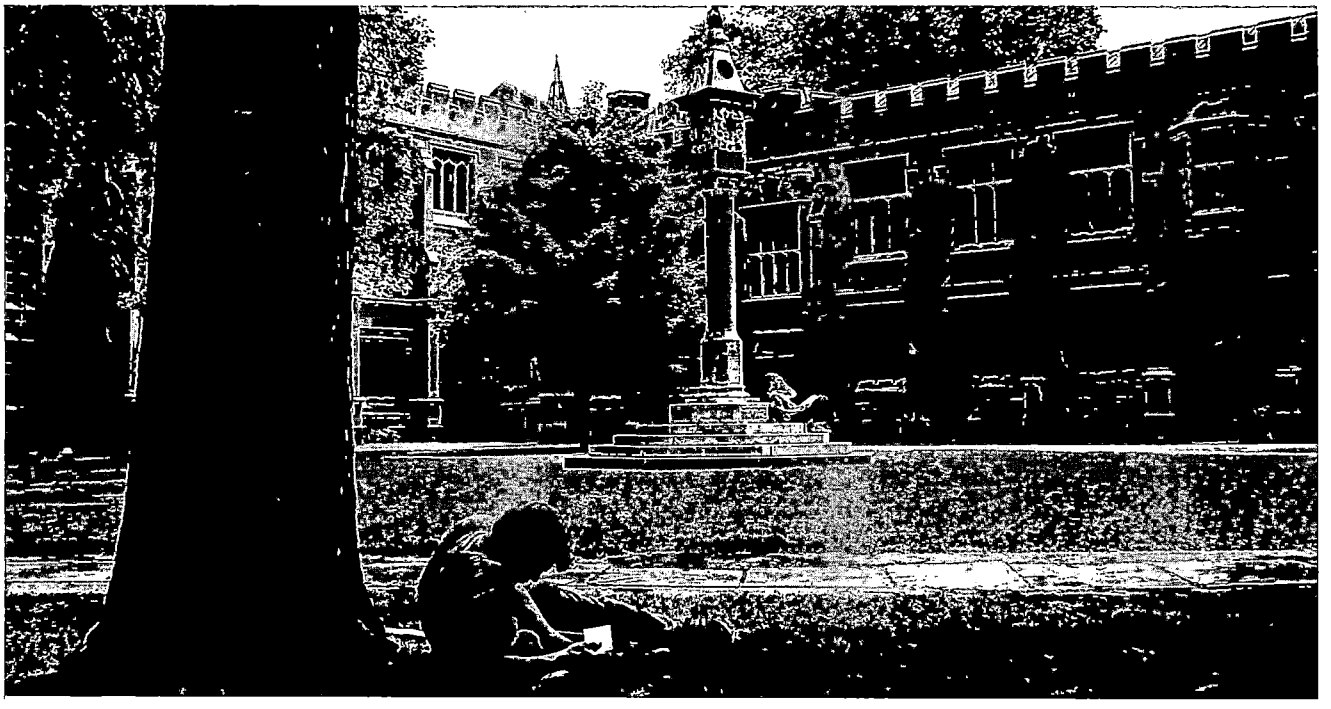
All A.B. candidates and virtually all B.S.E. candidates write a senior thesis. The time and concern that faculty and students give to the thesis demonstrate its importance in the Princeton curriculum. Seniors reduce their course load to three each semester while they are writing their papers, which are due in the spring.

Students choose their thesis topics with the approval of the department and research and write under the close supervision of a faculty member. Some recent topics include:

- "Alzheimer's Disease" (psychology)
- "Crescent on Fire: Islamic Militancy and the Middle East" (politics)
- "The King and His Image in 15th-Century England" (history)
- "Mass Transportation in Tokyo" (civil engineering)
- "A Study of Lichens as Indicators of Air Pollution in the New Jersey Pine Barrens" (biology)
- "Philon of Byzantium and the Traditions of Hellenistic Engineering" (classics)
- "The Long Road Back: A Study of the Works of Paule Marshall and Toni Morrison" (English)

The thesis is not always a research paper. It may also be a creative project such as poetry, drama, fiction, musical composition, or painting. Author John McPhee, in 1953, was the first Princeton student to receive approval for a novel, *Skimmer Burns*, as his senior thesis. He now teaches at Princeton.

About 15 novels, plays, and short story collections are submitted as senior theses each year. A notable thesis was A. Scott Berg's 1971 study of Maxwell Perkins, the editor who published Ernest Hemingway,



Thomas Wolfe, and F. Scott Fitzgerald. (Berg explored the library's rare manuscripts.) He later published his thesis as a book, *Max Perkins: Editor of Genius*.

University scholars

The University Scholar Program provides a small number of exceptionally talented students with maximum freedom in planning programs of study to fulfill individual needs and interests. Students admitted to the program concentrate in a department but may carry a reduced course load in any semester in order to undertake independent studies. Foreign language and distribution requirements may be waived. Each University scholar has a faculty adviser.

It is unusual for students to be designated University scholars before the completion of their first semester at Princeton. An interim University scholar may hold an appointment for one semester only, in order to pursue special projects while carrying a reduced course load, but is not exempt from University requirements.

Independent concentration

Students may propose an independent concentration when the existing departmental and interdepartmental programs do not meet their needs. A student must have the support of at least two members of the faculty, usually from different academic departments, who will serve as advisers. Each year approximately a half dozen students are independent concentrators, studying topics that range from cognitive science, biophysics, and neuroscience to comparative mythology, modern development in the Third World, and Renaissance studies.

Field study

The Field Study Program allows students to work full-time in jobs or field research closely related to their academic interests. Field study may be substituted for one semester at Princeton. Students work closely with their academic adviser and usually complete a paper or project based upon their experiences. Through the Field Study Program, students have been able to pursue an interest in structural engineering by assisting in the design and construction of a nuclear power plant, undertake research for the housing division of the Bay Area Governments in San Francisco, conduct biological research in a private laboratory, and enroll in the "Sea Semester" at Woods Hole Oceanographic Institute in Massachusetts.

Study abroad

Students who spend a semester or an academic year abroad may receive credit toward their degree. Some students apply independently to foreign universities, while others participate in overseas programs sponsored by American universities. Each year approximately 60 students choose to study abroad; Princeton's undergraduates have participated in 131 different programs in the last four years.

During study abroad Princeton students have studied marine biology near Australia's Great Barrier Reef, served internships in the British Parliament and

the West German Bundestag, studied James Joyce's *Ulysses* in Dublin, archaeology in Rome, and the behavior of monkeys at the London Zoo.

Interdepartmental programs and committees

There are 20 interdepartmental programs and committees that form an important part of the undergraduate curriculum in the liberal arts:

- African studies
- Afro-American studies
- American studies
- cognitive studies
- creative writing
- East Asian studies
- European cultural studies
- film studies
- Hellenic studies
- humanistic studies
- Jewish studies
- Latin American studies
- linguistics
- medieval studies
- Near Eastern studies
- Renaissance studies
- Russian studies
- theater and dance
- visual arts
- women's studies

Faculty members from several departments participate in each program; many programs offer special courses in addition to the relevant departmental courses.

Students may participate in one or more interdepartmental programs in addition to concentrating in a department. In each case, a program participant takes a core of designated courses in the subject area and prepares a substantial amount of independent work, usually including the senior thesis, on a topic related to the program. For example, a history major might take courses in Russian studies and write a thesis on Russian history, working within the Program in Russian Studies. Program faculty members are available to all students for advice and consultation about any aspect of their academic work related to the program.

For the interdepartmental programs available in the School of Engineering and Applied Science, see page 5.

Teacher Preparation Program

The Teacher Preparation Program provides theoretical grounding in education through course work in regular undergraduate departments and in the program itself. Practical skills are developed through fieldwork, especially the eight-week assignment as a practice teacher during the senior year. (It is possible to fulfill this requirement between the junior and senior years or after graduation.) Students who complete all requirements earn certificates that qualify them for teaching in public schools in most states. A shortened version of the program is available for students who wish to prepare for teaching in independent schools. Certification is possible in English, social studies, mathematics, sciences, foreign languages, and elementary school teaching. The program is compatible with most majors; both A.B. and B.S.E. students can participate.

The program maintains a placement service for all Princeton students and alumni interested in teaching and school administration.

Grading options and auditing

Most students take courses on a graded basis, but it is possible to take a limited number of courses on a pass/D/fail basis.

Students who feel that they do not have the time to complete all the requirements in a given course or those who simply like to attend good lectures have the option of auditing. To receive "audit credit" in a course, a student must pass the final examination or complete the final term paper or project.

Undergraduate Departments and Programs, 1990-91

A.B. (bachelor of arts) degree program

African Studies, Program in
230 Palmer, 258-4720

Afro-American Studies, Program in
70 Washington Road, 258-4270

American Studies, Program in
42 McCosh Hall, 258-4710

Anthropology
100C Burr Hall, 258-4537

Architecture
S110 Architecture Building, 258-3741

Art and Archaeology
104 McCormick Hall, 258-3781

Astrophysical Sciences
Peyton Hall, 258-3570

Biology
(See Ecology and Evolutionary Biology, and Molecular Biology)

Chemistry
121 Frick Chemical Laboratory, 258-3900

Classics
104 East Pyne, 258-3951

Comparative Literature
326 East Pyne, 258-4027

Computer Science
410 Computer Science Building, 258-1745

Creative Writing, Program in
185 Nassau Street, 258-4712

East Asian Studies
211 Jones Hall, 258-4279

East Asian Studies, Program in
211 Jones Hall, 258-4279

Ecology and Evolutionary Biology
160 Guyot Hall, 258-3867

Economics
1 Fisher Hall, 258-4000

English
22 McCosh Hall, 258-4061

European Cultural Studies, Program in
240 East Pyne, 258-4713

Geological and Geophysical Sciences
113 Guyot, 258-5807

Germanic Languages and Literatures
230 East Pyne, 258-4141

Hellenic Studies, Program in
13 East Pyne, 258-4159

History
129 Dickinson Hall, 258-4159

Humanistic Studies, Program in
122 East Pyne, 258-4717

Latin American Studies, Program in
240 East Pyne, 258-4148

Linguistics, Program in
318 East Pyne, 258-5405

Mathematics
305 Fine Hall, 258-4200

Molecular Biology
Thomas Laboratory, 258-3658

Music
201 Woolworth Center, 258-4241

Near Eastern Studies
111 Jones Hall, 258-4280

Near Eastern Studies, Program in
110 Jones Hall, 258-4272

Philosophy
111 1879 Hall, 258-4289

Physics
208 Jadwin Hall, 258-4418

Politics
400 Corwin Hall, 258-4760

Psychology
1-S-5 Green Hall, 258-4442

Religion
613 1879 Hall, 258-4482

Romance Languages and Literatures
201 East Pyne, 258-4502

Russian Studies, Program in
018 East Pyne, 258-5978

Slavic Languages and Literatures
028 East Pyne, 258-4726

Sociology
2-N-1 Green Hall, 258-4530

Statistics
ACE45 Engineering Quadrangle, 258-5783

Teacher Preparation, Program in
228 West College, 258-3336

Theater and Dance, Program in
185 Nassau Street, 258-3676

Visual Arts, Program in
185 Nassau Street, 258-5457

Women's Studies, Program in
218 Palmer Hall, 258-5430

Woodrow Wilson School of Public and International Affairs
438 Robertson Hall, 258-4817

B.S.E. (bachelor of science in engineering) degree program

School of Engineering and Applied Science
Office of Undergraduate Affairs
ACE23 Engineering Quadrangle, 258-4554

Departments
- Chemical Engineering
- Civil Engineering and Operations Research
- Computer Science
- Electrical Engineering
- Mechanical and Aerospace Engineering

Programs
- Architecture and Engineering
- Engineering Biology
- Engineering and Management Systems
- Engineering Physics
- Geological Engineering

Topical Programs
- Energy and Environmental Studies
- Robotics and Intelligent Systems
- Transportation

Princeton's area code is 609.

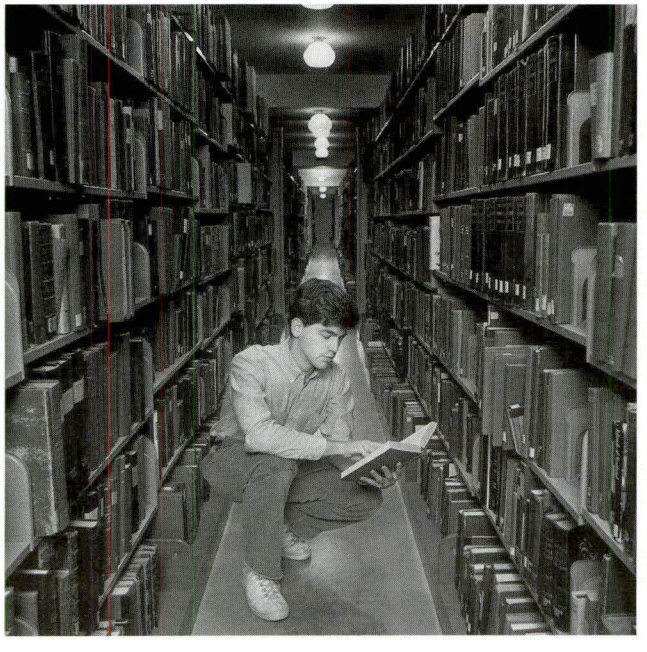
Resources

Libraries

The University's main library, Firestone, is one of the largest open-stack libraries in the world, with 55 miles of open shelving, several thousand study seats scattered throughout its six floors, and more than 500 closed study carrels (many of which are assigned to seniors writing their theses). While users in most other major research libraries must fill out call slips and wait for books to be delivered to them, Princeton students have quick access to more than 4 million printed books, almost 35,000 current journals and documents, and other library materials ranging from manuscripts and maps to prints and papyri. All but the rarest collections, which require special care and protection, are in open stacks.

When students take on special research projects, they can easily use the rare book and manuscript collections. These include, among many other items, the papers of Woodrow Wilson (class of 1879), Adlai Stevenson '22, and John Foster Dulles '34; major holdings of American and English writers, including Ernest Hemingway, T. S. Eliot, F. Scott Fitzgerald '17, and Thomas Wolfe; the Gest Oriental Library; the archives of the American Civil Liberties Union; and graphics by Aubrey Beardsley.

Academic departments—for example, art and archaeology, architecture, social sciences, mathematics, the School of Engineering and Applied Science, and the Woodrow Wilson School—maintain specialized libraries. The residential colleges have general interest libraries with study areas.



Art Museum

The Art Museum is a teaching museum for the Department of Art and Archaeology and a cultural resource for the entire University and the community.

Its collections range from art of the ancient world to Renaissance, modern European, and American painting and sculpture, and outstanding holdings of photographs, prints, and drawings.

The John B. Putnam, Jr., Memorial Collection of contemporary outdoor sculpture displays the works of Calder, Nevelson, Lipchitz, Moore, Noguchi, Picasso, and David Smith, among others, throughout the campus.

Major exhibitions, with works of art from all over the world, have hung in the museum. In recent years these have included drawings by Gianlorenzo Bernini from Leipzig's Museum der Bildenden Künste; 14 prints by Frank Stella '58, with drawings, collages, and working proofs; selections from the Edward L. Elliott family collections of Chinese calligraphy and painting; selections from the Ileana and Michael Sonnabend collection of contemporary art; drawings from Central Europe 1680–1800; and Winslow Homer in the 1870s, selections from the Valentine-Pulsifer collection.

Visual arts

Princeton's Program in Visual Arts introduces students to the studio arts in the context of a liberal arts education. Courses are offered in drawing, painting, sculpture, photography, printmaking, computer graphics, video, film theory and history, and ceramics. Facilities include painting studios; a printmaking shop for lithography, etching, and silkscreen printing; and sculpture studios equipped with hand and power tools for working wood and metal. There are also darkrooms, ceramic studios, and a 300-seat theater for showing films. Student work is exhibited year-round.

Music

The Woolworth Center is the focus of the University's musical activities and houses the Department of Music. The center includes soundproof practice rooms, a rehearsal room, a harpsichord room, a recordings library, and storage space for instruments, as well as classrooms. Woolworth also has an extensive electronic music laboratory, including studios for MIDI synthesis. Performance facilities include Richardson Auditorium in Alexander Hall and Taplin Auditorium in Fine Hall.

Theater and dance

In addition to the acting space in the 185 Nassau Street building, four other campus theaters offer production facilities, including Theatre Intime, theaters in both Wilson and Forbes colleges, and the McCarter Theatre.

Computing and information technology

Princeton offers a wide variety of computing resources, including a large IBM mainframe, a general use Unix system, specialized workstations, and various microcomputers. TigerNet, a broadband cable communications system, connects most of the University's buildings. Through TigerNet, students can gain access to the University library's on-line catalog, the Princeton News Network (PNN), a campus public information service, and information resources around the campus and throughout the world.

Students are entitled to a free study account on the University mainframe and Unix computer systems, which provide, among other things, electronic mail. Public clusters of Apple Macintoshes and IBM PCs, and high-quality printers are among the computing resources available to students.

Specialized workstations include two classrooms of Silicon Graphics Personal IRIS workstations, which provide data visualization tools. A cluster of SUN scientific SPARCstations provides tools for other kinds of scientific exploration.

All University students may use the public computing resources supported by Computing and Information Technology (CIT). Each term, CIT presents free lectures and workshops on various topics. Help in getting started with a particular system or service is also available from CIT.

The Microcomputer Distribution Center (MDC) offers hardware and software for sale to students at discounted prices. The MDC sells Apple, IBM, and NeXT hardware as well as a number of popular software packages. Financing arrangements are possible for all Princeton students.

Athletic facilities

Princeton offers students a wide range of competitive and recreational athletic opportunities and facilities. Jadwin Gymnasium's five floors provide 250,000 square feet of indoor space for intercollegiate basketball, track, wrestling, fencing, squash, and tennis, in addition to large practice areas for outdoor field sports.

The new Olympic-size DeNunzio Pool, next to Jadwin, provides complete facilities for competitive swimming, diving (one- and three-meter springboards and a 10-meter platform), and water polo.

Palmer Stadium seats 45,000 for football and track. Baker Rink is used for men's and women's intercollegiate ice hockey and for recreational skating. The crew and sailing teams use Lake Carnegie's Olympic racing course, boat house, and rowing tank.

Dillon Gymnasium has facilities for recreational swimming, health fitness, gymnastics, dance, weight training, volleyball, basketball, and squash.

In addition, there are 37 outdoor tennis courts, an 18-hole golf course, and numerous playing fields.

CAMPUS LIFE

Living and Dining

Freshmen and sophomores

All freshmen are assigned to one of the University's five residential colleges: Butler, Forbes, Mathey, Rockefeller, and Wilson.

As freshmen and sophomores, students live in the dormitories and eat in the dining and social center assigned to their college. Each residential college has a cluster of dormitories, lounges, seminar and study rooms, a library, computing facilities, game and television rooms and, in some cases, theaters and other spaces for the creative and performing arts.

Guiding each residential college is a faculty master, a director of studies, graduate students who serve as assistant masters, a resident faculty member, faculty fellows and advisers, upperclass students who serve as resident advisers, and minority affairs advisers who provide services for minority students.

The director of studies and faculty advisers are responsible for the academic advising of the students who live in their residential college.

Each college assumes its own character because students plan and organize many academic, social, and cultural activities themselves. These student-planned

events typically include concerts, films, dances, poetry readings, and theatrical productions. Colloquiums with faculty members and nationally known speakers attract many students, as do exercise classes or the production of a college literary magazine.

Colleges sometimes offer noncredit courses, sponsor dinners for special occasions, and arrange trips to plays, operas, museums, and sports events in both New York and Philadelphia. There is also an extensive intramural athletic program.

Dormitories in the residential colleges offer accommodations ranging from single rooms to 11-person suites. The most common arrangements are rooms or suites for two, three, or four people. Many suites contain a living room, some with a working fireplace. All bedrooms contain basic furniture, including a bed, dresser, desk, and chair. A few of the dormitories have shared kitchenettes.

The colleges vary in architectural style from Collegiate Gothic to contemporary. All are within easy walking distance of classrooms, athletic facilities, and the center of town.

Juniors and seniors

Most upperclass students live in individual dormitories that are not part of a residential college, and choose from among a variety of dining options.

More than half of all juniors and seniors take their meals at one of the historic nonresidential eating clubs along Prospect Avenue. Operated by student officers under the auspices of independent alumni boards, the clubs provide an intimate, comfortable atmosphere,

with lounge and recreation areas, computers, and study space. The clubs offer social, athletic, and educational programs, as well as meal exchanges with other clubs and dining halls. There are generally between 120 and 180 members in each club, and a full 20-meal-per-week contract, including social fees, costs between $500 and $1,000 more than the University's board rate.

Eight of the clubs are nonselective: a student simply signs up to join. Sign-up takes place at the beginning of spring semester of sophomore year, although full membership does not begin until the student is a junior. Five of the clubs conduct a member selection process.

Stevenson Hall, a hybrid between a residential college and an eating club, occupies two buildings on Prospect Avenue. It is a University-sponsored nonresidential dining and social facility that students can join in their junior or senior year. It provides an extensive program of guest speakers, films, foreign language tables at dinner, and a full range of intramural athletic teams.

Stevenson Hall is also a kosher dining facility open to all students, including freshmen. It is the site of many Jewish religious and cultural activities. Yavneh, an active organization of Orthodox Jewish students, holds many of its services there. The University has plans on the drawing board for a new Center for Jewish Life, which will incorporate a kosher dining facility and worship and meeting space.

Stevenson Hall has a faculty master, a graduate student who serves as assistant master, a resident

faculty member, and a number of faculty fellows who dine there regularly with their families.

Upperclass students may choose not to buy a meal contract at a University facility or an eating club. Under this option, known as "independence," students make their own dining arrangements. Two Dickinson Street is a house for independents, who shop and cook cooperatively. There is also a cooperative at the Third World Center. Other independents use dormitory kitchen facilities. Spelman Hall offers particularly attractive facilities for independents, with each four-person suite providing four single bedrooms, a living room, and a kitchen.

The Chancellor Green Center provides moderately priced meals and snacks throughout the day. The Rotunda offers evening snacks, large-screen television, and lounge and recreation space.

Student Activities

Theater and dance

The Program in Theater and Dance offers workshop courses in playwriting, acting, directing, design, and dance—all taught by professional performing artists. The program also presents a series of student-acted productions each year in the acting studio at 185 Nassau Street. At least two of these productions are directed by professionals and the others by students, often in connection with junior or senior independent work. These productions offer students an opportunity to write, direct, act, or design under the guidance of the professional staff. Modern dance courses focus on technique and composition, while the program's modern dance concert presents works choreographed by students and faculty.

Students may take classes in ballet, modern, and jazz dance through the physical education program.

A great many undergraduates are involved in theater and dance on an extracurricular basis—writing, directing, performing, and designing.

In addition to the acting space in the 185 Nassau Street building, there are four other campus theaters.

At Theatre Intime students produce a drama series each year, with productions ranging from original work by students to Greek classics, from Shakespeare to Beckett, and from Brecht to Neil Simon.

The Princeton Triangle Club, whose alumni include James Stewart, Joshua Logan, and José Ferrer, produces an entirely original musical each year, and takes it on tour. Triangle also does workshop productions of musicals like *Godspell* and brief original pieces written by students.

Wilson and Forbes colleges sponsor experimental theater in their own facilities; participation is not limited to college residents.

The PJ&B Players, made up of University students and Princeton townspeople, produce a musical comedy each year at McCarter Theatre. Expressions gives modern dance concerts.

McCarter Theatre, one of the leading regional theaters in the country, presents its own professional drama series each year. McCarter also brings dance troupes, films, and concerts to the campus. Recent offerings have included pianist Misha Dichter, mime Marcel Marceau, PDQ Bach, and the Martha Graham, Paul Taylor, Pilobolus, and Alvin Ailey dance companies.

Music

Involvement with musical groups on campus is an important activity, both curricular and extracurricular, for many Princeton undergraduates. Princeton attracts student musicians who want a broad liberal arts education while pursuing their musical interests. The Department of Music offers courses in composition and theory as well as in music history and literature. Several courses that incorporate student performance are given each year.

Though instrumental and vocal instruction is not part of Princeton's academic curriculum, noncredit private vocal instruction and instruction in a wide range of instruments is available. The department subsidizes the entire cost of one set of weekly lessons for departmental concentrators. The department also subsidizes part of the cost of weekly lessons for students enrolled in music theory courses or certain intermediate or advanced music history and literature courses, as well as for students actively participating in ensembles under the direction of the music department faculty.

The Friends of Music and other campus groups sponsor recitals by current and former Princeton students. The department arranges informal weekly concerts as well for those students taking lessons. The University

Orchestra attracts enthusiastic student performers and draws large audiences to its performances. Its recent programs have included Beethoven Symphonies 1, 3, 5, 6, 7, 8, and 9, the last with the Westminster Symphonic Choir; Mahler's Symphonies 2 and 4; Brahms's Symphonies 1, 2, and 4; Tchaikovsky's Fifth Symphony; and works by Berlioz, Ravel, Debussy, and Stravinsky, and a concert version of Wagner's *Tristan and Isolde*. In January of 1990 the orchestra embarked on a highly successful tour of the East Coast that included concerts in Washington, D.C. and Baltimore.

The Princeton University Opera Theater, founded by students in 1970, collaborates with the orchestra to bring high-quality opera to the campus. When the Opera Theater presented the early version of Beethoven's *Fidelio* at Princeton, New York's Lincoln Center invited them to repeat the performance there. Other productions have included Berlioz's *Beatrice and Benedict*, Britten's *The Rape of Lucretia*, Mozart's *The Magic Flute*, *Così fan tutte*, and *Don Giovanni*, Weber's *Der Freischütz*, Ravel's *L'enfant et les sortileges*, and Puccini's *Gianni Schicchi*.

The Jazz Ensemble is a select student-run group that includes two big bands and performs all styles of jazz, from Ellington to Kenton and Thad Jones. Recent highlights include a concert with Terence Blanchard, participation in *Downbeat* magazine's annual jazz competition in California, and production of an album.

The Glee Club, founded in 1874, has 80 members. The official chorus of the University, it gives several concerts a year, including annual appearances with the Harvard and Yale Glee Clubs. Recent performances have included Beethoven's *Missa Solemnis*, Bach's *St. John Passion*, the Berlioz *Requiem*, Schoenberg's *Kol Nidre*, and the *Triumphlied* of Brahms.

The Chapel Choir, a group of paid singers, provides music for weekly services in the University Chapel and gives two concerts every year, most recently including the Fauré *Requiem*, Handel's *Messiah*, and Schuetz's *Story of the Birth of Christ*. The University organists, most often students, work for the chapel music office for a modest fee.

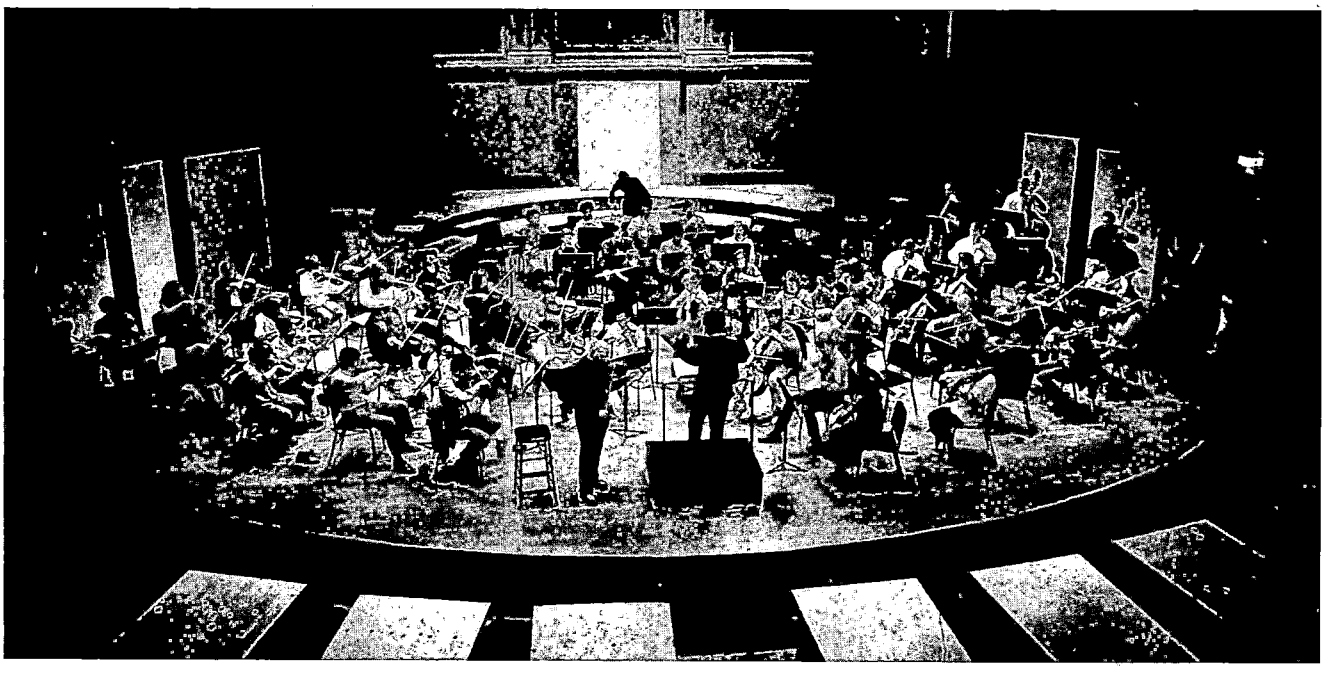
The Chamber Chorus is the touring choral group of the University, made up of members of the Glee Club and Chapel Choir. The group has traveled extensively in Europe, Central and South America, and the People's Republic of China, usually for the first six weeks of every other summer.

Other music groups include the Freshman Singers, Gospel Ensemble, and Early Music ensembles, small groups of instrumentalists and singers who perform early music on replicas of period instruments.

Princeton has three male a cappella groups, the Footnotes, the Nassoons, and the Tigertones; three female groups, the Tigerlilies, the Tigressions, and the Wildcats; and three groups of mixed voices, the Katzenjammers, the Madrigal Society, and the Roaring Twenties. These groups perform their own arrangements in concerts throughout the East Coast.

The University Band is a spirited, irreverent group that performs during the football season and as a smaller pep band during basketball and hockey season.

Musicians at Princeton also gather informally in any number of groups, from barbershop quartets to string ensembles and rock bands.



Athletics and Physical Education

Director of Athletics
Bob Myslik, Jadwin Gym,
258-3535

Men's varsity sports and head coaches

Baseball, Tom O'Connell
Basketball, Pete Carril
Crew (Heavyweight), Curtis Jordan
Crew (Lightweight), Joe Murtaugh
Cross Country, Larry Ellis
Diving, Greg Gunn
Fencing, Michel Sebastiani
Field Events, Fred Samara
Football, Steve Tosches
Football (Lightweight), Tom Murray
Golf, Eric Stein
Ice Hockey, Jim Higgins
Lacrosse, Bill Tierney
Soccer, Bob Bradley
Squash, Bob Callahan
Swimming, Rob Orr
Tennis, David Benjamin
Track (Indoor and Outdoor), Larry Ellis
Wrestling, John Johnston

Women's varsity sports and head coaches

Basketball, Joan Kowalik
Crew, Curtis Jordan
Cross Country, Peter Farrell
Diving, Greg Gunn
Fencing, Michel Sebastiani
Field Hockey, Beth Bozman
Ice Hockey, Bob Ewell
Lacrosse, Chris Sailer
Soccer, April Heinrichs
Softball, Cindy Cohen
Squash, Betty Constable
Swimming, Susan Teeter
Tennis, Louise Gengler
Track (Indoor and Outdoor), Peter Farrell
Volleyball, Glenn Nelson

Club sports

Most groups compete against other colleges. The list changes from time to time.

Coed
Aikido
Badminton
Ballroom Dance
Cricket
Cycling
Equestrian
Judo
Karate, Shotokon
Karate, Tae Kwon Do
Karate, Tang Soo Do
Power Lifting
Riflery
Sailing
Skiing
Table Tennis
Volleyball

Men
Gymnastics
Lacrosse
Rugby
Soccer
Ultimate Frisbee
Water Polo

Women
Field Hockey
Golf
Gymnastics
Lacrosse
Rugby
Soccer
Water Polo

Physical education

Aerobics
Aerobic Dance
Aerobic Fitness
Aerobic Stretch and Tone
Low-impact Aerobics
Power Aerobics

Aquatics
Advanced Lifesaving
Beginning Swimming
Open Water Scuba
Swimming Conditioning
Water Aerobics
Water Safety Instruction

Dance
Ballet
Ballroom Dancing
Jazz Dance

Fitness
Aerobic Strength Training
Circuit Aerobics
Coed Weight Training
Jogging
Nautilus Training
Personal Fitness
Stretch and Tone
Triathlon Training

Racquet Sports
Badminton
Racquetball
Squash
Tennis

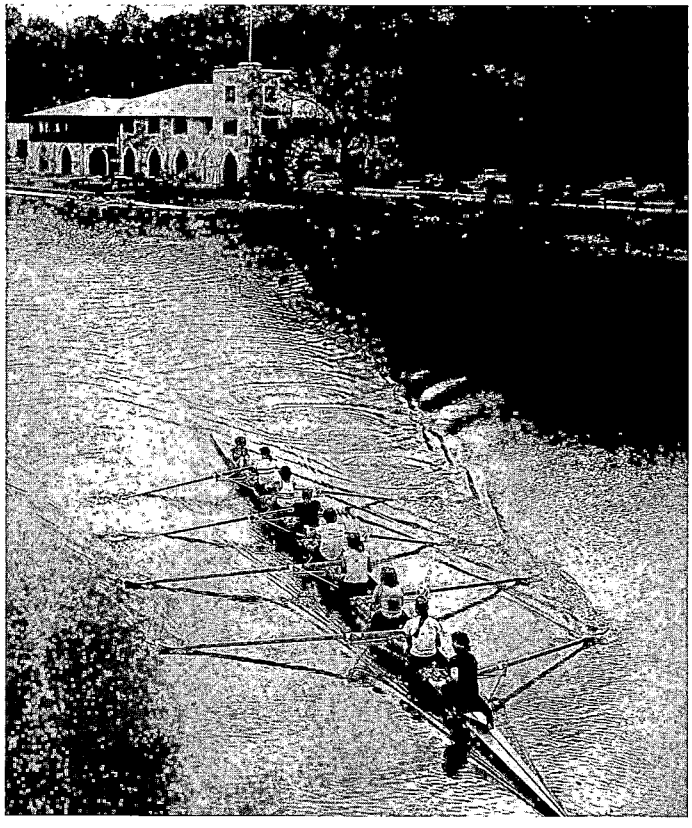
Special Interests
Bicycle touring
Fencing
Golf
Horseback riding
Sailing
Skating
Skiing
Yoga

Popular Team Sports
Basketball
Volleyball

Athletics

Approximately 1,800 undergraduates participate in intercollegiate athletics on varsity and club teams in a program that in recent years has compiled one of the Ivy League's best overall records. Men may compete in 19 varsity sports and women in 15. There are also more than 25 men's, women's, and coed club teams.

About 60 percent of Princeton students take part in the intramural and recreational sports program, which schedules team competition among eating clubs, residential colleges, independent groups, and faculty and staff groups. Some of the many activities are backgammon, basketball, billiards, chess, soccer, softball, flag football, golf, squash, swimming, tennis, and track.



Media

Students publish two newspapers regularly at Princeton: *The Daily Princetonian* and the *Nassau Weekly*. Student staffers, who handle writing and production, often go on to careers in journalism.

The *Nassau Literary Review* is the nation's oldest student-run literary magazine. Published twice a year and distributed to undergraduates, its pages include fiction, poetry, essays, interviews, photography, and artwork.

Other student publications include the *Princeton Tory* and the *Progressive Review*, political publications; the *Vigil*, published by the Third World Center; *Bric-a-Brac* and the *Nassau Herald*, the two yearbooks; the *Tiger*, a humor magazine; the *Princeton Engineer*; and the nationally circulated *Business Today*.

Residential colleges and ethnic groups also produce several publications.

WPRB, one of the oldest student-run radio stations in the country, transmits at 103.3 FM stereo and covers all of New Jersey and parts of New York and Pennsylvania. Because the station is affiliated with the Associated Press, WPRB gives students the advantages of national affiliation while offering unusual opportunities for creativity. WPRB's daily schedule includes morning classical and jazz shows in addition to the progressive rock that makes up the majority of the station's programming. It broadcasts folk and bluegrass, new wave, classical, and jazz specials; live coverage of sports events; third world programming; and public affairs and interview shows. Many students take part in "American Focus," a nationally broadcast program produced at Princeton.

Minority life

There is no single type of Princeton minority student: approximately 17 percent of the student body (24 percent of the most recently admitted freshman class) is composed of students from minority backgrounds.

Minority students regularly hold leadership positions on campus including, in recent years, the chair of *The Daily Princetonian*, the president of the undergraduate student government, and the president of the senior class.

Minority organizations on campus include the following:

Acción Puertorriqueña y Amigos
Asian-American Students Association
Chicano Caucus
Concerned Black Men
Gospel Ensemble
Hermanas (Hispanic/Latino women's discussion group)
Imhotep (minority health careers society)
Korean-American Students Association
Latin Americans at Princeton
Minority Business Associates
Minority Prelaw Society
Native Americans at Princeton
Onyx (Black women's discussion group)
Organization of Black Unity
The Society of Black Engineers
The Society of Hispanic Engineers
South Asian Students Association
Third World Center Governance Board
Taiwanese-American Student Association

Minority students are also active in the community. Puerto Rican students volunteer in Trenton's Latino community; Asian-American students have initiated programs in Chinatown and other parts of New York

City; and Black students do volunteer work at Community House, a multifaceted service organization in Princeton.

These organizations, together with various faculty and student committees and minority affairs advisers, provide support for minority students and help insure their contributions to the pluralism of the Princeton community.

American Whig-Cliosophic Society

"Whig-Clio" is the oldest college political, literary, and debating society in the United States. Founded by James Madison and Aaron Burr, Whig-Clio sponsors programs related to public affairs. It also sponsors platform, on-topic, off-topic, humorous, extemporaneous, and individual debate, as well as various speech events. All compete on an intercollegiate level.

Whig-Clio brings about 20 speakers to campus each year. Speakers give a formal address and attend informal seminars, receptions, and dinners with Whig-Clio members. Recent guests have included Paul Volcker, Warren Burger, George Kennan, John Toland, Elliott Abrams, and the ambassadors of Japan and the United Kingdom.

Whig-Clio has several subdivisions:

The Senate explores topics of national importance and campus interest in a format that matches students with experts on both sides of the issue.

The Debate Panel was the "American Team of the Year" in two recent seasons.

The International Relations Council runs informal discussions of foreign affairs with Princeton faculty, seminars at U.N. missions in New York, and represents Princeton in intercollegiate Model United Nations competitions.

The Congressional Forum conducts informal discussions with faculty members knowledgeable in the domestic issues facing the United States Congress and sponsors the nation's largest Model Congress for high school students.

Whig-Clio also sponsors public debates, endowed prize debates, and the campus-corporate luncheon program, which brings members together with business leaders at the Princeton Club of New York.

University governance

Student participation is basic to the governance of Princeton. Twelve undergraduates are among the 50 members of the Council of the Princeton University Community (CPUC). Students participate in the work of CPUC committees, including:

- the Executive Committee, which sets the agenda for the CPUC meetings and recommends the annual order of business for council committees;
- the Priorities Committee, which makes annual budget recommendations to the president of the University;
- the Resources Committee, which makes recommendations to the trustees on issues of corporate responsibility relating to the University's investments;
- the Rights and Rules Committee, which deals with questions of conduct for resident members of the University.

The Undergraduate Student Government (USG) also plays a substantial role within the University community. The USG's Academics Committee produces the *Student Course Guide* each semester, and addresses policy questions concerning curriculum, financial aid, admission, and academic life. The Campus and Community Affairs Committee is responsible for the Inter-Organizational Council and annually organizes, among other things, the Community Service Fund Drive, which provides funding for Student Volunteers Council, Community House, and the Princeton Education Center at Blairstown. The Social Committee is responsible for providing many diversions for students, most notably the Grad-Undergrad Party at the Graduate College and the annual P-Party in the spring. The Undergraduate Life Committee is active in issues concerning campus safety, intercultural relations, and living and dining options.

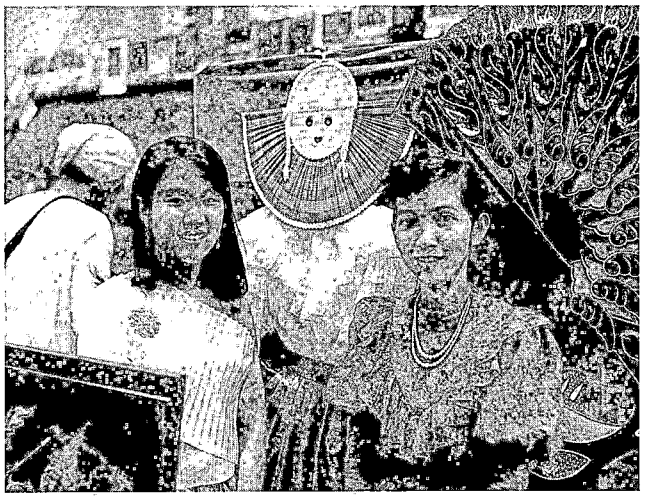
The USG Projects Board annually allocates about $40,000 from activities fees to student organizations sponsoring speakers, cultural events, conferences, and special projects.

Student Volunteers Council

The Student Volunteers Council (SVC), Princeton's largest student organization, is committed to involving the University in the surrounding communities. It serves as a clearinghouse and resource center for a wide variety of student-sponsored community action projects.

More than 550 students participate in SVC's 40 weekly projects. Volunteers tutor children, counsel prisoners, restore houses, "adopt" little siblings, and visit the elderly, among other activities. Many more students participate in SVC's special programs including Special Olympics, Urban Action, the fall and spring break outreach programs, and various educational and reflective forums.

A 15-member student board of directors and more than 60 student project directors oversee the SVC's activities. These volunteers are supported by an administrator, an office assistant, and two work-study students. The SVC offices are located in Murray-Dodge Hall.



International Center

The International Center in Murray-Dodge Hall provides a setting in which international students and visiting scholars are introduced to American life and where their diverse cultural resources are available to the Princeton community.

Center volunteers tutor English conversation, provide host family and holiday hospitality, and sponsor weekly international luncheons. In cooperation with national, ethnic, and international student groups, the center sponsors lectures and social and cultural events. An annual international festival regularly draws about 4,000 people.

Third World Center

The Third World Center, founded in 1971, is an educational resource available to all students interested in minority and third world issues. It is also a place to relax, study, and make new friends.

The building contains a library, computer room, two seminar rooms, a kitchen, game room, darkroom, lounge, outdoor patio, and large hall, as well as office space for the director and staff. The center also maintains a videotape library of more than 500 narrative and documentary films related to ethnic, labor, women's, and third world issues.

The center hosts conferences, academic courses, student-initiated seminars, colloquiums, lectures, a co-op kitchen, ethnic dinners, parties, and many other events. More than 30 student organizations use the center to exchange career, academic, and personal support.

The Third World Center encourages student leadership and activity through these organizations and through a multiethnic governance board elected annually.

Women's Center

The Women's Center in Aaron Burr Hall provides a comfortable place for the exploration of gender issues. The Women's Center has three purposes:

- to provide a supportive atmosphere for women;
- to raise awareness and promote discussion on issues of concern to women; and
- to promote institutional and social change to expand opportunities for women at Princeton and in society.

Collaborating with other campus centers, academic and administrative departments, residential colleges, and student organizations, the Women's Center offers social, cultural, and political programs based on the experiences and perspectives of women.

Support services for women and men who are interested in questions about gender and personal identity include discussion groups, workshops, individual counseling, and advocacy. In an effort to improve the status of all women at Princeton, the Women's Center establishes task forces that address the specific needs of women as well as the larger issues of institutional equity.

The center publishes a newsletter and maintains a comprehensive library of books on women's studies, feminist journals and magazines, women's resource information, and a collection of student papers on feminist scholarship.

Outdoor Action

The Outdoor Action program, directed by the Office of the Dean of Students, offers a wide variety of outdoor trips and programs throughout the year, including backpacking, bike touring, canoeing, hiking, cross-country skiing, rock climbing, and kayaking. Students lead the trips, which are offered for all levels of skill. The program also has an extensive training program for those interested in developing their outdoor skills and leadership abilities.

Every year, before orientation week, Outdoor Action sponsors five-day wilderness trips with backpacking, canoeing, or biking. The trips offer freshmen a chance to meet other people in their class before school starts. More than 30 percent of the freshman class usually participate in these trips.

ROTC

Two Reserve Officer Training Corps (ROTC) programs are open to men and women at Princeton. In both, participants may compete for scholarships described on page 34 of this booklet. Participants in either program engage in noncredit courses and

Student Organizations

The Office of the Dean of Students officially recognizes more than 200 student organizations, and students regularly form new ones to meet specific interests.

Career Options
Business Association of Princeton
IMHOTEP—Minority Prehealth Professionals
Minority Business Association
Prelaw Society
Teach for America

Cultural/Performing
Expressions: A Dance Company
Film Society
Footnotes
Freshman Singers
Friends of the Art Museum
Gilbert & Sullivan Society
G. K. Chesterton Society
Glee Club
Gospel Ensemble
Jazz Ensemble
Katzenjammers
Madrigal Society
Mime Company
Nassoons
P. U. Band
P. U. Orchestra
Princeton University Players
Roaring 20
Students' Theater Workshop
Theatre Intime
Tigerlilies
Tigertones
Tigressions
Triangle Club
Wildcats

Ethnic
Acción Puertorriqueña y Amigos
Arab Society of Princeton
Asian-American Students Association
Chicano Caucus
Concerned Black Men
Filipino Students
Hellenic Association
Hermanas
Hong Kong Students Association
Il Circolo Italiano
International Students Association of Princeton
Japanese Club
Korean-American Students Association
NAACP
Native Americans at Princeton
Organization of Black Unity
Princeton Canadians
Princeton Students for Palestine
Russian Club
South Asian Students Association
Third World Center Governance Board
Vietnamese Students Association

Game
Chess Club
College Bowl
Go Club
Simulation Games Union

Political
American Whig-Cliosophic Society
Amnesty International
Congressional Forum
Democrats
International Relations Council
Labor Solidarity Committee
PACLA (Princeton Area Committee on Latin America)
Princeton Pro-Choice
Princeton Pro-Life
Republicans
Students against Apartheid
Students for Social Responsibility
Undergraduate Student Government

Publications/ Communications
Bric-A-Brac/Nassau Herald
Buzz Magazine
Daily Princetonian
Focus on Youth
Foundation for Student Communication, Inc.
Law and Policy Review
Nassau Weekly
Nassau Literary Review
Press Club
Princeton Engineer
Princeton Sentinel
Princeton Tory
Progressive Review
Reality Sandwich
Tiger Magazine
Vigil
WPRB—Princeton Broadcasting Service, Inc.

Religious
Baha'i Club
Campus Advance
Christian Science Organization
Hillel Foundation
Jewish Women's Coalition
Latter Day Saints Students
M'ohr Hatorah
Muslim Students Association
Princeton Evangelical Fellowship
Yavneh House of Princeton

Science
American Institute of Aeronautics and Astronautics
Engineering Council
Princeton Planetary Society
Science Foundation
Society of Black Engineers
Society of Hispanic Engineers
Society of Women Engineers
Tau Beta Pi

Service/Social Action
Art Fantasy Association
Community House
Community Service Fund Drive
Communiversity
Environmental Action
Project Outreach
Special Olympics
Student Blood Drive
Students Against Apartheid
Student Volunteers Council
Vietnamese Relief

Special Interests
Debate Panel
Financial Forum
Focus on Youth
Health Education and Rescue Training (HEART)
Infinity, Ltd.
Math Club
Student Health Advisory Board (SHAB)

Sport
Captain's Council
Soaring Society

Support
Eating Concerns Task Force
Peer-to-Peer Counseling
Special Survivors

Student Agencies

Student entrepreneurs earn money by offering the following services and merchandise to the University community under the supervision of the Student Employment Office.

Advertising and Graphics
Bartending
Beer Mug
Cake, Balloons, and Care Package
Carpet
Compact Disc
Computer
Computer Consulting
Delivery
Fast Food
Flower
Furniture
Laundry
Linen
Loft
Moving
News
Parking
Pizza
Photo
Princeton Herald
Princeton Provisions
Refrigerator
Ring
Safeguard
Shipping and Packing
Souvenir
Sportswear
Storage
Summer Storage
Sweater/Clothing
T-shirt
Tape
Telephone and Answering Machine
Tuxedo
TV/VCR Rental
Video Game
Video Productions
Wallbanner
Watch

activities that, if successfully completed, lead to a commission as an officer.

Army ROTC. Successful participation in the Army ROTC leads to an appointment as an officer in the United States Army Reserve, National Guard, or the active army. Students can enroll at any time during freshman or sophomore year, but the program recommends participation as a freshman to fulfill requirements more easily.

Air Force ROTC. Princeton has an agreement with Rutgers University permitting its students to enroll in the AFROTC program at Rutgers. (Princeton students attend classes held at Princeton.) Enrollment in AFROTC involves no military commitment during freshman and sophomore years. Scholarship students incur a military commitment beginning with their sophomore year. The advanced portion of the program, called the Professional Officer Course, which does entail a commitment, takes place during junior and senior years.

The chapel and religious life

Princeton University is nonsectarian, but it has a continuing and vital religious tradition.

The religious interests of members of the University community are served by the dean, the associate dean, and an assistant dean of the University chapel, working together with chaplains who are assigned to minister to students and faculty of particular faiths.

The following foundations are represented by chaplains: Aquinas Institute (Roman Catholic), B'nai B'rith Hillel Foundation, Concordia Society (Lutheran), Episcopal Church at Princeton University, Orthodox Christian Fellowship, Baptist Chaplaincy, and Wesley-Westminster Foundations (Methodist-Presbyterian). The Princeton Evangelical Fellowship, Alpha-Omega Christian Fellowship, Campus Crusade for Christ, the Church of Christ, and Young Israel of Princeton (Orthodox) also have ministries on campus, and ministry on behalf of other denominations is carried out by local churches.

The University chapel welcomes all students to its formal and informal ecumenical worship services. Students can choose from study and discussion groups, conferences, retreats, special services, drama, and social action. The chapel sponsors a café featuring live entertainment and free refreshments several nights each week in Murray-Dodge Hall, the religious administrative center on campus.

The Hillel Foundation offers Jewish students a full religious, educational, and social program. Hillel's student committees organize programs on subjects such as Israeli issues, Soviet Jewry, Israeli dancing, interfaith relations, and social action. Reform, Conservative, and Orthodox services are held each Friday evening and a daily minyan meets before classes.

University chapel

In addition to the organizations listed here, there are many informal student religious groups on campus.

Dean of the University Chapel
Rev. Joseph C. Williamson, (609) 258-3047, Murray-Dodge Hall, second floor

Associate Dean of the University Chapel
Rev. Sue Anne Steffey Morrow, 258-3049, Murray-Dodge Hall, second floor

Assistant Dean of the University Chapel
Rev. William C. Gipson, 258-3621, Murray-Dodge Hall, third floor

Denominational chaplains

Baptist, Baptist Chaplaincy
For information, call 258-5081

Eastern Orthodox, Orthodox Christian Fellowship
Rev. Daniel Skvir (part-time), 258-7368

Episcopal, The Procter Foundation
Rev. Frank C. Strasburger '67, 258-3643, Murray-Dodge Hall, third floor

Jewish, The Princeton B'nai B'rith Hillel Foundation
Rabbi Edward Feld, 258-3635, Murray-Dodge Hall, third floor

Lutheran, The Concordia Society
Rev. John Mark Goerss, 258-5460 or 924-3642, Murray-Dodge Hall, second floor

Methodist-Presbyterian, The Wesley-Westminster Foundations
Rev. Susan Halcomb Craig, 258-3644, Murray-Dodge Hall, third floor

Roman Catholic, The Aquinas Institute
Rev. Vincent Keane, 924-1820 or 258-3396, Murray-Dodge Hall, third floor

Unitarian, The Liberal Religious Association
Rev. Donna DiSciullo, 924-4273, Unitarian Church of Princeton, Route 206

United Church of Christ
Rev. Hazel Staats-Westover, 921-2494

STUDENT SERVICES

University Health Services

University Health Services in the McCosh Health Center provides comprehensive prepaid care for students and a medical-surgical insurance plan. Full-time physicians, nurses, psychologists/counselors, a health educator, technicians, and administrative support services staff the health center.

The six physicians on the staff come from specialties in pediatric/adolescent medicine, family practice, internal medicine, and sports medicine.

The health center is open throughout the school year with 24-hour emergency service and a 20-bed in-patient care facility. It is fully accredited by the Accreditation Association for Ambulatory Health Care.

Among the center's special programs are:

- Sexuality Education Counseling and Health (SECH)
- alcohol and other drug education and counseling
- sexual harassment advising
- health education on many topics
- dormitory health aides
- physical therapy and athletic training

The Counseling Center provides the services of full-time psychologists and a consultant psychiatrist and offers help for personal and psychological problems.

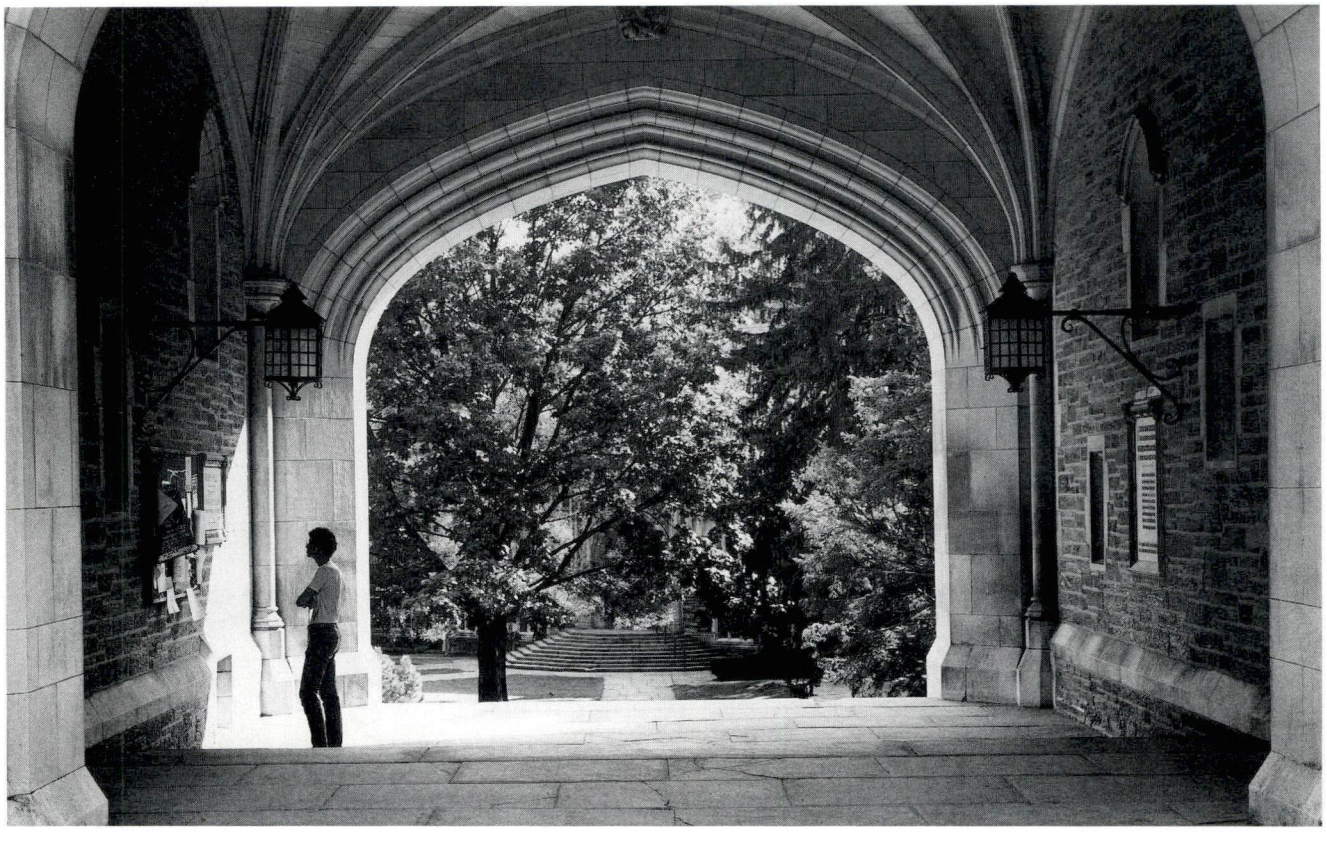
Career Services

The Office of Career Services provides programs and counseling to students planning graduate study or professional careers. The office also offers assistance in finding summer employment.

Its activities include:

- individual and group career counseling
- vocational testing
- job-hunting clinics
- workshops on résumé writing and interviewing
- career panels
- on-campus interviews with representatives of business, industry, and government for full-time and summer jobs
- semester-long internships
- the Alumni Careers Network, through which Princeton alumni provide advice and assistance to current undergraduates

Career Services' headquarters in Clio Hall has a well-stocked library and reading room with notebooks and postings of current job opportunities.



Admission to Princeton

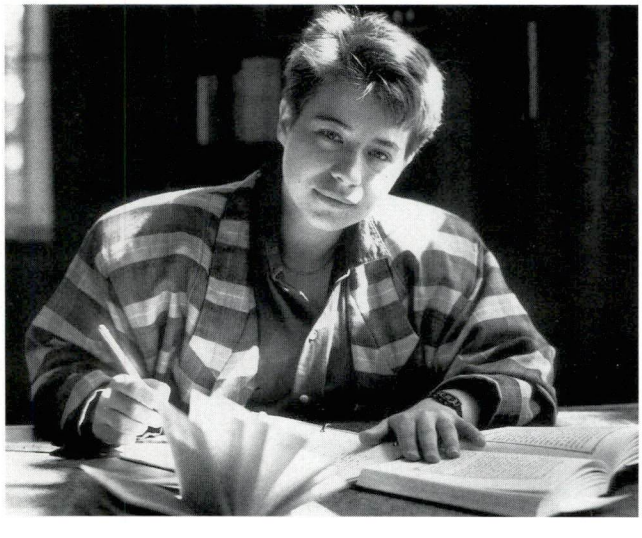
Please note: Applicants should carefully review the specific application requirements and deadline dates included with the application papers.

Princeton enrolls a freshman class of about 1,130 each year. In recent years, the number of applications we've received for admission to the freshman class has been slightly more than 12,500.

We treat each application individually, carefully evaluating personal as well as intellectual qualities, and we make every effort to be thorough, sensitive, and fair.

We seek to understand how candidates have excelled within the context of their respective schools and communities, asking ourselves how well each applicant has made use of the resources available to him or her.

Ultimately, we offer admission to those students who, in our judgment, will best take advantage of the educational opportunities at Princeton and contribute the most to the Princeton community. While we do not employ formulas or quotas, the large majority of admitted students have ranked in the top 10 percent of their graduating classes and have given evidence of a high energy level through their pursuit of nonacademic interests and activities. In evaluating candidates, we closely review all available information, including recommendations, application essays, and the results of various standardized tests. The most important single document in an applicant's folder, however, is the transcript showing the student's performance in his or her academic program in high school.



We attempt to bring together a freshman class marked not only by its exceptional academic ability but also by a diversity of backgrounds, particular interests, accomplishments, and aspirations. Princeton is a completely residential university, and we strongly believe that our undergraduates have much to learn from each other.

Given the relatively small size of Princeton and, therefore, the relatively small size of the freshman class, and given the overall strength of our applicants, we invariably end up having to disappoint many applicants who appear to be as highly qualified as those whom we have admitted.

Academic requirements

There are no fixed unit or course prerequisites that must be completed before admission. We recognize that all high schools have different programs. The stronger the promise and potential of the applicant, the more willing the University is to overlook possible gaps in his or her preparation.

Princeton recommends the following as basic preparation for study at Princeton:

- four years of English (including continued practice in writing)
- four years of mathematics
- four years of one foreign language
- at least two years of laboratory science
- at least two years of history (including that of a country or area outside the United States)
- some study of art, music, and, if possible, a second foreign language

Princeton also recommends that students take the most rigorous courses possible in their secondary schools, including honors and advanced placement courses where available. However, Princeton also encourages applicants to consult with their school advisers to plan the program that is best for them. In no case is a particular course an absolute requirement for admission to Princeton.

Applicants who intend to pursue a B.S.E. degree in the School of Engineering and Applied Science or to major in a physical science should complete not only four years of mathematics, preferably including calculus, but also one year of physics or chemistry (preferably both).

The University will, however, give full consideration to any applicant who has been unable to pursue studies to the extent recommended if the record otherwise shows clear promise.

Examination requirements

All applicants must submit the results of the Scholastic Aptitude Test (SAT). In addition, we also strongly recommend that applicants submit the results of at least three of the College Board Achievement Tests. While it is possible to gain admission with fewer than three Achievement Tests, the odds very much favor those applicants for whom we have the greatest amount of information about their academic abilities and accomplishments. In those cases where the only other colleges to which an applicant is applying require the results of American College Testing (ACT), the applicant may submit his or her ACT results instead of the SAT.

Applicants who intend to pursue a B.S.E. degree must include in their Achievement Tests one in either physics or chemistry and, in addition, one in either Level I or Level II mathematics.

Students applying under the Early Action program must have completed all of their testing no later than (and preferably sooner, if possible) the November 3, 1990, College Board test date.

Students in the United States, Canada, and Puerto Rico who are applying under Regular Action must have completed all of their testing by the January 26, 1991, College Board test date. Students in other countries must have completed all of their testing by December 31, 1990.

In any event, all applicants should be sure that their official score reports are sent to Princeton University directly from the testing agency.

Although most students take the tests during the senior year, sophomore and junior year test results are also acceptable. In fact, we recommend that students take the Achievement Tests in sophomore or junior year immediately after they complete the course for which they plan to take an Achievement Test.

Except as noted above for prospective B.S.E. candidates, the selection of the three Achievement Tests is up to the student. If an applicant chooses to take more than the three required, all scores will be taken into consideration by the Admission Office. Students who plan to meet Princeton's foreign language requirement for the A.B. degree by continuing a language begun in high school are encouraged (but not required) to take an Achievement Test in that language.

If a student is unable to follow the recommended testing pattern, he or she should consult with the Admission Office as soon as possible.

Where to apply to take the CEEB tests

Students who will take the tests in Canada or east of the Rockies should write to:

College Entrance Examination Board
Box 592
Princeton, NJ 08541

Applicants in Montana, Wyoming, Colorado, or states farther west should write to:

College Entrance Examination Board
Box 1025
Berkeley, CA 94701

English proficiency

Students who are not currently attending a school where English is the language of instruction are required to take the Test of English as a Foreign Language (TOEFL). This examination is administered by the Educational Testing Service at many testing centers throughout the world six times each year. The test should be taken no later than January 1991, in order for the results to reach us in time. For information about specific test dates in various countries and for registration forms, write to: Test of English as a Foreign Language, Box 899, Princeton, NJ 08541. Registration forms must reach the TOEFL office at least six weeks before the test date.

Special talents

Because evaluation of special talents can be important to the admission decision, applicants are encouraged to submit materials that show their level of proficiency. This is especially true if the applicant is deeply involved in fine arts (music, creative writing, painting, sculpture, and so on), where an audition tape or portfolio can be a valuable supplement to the application. In addition, an applicant who has done advanced work in an academic area might want to submit copies of special reports or projects.

These reports, tapes, and portfolios should be submitted no later than February 1. Tapes cannot be returned, and reports and portfolios will be returned only if a stamped, self-addressed envelope is provided.

Local alumni representatives

There are a several hundred Princeton Alumni Schools Committees in various cities and countries. The members of these committees volunteer their services to act as additional sources of information for students in their areas who are interested in Princeton. Applicants in those areas where such committees exist may hear from one or more of their members and be invited to meet with a Princeton alumna or alumnus. These interviews are not required for applicants, but they can be useful for students who wish to increase their understanding of the University.

Applications

Applications may be obtained by calling the Admission Office at (609) 258-3060, or by writing the Admission Office, Princeton University, Box 430, Princeton, NJ 08544-0430, by the late summer or fall of your senior year in high school. United States citizens who reside elsewhere should request the United States application forms if they attend an American school; otherwise, they should request the foreign application form.

A nonrefundable $45 application fee is required to cover part of the cost of processing each application. A check or money order for this amount (payable to Princeton University) should be submitted with Part 1 of the application form. If payment of this fee would cause extreme financial hardship, it may be waived upon a written request from the applicant's counselor that includes a brief explanation of the reason for the waiver.

All completed applications must be on file in the Admission Office by January 2 (January 15 for international students).

Confidentiality

Applicants should be aware that, under provisions of the Family Educational Rights and Privacy Act of 1974, a student attending a particular college has a right to inspect the official records directly related to him or her maintained by that college, including any admission materials the college has chosen to preserve for counseling purposes. Candidates who wish to have confidential recommendations submitted on their behalf, however, may waive their rights of access to those recommendations by signing a waiver statement on each recommendation form before giving it to the appropriate counselor or teacher to be completed. The waiver is strictly voluntary.

Notification

Applicants who wish to receive an Early Action decision in mid-December must have completed applications on file in the Admission Office by November 1. Normally, the results of standardized tests taken in November reach the Admission Office before Early Action decisions are made. In any event, students applying for Early Action decisions should plan to take the tests no later than November 3.

Preliminary financial aid evaluations are available for those offered admission under Early Action. Instructions on how to receive a tentative aid decision are included with the Early Action admission notice. Students admitted in mid-December need not respond to the admission offer before the May 1 candidate's reply date.

Early Action is available at Brown, Harvard, Princeton, and Yale. Under this program, students may file an Early Action application at only one of these institutions. They may apply, of course, to these and any other colleges at any time under their Regular Admission programs.

Some institutions offer an Early Decision plan that requires matriculation if the applicant is admitted. Colleges in the Ivy Group with this option are Columbia, Cornell, Dartmouth, and the University of Pennsylvania. Since those admitted under an Early Decision must withdraw other college applications, students who apply to a college under Early Decision should not apply to Princeton under Early Action.

Not all applicants under Early Action are offered or denied admission in mid-December; many are deferred to be reviewed again in the Regular Admission program.

In early April, the Admission Office will notify applicants to the Class of 1995 of all its admission decisions and all financial aid awards. Admitted applicants do not have to reply until the May 1 candidate's reply date.

The Admission Office reserves the right to review and cancel its offer of admission at any time up to actual matriculation at Princeton in September if an applicant's academic or personal qualifications fall below earlier expectations. Matriculation is also contingent upon the student's understanding and acceptance of Princeton's honor system, which is described on page 7.

Deferred enrollment

Admitted applicants may matriculate only in September, but entrance may be deferred, generally for one year or two years, if a student has an opportunity to travel, work, perform military service, or pursue a special program of study. Admitted applicants may not, however, defer in order to become full-time students at other degree-granting institutions.

Students request deferrals only after having been notified of admission. They do so by writing a letter explaining what it is they would like to do during the coming year and asking that we defer their admission.

A financial aid student who defers must reapply for assistance for the year of actual enrollment. Current aid application forms are available from the Undergraduate Financial Aid Office.

Physically challenged students

Princeton will make whatever arrangements are necessary to ensure that students with a handicap have the same opportunities as other students at the University.

Handicapped students who have questions concerning the admission process should contact the Admission Office. Specific questions about access and facilities should be directed to the Office of the Dean of Students. The telephone number is (609) 258-3055.

Admission by transfer

Each year Princeton admits a small number of applicants from other colleges and universities. Because the University is small, the number of places available is limited. Only those students with excellent academic records and who have particularly compelling academic reasons for seeking transfer admission should apply. The criteria for transfer admission are somewhat different from those for freshmen. The emphases for transfer admission are on proven academic ability at the college level, the academic reasons for which a student wishes to transfer to Princeton, and recommendations from faculty and administrators at the applicant's present institution. Extracurricular strengths and a student's high school record are taken into consideration but are secondary in importance.

Princeton admits transfer students primarily into the sophomore and junior classes, since there is a residence requirement of two years. Students who have already graduated from secondary school and have completed at least one term of full-time study as degree candidates at other colleges or universities must apply for transfer rather than freshman admission, although they may be admitted with freshman standing. The University does not admit applicants for undergraduate admission who have already completed a bachelor's degree program at another college or university.

Applications are available until February 15 and must be submitted by March 1 for admission the following September. No students are admitted at midyear. Princeton requires all students to enroll as full-time degree candidates.

Applications and further information are available from the Office of Transfer Admission, Princeton University, Box 223, Princeton, NJ 08544-0223, (609) 258-3060.

FEES AND EXPENSES

Fees and expenses for the academic year 1990-91

Comprehensive fee (tuition, matriculation, medical insurance, use of library, health services, and labs)	$15,440
Board rate	$ 2,775
Room charge	$ 2,283
Estimated miscellaneous expenses (books, supplies, laundry, telephone, recreation, etc.)	$ 1,902
Estimated total	$22,400

Of the comprehensive fee, $560 is used to pay for University health and counseling services. This amount may be a deductible item on the income tax returns of students or their parents. (Consult the applicable provisions of the Internal Revenue Service Code.) The board rate is for 20 meals a week, and the room charge is the standard for University dormitories. Estimated miscellaneous expenses include the residential college fee, student government fee, and class dues. These last three items, totaling about $360, are billed centrally by the University for the convenience of the organizations involved.

Because the cost of goods and services continues to rise, charges for 1991-92 will be somewhat higher. The increase is expected to be in the 6 to 8 percent range.

Payment of fees and charges

The University bill is the sum of the comprehensive fee, room, board, residential college fee, class dues, and the USG fee, less financial aid that has been credited to the student account. Princeton provides two options for paying the University bill.

The semester payment plan consists of two payments, the first due on August 15 and the second on January 15. An alternative is the Monthly Payment Plan, under which University charges are paid in 12 installments due on the first of each month from September to August. The current annual interest on the Monthly Payment Plan is 11 percent. Both options have additional charges for late payments. Bills for other expenses (auto registration and library fines, for example) will be sent monthly.

Changes in academic programs or variations in the school calendar do not entitle students to any credits against established fees.

Refund policy for withdrawing students

Comprehensive fee. If students withdraw from the University within the first two weeks of either term, whether voluntarily or by dismissal, they will be charged 20 percent of the comprehensive fee for the term; during the third week, 40 percent; fourth week, 60 percent; and fifth week, 80 percent. Withdrawals after the fifth week will be charged the full amount for that term. Adjustments may be made to this schedule for medical reasons.

Room and board. If students withdraw from the University after the beginning of a term, they incur room and board charges as outlined in their contracts. Ordinarily the board charges will be adjusted based on the number of meals taken, while the full cost of the room for that term will be charged.

Residential college fee, student government fee, and class dues. These charges are set by semester. They will not be refunded to students who withdraw after the beginning of a term.

Financial aid refunds. Although financial assistance is awarded for the entire academic year, it is credited to a student's bill on a semester basis. If a student withdraws before completing the year, scholarships and loans will be available to pay expenses in the same proportion that the comprehensive fee is charged.

If not used to cover University charges, remaining scholarships and loans will be returned to the sources from which they came as specified by program requirements. Withdrawing students receive detailed information about refunds and aid credits from the Financial Aid Office at the time they leave Princeton.

PAYING FOR A PRINCETON EDUCATION

Princeton has traditionally sought to enroll the most qualified students without regard to their financial circumstances. For many years, the University has provided aid to all admitted students who are judged by the Financial Aid Office to be in need of funds.

Many families are understandably concerned about how to meet mounting educational costs, especially at private colleges like Princeton. To address these concerns we have prepared the following two sections for prospective Princeton applicants and their parents.

How to Pay for College provides an overall view of financing a college education and suggests ways to plan for these expenses. This section should prove helpful for nearly every family, both those who plan to apply for financial aid and those who may have adequate resources but are worried about paying large college bills over a short period.

Princeton's Student Aid Program is written specifically for families who plan to apply for aid. It describes Princeton's need-based program, including the calculation of the family contribution and how aid is awarded in a "package" that consists of scholarship, loan, and a work-study job.

While there is no denying that the costs of a college education are high, a significant amount of financial aid, an estimated $26 billion, is available nationwide each year. The federal government provides the most support, but state agencies, private organizations, and colleges also make major contributions.

Princeton itself, which established its first scholarship in 1792, has traditionally maintained a strong financial aid program to help students whose families cannot pay the University's costs. Beyond this need-based system on which aid is based, the University has recently developed other forms of assistance such as parental loans that are intended to make it easier for higher income families to meet their yearly obligation.

If you have questions about any aspect of financing a Princeton education, the staff of the Financial Aid Office will be pleased to talk to you on the phone or arrange for an on-campus interview. Please contact:

Undergraduate Financial Aid Office
Box 591
Princeton University
Princeton, NJ 08544-0591
(609) 258-3330

How to Pay for College

Whether or not you intend to apply for financial aid, there are two key elements in planning to pay for a Princeton education: estimating costs and looking at resources.

The first step in financial planning is to make a realistic estimate of the total costs of attending college. At Princeton, the comprehensive fee (covering tuition and other fees) for 1990-91 is $15,440. Room charges are $2,283, board is $2,775, and books and miscellaneous expenses are estimated at $1,902. Thus, a freshman's budget for the academic year, not including travel expenses, is $22,400. Costs for 1991-92 are expected to increase between 6 and 8 percent.

With an estimate of college expenses in mind, the next step is to see how much your family can contribute before considering need-based financial aid. To do this, you should:

1. Divide estimated 1991-92 Princeton costs by 12 in order to get an idea of the monthly obligation.
2. With this monthly payment in mind, review how much might come from parental income and assets, the student's own savings or earnings, and other forms of help, such as merit scholarships or gifts from relatives.
3. As a result of this comparison between costs and available family resources, any candidate for admission should apply for aid if his or her parents feel they are unable to cover expenses.

Because of Princeton's high cost, a number of families with quite good incomes will qualify for assistance. Overall, about 40 percent of our undergraduates receive financial aid.

Now let's look in some detail at the three primary financial resources mentioned above:

1. The parental contribution
2. The student's own share
3. Assistance unrelated to demonstrated financial need.

The parental contribution

Princeton believes that parents should pay as much as they reasonably can toward the college expenses of their children, and in most families the parental contribution is the primary resource for meeting college costs. The amount of this contribution varies from family to family, but since parents have been providing support to the student while he or she was attending high school, almost every family can be expected to pay some amount for college.

To determine the parental contribution for aid applicants, Princeton follows the national need analysis system used by the College Scholarship Service (CSS) as a guideline for professional judgment by the Financial Aid Office staff. This system examines income, assets, family size, the number of family members attending college, extraordinary expenses, and other variables that affect a family's financial strength. *Meeting College Costs*, a CSS publication that helps families estimate what the parental contribution might be, is available from high school guidance offices or from CSS, Box 2700, Princeton, New Jersey 08541. The staff of Princeton's Financial Aid Office is also available to answer questions that are not adequately covered by the CSS publication.

Although the determination of parental contribution includes variables other than income, the table below gives a general indication of aid eligibility based on different ranges of family income.

Many students will readily qualify for financial aid, and there is more information in the next section, ***Princeton's Student Aid Program***, about how aid is awarded. Some families can afford to pay all educational expenses and simply want to learn about the options available to pay the yearly bill. The payment plans that Princeton offers are described below. Other families may find themselves caught in the middle—perhaps qualifying for aid, perhaps not. Our advice to a family in this position is to make a best estimate about available resources compared to the yearly cost, and if you are still uncertain about your ability to pay the bill, apply for aid.

Admitted students in the class of 1994 who applied for financial aid

Family income level	*Applying for aid*	*Percent with financial need*	*Average need of those eligible*
$0–29,999	202	98	$18,200
30,000–34,999	53	96	16,850
35,000–39,999	52	100	15,900
40,000–44,999	55	96	14,900
45,000–54,999	120	95	14,000
55,000–64,999	128	93	10,900
65,000–74,999	152	90	9,100
75,000–84,999	114	75	7,500
85,000–94,999	82	54	7,700
95,000–104,999	65	35	6,500
Over $105,000	135	17	6,500

Princeton tries to make it easier to manage college expenses by providing two methods for paying the University bill within the academic year:

1. One payment each semester
2. Twelve monthly payments

Some parents, however, prefer to contribute even less each month than these payment plans allow. For these families there are several loan plans available on terms that can extend to 14 years:

1. Regular consumer bank loans, including home equity loans and commercial insured tuition plans, provide alternatives to the normal payment schedule. After taking a careful look at interest rates, administrative fees, tax advantages, and other terms, each family should decide whether these kinds of arrangements are more appropriate than the educational loan plans mentioned below.

2. PLUS is a federally sponsored loan to parents, and funds are available from the same banks that provide Stafford loans to students. Parents may borrow up to $4,000 per undergraduate dependent child with a cumulative ceiling of $20,000. The variable PLUS interest rate is now 11.5 percent, and the 10-year repayment begins 60 days after the money is disbursed. A version of PLUS, called the Supplemental Loan to Students (SLS), is available to students who are self-supporting.

3. The University itself offers the Princeton Parent Loan (PPL). This loan gives families the opportunity to borrow their share of Princeton's costs at an interest rate (currently about 9 percent) that is adjusted before the start of each academic year. The PPL is available to families based on credit history and ability to meet repayment terms. A single application can be used to apply for four years of borrowing, and parents have up to 14 years to repay. Further information about the PPL may be obtained from the Parent Loan Office, Princeton University, Box 35, Princeton, NJ 08544.

The student's own share

Undergraduates can assume responsibility for meeting a portion of their college expenses by:

1. borrowing student loans;
2. working during both the academic year and the summer; and
3. contributing a portion of their own savings as well as veterans' and other student benefits.

Princeton requires aid recipients to make contributions from these sources and also to assist by providing funds from external scholarships, as explained in the following section.

Federal student loans, such as the Stafford Student Loan, are available to aid applicants on the basis of financial need. The Princeton Student Loan is available from the University for certain families who do not qualify for a Stafford loan. Both the Princeton Student Loan and the Stafford loan are described in more detail in ***Princeton's Student Aid Program.*** Some students may have access to loans that are separate from the financial aid system. Possible sources are veterans' organizations, parents' employers, religious groups, and civic associations.

Nearly 90 percent of Princeton's undergraduates are employed during the summer. Entering freshmen average about $1,300 in savings after living expenses have been met.

Princeton has an extensive student employment program, enabling the University to offer jobs during the academic year not only to students who receive job assignments as part of their aid package, but also to students who are not on financial aid. Aid recipients receive priority in placement and are notified of their work place before they arrive on campus in September. Other students may apply for jobs at the Student Employment Office after aid students have been placed.

Students work in almost all areas of the University. Food Services, the library, and the athletic department are the largest employers. There is also an agency system in which students can operate their own businesses. A standard nine-hour-a-week job provides a freshman with approximately $1,550.

Awards not requiring need for eligibility

Awards based on merit rather than need are offered by a variety of sources. The most common are state grant agencies, civic organizations, community groups, charitable foundations, the military services, and corporations. Both students on financial aid and those who do not qualify for need-based awards may receive merit scholarships and prizes. In addition, some parents receive educational assistance for their children as part of an employee benefit program.

The Reserve Officer Training Corps sponsors an extensive scholarship program. Army ROTC has a unit at Princeton, and Air Force ROTC is available through a cooperative arrangement with Rutgers University. Army scholarship winners receive 80 percent of their tuition, an award worth approximately $12,350 in 1990-91. Air Force awards can either be $7,500 or 100 percent of tuition, depending on how the student rates in the national competition. In addition, ROTC provides a $100 a month stipend and reimburses book costs. Further information is available in your high school guidance office or from the Princeton Army ROTC, P.O. Box 2151, Princeton, NJ 08540, or from AFROTC, Rutgers University, 9 Senior Street, New Brunswick, NJ 08901.

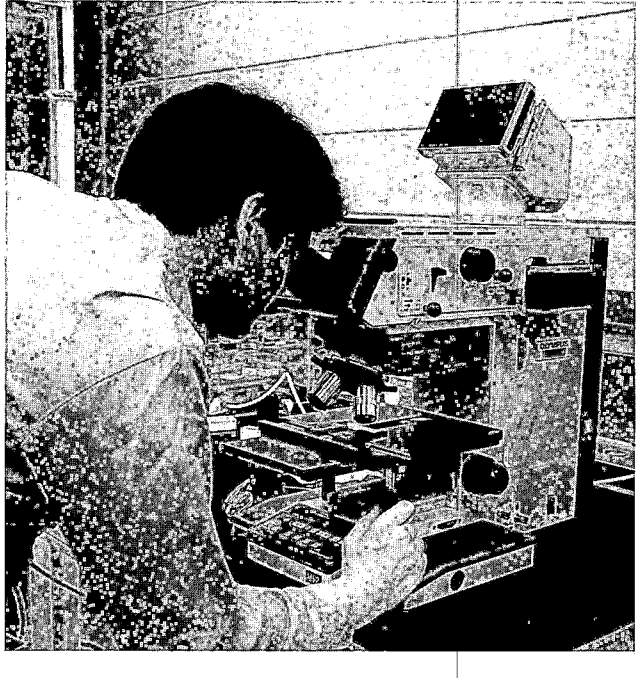
It may be worth some effort to look for specialized scholarships—those awards that are relatively small in number but can help students whose characteristics match the restrictions of the scholarship. Students who wish to explore this opportunity should check the reference section of their high school or community library.

Financial aid from Princeton

As described in the next section, ***Princeton's Student Aid Program***, all University awards depend on financial need; there are no special scholarships based on academic, extracurricular, or athletic talent. Princeton's financial aid package usually consists of a combination of loan, job, and scholarship.

Princeton expects to award about $13.4 million from its own scholarship funds during the 1990-91 academic year. About $1.9 million will also be awarded to students through various federal and state grant programs. Private organizations that sponsor scholarships contribute another $1.5 million. Both grants and scholarships are outright gifts with no obligation for repayment.

In addition, Princeton students on aid will earn about $1.7 million from their campus jobs and receive about $4.8 million in federal subsidized loans.



Four Case Studies

To give you and your parents a better understanding of how families with varying financial circumstances pay for a Princeton education, the following examples have been developed.

Case 1: A lower-income family

This family consists of two parents and three children and has an annual income of $19,000. The daughter has been admitted to the freshman class for 1990-91. The family has modest savings and equity in a small home. They report no unusual expenses. The student has $700 in a savings account.

The Financial Aid Office estimates that the parents can contribute $500 (about $56 a month for each of the nine months of the academic year) toward college expenses. The student can contribute $240 from her savings and can be expected to add another $1,220 from summer employment. Since Princeton's cost of attendance (including personal expenses) for 1990-91 is $22,400, the student needs financial aid of $20,440. She receives an aid package for the year that includes a $1,560 term-time campus job, a $2,720 student loan, and a $16,160 scholarship. The scholarship includes a $500 Pell Grant, a $2,000 Supplemental Educational Opportunity Grant, and a $13,660 University-endowed scholarship.

After the original award is made, the student receives a $1,000 Rotary Club scholarship. As the University requires, the student notifies the Financial Aid Office of the outside award. She is allowed to use the first $750 of the Rotary Scholarship to reduce the loan to $1,970. The remaining $250 of the outside award replaces Princeton scholarship funds, which can then be awarded to other eligible students.

Case 2: A middle-income family

In this family, both parents work. Their gross income is $50,000. The oldest of the two children is a Princeton freshman. The parents have a money market fund of $10,000 and home equity of $50,000. The student has a $400 savings account. Princeton estimates the parental contribution to be $7,300, and the student is expected to provide $140 from savings and $1,320 from summer earnings toward college expenses.

The need is calculated to be $13,640 when the family resources of $8,760 are subtracted from the budget of $22,400. The student is awarded a $1,560 campus job, a $2,920 loan, and $9,160 in Princeton scholarship assistance.

Case 3: A higher-income family with need

Both parents are employed and earn a combined income of $81,000. The family has three children, two of whom are in college. The home equity is $75,000, with $65,000 in savings and investments. In recognition of the need for a family to maintain a reserve fund for emergency expenses, assets are not treated in the same way as income. Of the $140,000 in assets, only $12,300 is added to form the "adjusted available income" on which the parental contribution is based. The student has $2,000 in the bank.

The family lives in Chicago, and $550 travel expenses are added to the 1990-91 budget of $22,400. Considering that this family has to pay for two children in college at the same time, the total parental contribution of $20,000 is divided by two, resulting in a $10,000 share for the student at Princeton. When this amount is combined with $700 from student savings and $1,320 from summer earnings, the student has financial need of $10,930. The need is met by a $1,560 campus job, a $2,920 loan, and a $6,450 University scholarship.

The parents choose to finance part of their share by borrowing a $4,000 PLUS loan. They will pay the remaining $6,000 through the Monthly Payment Plan over a 12-month period. The monthly payments will be approximately $515 including interest. They will also pay their bank $56 each month for the $4,000 PLUS loan over a 10-year period.

Case 4: A higher-income family without need

The fourth family does not qualify for financial aid. The annual income is $90,000, and the family has assets of $210,000. According to the usual need analysis procedure, this family has sufficient resources to meet college expenses. However, the parents wish to reduce their monthly obligation by asking their son to help with his college expenses and also by extending their own payments beyond the usual four-year period.

The son, who will enroll in Princeton in the fall of 1990, will save $1,400 from his summer job and also set aside one-fourth of his $4,000 savings, or $1,000, for Princeton. He will borrow a $3,000 Princeton Student Loan explained in the next section, ***Princeton's Student Aid Program***, and he will also work during the academic year to pay for books and personal expenses. In addition, he is a recipient of a $2,000 non-need-based (merit) scholarship.

Thus, he will contribute $7,400 toward Princeton's costs for tuition, room, and board of $20,500. His parents will finance the remaining $13,100 that is due the University with a Princeton Parent Loan (PPL). The PPL plan allows this family to make monthly payments of about $140, including interest, over a 14-year period. This monthly payment will increase if they choose to borrow additional amounts through the PPL plan for the three remaining years.

Princeton's Student Aid Program

Applicants who wish to be considered for financial aid should:

1. Submit all sections of the 1991-92 Financial Aid Form (FAF), along with the appropriate fee, to the College Scholarship Service by February 1, 1991. The FAF is available in high school guidance offices.

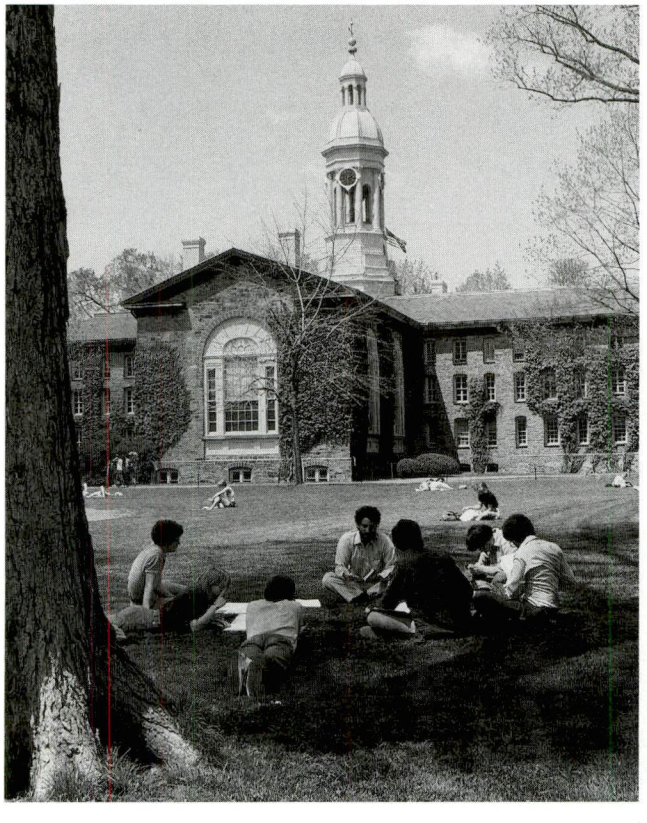
2. Submit a separate Princeton University financial aid application to the Financial Aid Office by February 1, 1991. Detailed instructions on how to complete the FAF, as well as the Princeton aid application, are contained in the section ***How to Apply for Financial Aid*** that is part of the admission application.

Note: Except for Canadians (who are treated in the same manner as United States residents), there is a limited financial aid budget for foreign citizens.

Determining financial need

Applicants should keep in mind that Princeton financial aid is awarded solely on the basis of financial need. No University aid is granted based on a student's talents or achievements.

Need is defined as the difference between the student budget and our estimate of what the student and his or her family can afford to pay toward these expenses. The parents' contribution, the student's summer earnings, a portion of the student's own savings, and direct educational benefits are the family resources that are compared with Princeton's costs to judge whether or not the applicant needs financial assistance.



The parents' contribution

Princeton, as well as the other Ivy Group institutions and most other colleges, uses the College Scholarship Service (CSS) need analysis system as the basis for making its own judgment of parental ability to pay for educational costs. (The Ivy Group includes Brown, Columbia, Cornell, Dartmouth, Harvard/Radcliffe, MIT, University of Pennsylvania, Princeton, and Yale.)

The need analysis system attempts to evaluate the overall financial strength of the applicant's family. The main elements we use in determining the parental contribution are family income, assets, number of family members, and the number of family members in college and their college costs. Once the FAF and a need analysis report arrive in the Financial Aid Office from CSS, an aid counselor reviews the entire application and determines the expected family contribution. This exercise of professional judgment on campus may result in an actual family contribution that is higher or lower than the figure computed by CSS.

There are two common reasons our expectation can be greater than the CSS estimate. The first is the use of a higher income based on a comparison of the parents' federal income tax return with the FAF. The second is a treatment of family members in college that takes into account actual tuition payments, rather than merely dividing the total parental contribution by the number in college. In a number of instances the Princeton parental contribution will be lower than the CSS estimate; this occurs when we take into account special circumstances that CSS did not consider in its calculation.

Separated or divorced parents

When the parents of an aid applicant are separated or divorced, it is the policy of Princeton as well as other Ivy Group colleges to request financial information from both parents and to expect that they both contribute to educational costs to the extent they are able.

In applying for aid, the parent who has custody of the applicant should complete the FAF. If the custodial parent has remarried, the stepparent's financial information must be included on the FAF, and an evaluation of need will be based on the income and assets of both the natural parent and the stepparent. Every effort will be made, however, to be sensitive to the stepparent's

particular circumstances, especially if he or she has other financial commitments.

If the custodial parent has not remarried, the Financial Aid Office will send a separate financial aid form for the applicant's other parent to complete.

Self-supporting students

Princeton expects parents to provide financial support throughout their children's college years according to their ability to pay. Should a student's parents discontinue their support for other than financial reasons, aid funds will not be available to replace the parents' contribution.

Guidelines for determining if an applicant is self-supporting are included in the FAF. However, for the purpose of awarding its own funds, Princeton has a more restrictive definition of "self-supporting." The University's policy normally excludes undergraduates from being considered as independent with the exception of orphans or wards of the court and those who have been truly self-supporting for five years or longer.

The student's own contribution

In addition to the amount parents are asked to contribute, students are also expected to help meet a portion of the yearly costs of their own education. A student's share comes from summer employment, savings, and educational benefits.

A typical student entering in September 1990 was asked to contribute $1,320 from summer earnings. It is expected that this amount will increase for students entering in the fall of 1991, and more will be asked from students who indicate greater earnings. Students who are unable to save the amount Princeton requires, either because they do not earn enough or because of high job-related expenses, may request an increase in aid from Princeton by discussing the situation with an aid counselor.

Each year students will be expected to contribute 35 percent of their assets to their education. Student assets are defined as money that is in the student's name at the time he or she applies for aid. This includes funds that have been placed in a trust or given to the student under the Uniform Gift to Minors Act. The overall effect on student assets is to ask for about 80 percent of pre-freshman savings over a four-year period. Students who accumulate additional assets while they are enrolled at Princeton will be expected to increase their share.

Another source of student contributions is Veterans Administration and other educational benefits.

Assigning aid

Once we have determined that the amount the applicant and his or her parents should be able to pay toward educational fees is less than the yearly cost of attending Princeton, we assign financial aid. In doing this, we consider three types of aid: scholarships or grants, jobs, and loans.

The usual order of assigning this assistance is:

1. external scholarships that are awarded to the student (such as National Merit or local community scholarships);
2. a combination of campus employment and low-interest loans, together known as self-help;
3. Princeton University scholarship funds.

External scholarships and grants

An important part of Princeton's aid program is the expectation that students will receive a substantial number of scholarships from non-University sources. These scholarships, when combined with Princeton's own funds, enable the University to meet the full need of all aided undergraduates. Aid applicants are expected to apply for these awards so Princeton will be able to spread its own scholarship funds as far as possible. Applicants who win an outside award are required to notify the Financial Aid Office.

As an encouragement to apply for external scholarships, self-help will be reduced by the first $500 of all scholarships and 50 percent of amounts over $500 until the University's self-help minimum (currently $1,600) is reached. This self-help reduction arrangement for external scholarships does not apply to the government grants described below.

Pell Grants are funded by the federal government. Aid applicants are required to apply for a Pell Grant, an award that ranges from $200 to $2,300, by checking a box on the FAF.

Another source of government funds that can be used at Princeton is a state scholarship. Residents of the following states may qualify for a grant varying from $200 to $3,500: Alaska, the District of Columbia, New Jersey, Rhode Island, and Vermont. Students should apply for a state scholarship by completing either a separate state application or a state's version of the FAF. Applicants should contact either their high school guidance office or the scholarship agency in their state for more information.

Campus employment

Most students will be offered a term-time job as part of their financial aid award. Princeton has developed an extensive campus employment program to encourage

students to work to help pay for some of their college expenses. Students are expected to use their earnings, paid directly to them every two weeks, to meet book and personal expenses. Part of the funding comes from the federal College Work-Study Program.

During freshman year, students can earn their job expectation if they work an average of nine hours per week for 30 weeks. After freshman year the work assignment is greater, not only because wages increase, but also because students are expected to work 10 hours per week.

Campus jobs are available in the dining halls, library, bookstore, computing center, and academic and administrative departments. Freshmen are usually assigned jobs in the dining halls, although a limited number of students will be placed in other positions.

Loans

Princeton assigns low-interest loans as part of a financial aid award because we believe that a student should be willing to invest in his or her future. Students should understand the responsibility they assume when accepting a loan. Most important is the obligation to pay a combination of principal and interest after graduation until the loan is repaid.

Princeton administers two main types of need-based loans for undergraduates: the Perkins Loan and the Stafford Student Loan.

Perkins Loan. Annual contributions from both the federal government and Princeton, as well as repayments from former borrowers, make it possible for the University to offer Perkins loans to eligible undergraduates. All students who qualify for aid will be considered applicants for Perkins loans, and preference in awarding the funds will be given to students with high need. These loans have an interest rate of 5 percent once the repayment period starts. The Perkins loan limit is $9,000 for undergraduate students, with a maximum of $4,500 during the first two years of college.

Repayment of both principal and interest (at a monthly rate of $10.61 per $1,000 borrowed) begins nine months after the borrower leaves school and can extend for 10 years. Minimum payments are $30 per month. Repayment may be deferred for certain circumstances, including periods of disability and service in the armed forces or public service organizations. Cancellation of part of the loan principal is possible for borrowers who teach in schools serving low-income or handicapped students.

Stafford Student Loan. To apply for a Stafford loan students must complete a FAF. Eligibility is based on financial need, and students who qualify will be notified in their financial aid award letter.

Stafford loans are available from commercial lenders such as banks, savings and loan associations, and credit unions. These loans have a $2,625 yearly limit for freshmen and sophomores ($4,000 for juniors and seniors) and currently carry an 8 percent interest rate that is paid by the federal government while the student is in college. Students may borrow as much as $17,250 during a five-year period, with a $54,750 ceiling on total borrowing for undergraduate and graduate education.

Repayment of principal and interest with a $50 minimum monthly obligation begins six months after enrollment ceases and may extend for 10 years. The interest rate of 8 percent increases to 10 percent during the fifth year of repayment. Overall, this works out to a monthly rate of about $12.70 for each $1,000 borrowed. Delay of repayment is possible under certain circumstances, including periods of disability and service in the armed forces and public service organizations.

Stafford loan borrowers will be charged a 5 percent origination fee by the lender. For example, students who are eligible for $2,625 and apply for this amount actually receive 5 percent less, or $2,500. The lender may also deduct up to 1 percent of the loan for an insurance fee. Students should keep in mind that the full face value of the loan, including that portion deducted for origination and insurance fees, must be repaid.

Student loans are also available from Princeton for certain families who apply for aid but just miss the cut-off for need-based assistance. The Princeton Student Loan has an 8 percent interest rate, charged annually, and a $3,000 yearly limit. Students have 10 years to repay the loan after college.

Princeton Scholarships

The University assigns scholarships from a variety of sources: endowment, general revenues, yearly gifts from alumni and friends, and federal grants. In addition, students may receive scholarships from non-Princeton sources as discussed earlier in this section.

Princeton scholarships are awarded on the basis of financial need. Some awards require recipients to meet geographic, academic, career, or other kinds of restrictions. Since the Financial Aid Office is responsible for matching students with specific Princeton funds, it is

not necessary to file a separate application for University scholarships.

Graduates of New Jersey public high schools who are eligible for need-based gift aid from Princeton are awarded Cane Scholarships. Cane recipients are not required to work (including both term-time and summer employment) and therefore receive a larger portion of scholarship aid in their award.

Supplemental Educational Opportunity Grants (SEOGs) are federal funds administered by Princeton and are assigned to students as part of University scholarship funds. Preference in awarding SEOGs is given to students with the lowest expected family contributions.

Federal student aid programs

Most students will receive a portion of their financial aid from federal funds: College Work-Study, Supplemental Educational Opportunity Grant, Pell Grant, Perkins Loan, and Stafford Student Loan.

In addition to demonstrating financial need, a recipient of federal aid must:

1. be a U.S. citizen or permanent resident;
2. enroll for at least half-time;
3. maintain satisfactory progress toward his or her degree;
4. certify that he or she either is registered with the Selective Service or is not required to register;
5. not be in default on a Perkins or Stafford student loan nor owe a refund on a previous federal grant.

Further information about the rights and responsibilities related to awards is provided at the time aid is offered. Detailed loan repayment data is made available before promissory notes are signed.

The Ivy Group agreement

All Ivy Group colleges use the same general method for assessing how much the family can contribute toward educational expenses. Individual institutions, however, may differ in the way they combine scholarship aid with student self-help.

If a student receives an award from more than one Ivy Group college, the total aid offered by each college should be similar except for differences in institutional budgets.

General Financial Aid Policy

Princeton provides aid to full-time students who make satisfactory progress toward a degree and continue to demonstrate financial need. (The academic regulations section of Princeton's *Undergraduate Announcement* contains a definition of satisfactory progress.) Students who are required to repeat a semester because of academic difficulty will receive a $2,000 increase in their student loan for the repeated term before Princeton scholarship funds are included in the award.

The amount and type of aid students receive is reviewed annually. However, adjustments may be made during the year if there are important changes in family resources or student budgets. The most common reasons for award revisions are differences in the information parents provided on the FAF compared with the income shown on their federal income tax return, family financial problems such as loss of income or emergency expenses, and a shortage of student summer savings.

Adjustments may be made in a student's budget for costs that are not adequately covered by the book and personal expense allowance, such as unusual medical expenses. Aid increases to cover higher budgets are usually made with self-help funds, although scholarships may be given in some situations.

Each year students must reapply for financial aid by submitting a Princeton application, a current FAF, and their parents' most recent federal income tax return. While the award received during freshman year provides an indication of the level of assistance a student can expect to receive in following years, aid may increase or decrease in individual cases depending on changes in a family's financial circumstances.

Typically, the parental contribution increases as family income rises from one year to the next. If the increase in parental contribution does not keep up with higher University charges, student self-help and scholarship assistance, in that order, rise to meet the additional need.

Finally, students can be assured that once they are enrolled, if they demonstrate need in subsequent years, Princeton will continue to provide financial aid. In other words, in the unlikely event that a shortfall of student aid funds would cause the University to depart from its policy of aiding all needy students, changes would begin with the newly entering freshman class rather than with enrolled students.

Students who have questions or would like additional information about financial aid at Princeton should write to the Director of Undergraduate Financial Aid, Princeton University, Box 591, Princeton, NJ 08544-0591, or call (609) 258-3330.

COURSE OFFERINGS

Program in African Studies
Seminar: Topics in African Studies

Program in Afro-American Studies
Introduction to the Study of Afro-American Cultural Practices
Introductory Research Methods in Afro-American Studies
Atlantic Crossings: African Roots of American Music
Rap Music 1990
Third World Images in Film
Afro-American Women's Literature
Afro-American Intellectual History
Intermediate Research Methods in Afro-American Studies

Program in American Studies
Culture and Society in America, 1820–1861
Culture and Society in America, 1880–1940
The Theater of the Thirties
Visions of California
Social Theory and Social Criticism in 20th-Century America
American Art and Culture: The 19th Century
American Sentimental Discourse

Anthropology
Introduction to Anthropology
Human Evolution
Folklore
Introduction to Archaeology and Prehistory
The Ethnographer's Craft
Wealth and Society
Political Anthropology
Special Problems in Anthropology
Archaeology of Complex Societies
Latin America: Continuity and Change
New World Civilizations
The Communicative Process
Language and Culture
Ritual, Myth, and Worldview
Art, Society, and Culture
Buddhism and Society
Africa: Peoples and Cultures
Religion and Social Organization of the American Indian
The Anthropology of Gender
The Anthropology of Law
Peasant Society and Culture
The American Indian in Society, History, and Law
Field and Laboratory Methods in Archaeology
Seminar: Theories of Social Structure
Seminar: Anthropology and Public Policy
Seminar: Peoples and Cultures of Selected Regions
Seminar: Topics in Anthropology
Seminar: Theoretical Orientations in Cultural Anthropology
Psychoanalysis and Anthropology
History of Anthropological Theory
Seminar: Linguistic Anthropology
Seminar: Social Change and Cultural Transformation
Seminar: Anthropological Approaches to the Study of Religion
Languages, Culture, and the Politics of Translation

School of Architecture
Introduction to the Built Environment
Introduction to Architectural Design
Building Science and Technology: Structures
Analysis and Criticism: Architecture as Cultural Expression
Architecture and the Visual Arts
The Historical Development of Urban Forms: The Pre-Industrial City
City and Society: Urban Form and Social Change in the Modern Industrial Era
Urban Studies: Contemporary Analysis of Urban Form
The Skyscraper: Historical Roots, Technology, Form and Function
History of Architectural Theory
Building Science and Technology: Building Systems
Architectural Studies
Structural Behavior and Model Analysis
Social and Architectural Theory in Urbanism and Housing
Thematic Studies in Architecture
Topics in the History and Theory of Architecture
Energy and Form
Structure in Architectural History

Art and Archaeology
Introduction to the History of Art
Greek Art: From Myth to Man
Roman Art: Images of Power
Medieval Art in Europe
Baroque and Rococo Painting
Italian Renaissance Painting and Sculpture
Major Figures in American Art
Neoclassicism through Impressionism
20th-Century Art: 1890 to 1950
Contemporary Art: 1950 to Present
Early Chinese Art
Later Chinese Art
Early Japanese Art
Later Japanese Art
Greek Archaeology of the Bronze Age
Myths in Greek Art
Greek and Roman Architecture
Classical Painting
Roman Cities and Countryside: Republic to Empire
Art and Architecture of Late Antiquity
Byzantine Art and Architecture
The Arts of Medieval Europe
Medieval Architecture
Medieval Manuscript Illumination
Italian Trecento Art
Great Cities: Rome
Northern Renaissance
Art of the High Renaissance
Painting in Venice
Renaissance and Post-Renaissance Gardens and Landscape Architecture
Renaissance Architecture
The Age of Rembrandt
The Art of Central and Eastern Europe
Art of Spain
Art in France: 1500 to 1789
Rococo to Neoclassicism
Modern Architecture
Masters and Movements of 19th-Century Art
Masters and Movements of 20th-Century Art
Foundations of Modern Art
History of Photography
The Art of the Print
Pre-Columbian Art: Olmec and Maya Civilizations
Pre-Columbian Art: Ancient Mexico and Peru
Early American Art
Modern American Art
The Materials and Techniques of Painting from Antiquity to the Late Renaissance
Seminar: Asian Art
Seminar: Greek Art
Seminar: Medieval Art
Seminar: Old Master Drawings
Seminar: Renaissance Art
Seminar: Baroque Art
Seminar: Contemporary Art
Seminar: Modern Architecture
Seminar: Modern Art
Seminar: 20th-Century Photography
Seminar: American Art

Astrophysical Sciences
The Universe
Topics in Modern Astronomy
Gravitational Astronomy: Newton to Einstein
Structure of the Stars
Galaxies, Quasars, and the Universe
Interstellar Matter and Star Formation

Biology
See courses offered by Ecology and Evolutionary Biology, and Molecular Biology

Chemistry
From Ozone to Oil Spills: A Chemical Perspective
General Chemistry
Advanced General Chemistry
Advanced General Chemistry—Honors Course
Organic Chemistry I
Organic Chemistry II
Physical Chemistry I
Physical Chemistry II
Inorganic Chemistry I
Inorganic Chemistry II
Chemistry and the Environment
Experimental Chemistry I
Experimental Chemistry II
Advanced Organic Chemistry
Advanced Physical Chemistry

Classics
Courses taught through English translations:
Homer and the Tragic Vision
The Myth of Augustan Rome
The Ancient Comic Tradition
Introduction to Ancient Philosophy
Classical Mythology
Archaic and Classical Greece
Greece in the Hellenistic Age
The Roman Republic 753 to 31 B.C.
The Roman Empire 31 B.C. to A.D. 337
Self and Society in Classical Greek Drama
Classical Historians and Their Philosophies of History
Roman Law
Topics in Ancient History
Sex and Gender in the Ancient World
Modern Transformations of Classical Themes
Studies in the Classical Tradition
English Literature and the Classics
Courses in Greek and Latin:
Beginner's Greek: Greek Grammar
Beginner's Greek: Attic Prose
Ancient Greek: An Intensive Introduction
Socrates
Homer
Beginner's Latin
Beginner's Latin Continued: Basic Prose
Intermediate Latin: Catullus and His Age
The Origins of Rome: Livy and Vergil
Introduction to Augustan Literature
Sophomore Seminar (Latin)
The Tragic Poetry of the Late Fifth Century
Sophomore Seminar (Greek)
Introduction to Medieval Latin
Latin Language and Stylistics
Introduction to Greek Prose: *Koine* to Standard Late Greek
Plato
Greek Tragedy
Greek Historians
Greek Comedy
Greek Rhetoric: Theory and Practice
Homer and the Epic Tradition
The Lyric Age of Greece
Greek Literature: Selected Author(s)
Cicero
Horace
Roman Drama
Vergil's *Aeneid*
Vergil's *Eclogues* and *Georgics*
Roman Literature: Selected Author(s)
Epicureanism and Stoicism
Roman Republican Historians: Livy
Latin Prose Fiction
Roman Historians of the Empire: Tacitus
Roman Satire
Special Topics
Early Medieval Literature: New Beginnings
Fictional Narratives: Epic and Romance
Latin Poetry in the Later Middle Ages
Courses in Modern Greek: see Hellenic Studies

Committee for Cognitive Studies

Comparative Literature
The Classical Roots of Western Literature
Masterworks of European Literature
Comparative History of Literary Criticism
Theory and Methods of Comparative Literature
20th-Century European Criticism
The European Novel: Cervantes to Tolstoy
The Modern European Novel: Joyce, Mann, and Proust
The Lyric
The Literature of Medieval Europe
The Renaissance
The Enlightenment and Romanticism
The Modern Period
Experimental Fiction
Tragedy
Modernism in Fiction
Modernism in Poetry
Really Fantastic Fiction

Forms of Short Fiction
Literature of the Holocaust
Topics in Comparative Literature
Seminar: Literary Imagination and the Image of History
Seminar: Types of Ideology and Literary Form
Seminar: Literature Across Languages
Senior Seminar

Computer Science
See Engineering

Program in Creative Writing
Creative Writing
Advanced Creative Writing
Advanced Creative Writing Tutorial

East Asian Studies
Chinese Section:
Elementary Chinese
Intermediate Chinese
Introduction to Classical Chinese
Readings in Modern Chinese Short Stories
Readings in Modern Chinese Documents
Readings in Modern Chinese Theater
Readings in Modern Chinese Prose
Advanced Classical Chinese
Readings in the Humanities
Readings in Classic Chinese Novels
Readings in the Social Sciences
Readings in Modern Chinese Fiction
Readings in Selected Fields

Japanese Section:
Elementary Japanese
Intermediate Japanese
Advanced Japanese
Readings in Modern Japanese
Japanese Readings in Selected Fields
Literary Japanese
Japanese Historical Texts

Courses in Linguistics:
Introduction to Chinese Linguistics
History of the Chinese Language
Introduction to Japanese Linguistics

Courses in Literature and Civilization:
Introduction to Japanese Literature
Life and Values in Chinese Culture
Ideas and Images in Japanese Culture
The Chinese Classics: A Comparative Approach
The Humanistic Tradition of Chinese Literature
Early Japanese History
Japan from Feudal to Modern State
Chinese Poetry
The Chinese Novel
20th-Century Chinese Literature
Early Chinese History
Chinese History, 221–278
Chinese Institutional History
Chinese Theories of the Arts
Culture and Society in Late Imperial China, 1000–800
Narrative and the Japanese Tradition
The 20th-Century Japanese Novel
Intellectual History of China to the Fifth Century
Intellectual History of China from the Ninth to the 19th Century
Comparative Studies in Non-Western Literature

Program in East Asian Studies

Ecology and Evolutionary Biology
Managing the Global Environment
The Evolution of Biological Diversity
Population and Community Ecology
Evolution and Genetics
Conservation Biology
Neurophysiology
Animal Behavior
Invertebrate Biology
Vertebrate Biology
Plant Biology

Economics
The Structure and Functioning of the National Economy
Description and Analysis of Price Systems
Introduction to Financial Economics
Introduction to Econometric Methods
Introduction to Econometric Methods: A Mathematical Approach
Macroeconomics
Macroeconomics: A Mathematical Approach
Microeconomic Theory
Microeconomic Theory: A Mathematical Approach
Mathematical Theory of the Firm and Managerial Economics
Industrial Organization
Topics in Labor Economics
Economics of the Labor Market
Urban Economics
Corporation Finance
Economics of Development
International Trade
International Monetary Economics
Income Distribution
The Economics of Uncertainty
Public Finance
Money and Banking
The Development and Use of Accounting Data
Analyses of Capitalism
Soviet-Type Economies
The Chinese Economy
American Economic History
Introduction to Population Problems
Topics in Economics

Center for Energy and Environmental Studies

School of Engineering and Applied Science

Chemical Engineering
Introduction to Chemical Engineering Principles
Thermodynamics I
Engineering Properties of Materials
Mass, Momentum, and Energy Transport
Thermodynamics II
Chemical Engineering Laboratory
Independent Work
Polymers
Structure and Properties of Polymers
Plasmas for Chemical Processing of Materials
Catalytic Chemistry
Semiconductor Processing Technology
Chemical Reactor Engineering
Economy of Chemical Processes
Separations in Chemical and Biochemical Processes
Special Topics in Chemical Engineering and Technology
Process Control
Biochemical Engineering
Independent Work
Senior Thesis

Civil Engineering and Operations Research
Structures and Machines in Urban Society
Computer Methods for Problem Solving
Mechanics of Solids
Engineering Graphics and Surveying
Engineering Geometry and Graphics for Computer-Aided Design
Fundamentals of Engineering Statistics
Structures and the Urban Environment
Introduction to Engineering Systems Analysis
Introduction to Water Resources
Elements of Interactive Computer Graphics
Engineering Elasticity
Environmental Studies
Groundwater Hydrology
Applied Engineering Hydraulics
Deterministic Systems Analysis
Stochastic Systems Analysis
Computer Methods for Engineering Problems
Technology and Society Seminar I: Present and Future Challenges
Technology and Society Seminar II: Problems in the Human Environment
Risk Assessment and Management
Structural Analysis and Design
Engineering Dynamics
Structural Behavior and Model Analysis
Soil Mechanics
Analysis and Design of Reinforced Concrete Structures
Special Topics in Civil Engineering and Operations Research
Junior Independent Work
Statistical Methods for Industrial Processes
Statistical Modeling, Design, and Decisions
Strategies in Modeling: Public and Corporate Decisions
Analysis of Information Systems
Network Optimization Algorithms and Applications
Reliability of Engineering Systems
Theory of Plates and Shells
Introduction to Finite Element Methods
Construction Management
Earthquake Engineering
Construction Methods and Foundation Engineering
Transportation Planning and Logistics
Transportation Technology
Introduction to Water Pollution Technology
Water Resources Systems Planning
Design and Planning of Civil Engineering Systems
Senior Thesis

Computer Science
Introduction to Computer Science
Introduction to Digital Computer Programming
Introduction to Programming Systems
Algorithms and Data Structures
Introduction to Artificial Intelligence and Symbolic Computation
Fundamentals of Scientific Computing
Computer Structure
Operating Systems
Compiling Techniques
Discrete Mathematics
Junior Independent Work
Microprocessor-Based Digital Systems Design
Design of Very Large-Scale Integrated (VLSI) Systems
Theory of Algorithms
Database Systems
Computer Graphics
Programming Languages
Computational Geometry
Distributed Computing
Computer Architecture
Theory of Automata and Computation
Special Topics in Artificial Intelligence
Special Topics in Computer Science
Senior Independent Work

Electrical Engineering
Digital Systems and Microprocessors
Principles of Applied Electronics
Introduction to Electrical Engineering
Introduction to Discrete Systems
Physical Foundations of Electrical Engineering
Power Systems and Industrial Electronics
Computer Structure
Optimization Techniques
Electronic Devices and Circuits
Digital Electronics
Computer-Aided Analysis and Design
Physical Principles of Electronic Devices
Electromagnetic Field Theory and Optics
Linear Systems Theory
Junior Independent Work
Electrical Engineering Design Laboratory
Microprocessor-Based Digital System Design
Design of Very Large-Scale Integrated (VLSI) Systems
Computer-Aided Design of Digital Systems
Switching and Sequential Systems
Digital System Testing
Solid State Electronics I
Solid State Electronics II
Computer Architecture
Digital Signal Processing
Microwave Electronics
Feedback Systems
Signal Analysis and Communication Systems
Digital Communications: Techniques, Systems, and Networks
Photonics and Lightwave Communication
Materials and Solid State Device Laboratory
Solid State Devices
Electrical Engineering Seminar
Senior Independent Work

Mechanical and Aerospace Engineering
Introduction to Energy and Its Impact on the Environment
Introduction to Engineering Dynamics
Introduction to Nuclear Science and Nuclear Issues
Thermodynamics
Mechanics of Fluids
Mathematics in Engineering I
Mathematics in Engineering II
Topics in Energy Conversion and Resources
Structure and Properties of Materials
States of Matter
Physical Processes of Energy Conversion
Engineering Dynamics
Applied Aeronautics
Fluid Dynamics
Viscous Flows
Junior Independent Work
Junior Independent Work with Design
Microprocessor Control Systems
Microprocessors for Measurement and Control
Mechanical Design and Analysis
Heat Transfer
Fossil Fuel Energy Conversion I: Mobile Power Plants
Fossil Fuel Energy Conversion II: Stationary Power Plants
Aerospace Structures
Space Flight Engineering
Automatic Control Systems
Special Topics in Transportation Technology
Special Topics in Mechanical and Aerospace Engineering
Aerospace Guidance and Control
Senior Independent Work
Senior Independent Work with Design

Program in Architecture and Engineering

Program in Engineering and Management Systems

Program in Engineering Biology

Program in Engineering Physics

Program in Geological Engineering

Topical Program in Energy and Environmental Studies

Topical Program in Robotics and Intelligent Systems

Topical Program in Transportation

English
Shakespeare
Major American Writers
The Craft of Writing
The Literary Tradition: From the 14th to the 18th Century
The Literary Tradition: From the 18th Century to the Present
Public Speaking
Modern Drama
Modern Literature
The Old English Period
Medieval English Literature in Modern Versions
The Medieval Period
Chaucer
The Plays of Shakespeare: I
The Plays of Shakespeare: II
Spenser and the Epic Romance
The 16th Century
The 17th Century
Milton
The English Drama to 1700
English Literature of the 18th Century
English Fiction Before 1800
Selected Topics in 18th-Century Literature
Five Romantic Poets
19th-Century Fiction
Victorian Poetry
Selected Topics in the 19th Century
Topics in Romanticism
Children's Literature
Literature of the Fin-de-Siècle
20th-Century Fiction
Modern British Poetry
Bernard Shaw and the Modern British Drama
Selected Topics in Drama
Contemporary Drama
Contemporary Fiction
Contemporary Poetry
American Literature before 1825
Literature of the American Renaissance, 1820–1860
American Literature: Civil War to World War I
20th-Century American Fiction
Modern American Poetry
Special Topics in American Literature
American Women Writers
Linguistic Thought from Locke to Saussure
The History of Criticism
Forms of Nonfiction
Contemporary Literary Theory
Satire
Topics in Comedy
Special Topics in Contemporary Culture
Forms of Poetic Interpretation
Special Topics in Gender and Literature
Oral Interpretation of Literature
Topics in Black Literature
Afro-American Literature: Five Black Writers
The Female Literary Tradition

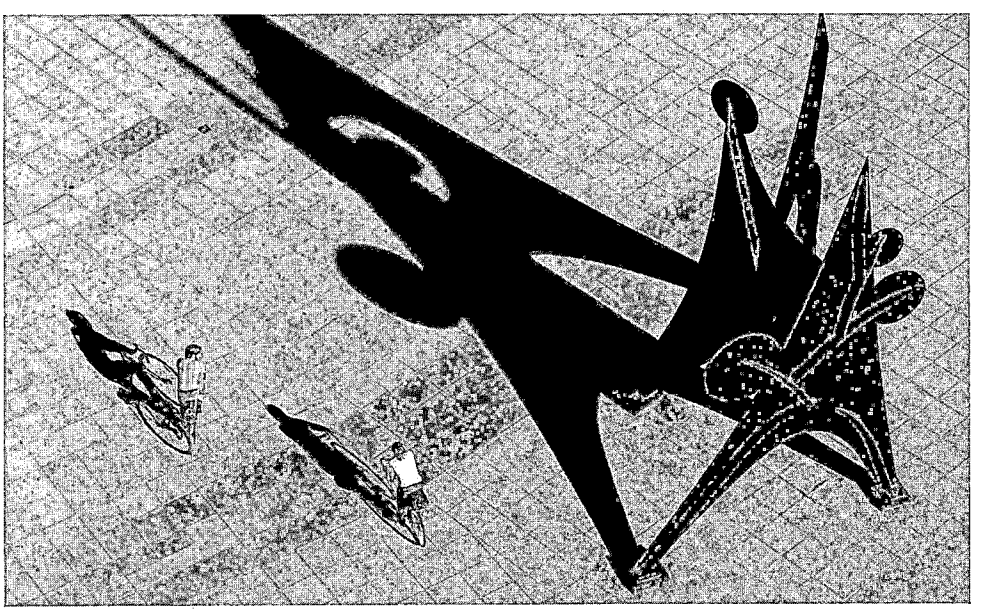
Forms of Literature
Nature's Politics: Emerson and the Institution of American Letters
Anglophone African Narratives
North America: A Literary Geography
Whitman and Dickinson

Program in European Cultural Studies
Cultural Interpretation
Cultural Systems
Communication and the Arts
The History of Mentalities
Modernism, Avante-Garde, and Popular Culture in France and Germany, 1848-1918

Committee for Film Studies

Program of Freshman Seminars in the Residential Colleges

Geological and Geophysical Sciences
Earth: The Physical Setting
History of Earth and Life
Resources and World Affairs
Engineering and Environmental Geology
Summer Course in Geologic Field Methods
The Greenhouse Effect and Our Changing Climate
Earthquakes and Other Hazards
Geology and Resources of Less-Developed Countries
Evolution and Catastrophies
Sedimentology and Stratigraphy
Introduction to Mineralogy and Petrology
Igneous and Metamorphic Petrology
Structural Geology and Tectonics
Introduction to Geochemistry
Introduction to Geophysics
Applied Geophysics
Biostratigraphy and Micropaleontology
Aqueous Sedimentary and Environmental Geochemistry
Evolution of the Ocean Basins
Evolution of the Continents
Topics in Earth Science
Introduction to Physical Oceanography
Introduction to Terrestrial and Planetary Atmospheres



Germanic Languages and Literatures

German Language Courses:
Beginner's German
Intensive Intermediate German
Intermediate German
Advanced German
Studies in German Language and Style: Readings in Literature and Culture
Studies in German Language and Style: Society, Politics, and Economics
Colloquium

Courses in German Literature and Civilization:
Literature and Politics
Introduction to German Civilization: 800–1500
Modern Austrian Culture
German Intellectual History
Topics in Modern German Culture and Society
Introduction to German Literature after 1700
The Drama
Prose Fiction from Goethe to Thomas Mann
Modern German Poetry
Topics in Germanic Literatures
German Literature in the Age of Revolution
The Romantic Movement
Rebellion, Reaction, and Realism
The Origins of Modernism
Contemporary German Literature

Germanic and European Literatures in Translation:
Masterworks of European Literature: The Romantic Quest
Masters of German Literature
Modern Euopean Languages Senior Seminar

Program in Hellenic Studies

Elementary Modern Greek
Intermediate Modern Greek
Advanced Modern Greek
Myth, History, and Contemporary Experience in Modern Greek, English, and American Poetry
The Legacy of the Past: Politics, Society, and Culture in Modern Greece
Hot War, Cold War: Southeastern Europe in the 1940s
Special Topics in Modern Greek Civilization
Special Topics in Byzantine Civilization
Special Topics in Hellenic Studies

History

History of the People of the United States
History of East Asia to 1800
History of East Asia in the 19th and 20th Centuries
Europe From Antiquity to 1700
Europe since 1700
The World and the West since 1950
American Social History
Afro-American History
Approaches to American History
The Scientific World View of Antiquity and the Middle Ages
The Origins of Modern Science, 1500–1750
Science in the Modern World
Colonial and Neo-Colonial Latin America, 1500–1900
20th-Century Latin America
Precolonial Africa
Colonial and Postcolonial Africa
The Making of Modern India
20th-Century Japan
Chinese Social Ideology in Transition
China, 1800 to the Present
The Civilization of the Early Middle Ages
The Civilization of the High Middle Ages
Renaissance and Reformation
The Origins of the Modern State
Society and the Sexes in Early Modern Europe
History of France, 1480–1685
History of France, 1685–1815
France, 1815 to the Present
Intellectual History of Europe, 1780–1870
Intellectual History of Europe, 1870–1920
European Intellectual History, 1920–1980
Imperial Russia, 1700–1917
Culture and Society in Imperial and Soviet Russia
The Soviet Union, 1917–1953
The Mediterranean: 16th to 20th Century
International Economic History in the 20th Century
Europe in the 20th Century
Germany since 1806
English Constitutional History
The First Road to Modernization: England, 1470–1690
Britain since the 18th Century
The English Colonies in America
Revolutionary America
The New Nation
The American Civil War and Reconstruction
Progressive America: The United States, 1877–1920
History of Spanish-Speaking Peoples in the U. S.
The United States and World Affairs: From the Era of Imperialism to the Present
The United States South
The United States: The 1890s to 1941
The United States since 1940
Gender in America: Colonial, Revolutionary, and Victorian Society
The Role of Law in American Society, 1607–1982
American Economic Development
The City in American History
American Cultural History to 1876
American Cultural History since 1876
American Social History: The 20th Century
Women and Gender in America: From the Victorian Era to the Present
Science in American History from the Civil War to the Present
Disease and Doctors in the Modern West
Technologies and Their Societies: Historical Perspectives
Junior Seminars
Selected Topics in 20th-Century Latin America
Asians in America
War and Society in the Modern World
South African History
Gandhi: The Making of the Mahatma
Canadian History, 1763 to the Present
Religion and Society in Early Medieval Byzantium and Western Europe
Social History of Modern Japan
Jews in Early Modern Europe, 1500–1800: A Comparative Perspective
The Culture and Institutions of Old Russia
Perspectives on the Nature and Development of Science
Problems in the Development of the Physical Sciences
Problems in the Development of the Life Sciences

Program in Humanistic Studies

The World of the Middle Ages
The Origins of Modern Western Culture
The Classical Roots of Western Literature
Masterworks of European Literature
The Bible in Western Cultural Tradition
Ethics, Aesthetics, and the Arts
Finding Our Place in the Universe
Studies in American Africanism
Resistance, Rebellion, and Death
The Literature of Fact
Seminar in Writing
Topics in Medieval Studies
Politics and the Press

Committee for Jewish Studies

Program in Latin American Studies

Seminar: Research Methods, Sources, and Trends in Latin American Area Studies

Program in Linguistics

Introduction to Language and Linguistics
Historical Linguistics
Phonetics and Phonology
Introduction to the Theory of Syntax
Linguistic Semantics
Social and Geographic Variation in Language
Advanced Syntax

Literature in Translation

Mathematics

Analytic Geometry and Calculus
Calculus
Linear Algebra and Multivariable Calculus for Economists
Multivariable Calculus
Linear Algebra with Applications
Advanced Multivariable Calculus
Advanced Linear Algebra and Multivariable Calculus
Evolution of Mathematical Concepts
Honors Linear Algebra and Advanced Calculus I
Honors Linear Algebra and Advanced Calculus II
Ordinary Differential Equations
Introduction to Partial Differential Equations
Mathematical Programming
Introduction to Discrete Mathematics
Combinatorial Mathematics
Theory of Games
Introduction to Modern Applied Mathematics
Mathematical Logic
Introduction to Real Analysis
Real Analysis
Topics in Real Analysis
Complex Analysis with Applications
Complex Analysis
Topics in Complex Analysis
Algebra
Topics in Algebra
Topology
Algebraic Topology
Differential Geometry
Mathematical Fluid Dynamics
Advanced Topics in Analysis
Advanced Topics in Algebra
Advanced Topics in Geometry
Analytical Methods of Applied Mathematics

Committee for Medieval Studies

Molecular Biology

Introduction to Biology
Introduction to Cellular and Molecular Biology
Molecular Biology and Genetics
Biochemistry
Laboratory in Molecular Biology
Principles of Animal Development
Mammalian Genetics
Cell Biology
Immunology
Biotechnology and Its Social Impact

Music

Introduction to Music
Music Theory through Performance and Composition
The Opera
Choral Music
Music of the Baroque: An Introduction
Introduction to Music of the Romantic Era
Species Counterpoint
Tonal Syntax
Introduction to 20th-Century Music
Introduction to Jazz
Urban Blues and the Golden Age of Rock
Instrumental Music: The Symphony from Haydn to Stravinsky
Instrumental Music: The Concerto
Special Topics in Composition and Performance
Beginning Workshop in Musical Composition
Renaissance Music from Notation to Performance
Musics of East and Southeast Asia
Musics of the Middle East
Musics of India
Beethoven
Wagner
Bach and Handel
Haydn and Mozart
Twentieth-Century Music Through Composition and Performance
Nontonal Composition
Topics in Medieval Music
Topics in Renaissance Music
Composers' Manuscripts
The Study of an Opera
Studies of Orchestral Music
Advanced Workshop in Musical Composition
Verdi and the Playwrights
Monteverdi: Madrigal and Opera, 1575–1650
Introduction to Computer Music
Computer and Electronic Music Composition
Topics in History, Analysis, and Interpretation

Near Eastern Studies

The Self and Society in Islamic Literature
Elementary Arabic
Intermediate Arabic
Advanced Arabic
Elementary Hebrew
Intermediate Hebrew
Introduction to Biblical Hebrew
Medieval Hebrew Literature

Modern Hebrew Literature
Elementary Persian
Intermediate Persian
Elementary Turkish
Intermediate Turkish
An Introduction to the Middle East
Near Eastern Literature in Translation
Masterworks of Hebrew Literature in Translation
The Ancient Near East
The Near East from Alexander to Muhammad
Islamic History, 600–1050
Mediterranean Islam, 1050–1500
Islamic History, 1050–1800
International Relations in the Middle East since the First World War
The Jews under Medieval Islam
The Jews in Medieval Europe
Economic Organization and Development of the Contemporary Near East and North Africa
Economic History of the Near East and North Africa since 1800
Turkish Culture
Modern Iran
History of the Near East and North Africa in the 19th Century
History of the Near East and North Africa in the 20th Century
The Near East and the Eastern Question since 1815
The Ottoman Empire, 1500–1800
Islamic Civilization in Africa before 1750
Islamic Civilization in Africa since 1750

Program in Near Eastern Studies

Philosophy

Philosophy and the Modern Mind
Introductory Logic
Introduction to Moral Philosophy
Introduction to Metaphysics and Epistemology
Introduction to the Philosophy of Science
Introduction to Ancient Philosophy
Basic Philosophical Problems
Plato and His Predecessors
Aristotle and His Successors
British Empiricism
Descartes, Spinoza, and Leibniz
The Philosophy of Kant
German Idealism
Marx, Nietzsche, and Freud
Systematic Ethics
Social Philosophy
Political Philosophy
Problems of Philosophy
Intermediate Logic
Theory of Knowledge
Philosophy of Mathematics
Philosophy of Mind
Philosophy of History
Philosophy of Language
Metaphysics
Normative Ethics
Philosophy and Literature
Philosophy of Science
Philosophy of the Cognitive Sciences
Advanced Logic
Philosophical Issues in Linguistic Theory
Philosophy of Religion
Philosophy of Art
Philosophical Problems in the Sciences
Special Topics in the History of Philosophy
Early Modern Philosophy
Recent Continental Philosophy
20th-Century Philosophical Analysis
Probability and Scientific Inference

Physics

Introductory Physics
General Physics
Advanced Physics (Mechanics)
Advanced Physics (Electromagnetism)
Classical Physics
Topics in Physics
Elementary Mechanics
Electromagnetism and Vectors
Advanced Physics II
Principles of Quantum Mechanics
Modern Physics
Thermal Physics
Advanced Electromagnetism
Introduction to the Quantum Theory
Experimental Physics
Elementary Mathematical Physics
Plasma Physics
Modern Physics I—Atomic, Molecular, and Solid State Physics
Modern Physics II—Nuclear and Elementary Particle Physics
Modern Classical Dynamics

Politics

American Democracy: Principles and Issues
Political Theory
American Politics
Introduction to Comparative Politics
International Relations
Modern Political Theory
Soviet Politics
Ancient and Medieval Political Theory
Law and Society
Constitutional Interpretation
The Politics of Civil Liberties
The Presidency and Executive Power
The Politics of Economic and Social Control
American Political Thought
Urban Politics
Party Politics
Democratic Theory
Politics and Social Change in Asia
Politics in the Third World
American Foreign Policy
The Great Powers in International Politics
International Legal Order
International Organization
European Politics
The Politics of Modernization in the Near East and North Africa
Women, Gender, and Politics
Theories of International Relations
Latin American Politics
Politics in Africa
Personal and Political Transformation
Technology and Political Economy
Congressional Politics
Politics and the Black American
Chinese Politics
Political Leadership and Personality
Public Opinion and Mass Political Behavior
Conservative Political Thought
Political Economy
Radical Thought
An Introduction to World Order
Political Conflict and Violence
Comparative Urban Politics
The Soviet Union in World Affairs
Latino Politics in the United States
Japanese Politics
Political and Social Movements
The Sacred and the Political
War and Peace in the Nuclear Age
Modern and Contemporary Theories of the State
East European Politics
Chinese Foreign Policy
Political Culture
Comparative Asian Socialist Regimes
Domestic Political Economy
Political Cultures of the Middle East
Political Economy and Public Policy in Latin America
The Philosophy of the Social Sciences
Comparative Capitalism in Advanced Industrial Countries
Departmental Seminars

Psychology

Introduction to Psychology
General Psychology
Personality
Social Psychology
Brain and Behavior
Developmental Psychology
Cognitive Psychology
Reward, Punishment, and Behavior
Abnormal Psychology
The Brain: A User's Guide
Introduction to Health Psychology
Quantitative Methods
Artificial Intelligence and Human Cognition
Cognitive Development
Memory and Cognition
Educational Psychology
Perception
Psychology of Language
Psychology of Thinking
Sex Roles and Behavior
Social Interaction and Influence
Interpersonal Perception
Physiological Psychology: Motivation and Emotion
Cognitive Neuroscience: Perception and Memory
Comparative Psychology: Development of Behavior
Physiological Psychology: Drugs and Behavior
Seminar: Issues in Black Personality
Psychology of Consciousness
Theories of Psychotherapy
Forms of Psychological Inquiry
Issues in Psychoanalysis
Childhood Psychopathology

Religion

The Self in World Religions
Religion and Its Modern Critics
Approaches to the Study of Religion
Patterns of Women's Religious Experience
The Buddhist World of Thought and Practice
The Religions of China
Religion and Literature of the Old Testament: Through the Babylonian Exile
Religion and Literature of the Old Testament: Wisdom Literature and the Post-Exilic Period
Classical Judaism
Modern Judaism
The New Testament and Christian Origins
Religion in American Society
Christian Ethics and Modern Society
Religion in Modern Fiction
Studies in the Philosophy of Religion
Religion and Contemporary Philosophy
Varieties of Religious Language
Religion and Morality from Kant to Nietzsche
Afro-American Religious History
The Religions of Japan
Chinese Ritual: Theory and Practice
The Mahayana Tradition
Religion and Society in India
Women and Islam
Psychology and Religion
The Religion of Islam
Religious Quests of the Greco-Roman World: The Magical Arts and Astrology
Judaism in the Greco-Roman World
Jews, Gentiles, and Christians in the Ancient World
Adam, Eve, and the Serpent: Interpretation of the Genesis Account
Gnosticism and Early Christianity
Spiritual Autobiography and Biography
Thomas Aquinas
Protestant Reformation and Catholic Renewal
Roman Catholicism in America
Religion in Colonial America and the New Nation
Religion and Social Change in 19th-Century America
Perspectives on Religious Ethics
Studies in Religion

Committee for Renaissance Studies

Romance Languages and Literatures

Modern European Writers

Romance Literatures and Linguistics
Dante's *Divine Comedy*
Introduction to Romance Linguistics and Literary Theory
Modern Latin American Fiction in Translation
Seminar
Modern European Languages Senior Seminar

French Section:
Beginner's French
Intensive Beginner's and Intermediate French
Intermediate French
Advanced French
Studies in French Language and Style
Advanced Language and Style
Prose Translation
Introduction to French Society and Culture
French Literature, Language, and Society: From 1789 to the Present
French Literature, Language, and Society: From the Beginnings to 1789
French Literature: Approaches to the Language of Literary Texts
Masterpieces of Medieval French Narrative
Topics in Medieval French Literature
The French Renaissance: Literature and Society
Topics in French Renaissance Culture
French Classicism
Theater and Society in the Ancien Régime: Baroque to Early Realism
The Enlightenment in France
French Romanticism
French Poetry from Baudelaire to Valéry
Masters of 19th-Century French Fiction
Modern French Theater
20th-Century French Poetry
The Modern French Novel
Topics in 19th- and 20th-Century French Literature

The Civilization of the French Middle Ages
The Ancien Régime: Society and Culture in France, 1624–1789
Contemporary French Civilization
Paris in History and Literature
Writers and Politics in France
Topics in French Culture and Society

Italian Section:
Beginner's Italian
Advanced Italian
Advanced Language and Style
Introduction to Italian Literature, Language, and Society: From the Beginnings to 1700
Introduction to Italian Literature, Language, and Society: From 1700 to the Present
Topics in Medieval Italian Literature and Culture
The Italian Renaissance: Literature and Society
Topics in 20th-Century Italian Literature
Topics in Contemporary Italian Civilization
Topics in 18th- and 19th-Century Italian Literature

Portuguese Section:
Introductory Brazilian Portuguese
Intermediate Brazilian Portuguese
Modern Brazilian Literature and Culture

Spanish Section:
Beginner's Spanish
Intensive Beginner's and Intermediate Spanish
Intermediate Spanish
Advanced Spanish
Studies in Spanish Language and Style
Introduction to Spanish Literature and Civilization From the Middle Ages to the Baroque
Introduction to Spanish American Culture from the Discovery of America to the Present
Spanish Literature: Approaches to Literary Texts
Topics in Spanish Literature of the Golden Age
Topics in Spanish Civilization of the Golden Age
Cervantes and His Age
Topics in the Cultural Expression of Protest and Dissent in Spain
Topics in Contemporary Spain: Turning Points
Modern Spanish Fiction
Topics in the Intellectual History of Modern and Contemporary Spain
Modern Spanish Poetry
Modern Spanish American Fiction
Modern Spanish American Poetry
Topics in Spanish American Modernity
The Invention of Spanish American Traditions
Topics in Spanish American Literature and Ideology

Program in Russian Studies

Program of Senior Seminars in the Social Sciences

Slavic Languages and Literatures

Courses in the Russian Language:
Beginner's Russian
Intermediate Russian
Advanced Russian Reading and Conversation
The Structure of Modern Russian
The History of the Russian Language
Advanced Russian Reading, Composition, and Conversation

Courses in Slavic Literatures and Civilization:
The Russian Short Story
Russian Poetry from Derzhavin to Fet
Russian Drama
Russian Literature and Revolution, 1880–1920
Solzhenitsyn
Selected Topics in Russian and Soviet Literature
Pushkin and His Time
Tolstoy
Dostoevsky
Gogol

Section of European Languages, Literatures, and Civilizations:
History of Russian Literature before 1860
History of Russian Literature, 1860–1917
Soviet Literature, 1917–1965
Soviet Literature, 1965 to the Present
Modern European Languages Senior Seminar

Sociology

Introductory Courses:
The Sociological Perspective: Patterns of Social Behavior
The Sociological Perspective: Social Organization and Processes
The United States in Comparative Perspective
Social Stratification: Forms and Functions of Inequity
The Social Basis of Individual Behavior

General Courses:
Current Sociological Theory
Sociological Research Methods
Special Topics in Sociology

Comparative Social Systems:
Comparative Family Systems
Comparative Legal Systems
The Structure and Transformation of Societies
The Comparative Study of Revolution
The Heritage of East Asian Societies: China and Japan
The Patterns of Rapid Modernization: Japan and the Soviet Union
The Social Consequences of Communism: The Soviet Union and China

Social Structure and Social Organization:
Elites, Leadership, and Society
Race and Ethnicity in Human Society
Population Change in the United States
Age and Social Structure
Cities and Social Life
The Organization of Work in Government and Corporations
Health, Society, and Politics
The Sociology of Law
Fiscal Sociology: The Political Sociology of Public Finance

Social Conformity and Deviation:
Small Groups
Sex and Society
Communication, Culture, and Society
Human Nature and Social Conduct
Sociology of Mental Health and Illness
Deviant Behavior

Society and Culture
Sociology of Religion
Classical Sociological Theory
Science and Society
Education and Society
Technology and Social Change
Mass Media and Popular Culture
Society, Literature, and the Arts

Statistics

Introduction to Exploratory Data Analysis
Probability
Mathematical Statistics
Statistics in Medicine and Biology
Intermediate Statistical Techniques
Advanced Topics in Data Analysis
Advanced Topics in Statistics

Program in Teacher Preparation!

Senior Seminar on Education
Practice Teaching

Program in Theater and Dance

Beginning Studies in Acting: Scene Study
Introductory Playwriting
Introduction to Modern Dance
Beginning Modern Dance: Technique and Choreography
Intermediate Studies in Acting: Scene Study II
Playwriting II: Intermediate Playwriting
Intermediate Modern Dance: Technique and Choreography
Intermediate Studies in Acting: Creating Character and Text
Dance Performance Workshop: Repertory and Choreography
Advanced Studies in Acting: Scene Study and Style
Advanced Modern Dance: Technique and Choreography
Directing Workshop

Program in Visual Arts

Introductory Drawing
Introductory Painting
Introductory Photography
Introductory Sculpture
Ceramics
Introduction to the Film Medium
Intermediate Painting
Intermediate Photography
The Handprinted Image: Etching and Lithography
Computer Graphics
The Silent Cinema and the First Decade of Sound Films
The Cinema from World War II until the Present
Special Topics in Film History
Advanced Painting
Advanced Problems in Photography
Advanced Sculpture
Problems of Film and Video Practice
Theory of Film Form
Major Film Makers
Topics in Visual Arts

Program in Women's Studies

Introduction to the Study of Gender
Sociobiology, Sex Roles, and Human Development
Seminar: Topics in the Study of Gender
Senior Thesis Colloquium

Woodrow Wilson School of Public and International Affairs

Policy Conferences
Policy Task Forces
Policy Seminars
Political Theory and Public Policy
Historical Analysis and Public Policy
Quantitative Analysis and Public Policy
Science, Technology, and Public Policy
Geography and Public Affairs
Public Affairs Internships
Special Topics in Public Affairs

Undergraduate Announcement

If you would like more detailed information about courses and programs of study, you may request a copy of Princeton's *Undergraduate Announcement*. Because of the printing and mailing costs involved, the University charges a small fee for it. If you would like to purchase a copy, please forward the correct amount of U.S. dollars (by check or money order made out to Princeton University) to: Admission Office, Box 430, Princeton University, Princeton, New Jersey 08544-0430.

United States, Canada, Mexico	$2
Bahamas, Bermuda, Central America	$4
Europe, Middle East, Central America	$6
Asia, Africa, New Zealand, Australia	$8

The *Undergraduate Announcement* is mailed special, non-first-class rate to U.S. and Canadian addresses and air mail/printed matter to locations abroad.

Copies of the *Undergraduate Announcement* may be found in the library of a local college or university, a local public library, a U.S. Information Service library, or the library of a local secondary school counseling office.

VISITING PRINCETON

Tours

You are welcome to visit Princeton at any time during the year to stroll through the campus or take the one-hour tour conducted by student guides (the Orange Key Guide Service).

Campus tours begin at 10:00 a.m., 11:00 a.m., 1:30 p.m., and 3:30 p.m., Monday through Saturday; on Sunday, tours begin at 1:30 p.m. and 3:30 p.m. Tours leave from the rear of Maclean House (at the front of campus, near Nassau Street); you are asked to arrive five minutes before the tour begins. For more information, write to the Orange Key Guide Service, Maclean House, Princeton University, Princeton, NJ 08544, or call (609) 258-3603.

You can also tour the Engineering Quadrangle. Tours leave from Room ACE 23 in the Engineering Quadrangle at 11:15 a.m. and 2:45 p.m., Monday through Friday, during the academic year (except during semester recesses and examination periods). Call (609) 258-4554 to schedule a tour or to make an appointment to meet with a faculty member from the School of Engineering and Applied Sciences.

Admission information sessions

General admission information sessions are held at 12:30 p.m., Monday through Friday, from early June through the end of December.

These one-hour presentations describe the University and its admission and financial aid processes. Parents and students are welcome; no reservations are necessary. For information, call (609) 258-3060.

Campus interviews

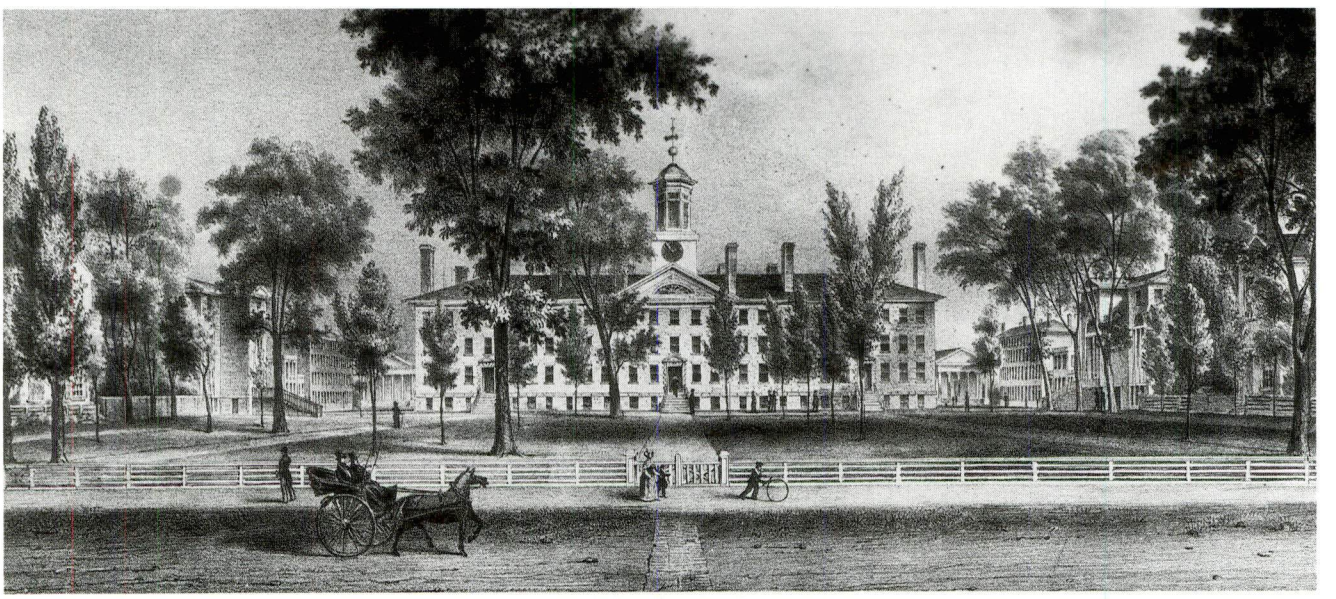
A personal interview is not required for admission, but we do schedule appointments from late May through the end of December for students who would like to meet with a member of the admission staff. These sessions usually last about an hour and may include between one and six students. Students entering their senior year in high school receive first priority for these appointments. There are no appointments available from January 1 through most of May, when the admission staff is busy reading and evaluating applications for the upcoming freshman class.

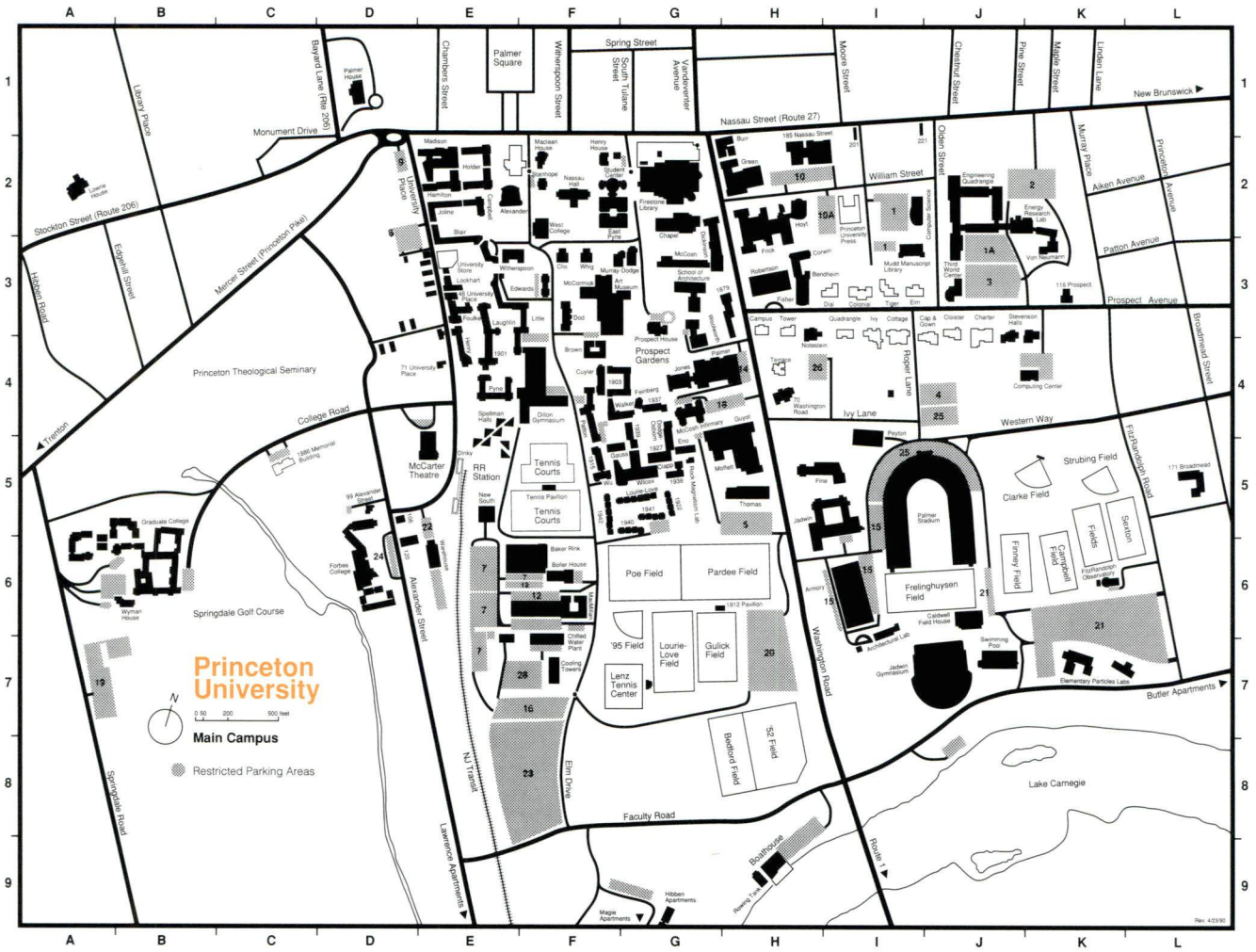
To schedule an appointment, call (609) 258-3060 at least several weeks in advance. High school juniors should not request appointments until the spring of their junior year, although they're welcome to visit the campus and take a tour at any time.

Getting to Princeton

By car: From the north or south, take the New Jersey Turnpike to Exit 8 (Hightstown). Exit, following signs for Hightstown, to Route 571 (Princeton-Hightstown Road) directly to Princeton. From the west, take Interstate 95 from Philadelphia to Route 1 North. Follow Route 1 to the Hightstown/Princeton circle. Follow signs for Princeton.

By train: New Jersey Transit trains bound for Princeton Junction leave New York City's Penn Station every 30 minutes; SEPTA trains from Philadelphia go to Trenton and connect there with New Jersey Transit trains heading for Princeton Junction. From Princeton Junction, a one-car train (known locally as the Dinky) makes the five-minute trip to Princeton.





Admission Office (West College), F2
Alexander Hall (Richardson Auditorium), E2
Architecture, School of, G3
Architectural Lab, I7
Armory, I6
Art Museum, F3
Baker Rink, F6
Bendheim, H3
Blair, E3
Boathouse, H9
Brown, F4
Burr, H2
Butler Apartments, L7
Caldwell Field House, J6
Campbell, E2
Chancellor Green Center, F2
Chapel, G2
Clapp, G5
Class of 1901, E4
Class of 1903, F4
Class of 1904–Henry, E4
Class of 1905–Foulke, E3
Class of 1915, F5
Class of 1922, G5
Class of 1927–Clapp, G5
Class of 1937, G4
Class of 1938, G5
Class of 1939, G5
Class of 1940, G5
Class of 1941, G5
Class of 1942, F5
Clio, F3
Computing Center, K4
Computer Science, I2
Corwin, H3
Cuyler, F4
Dickinson Street Housing, D3
Dickinson, G3
Dillon Gym, F4
Dinky (Railroad station), E5
Dod, F3
Dodge–Osborn, G5
East Pyne, F2
Edwards, F3
1879, H3
Elementary Particles Labs, K7
Energy Research Lab, J2
Engineering Quadrangle, J2
Eno, G5
Feinberg, G4
Fine, H5
Firestone Library, G2
Fisher, H3
FitzRandolph Observatory, K6
Forbes College, D6
48 University Place, E3
Foulke, E3
Frick, H3
Gauss, F5
Graduate College (residential and dining complex), B6
Green, H2
Guyot, H5
Hamilton, E2
Henry, E4
Hibben Apartments, G9
Holder, E2
Hoyt, H2
Jadwin Gym, J7
Jadwin Hall, H5
Joline, E2
Jones, G4
Laughlin, E3
Lenz Tennis Center, G7
Little, E3
Lockhart, E3
Lourie–Love, G5
Lowrie House, A2
Maclean House, F2
MacMillan, F6
Madison, E2
Magie Apartments, G9
McCarter Theatre, E5
McCormick, F3
McCosh Infirmary, G4
McCosh, G3
Mestres (Madison), E2
Moffett, H5
Mudd Manuscript Library, I3
Murray–Dodge, F3
Nassau Hall, F2
New South, E5
Notestein Hall, H4
116 Prospect, K3
171 Broadmead, L5
185 Nassau Street, H2
Orange Key Tours (Maclean House), F2
Palmer House, D1
Palmer Stadium, I5
Palmer, G4
Patton, F4
Peyton, I5
Princeton University Press, I2
Prospect House, G3
Pyne, E4
Richardson Auditorium (Alexander Hall), E2
Robertson, H3
Rock Magnetism Lab, G5
Railroad station, E5
School of Architecture, G3
70 Washington Road, H4
Spelman, E5
Stanhope, F2
Stevenson, J4
Student center (see Chancellor Green Center), F2
Swimming Pool, J7
Tennis Pavilion, F5
Third World Center, J3
Thomas, H5
Train station, E5
University Store, E3
Von Neumann, K3
Walker, F4
West College, F2
Whig, F3
Wilcox, G5
Witherspoon, E3
Woolworth, G3
Wu, F5
Wyman House, B6

Undergraduate Residential Colleges

BUTLER COLLEGE
Class of 1915, F5
Class of 1922, G5
Class of 1940, G5
Class of 1941, G5
Class of 1942, F5
Lourie–Love, G5
Patton, F4
Wu, F5

FORBES COLLEGE
D6

MATHEY COLLEGE
Blair, E3
Campbell, E2
Hamilton, E2
Joline, E2

ROCKEFELLER COLLEGE
Blair, E3
Holder, E2
Madison, E2
Witherspoon, E3

WILSON COLLEGE
Class of 1927–Clapp, G5
Class of 1937, G4
Class of 1938, G5
Class of 1939, G5
Dodge-Osborn, G5
Feinberg, G4
Gauss, F5
Walker, F4
Wilcox, G5

Graduate College

Residential and dining complex, B6
Wyman House, B6

Eating Clubs

Campus Club, H3
Cap and Gown Club, J4
Charter Club, J4
Cloister Club, J4
Colonial Club, I3
Cottage Club, I4
Dial Lodge, I3
Elm Club, I3
Ivy Club, I4
Quadrangle Club, I4
Terrace Club, H4
Tiger Inn, I3
Tower Club, H4

INDEX

ACADEMIC CALENDAR

Fall Term, 1990-91

September 11, Tuesday. Freshmen registration.
September 16, Sunday. Opening Exercises.
September 17, Monday. Classes of the fall term begin.

October 22–26, Monday–Friday. Midterm tests.
October 27, Saturday. Fall recess begins.

November 4, Sunday. Last day of fall recess.
November 21, Wednesday. Thanksgiving recess begins.
November 25, Sunday. Last day of Thanksgiving recess.

December 12, Wednesday. Final date for freshmen to file choice of courses for the spring term.
December 17, Monday. Thursday classes meet.
December 18, Tuesday. Friday classes meet. Winter recess begins.

January 6, Sunday. Last day of winter recess.
January 7, Monday. First day of reading period.
January 15, Tuesday. Last day of reading period.
January 16, Wednesday. First day of fall term examinations.
January 26, Saturday. Last day of fall term examinations.

Spring Term, 1990-91

February 4, Monday. Classes of the spring term begin.

March 11–15, Monday-Friday. Midterm tests.
March 16, Saturday. Spring recess begins.
March 24, Sunday. Last day of spring recess.

May 3, Friday. Final date for freshmen to file choice of courses for the fall term 1991-92.
May 6, Monday. First day of reading period.
May 19, Sunday. Last day of reading period.
May 20, Monday. First day of spring term examinations.

June 1, Saturday. Last day of spring term examinations.
June 9, Sunday. Baccalaureate.
June 10, Monday. Class Day.
June 11, Tuesday. Commencement.

Important phone numbers

Princeton's area code is 609.

Main University operator	258-3000
Admission Office	258-3060
Undergraduate Financial Aid	258-3330
Orange Key Guide Service (campus tours)	258-3603
Engineering Quadrangle tours	258-4554
Telex	4991258

Equal opportunity policy

Princeton University subscribes to a policy of equal opportunity. The University believes that commitment to principles of fairness and respect for all helps create a climate favorable to free and open exchange of ideas, and the University seeks to reach out as widely as possible in order to attract the ablest individuals as students, faculty, and staff. For these reasons, decisions concerning admission to University academic and other programs, as well as employment decisions in all University departments and offices, are made on the basis of an individual's qualifications to contribute to meeting Princeton's educational objectives and its institutional needs. In applying this policy, the University is committed to the principle of not discriminating against individuals on the basis of personal beliefs or characteristics such as political views, religion, national or ethnic origin, race, color, sex, sexual orientation, age, marital status, veteran status, or disability unrelated to job or program requirements.

In addition to the general policy just defined, Princeton also has specific legal obligations as a recipient of federal financial assistance and as a federal contractor. These obligations include the development and implementation of a plan to undertake appropriate forms of affirmative action to employ women, members of minority groups, handicapped individuals, and veterans. An affirmative action plan written in compliance with Executive Order 11246 has been filed with and approved by the U.S. Department of Labor's Office of Federal Contract Compliance Programs. This plan is available for review at the University upon request.

The provost is the University officer with responsibility for overseeing the implementation of this equal opportunity policy and the affirmative action plan.

Accreditation

Princeton University is accredited by the Middle States Association of Colleges and Schools. Requests to review documentation supporting this accreditation should be directed to the dean of the college. In addition, the School of Architecture is accredited by the National Architecture Accreditation Board. Of the programs of study offered by the departments of chemical engineering, civil engineering and operations research, computer science, electrical engineering, and mechanical and aerospace engineering in the School of Engineering and Applied Science, the following are accredited by the Accreditation Board for Engineering and Technology: aerospace engineering, chemical engineering, civil engineering, electrical engineering, engineering physics, geological engineering, and mechanical engineering. Supporting documentation may be reviewed by contacting the deans of these schools.

Credits

Coordinated by Communications/Publications
Stanhope Hall, Princeton University
Edited by Laurel Cantor, Patricia Coen, Susan Jennings, Lisa Dunkley, Fred Hargadon, Robin Moscato
Designed by Mahlon Lovett
Photographs by Robert Bielk '78, William Choi '82, Nat Clymer, Clem Fiori, Lawrence French, Conrad Gloos, Jean Gwaltney, Paul Heugel, Mahlon Lovett, Robert P. Matthews, J. T. Miller '70, Cliff Moore, Rich Rojo '91, John W. H. Simpson '66
Typeset by Princeton's Office of Printing and Mailing Services
Printed by Intelligencer Printing Company

Princeton University
Princeton, New Jersey 08544

Second class
postage paid at
Princeton, NJ 08540

Peter Johnson, bibliographer for Latin America, Spain, and Portugal
Klaus E. Knorr, William Stewart Tod Professor of Public Affairs, Emeritus
Atul Kohli, assistant professor of politics and international affairs
Charles Kupchan, assistant professor of politics
John P. Lewis, professor of economics and international affairs; director of the Research Program in Development Studies
James T. Liu, professor of East Asian studies
James A. McAdams, assistant professor of politics
Walter F. Murphy, McCormick Professor of Jurisprudence
Barry Nalebuff, assistant professor of economics
Kenneth A. Oye, assistant professor of politics
Christina Paxson, assistant professor of economics and public affairs
Anne R. Pebley, research demographer, Office of Population Research
Gilbert F. Rozman, professor of sociology
Carl Shapiro, professor of economics and public affairs
Paul E. Sigmund, professor of politics
Paul Starr, professor of sociology
Joseph E. Stiglitz, professor of economics
Donald E. Stokes, dean of the Woodrow Wilson School; Class of 1943 University Professor of Politics and Public Affairs
Ezra N. Suleiman, professor of politics; director of the Program in Comparative and Regional Studies
Robert L. Tignor, professor of history
Robert C. Tucker, IBM Professor of International Studies, Emeritus
Richard H. Ullman, professor of international affairs; director of the Program in International Security
Frank N. von Hippel, professor of public and international affairs
Stephen M. Walt, assistant professor of politics and international affairs
John Waterbury, William Tod Stewart Professor of Politics and International Affairs
Lynn T. White III, associate professor of politics and international affairs
Robert Willig, professor of economics and public affairs

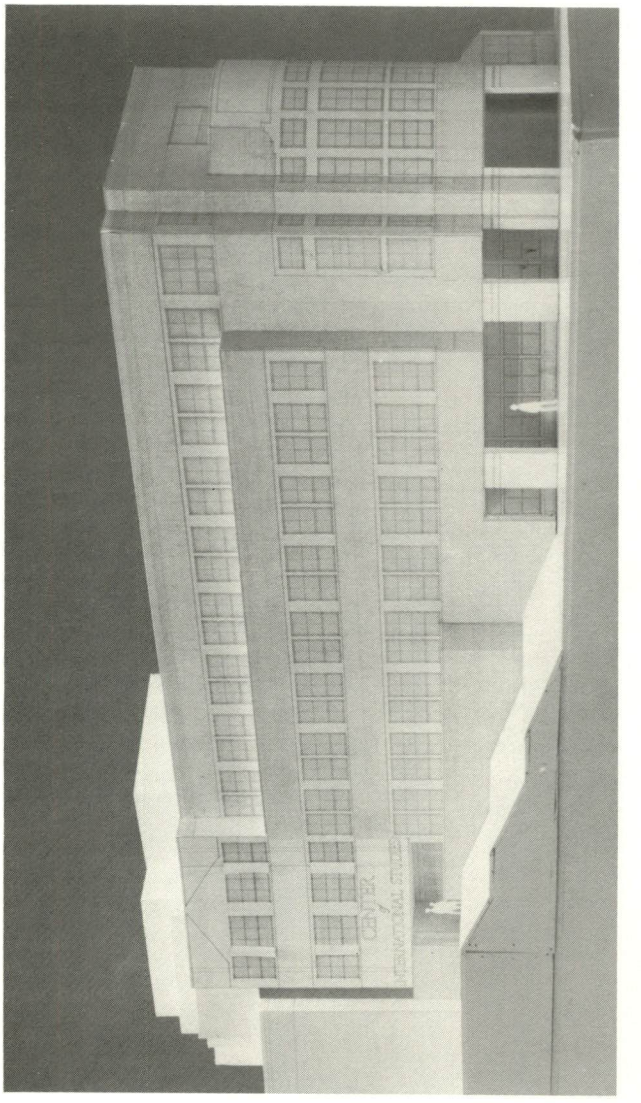
For More Information

For more information about the Center of International Studies, write: Center of International Studies 118 Corwin Hall Princeton University Princeton, N.J. 08544, or call 609-452-4851

Woodrow Wilson School of Public and International Affairs

Princeton University

Center of International Studies



Construction on a new building for the Center of International Studies will begin in November, 1987. The building is designed by Venturi, Rauch and Scott Brown.

Center of International Studies

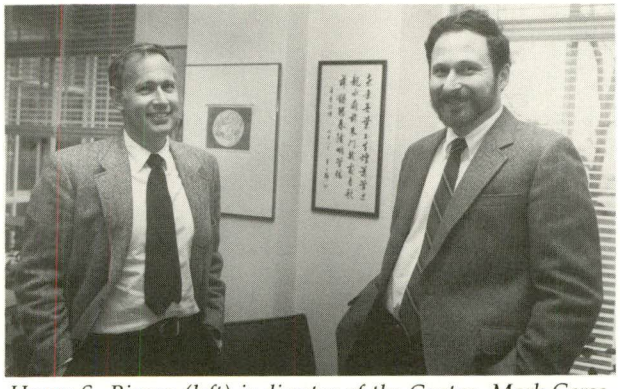
Princeton's Center of International Studies enjoys a distinguished reputation for its seminal work in international relations and economic issues in the developing world. As a major research arm of the Woodrow Wilson School of Public and International Affairs, it has as its primary purpose the support of scholarship relating to issues of world peace and the improvement of economic cooperation and mutual understanding among nations.

For more than three decades, faculty associates of the Center—leading economists, political scientists, and historians—have worked closely together on joint projects. In addition to its resident faculty, the Center sponsors visiting scholars from the United States and abroad.

The Center exerts an influence on scholarship relating to international issues out of all proportion to its size. It does so through its many publications (which include *World Politics*, the outstanding journal in its field) and through its sponsorship of research that takes a multidisciplinary approach to questions.

The Center was established at Princeton in 1951, when the Institute of International Studies moved here from Yale University. Begun in 1935, the Institute was one of the first university-based research centers in the field of international relations.

Since its founding, the Center has been directed by a senior member of the University faculty. Its first director was the late Frederick Sherwood Dunn, who established the Center at Princeton. Klaus Knorr, William Stewart Tod Professor of Public Affairs, Emeritus, served as its director from 1961 to 1968. Cyril E. Black, James S. McDonnell Distinguished University Professor of History, Emeritus, was the Center's director until 1985. Then, Henry S. Bienen, James S. McDonnell Distinguished University Professor of Politics and International Affairs, assumed directorship.



Henry S. Bienen (left) is director of the Center. Mark Gersovitz is directing a research project funded by the Asian Development Bank. The grant supports research by CIS associates in Nepal, Thailand, and Indonesia.

Research Programs

A major strength of the Center is the interdisciplinary nature of its research. Currently, research is concentrated on five areas:

Program in International Security. Director: Richard H. Ullman, professor of international affairs. Current studies include Soviet-Chinese relations, arms control, and the trade-offs between defense and domestic spending in the Soviet and Western blocs and how that conflict influences relations within each bloc. A major study is also underway on the feasibility of deep cuts in the nuclear arsenals of the Soviet Union and the United States; the study examines critical issues of verification, mutual deterrence, and nuclear proliferation. Another involves integrating economic and security analyses.

Program in International Political Economy. Director: Robert G. Gilpin, Dwight D. Eisenhower Professor of Politics and International Affairs. Current projects include studies of international debt in the developing countries and trade and security issues in the Pacific Basin, especially the evolving relationship between Japan and the United States.

Research Program in Development Studies. Director: John P. Lewis, professor of economics and international affairs. The program was established in 1967 by Nobel laureate W. Arthur Lewis, the James S. McDonnell Distinguished University Professor of Economics and International Affairs, Emeritus. Lewis shared the 1979 Nobel prize in economics with Theodore Schultz for pioneering research in developing economies. Research in the program focuses on such topics as income distribution, Third World debt, and economic strategies for developing nations.

A research team recently completed an extensive study of structural adjustment issues in the Sudan; members of the team included economists, political scientists, historians, and Islamic

experts from Princeton and several other institutions. Currently, research is underway in Thailand, Indonesia and Nepal under the auspices of the Asian Development Bank.

Program in Comparative and Regional Studies. Director: Ezra N. Suleiman, professor of politics. The program is completing a series of major studies examining how different countries or regions have adapted their varying cultural traditions to achieve similar economic goals. Studies on Japan, Russia, and China are completed and published; volumes on the Middle East and Inner Asia are being prepared for publication. A major undertaking involves study of privatization and public sector reform in industrial and developing countries.

World Order Studies Program. Director: Richard A. Falk, Albert G. Milbank Professor of International Law and Practice. Professor Falk pioneered in the development of world order studies, a relatively new field exploring 'unconventional' international futures and the creation of a peaceful international order. Its current work focuses on the overall organization of international institutions. Association with the Peace and Global Transformation Project of the United Nations University accounted for the main recent undertakings of the Program.

Visiting Fellows

The Center plays an important role in hosting visiting scholars from other institutions in the U.S. and from abroad. These exchanges provide a critical perspective on international issues for the Center's resident faculty and students and give visitors access to the University's superb faculty and library resources.

The Center strives for a mix of junior and senior visitors from academic institutions and from government and seeks to match their expertise and interests with those of Center faculty. Upon application, Visiting Fellows submit a proposal for a research project they will pursue when in residence at the Center.

Recent senior visitors included William P. Bundy, former assistant secretary of state for East Asian and Pacific Affairs; Dawit Wolde Giorgis, former acting foreign minister of Ethiopia and head of famine relief; and Chen Qimao, director of the Shanghai Institute of International Studies.

Publications and Conferences

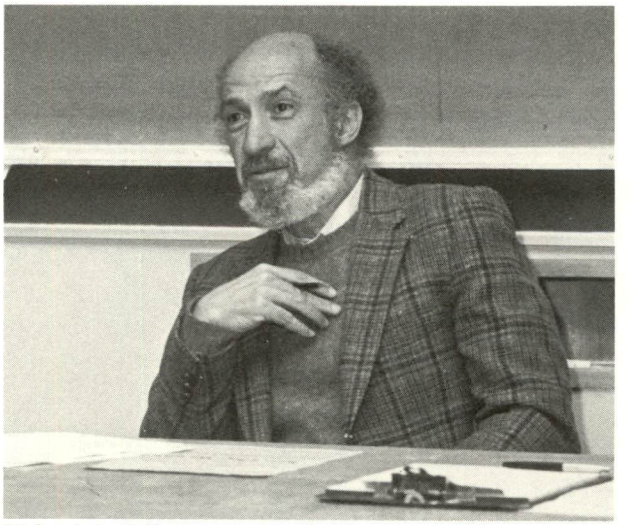
The work done by faculty associates and Visiting Fellows at the Center reaches beyond academia to affect national and international policies through their own publications. The Center publishes its own series and sponsors conferences on vital international issues.

The Center publishes *World Politics*, a quarterly journal open to contributions from scholars around the world. The journal represents all of the disciplines, methods, and viewpoints that are relevant to the central problems of international relations, comparative politics, and national development.

The Center publishes monographs in three series on an irregular basis: *Research Monographs*, *Policy Memoranda*, and *World Order Studies Program Occasional Papers*.

Recent conferences organized under the auspices of the Center include: The United States and the Pacific Basin; Jews Among Arabs: Contacts and Boundaries; Socialist Governments in Market Economies; The World Order Approach to International Relations; Bloc Cohesion in NATO and the Warsaw Pact; and Contemporary Soviet-Latin American Relations.

In addition, the Center sponsors frequent colloquiums, lectures, and seminars open to members of the University community.



Richard A. Falk pioneered in the development of world order studies.

Research Support

The Center has received substantial support for its research from government agencies, foundations, and corporations. In the past several years, it has received major support for faculty research from USAID, the Asian Development Bank, the Ford Foundation, the J. Howard Pew Freedom Trust, the James D. and Catherine T. MacArthur Foundation, the Tinker Foundation, the General Electric Foundation, Sumitomo Bank, the Boeing Corporation, the Pfizer Corporation, and Johnson and Higgins Corporation.

Research support is available for scholars of advanced academic standing as well as scholars who are less well known. Support is also available for graduate and undergraduate students at Princeton University.

Facilities

Currently, the Center of International Studies is located in Corwin Hall at Princeton. Associated faculty and visitors have offices there or in the Woodrow Wilson School, which is connected to Corwin Hall through an underground corridor.

Construction of a new building that the Center will share with the department of economics commenced in summer, 1987. The three-story, 50,000-square-foot complex was designed by the Philadelphia architectural firm of Venturi, Rauch, and Scott Brown. It will be connected to both the Woodrow Wilson School and Corwin Hall, and will provide additional space for faculty and visitor offices, as well as seminar facilities.

The Woodrow Wilson School's library contains a core public and international affairs collection of journals, books, and related materials. Faculty and visitors have access to the resources of Princeton University, including the facilities of Firestone Library and extensive computing facilities.

Associated Faculty and Staff

The following members of the Princeton University faculty are associated with the Center:

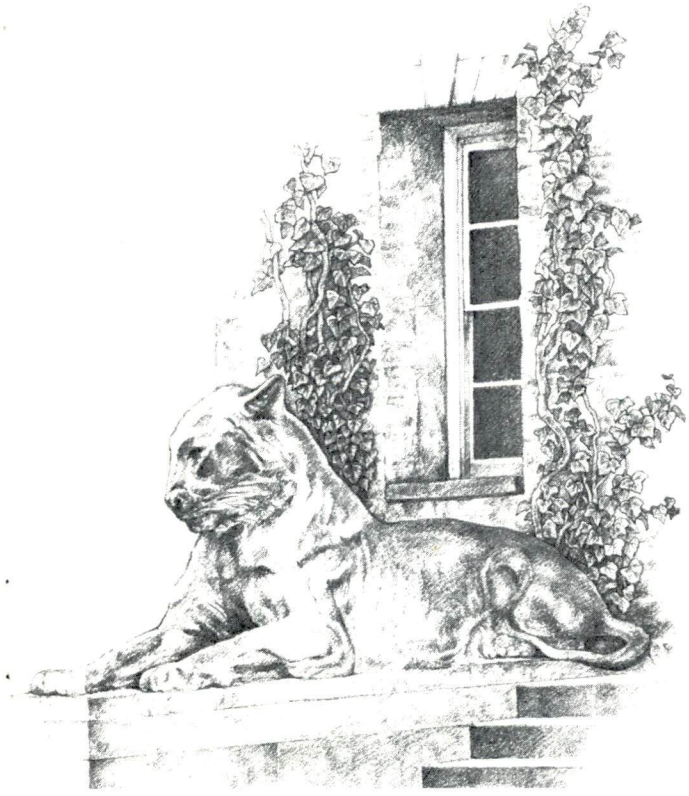
Director: Henry S. Bienen, James S. McDonnell Distinguished University Professor of Politics and International Affairs.

Administrative Staff: Gladys M. Starkey and Jerri Kavanagh, administrative officers; Elsbeth G. Lewin, executive editor, *World Politics*;Tracey Bartzak, Shirley Canty, Kathy DiMeglio, June Garson, Sylvia Klun, Gail A. Wenrich, and Patricia Zimmer, secretaries.

Center Associates:

David M. Bachman, assistant professor of politics
Nancy G. Bermeo, assistant professor of politics
Cyril E. Black, James S. McDonnell Distinguished University Professor of History and International Affairs, Emeritus
William H. Branson, professor of economics and international affairs
L. Carl Brown, Garrett Professor in Foreign Affairs
Kent E. Calder, assistant professor of politics and international affairs
Stephen F. Cohen, professor of politics
Forrest Colburn, assistant professor of politics
Martin Collcutt, professor of East Asian studies and history
Michael N. Danielson, B.C. Forbes Professor of Public Affairs
Angus S. Deaton, professor of economics and international affairs
George W. Downs Jr., professor of politics
Richard A. Falk, Albert G. Milbank Professor of International Law and Practice; director of World Order Studies Program
Harold A. Feiveson, research policy analyst, Center for Energy and Environmental Studies
Gerald Garvey, professor of politics
Mark Gersovitz, senior research economist and public policy analyst
Robert G. Gilpin, Dwight D. Eisenhower Professor of International Affairs; director of the Program in International Political Economy
Fred I. Greenstein, professor of politics
Gene M. Grossman, associate professor of economics and international affairs
Manfred Halpern, professor of politics
G. John Ikenberry, assistant professor of politics and international affairs
Charles P. Issawi, Bayard Dodge Professor of Near Eastern Studies, Emeritus
Marius B. Jansen, professor of history and East Asian studies

A Princeton Profile 1990-91



Cover illustration by Heather Lovett

Coordinated by Princeton's Office of Communications/Publications

1990-91 Academic Calendar

September 11, 1989	Freshman registration
September 16	Opening Exercises
September 17	Fall term classes begin
October 18	Fall meeting, Board of Trustees
October 27–November 4	Midterm recess
November 22–25	Thanksgiving recess
December 19–January 6, 1991	Winter recess
January 7–15	Reading period
January 16–26	Fall term course examinations
January 18	Winter meeting, Board of Trustees
February 4	Spring term classes begin
February 16	Alumni Day
March 16–24	Spring recess
April 19	Spring meeting, Board of Trustees
May 6–19	Reading period
May 20–June 1	Spring term course examinations
June 6–9	Alumni reunions
June 10	Baccalaureate Sunday
June 10	Commencement meeting, Board of Trustees
June 10	Class Day
June 11	Commencement

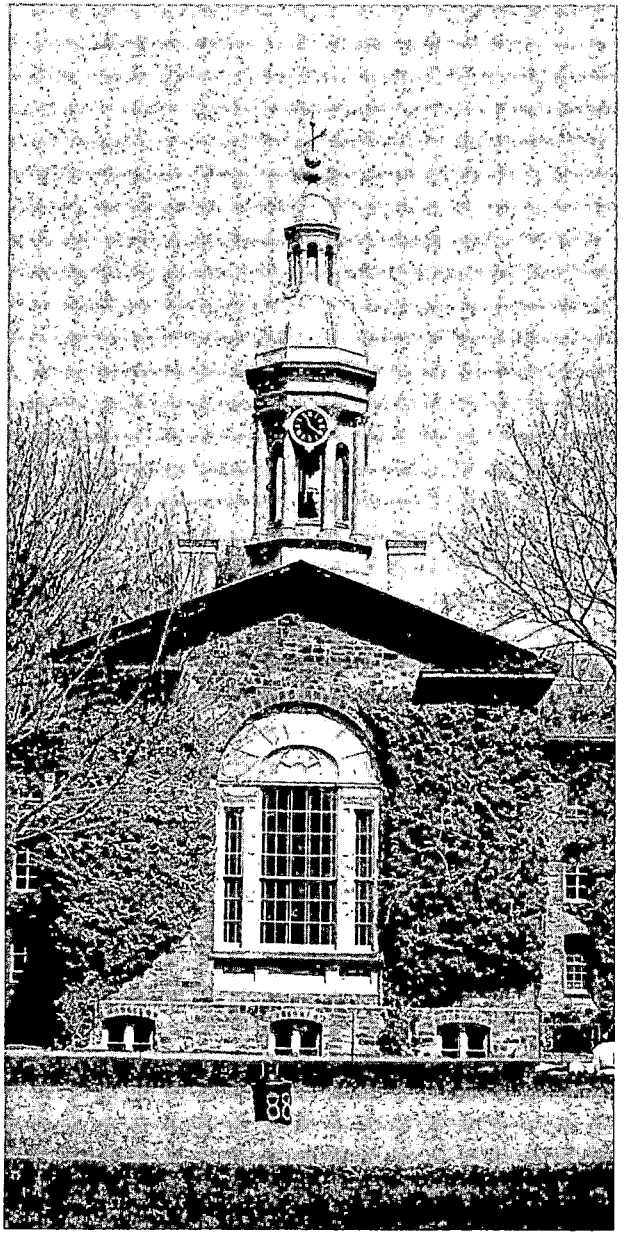
Telephone Numbers

Main campus information	(609) 258-3000
Admissions (graduate)	258-3034
Admissions (undergraduate)	258-3060
Alumni Council	258-5814
Alumni Records	258-3114
Annual Giving	258-3373
Art Museum	258-3787
Athletic Ticket Office	258-3538
Athletics	258-3537
Career Services	258-3325
Communications/Publications	258-3600
Community and State Affairs	258-3018
Development	258-3311
McCarter Theatre	683-9100
McCarter Theatre Box Offfice	683-8000
Plasma Physics Laboratory	243-2000
President's Office	258-6100
Princeton Alumni Weekly	258-4885
Princeton Weekly Bulletin	258-3600
Public Safety	258-3134
Registrar	258-3360
University Press	258-4900
University Store	258-3647

1905 President Wilson establishes system of preceptorials by junior faculty.
1906 Carnegie Lake created by Andrew Carnegie.
1913 Graduate College dedicated.
1914 Palmer Stadium completed.
1919 School of Architecture established.
1921 School of Engineering established.
1928 Princeton University Chapel dedicated.
1930 School of Public and International Affairs established.
1933 Albert Einstein becomes a life member of the Institute for Advanced Study, with an office on the Princeton campus.
1940 Program of Annual Giving established. Undergraduate radio station (then WPRU, now WPRB) founded.
1948 Firestone Library dedicated.
1951 Forrestal Campus established on Route 1; "Project Matterhorn" research in nuclear fusion begins there. In 1961 its name is changed to the Princeton Plasma Physics Laboratory.
1962 $53 million fund-raising campaign, under President Robert Goheen, concludes. It exceeded its goal and raised $61 million.
1964 Ph.D. degree awarded to a woman for the first time.
1969 Trustees vote to admit women undergraduates.
1970 The Council of the Princeton University Community (CPUC), a deliberative body of faculty, students, staff, and alumni, is established.
1971 Third World Center founded.
1982 System of residential colleges established.
1986 A five-year "Campaign for Princeton" concludes under President William Bowen after raising $410.5 million.
1988 Harold T. Shapiro installed as 18th president of Princeton.

Contents

September 1990



A Princeton Timeline

1696 Town of Princeton settled.

1746 College of New Jersey founded in Elizabethtown, New Jersey, by the Presbyterian Synod. Jonathan Dickinson appointed first president.

1747 College moves to Newark under President Aaron Burr.

1748 Present charter granted in New Brunswick, New Jersey.

1753 Nathaniel and Sarah FitzRandolph and others deed 10 acres in Princeton to the College.

1756 Nassau Hall completed; College of New Jersey moves from Newark to Princeton.

1766 The Reverend John Witherspoon of Scotland elected president.

1769 American Whig Debating Society formed; Cliosophic Debating Society formed one year later.

1776 President Witherspoon signs the Declaration of Independence.

1777 George Washington drives the British from Nassau Hall.

1783 Continental Congress meets in Nassau Hall, which served as the capitol of the United States from June until November.

1826 James Madison, Class of 1771 and former president of the United States, becomes the first president of the Alumni Association of the College of New Jersey.

1868 James McCosh of Scotland elected president.

1876 The *Princetonian* is published for the first time. It is still published daily by students during the academic year.

1883 Triangle Club (originally called Princeton College Dramatic Association) is founded.

1888 The Princeton University Art Museum founded.

1893 Honor system established.

1896 Name officially changed to Princeton University.

1901 Graduate School established.

1902 T. Woodrow Wilson, Class of 1879, elected president of Princeton.

Gerald L. Parsky '64 (1991)
Pasadena, California
Attorney; Senior Partner, Gibson, Dunn & Crutcher

Nancy B. Peretsman '76 (1991)
New York, New York
Managing Director, Salomon Brothers, Inc.

Elizabeth Plater-Zyberk '72 (1991)
Coral Gables, Florida
Principal, Duany & Plater-Zyberk, Architects, Inc.; Professor, University of Miami

Robert H. Rawson, Jr. '66 (1999)
Shaker Heights, Ohio
Attorney; Cleveland Administrative Partner, Jones, Day, Reavis & Pogue

Cecilia Rey '88 (1992)
Larchmont, New York
District Director for Congresswoman Nita Lowey

John W. Rogers, Jr. '80 (1994)
Chicago, Illinois
President, Ariel Capital Management, Inc.

William D. Ruckelshaus '55 (1991)
Houston, Texas
Chair and CEO, Browning-Ferris Industries

John C. Sawhill '58 (1991)
Washington, D. C.
President and CEO, The Nature Conservancy

John H. Scully '66 (2000)
Ross, California
Partner, San Francisco Partners and Texas Partners

John J. F. Sherrerd '52 (2000)
Bryn Mawr, Pennsylvania
Partner, Miller, Anderson & Sherrerd

Daniel R. Toll '49 (1994)
Kenilworth, Illinois
Chair, Corona Corporation

John L. Weinberg '47 (1995)
Greenwich, Connecticut
Senior Chair, Goldman, Sachs & Company

About Princeton University

Chartered in 1746 as the College of New Jersey, Princeton was British North America's fourth college. First located in Elizabeth, then in Newark, the College moved to Princeton (approximately 55 miles from New York City and 45 miles from Philadelphia) in 1756. The College was housed in Nassau Hall, newly built on land donated by Nathaniel and Sarah FitzRandolph. Nassau Hall contained the entire College for nearly half a century.

The College was officially renamed Princeton University in 1896; the Graduate School was established in 1901.

Coeducational since 1969, Princeton enrolls about 6,200 students (4,550 undergraduates and 1,650 graduate students). The ratio of full-time students to faculty (in full-time equivalents) is eight to one.

Today, Princeton's main campus consists of more than 5.5 million square feet of space in 135 buildings on 600 acres. The University's nearby James Forrestal Campus consists of a million square feet of space in four building complexes on 340 acres.

The Borough and Township of Princeton in New Jersey's Mercer County have a combined population of 30,000. The University employs about 4,660 people, including approximately 900 faculty members. It is the single largest private employer in Mercer County.

The Undergraduate College

Program of Study

Princeton offers two bachelor's degrees: the bachelor of arts (A.B.) and the bachelor of science in engineering (B.S.E.). Within these degree programs, students can choose from among 55 departments and interdepartmental programs. They may also apply for an independent concentration outside of existing programs.

A.B. candidates take at least two courses in each of four areas: natural sciences; social sciences; arts and letters; and history, philosophy, and religion. They also meet a one-term writing requirement and demonstrate proficiency in a foreign language. A.B. students usually take four courses each semester during their freshman through junior years; during senior year they take three courses per semester.

Departmental requirements combine upper-level courses with independent work in both the junior and senior years. A senior thesis is required of all A.B. candidates.

Engineering students take at least seven courses in the humanities and social sciences in addition to satisfying the writing requirement and meeting the requirements in mathematics, physics, chemistry, and computer programming specified by the School of Engineering and Applied Science. Most B.S.E. candidates take nine courses a year for a total of 36 courses. All engineering departments offer upperclass students opportunities to pursue independent work in lieu of formal course work. In some departments, independent work or a senior thesis is required for completion of the B.S.E. degree.

Wilbur H. Gantz III '59 (1993)
Wilmette, Illinois
President, Baxter International, Inc.

William R. Hambrecht '57 (1992)
San Francisco, California
President and CEO, Hambrecht & Quist Group

Robert P. Hauptfuhrer '53 (1997)
Wayne, Pennsylvania
Chair and CEO, Oryx Energy Company

James A. Henderson '56 (1992)
Columbus, Indiana
President and Chief Operating Officer, Cummins Engine Company, Inc.

Patricia L. Irvin (1994)
New York, New York
Attorney; Partner, Milbank, Tweed, Hadley & McCloy

Juanita T. James '74 (1998)
Stamford, Connecticut
Vice president, Book of the Month Club

Virginia A. Kamsky '74 (1992)
New York, New York
President and CEO, Kamsky Associates, Inc.

John C. Kenefick '43 (1992)
Omaha, Nebraska
Retired Chair, Union Pacific Railroad Company

Galway Kinnell '48 (1992)
New York, New York
Poet; Professor of Arts and Sciences, New York University

Eric S. Lander '78 (1991)
Cambridge, Massachusetts
Associate Professor, Harvard Business School; Whitehead Fellow, Whitehead Institute

Thomas W. Langfitt '48 (1995)
Wynnewood, Pennsylvania
President and CEO, Glenmede Trust Company and Pew Charitable Trusts

John F. McGillicuddy '52 (1991)
Rye, New York
Chair and CEO, Manufacturers Hanover Trust Company

Jason D. McManus, GS'58 (1993)
New York, New York
Editor-in-Chief, Time Warner Inc.

Michele N. Parris '90 (1994)
Central Islip, New York
Writer

Trustees of the University

Ex Officio

President Harold T. Shapiro GS'64
Princeton, New Jersey

Governor James J. Florio
Princeton, New Jersey

Trustees

Date in parentheses refers to end of term as trustee

Thomas A. Barron '74 (1993)
Boulder, Colorado
Chair and CEO, Evergreen Management Corporation

John C. Beck '53 (1998)
Mount Kisco, New York
Senior Partner, Beck, Mack, & Oliver

Philip C. Bobbitt '71 (1994)
Washington, D.C.
Attorney, Office of the Legal Adviser, Department of State; Professor of Law, University of Texas

Julian T. Buxton, Jr. '50 (1992)
Charleston, South Carolina
Surgeon; Clinical Professor of Surgery, Medical University of South Carolina

Ronald E. Cape '53 (1993)
Oakland, California
Chair, Cetus Corporation

Edmund N. Carpenter II '43 (1991)
Wilmington, Delaware
Attorney; Director, Richards, Layton & Finger

W. Hodding Carter III '57 (1998)
Alexandria, Virginia
Journalist; President, Main Street Productions

Elgin R. Clemons, Jr. '89 (1993)
Little Rock, Arkansas
Legal Aide; Writer

Todd A. Cox '87 (1991)
Philadelphia, Pennsylvania
Student, University of Pennsylvania Law School

John C. Danforth '58 (1993)
Washington, D.C.
U.S. Senator, Missouri

Anthony B. Evnin '62 (1991)
Chappaqua, New York
General Partner, Venrock Associates

Richard B. Fisher '57 (1994)
Brooklyn, New York
President, Morgan Stanley Group, Inc.

Departments and Programs

Academic Departments

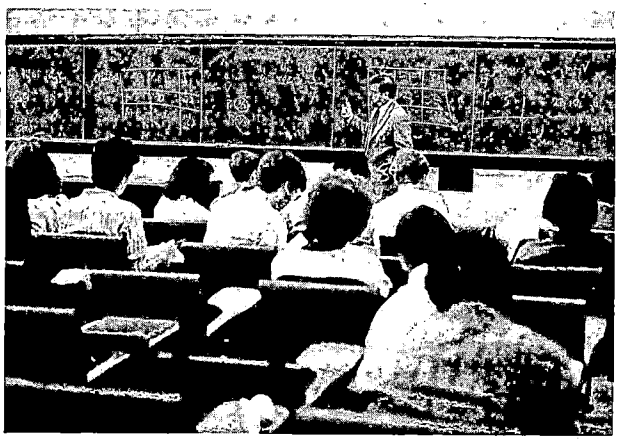
Undergraduates may concentrate their studies in the following fields:

Anthropology
Architecture
Art and Archaeology
Astrophysical Sciences
Chemical Engineering
Chemistry
Civil Engineering and Operations Research
Classics
Comparative Literature
Computer Science
East Asian Studies
Ecology and Evolutionary Biology
Economics
Electrical Engineering
English
Geological and Geophysical Sciences
Germanic Languages and Literatures
History
Mathematics
Mechanical and Aerospace Engineering
Molecular Biology
Music
Near Eastern Studies
Philosophy
Physics
Politics
Psychology
Public and International Affairs (Woodrow Wilson School)
Religion
Romance Languages and Literatures
Slavic Languages and Literatures
Sociology
Statistics

Interdepartmental Programs

Undergraduates may also receive certificates in these areas:

African Studies
Afro-American Studies
American Studies
Architecture and Engineering
Creative Writing
East Asian Studies
Engineering and Management Systems
Engineering Biology
Engineering Physics
European Cultural Studies
Geological Engineering
Hellenic Studies
Humanistic Studies
Latin American Studies
Linguistics
Near Eastern Studies
Russian Studies
Teacher Preparation
Theater and Dance
Visual Arts
Women's Studies



Areas of Concentration

Undergraduate concentration patterns have remained fairly constant over the years. Here, in descending order, are the 12 most popular areas of concentration for 1989-90:

Department	*Number of Concentrators*
History	285
Politics	256
English	249
Economics	164
Woodrow Wilson School (public and international affairs)	139
Biology*	127
Mechanical and Aerospace Engineering	89
Electrical Engineering	83
Civil Engineering and Operations Research	80
Psychology	77
Art and Archaeology	67
Religion	61

*Effective July 1, 1990, the Department of Biology split into two separate departments: the Department of Ecology and Evolutionary Biology and the Department of Molecular Biology.

Students in the Class of 1990 were given the choice of receiving their degrees in either biology or molecular biology.

Officers of the Corporation

Provost
Paul Benacerraf '52, GS'60

Vice-President for Finance and Administration
Richard R. Spies GS'72

Vice-President, General Counsel, and Secretary
Thomas H. Wright, Jr. '62

Vice-President for Development
Van Zandt Williams, Jr. '65

Vice-President for Public Affairs
Robert K. Durkee '69

Vice-President for Facilities
Eugene J. McPartland HC'54

Vice-President for Computing and Information Technology
Ira H. Fuchs

Vice-President for Human Resources
Audrey S. Smith

Treasurer
Raymond J. Clark

Masters of the Residential Colleges

Butler College
Frank P. Calaprice, Professor of Physics

Forbes College
John F. Wilson, Professor of Religion

Mathey College
Barrie S. H. Royce, Professor of Mechanical and Aerospace Engineering

Rockefeller College
Michael W. Jennings, Associate Professor Germanic Languages and Literatures

Wilson College
John V. Fleming GS'63, Professor of English

Officers of the University

President

Harold T. Shapiro GS'64

Academic Officers

Dean of the Faculty
Robert C. Gunning GS'55

Dean of the Graduate School
Theodore J. Ziolkowski

Dean of the College
Nancy Weiss Malkiel

Dean of Students
Eugene Y. Lowe, Jr. '71

Dean of Admission
Fred Hargadon

Chairman of the University Research Board
Sam B. Treiman

Dean of the Chapel
Joseph C. Williamson

Dean of the School of Engineering and Applied Science
Hisashi Kobayashi GS'67

Dean of the Woodrow Wilson School of Public and International Affairs
Donald E. Stokes '51

Dean of the School of Architecture
Ralph Lerner

Director of University Health Services
Louis A. Pyle, Jr. '41

Librarian
Donald W. Koepp

Registrar
C. Anthony Broh

Admission and Enrollment

Undergraduate admission at Princeton is extremely selective, as demonstrated by both the number of students applying for places in the freshman class (see the table on page 8), and by the qualifications of those admitted.

In 1989-90, there were 3,816 candidates for the A.B. degree and 708 for the B.S.E. degree. The largest number of students came from New York (691); New Jersey (621); California (394); Pennsylvania (332); Massachusetts (229); Maryland (227); Virginia (174); and Texas (168).

Approximate Undergraduate Enrollment, Fall 1990

	Number	*Percentage*
Total	4,551	
Men	2,676	59%
Women	1,875	41%
American minorities*	915	20%
Alumni children	728	16%
Foreign citizens	214	5%

*Includes black, Latino, Asian-American, and native American students

In recent years, approximately 86 percent of each entering class has graduated from Princeton within four years, and 93 percent of all undergraduates receive a degree from Princeton within five years.

Admission 1990: Class of 1994

(all percentages rounded)

	Applicants		Admitted		Enrolled		
	No.	*% of Total*	*No.*	*% of Applicants*	*No.*	*% of Admits*	*% of Class*
Total	12,652	—	2,129	17	1,175	55	—
Men	7,361	58	1,175	16	673	57	57
Women	5,291	42	954	18	502	53	43
Alumni children	447	4	205	46	155	76	13
Minority Students	3,568	28	631	18	281	45	24
International students*	1,276	10	142	11	78	55	7

**Includes Canadians*

SATs/Achievement Tests**

Middle 50 percent of Verbal SAT, Mathematics SAT, and three highest Achievement Tests. For example, 25 percent of the applicants had Verbal scores below 55; 50 percent had Verbal scores between 55 and 67; 25 percent had Verbal scores above 67.

	Applicants	*Admits*	*Enrollees*
Verbal (Highest)	55–67	61–71	60–70
Math (Highest)	64–74	66–75	66–75
Achievements	60–70	65–74	64–73

** For a number of years now, College Board scores have been reported in two digit numbers, for example, V 55 rather than V 550. When discussing a student's results, it is not uncommon to refer to them as if the last zero were there.

Fund Raising

As Princeton approaches the 250th anniversary of its founding, the University continues a long tradition of educational revitalization and renewal. Fund raising is an essential part of that tradition because it makes innovation and continued academic leadership possible.

Annual Giving. At the heart of Princeton's fund-raising effort is Annual Giving, which contributes 10 percent of the University's overall budget for educational and general expenses. Annual Giving is thus Princeton's margin of excellence—and absolutely crucial to sustaining the quality of the University. The unrestricted, spendable funds it raises are particularly useful because of their flexibility; the president and trustees may apply them wherever the need is greatest. Throughout its history, Annual Giving has raised nearly $230 million for Princeton. In 1989-90, it set an all-time record, raising $18,605,030 for the University.

Annual Giving is entirely a volunteer effort, supported by alumni, parents, and friends of the University. This is the 51st anniversary year for Annual Giving.

Capital Giving. Capital giving shapes the future of the University. Princeton works to preserve its unique qualities while responding to the growth of knowledge and a changing environment in a thoughtful and selective way. One of the smallest of the nation's research universities, Princeton maintains a balance between the spirit of a small liberal arts college and the demands made by a position of international leadership in scholarship and education. Current capital fund-raising priorities include new life science and engineering facilities and endowment for faculty positions, library materials, graduate fellowships, and undergraduate financial aid.

The Endowment

Princeton's endowment is the third largest in the country, with a value of $2.7 billion as of May 31, 1990. (Harvard has approximately $5.2 billion in endowment funds; the University of Texas has approximately $3.7 billion.) The endowment is invested primarily in stocks and bonds but also includes real estate, venture capital and other specialized asset pools, and the University's various loan funds.

Princeton's portfolio has historically experienced solid returns. The total return on Princeton's endowment—defined as "dividends and interest on portfolio holdings plus or minus capital appreciation or depreciation"—was equivalent to 15.6 percent per year over the 12-year, six-month period ending May 31, 1990.

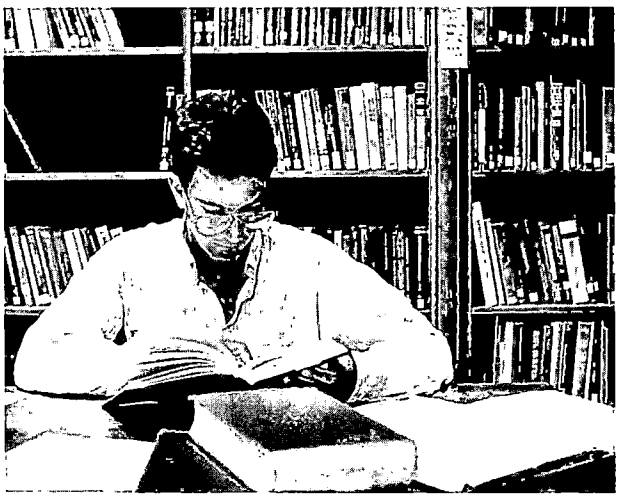
Awards and Scholarships

Princeton students do very well in national scholarship and fellowship competitions. During the past 13 years, 34 Princeton undergraduates have been Rhodes Scholars, representing 8 percent of all Rhodes Scholars chosen throughout the United States in that period.

The table below lists eight of the award programs open to seniors, and shows the number of Princetonians who have won these scholarships over the past five years.

	Awarded nationally	*85-86*	*86-87*	*87-88*	*88-89*	*89-90*
Churchill	10	0	1	1	0	1
DAAD*	—	3	2	2	3	2
Fulbright	—	14	13	8	9	9
Marshall	30	3	3	6	3	1
Mellon	100–125	5	9	6	10	6
NSF*	600	27	27	37	27	41
Rhodes	32	4	2	3	0	4

*Deutscher Akademischer Austauschdienst
*National Science Foundation



Costs and Financial Aid

Here is what it costs for an undergraduate to study at Princeton in 1990-91 (excluding books, personal expenses, and transportation):

Tuition	$15,440
Room	2,283
Board	2,775
Total	$20,498

Students applying for financial aid help pay for their education by working in the summer and during the school year (contributing a minimum of $2,780 in 1990-91) and by taking out loans (typically $2,920) offered at favorable terms. Princeton then provides scholarships to fill any gap between a student's expenses and the amount a student and his or her parents are able to contribute.

The size of the parental contribution is determined with the help of a formula developed by the College Scholarship Service and used by all Ivy Group schools.

Princeton's Financial Aid Budget, 1990-91

Number of undergraduates receiving financial aid	40%	1,800
Median family income of students receiving aid		$53,900
Total scholarship budget		$16,760,000
Provided by the University	80%	
Endowed scholarships		12,080,000
General funds		930,000
Yearly gifts to the scholarship program		340,,000
Provided by government	12%	1,940,000
Provided by outside organizations	8%	1,470,000
Amount borrowed by financial aid students		$4,800,000
Earnings of financial aid students		$1,700,000

Finances

Operating Budget

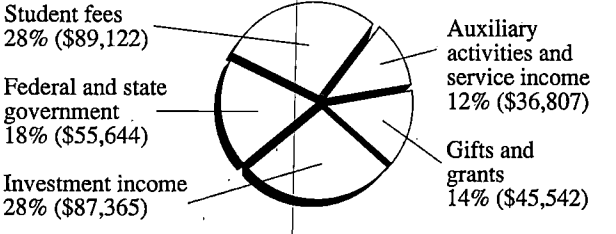
1989-90	$408,500,000
1990-91 (projected)	426,816,000

The total operating budget for 1990–91 includes projections of $90–100 million for sponsored research at the Princeton Plasma Physics Laboratory. This amount represents 22-25 percent of the University's overall budget.

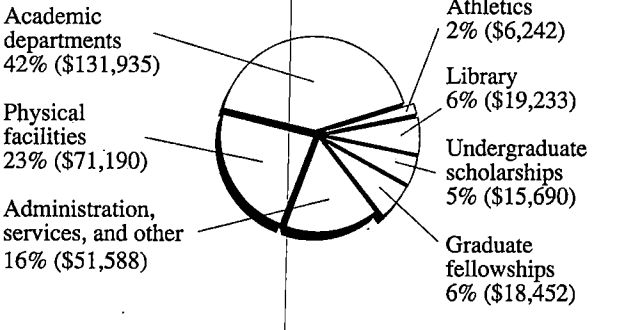
Income and Expenditures, 1989-90

(Excluding Plasma Physics Laboratory)

Income *(in thousands)*



Expenditures *(in thousands)*



The Art Museum

The Princeton University Art Museum is used extensively as a teaching resource. Its collections and exhibitions include artifacts of the ancient world (including rare pre-Columbian, classical, and Far Eastern objects); paintings and sculpture of the Renaissance, modern Europe, and America; a collection of outdoor sculpture displayed throughout the campus; and important collections of prints, drawings, and photographs.

Renovations include the Mitchell Wolfson Jr., Class of 1963, Wing (27,187 square feet); a photography study center; a new conservation studio; open study/storage in ancient art; facilities for the disabled; and an enlarged shop and information area.

Computing and Information Technology

Princeton offers a wide variety of computing resources, including a large IBM mainframe, a general-use Unix system, specialized workstations, and various microcomputers.

TigerNet, a broadband communications system, connects most of the University's buildings. Through TigerNet, students, faculty, and staff can gain access to the library's online catalog and to Princeton News Network (PNN), the campus public information service. Via TigerNet, members of the University community can reach information resources around the campus and throughout the world.

Public clusters of Apple Macintoshes and IBM PCs, also connected to TigerNet, are located throughout the campus. Specialized campus workstations include Silicon Graphics, personal IRIS workstations, and Sun scientific SPARCstations.

A Microcomputer Distribution Center (MDC) makes personal microcomputer packages available to students, faculty, and staff members at advantageous prices.

Student Life

All freshmen and sophomores at Princeton live and dine in five residential colleges: Butler, Forbes, Mathey, Rockefeller, and Wilson. Each college consists of a cluster of dormitories (housing between 450 and 500 students) and a dining and social center. The colleges have libraries and study spaces, game rooms, offices, seminar rooms, coffee houses, theaters, and computer clusters.

A senior faculty member serves as master of each college. Each college also has a staff that includes a director of studies responsible for academic advising, a college administrator, two assistant masters, a resident faculty member, faculty fellows, about a dozen juniors and seniors who serve as resident advisers, and three juniors and seniors who serve as minority affairs advisers.

More than 97 percent of Princeton undergraduates live on campus. Around 75 percent of juniors and seniors take their meals at one of 13 private eating clubs. Eight of these clubs are open to all students on a sign-in basis. Five clubs are selective.

Other juniors and seniors cook their own meals in dormitory kitchens, dine in the residential colleges, or join Stevenson Hall, a dining and social facility that, like the residential colleges, has a staff and faculty fellows and plans social and cultural activities. It also has a kosher dining room open to all students.

The Third World Center, the Women's Center, and the International Center are also important resources and gathering places for Princeton students. In addition, the University sponsors more than 200 student organizations and 40 student-run, on-campus business agencies.

Athletics

In 1989-90, roughly 1,850 men and women (41 percent of the student body) participated in intercollegiate (varsity and club) sports on 58 teams and crews. In addition, nearly 550 teams played in approximately 3,000 contests within the intramural program, which includes teams from residential colleges, eating clubs, and various campus organizations. About 60 percent of the student population is involved in the intramural program.

Men compete in 18 varsity sports at Princeton; women in 15. Varsity and club teams have a history of excellence. The University is one of eight members of the Ivy League; based on the final Ivy League standings in 33 sports last year, Princeton varsity teams had the highest average finish of any Ivy school for the fourth consecutive year.

Men's teams topped the Ivy League for the fifth straight year in 1989-90. Their overall strength was boosted by five Ivy championships—basketball, football, swimming, outdoor track and field, and volleyball.

Women's varsity teams finished third in the composite Ivy standings. Their performance was bolstered by three Ivy titles —crew, swimming, and tennis. The crew team ended an outstanding season by capturing the Women's National Collegiate Rowing Championship in Madison, Wisconsin in June.

The University's athletic facilities have few rivals. Palmer Stadium, the nation's second-oldest football stadium, has hosted numerous world-class track and field meets as well as the 1981 NCAA Division I Men's Lacrosse Championship. Last year, Palmer Stadium was the site of the NCAA Women's Lacrosse Championship.

The multifunctional Jadwin Gymnasium, with a quarter of a million feet of indoor space, is the home venue for 11 teams and has hosted national championships for wrestling, fencing, and squash.

Lake Carnegie features a 2,000-meter rowing course that has served as the site of the U.S. Olympic trials.

DeNunzio Pool, completed last spring, is one of the top swimming and diving facilities in the east.

Other athletic facilities include Baker Rink (ice hockey), Dillon Gym (volleyball and gymnastics), Clarke Field (baseball), 1895 Field (softball), and 10 multipurpose fields.

Central Educational Resources

The Library

Princeton's library system consists of the Harvey S. Firestone Memorial Library, which houses the largest portion of Princeton's collection, and 22 special libraries, including 15 academic department collections. The libraries contain more than 4 million books and artifacts and 33,000 periodicals.

Princeton's library system has the largest per student/per year circulation of books among American research universities. Last year the average student borrowed 113 books.

Library expenditures for 1989-90 were approximately $18 million. The budget for 1990-91 is estimated at $19 million, which includes more than $6 million for acquisitions.

Scholarship and Research

Scholarship and research are essential to the University's enterprise. Every member of the faculty is engaged in scholarly research; each year the members of the faculty publish more than 2,000 scholarly documents. In addition, graduate students and upperclass undergraduates pursue independent research.

One indication of the University's commitment to research is the large number of externally supported projects undertaken at Princeton. External sources funded more than 980 separate projects in 1989-90 (not including the Plasma Physics Laboratory). Approximately 500 of these sponsored projects were in the natural sciences; 300 were in engineering and applied sciences; 140 were in the humanities and social sciences; and 40 were in inter- and nondepartmental programs. Funding for these projects totaled $64 million—79 percent from the government, 9 percent from industry, 8 percent from foundations, and 4 percent from other sources.

Princeton Plasma Physics Laboratory

The Princeton Plasma Physics Laboratory (PPPL) is located on the James Forrestal Campus on U.S. Route 1. In operation since 1951, PPPL is engaged in long-term development of magnetic fusion as a safe, economical, and environmentally acceptable method of generating electricity. It is supported by the U.S. Department of Energy.

The Tokamak Fusion Test Reactor at PPPL is the largest magnetic fusion device in the United States. A more advanced follow-up experiment, the Compact Ignition Tokamak, is being considered by the Department of Energy for construction at the Plasma Physics Laboratory during the mid-1990s.

The laboratory has approximately 880 full-time employees. The budget for research at PPPL in 1989-90 was $94.3 million.

ROTC

There is an Army Reserve Officer Training Corps (ROTC) program at Princeton that prepares men and women to be officers in the active Army, the Army Reserve, or the National Guard. In 1989-90, 75 men and 7 women were enrolled as full participants in the Army ROTC Program at Princeton. Three-quarters of them benefited from ROTC scholarships worth approximately $14,000 per year. Rutgers University permits Princeton students to enroll in its Air Force ROTC program; 20 men and 4 women were enrolled as cadets in that program in 1989-90.

Seniors' Plans

Each spring the Office of Career Services asks the senior class what they plan to do after graduation. According to that survey, approximately one-third of the Class of 1990 went right to work—nearly 23 percent of the Class had accepted job offers; six percent were considering offers, and four percent believed an offer was forthcoming. Approximately 29 percent of the Class indicated they would continue their education immediately after graduation: 10 percent in graduate school in the arts and sciences, 6 percent in medical school, 8 percent in law school, and 5 percent in divinity school, business school, or other professional schools. Many in the Class said they plan to continue their education in the future.

Alumni

There are more than 63,000 living Princeton alumni, including 8,750 women and 16,000 Graduate School alumni.

Princeton graduates live in all 50 states and 117 foreign countries. The states with the most Princeton alumni are, in descending order: New York, New Jersey, California, Pennsylvania, Massachusetts, Maryland, Connecticut, Florida, Virginia, and Illinois.

There are 126 Princeton alumni clubs and organizations throughout the world. The Alumni Association, to which all alumni belong, was established in 1826. It meets twice each year, on Alumni Day in February and at reunions in June.

Two U.S. presidents were Princeton alumni—James Madison, Class of 1771, and Woodrow Wilson, Class of 1879.

The Graduate School

The Graduate School, established in 1901, enrolls approximately 1,770 students in 37 departments and programs. By history and design it is relatively small, and has traditionally emphasized Ph.D. programs in the arts, sciences, and engineering. In 1989-90, Princeton awarded 240 Ph.D.'s and 331 master's degrees. Princeton University has no business, law, or medical school.

Thirty-three percent of the Graduate School's students are female, 34 percent are citizens of foreign countries, and 9 percent are members of U.S. minority groups. The approximate enrollment of graduate degree candidates by academic division for 1989-90 is given below.

Division	*Number*	
Humanities	355	20%
Social sciences	266	15%
Natural sciences and mathematics	542	31%
School of Engineering and Applied Science	364	21%
School of Architecture	61	3%
Woodrow Wilson School of Public and International Affairs	182	10%
Total	1,770	

Additional laboratories are located at the James Forrestal Campus.

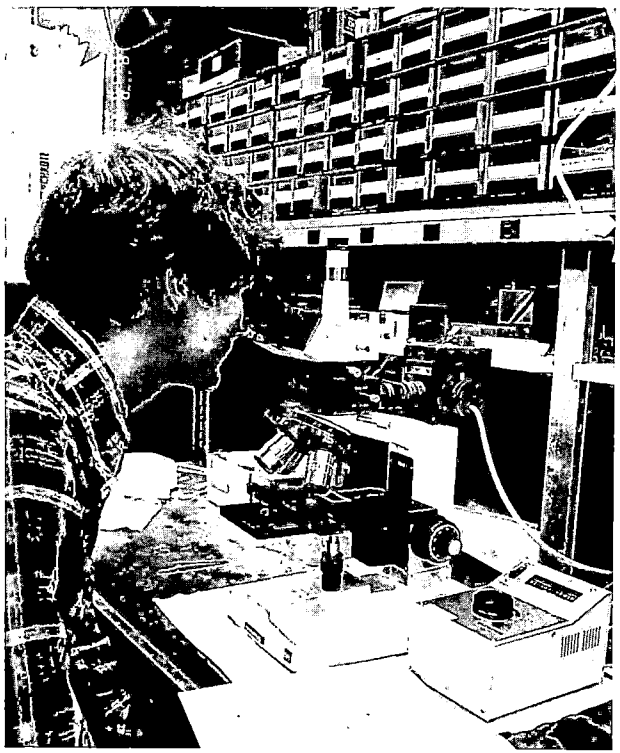
In spring 1990, 677 engineering undergraduates and 364 graduate students were enrolled. Ninety-nine faculty members serve the five departments of the school: chemical engineering, civil engineering and operations research, electrical engineering, mechanical and aerospace engineering, and computer science, which offers an A.B. as well as a B.S.E. degree.

Interdepartmental programs directed through the engineering school include energy and environmental studies, architecture and engineering, engineering and management systems, engineering physics, engineering biology, geological engineering, robotics and intelligent systems, transportation, plasma physics, fusion technology, and statistics and operations research, among others.

Eighteen engineering faculty members have received the NSF Presidential Young Investigator Award since its inception in 1984. Total engineering research expenditures for 1990 were above $23 million. New research initiatives by engineering faculty include the development of programs in photonics and opto-electronic materials, materials science, earthquake engineering, discrete mathematics, and theoretical computer science.

The School of Engineering and Applied Science

Engineering study at Princeton University dates back to 1875 when a professor was appointed and a course of study designed for civil engineering. The School of Engineering and Applied Science was established in 1921, and moved to its present home, the Engineering Quadrangle, in 1962. A new Computer Science Building opened in 1989. The two facilities offer students, researchers, and faculty members access to 92 laboratories, 18 classrooms, two specially equipped rooms for lecture demonstrations, and a new auditorium. The Engineering Library holds more than 200,000 volumes and an extensive microfiche collection.



Admission to the Graduate School is highly competitive. There were 5,646 applications for 1990-91; 1,040 of the applicants were admitted, and 486 accepted the offer of admission.

The Graduate School enrolls the third largest number of Mellon Fellows in the Humanities and the sixth largest number of National Science Foundation Fellows in the country. It is one of only seven institutions offering Whiting Fellowships, and it administers a number of National Institutes of Health traineeships and area studies fellowships.

Most degree candidates receive financial support, often from some combination of University fellowships, assistantships in research or teaching, loans, work-study, and non-University awards.

The average time from matriculation to receiving a Ph.D. at Princeton is five years, five months. This figure compares very favorably to the national average of six years, eleven months.

The Faculty

In 1989-90 the faculty (including visitors and part-time faculty) totaled 1,016, including 376 professors, 59 associate professors, 193 assistant professors, 16 instructors, 248 lecturers, and 124 visitors.

Sixty-nine percent of the professorial faculty is tenured. Of the 628 members of the professorial faculty, excluding visitors, 184 are women and 89 are identified as members of minority groups. There are 43 tenured women on the faculty this year.

Approximately half of Princeton's tenured faculty members were promoted to tenure while they were at Princeton; the other half were hired with tenure from other institutions.

All faculty members at Princeton are expected to teach as well as to engage in scholarly research. The preceptorial system, introduced by Woodrow Wilson in 1905, makes faculty particularly accessible to students. "Precepts" are small classes in the humanities and social sciences in which a faculty member and a small group of students exchange ideas and explore subjects in depth. Faculty members also work closely with students in seminars (including the five-year-old program of freshmen seminars and the two-year-old program of senior seminars) and in the supervision of junior year independent work and senior theses.

Four members of the Princeton faculty are recipients of the Nobel Prize: Eugene Wigner, Thomas D. Jones Professor of Mathematical Physics Emeritus, won the Nobel Prize in Physics in 1963; Philip W. Anderson, Joseph Henry Professor of Physics, won the Nobel Prize in Physics in 1977; Sir W. Arthur Lewis, James S. McDonnell Distinguished University Professor of Economics and International Affairs Emeritus, received the Nobel Memorial Prize in economic science in 1979; and Val L. Fitch, James S. McDonnell Distinguished University Professor of Physics, won a Nobel Prize in Physics in 1980. Twelve faculty members have been named MacArthur Fellows.

Since 1984, Princeton faculty members in engineering, natural sciences, and social sciences have won 37 Presidential Young Investigator awards given by the National Science Foundation.

In 1988-89, five faculty members received Sloan Research Fellowships in economics, electrical engineering, physics, and mathematics. Eight members of the faculty received fellowships from the John Simon Guggenheim Memorial Foundation. The Guggenheim Fellows, from the departments of politics, mathematics, history, computer science, music, chemistry, and the humanities council, were appointed on the basis of unusually distinguished past achievement and exceptional promise for future accomplishment.

What will studying economics prepare me for?

About one-quarter of the concentrators in economics choose to continue their education immediately after graduation. Some of these students attend graduate school in economics, but the majority enroll in law school or business school. Increasingly, however, business schools prefer students with previous business experience; many Princeton graduates who will ultimately attend business school choose to work after leaving the University.

Overall, in recent years from two-thirds to three-quarters of Princeton economics students have gone directly into the work place. The most popular fields have been investment banking, accounting, commercial banking, and financial services.

The Program in Political Economy

Political economy is a cross-disciplinary field for students who wish to further their understanding of social phenomena and individual behavior. The program functions somewhat like a joint major in economics and politics.

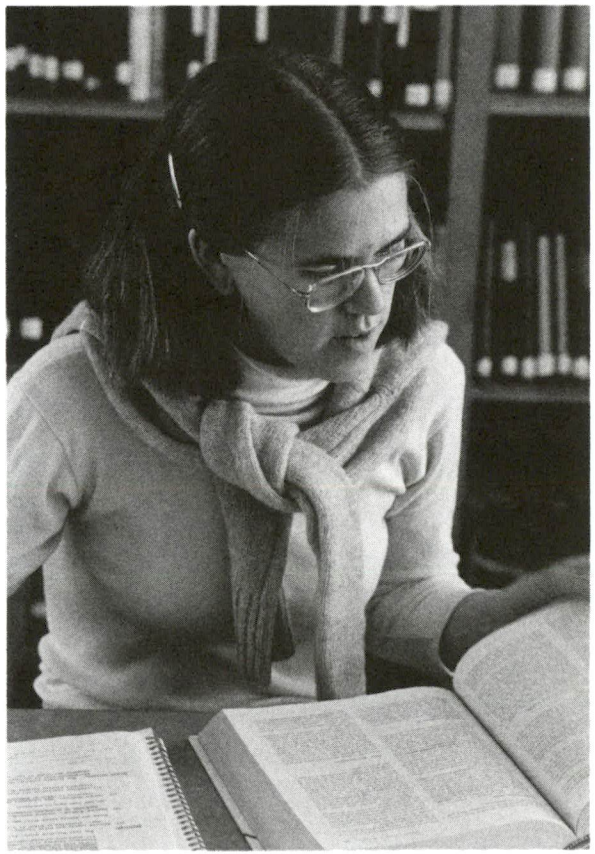
One semester of junior independent work must be done through each department. Participants from the economics department must complete the prerequisites of both departments and take a minimum of five economics courses and three politics courses. The ratio of politics courses to economics courses is reversed for participants from the politics department.

A senior thesis is required and the topic should be genuinely cross-disciplinary. Senior theses are formally supervised by a member of the economics department.

Graduates receive a joint letter from the two departments certifying successful completion of the program.

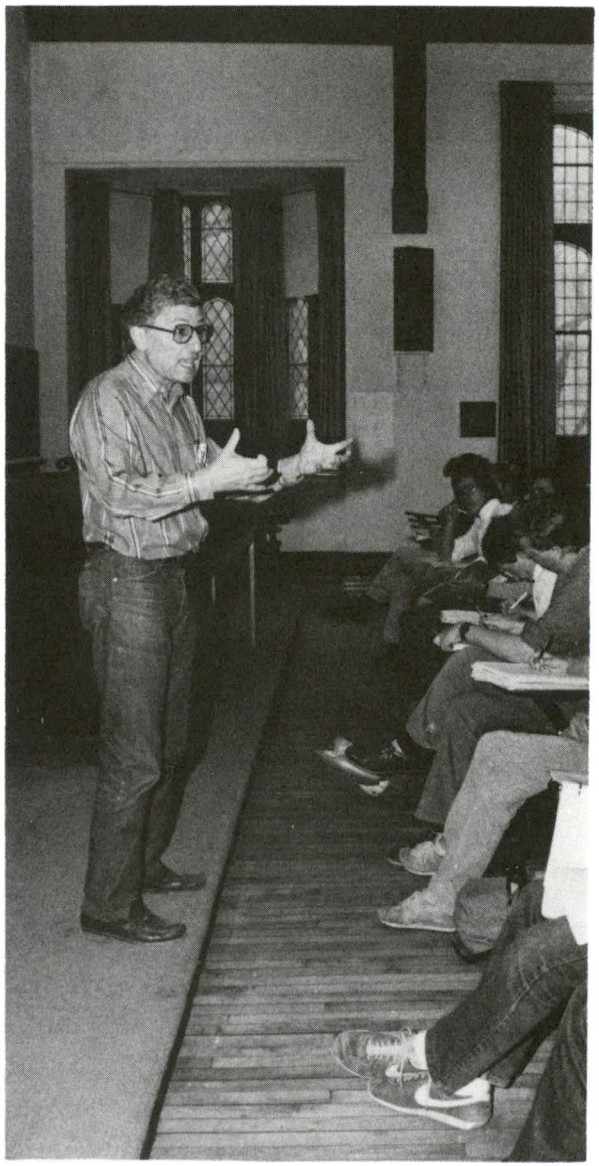
Whom can I contact for more information?

If you have any questions about Princeton's economics department, please write to the Departmental Representative, Department of Economics, Princeton University, Princeton, New Jersey 08544.



Princeton University

Economics at Princeton



Economics is the study of the production and distribution of goods and services to determine what is produced, how it is produced, and for whom. The scarcity of economic goods and services and the resources necessary to produce them makes it important to satisfy efficiently and fairly the economic needs of society.

Economic questions are studied at both the level of the individual household and firm (microeconomics) and at the aggregate level (macroeconomics). Courses are offered in both economic theory and in applied fields such as labor economics and money and banking. Undergraduate courses are available at the introductory and advanced levels. Some undergraduates also enroll in graduate courses.

The Department of Economics at Princeton has a worldwide reputation for outstanding teaching and research. According to the 1982 Jones-Lindzey survey of graduate school facilities and programs, the department now ranks among the top five in the nation. During the past few years, various members of the department have received public recognition of their distinction (including a Nobel Prize), have served as president of the American Economic Association, and have held high economic policy positions in government.

There are approximately forty full-time economics faculty members including department members with joint appointments in the Woodrow Wilson School of Public and International Affairs, the Office of Population Research, and the Mathematics Department.

Students have an unusual degree of access to the faculty, and nearly all faculty members teach at both the undergraduate and graduate levels. The faculty is also actively involved in government service, editorial positions on important academic publications, and consulting positions with business and international organizations.

The research activities of the faculty are unusually integrated with the teaching program. Special programs and research groups that function within the framework of the department include the Financial Research Center; the Econometric Research Program; the Industrial Relations Section; the International Finance Section; the Office of Population Research; and the Research Program in Economic Development.

Students are welcome to attend the research seminar series of these groups and may make use of their specialized resources while pursuing independent projects. The department also participates in various University programs carried out in cooperation with other departments; the Program in Political Economy is an example.

Which courses will I take?

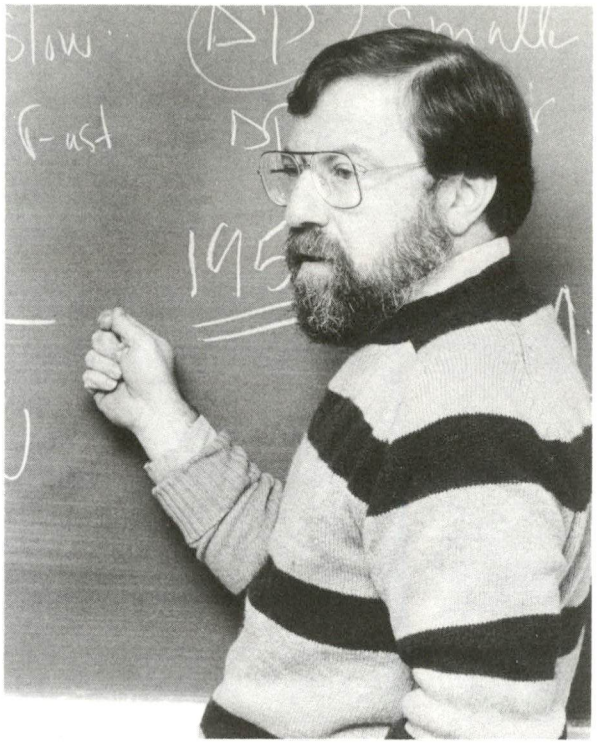
Economics 101 and *102*, a two-semester introductory sequence in macroeconomics and microeconomics, are the principal requirements for taking further courses in economics and for entry into the department. An overwhelming majority of undergraduates take these courses, whether or not they plan to take more economics courses or to concentrate in economics. *Economics 101* and *102* are commonly taken in the freshman year and may be taken in any order.

Economics concentrators are required to take a minimum of eight (and a maximum of twelve) economics courses beyond *Economics 101* and *102* as well as the prescribed independent research projects; these courses must be taken for graded credit. Intermediate macroeconomics and microeconomics are specifically required. These courses are offered in both nonmathematical and mathematical versions (*Economics 301* and *304* for macroeconomics and *Economics 302* and *305* for microeconomics).

Beyond intermediate microecomonics and macroeconomics and econometrics, concentrators are free to fulfill the eight-course requirement according to their own desires for further economic theory or applied courses. Some of the department's courses in applied economics include *Industrial Organization, Urban Economics, Corporation Finance, Economic Growth in Less Developed Countries, Public Finance, Money and Banking, The Development and Use of Accounting Data, Analyses of Capitalism,* and *Soviet-Type Economies.*

Concentrators may also fulfill the eight-course requirement with graduate level courses or acceptable "cognates" (related courses) in other departments. Prior permission of the department is required to pursue these options.

Prospective economics concentrators should be aware that the department makes substantial use of mathematical techniques in its teaching, in line with the general trend in economic methodology. At present, no mathematics beyond the level of regular algebra is required, but knowledge of calculus (at the level of *Mathematics 102* or *103*) is highly recommended for economics concentrators. Linear algebra (at the level of *Mathematics 201*) is



required for several courses in the department, and students who wish to pursue advanced study in economics and related fields are urged to achieve at least this level of mathematical training.

What does independent work involve?

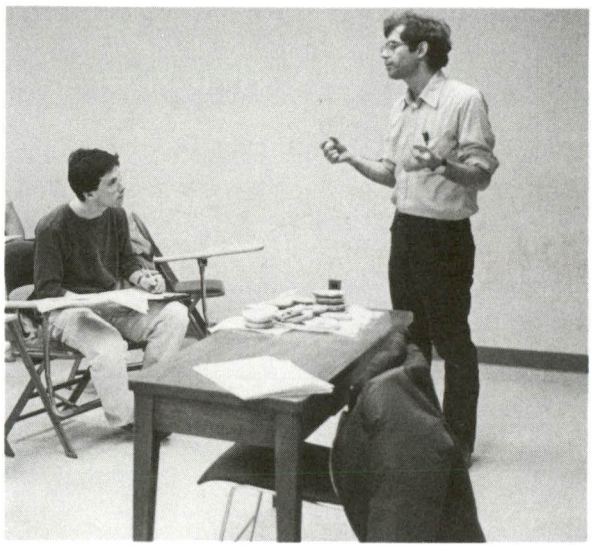
Independent work permits students to develop skills in logical, precise exposition and to carry out a critical analysis of problems using the principles of economics. Juniors must write two research papers under the supervision of faculty advisers; seniors prepare a thesis. Passing grades on the junior independent work and the senior thesis are required for graduation.

Junior independent work during the fall semester guides students through a research topic; key parts of this exercise are geared toward instruction in writing, organization, and research. Traditionally, the department selects the general topic of welfare economics—the analysis of the social desirability of alternative allocations of resources. The paper in welfare economics is approximately fifteen pages in length. It can focus on a specific area chosen by the student or on an area suggested by the adviser.

The second-semester research paper allows more freedom and further promotes independent research. Many students use this paper as an opportunity to do initial investigation for the senior thesis. A short thesis proposal, between one and five pages in length, is submitted to the adviser.

The senior thesis is a project that encourages serious, meaningful contributions to the field. The thesis involves research throughout the senior year, and many students consider it the most important and satisfying component of their undergraduate education. The requirement of a senior thesis for *all* concentrators is a special feature of the Princeton program. The level of achievement in the senior thesis can be extremely high, and a number of theses have been published in past years.

Titles of recent senior thesis projects include "Assessing the Performance of a Model of Trade Union Behavior," "The Effects of Sectoral Employment Composition on Recession Performance—an Empirical Study," "The Total Costs of Nuclear Energy: An Economic Analysis of the Current Debate," "An Analysis of the National Hockey League Labor Market," "An Economic Account of Racial Discrimination in the Labor Market, 1948-1982," "A Study of Brand Loyalty in the Computer Industry," "The Economic Viability of Synthetic Fuels," and "The Economics of Interstate Banking."



What special facilities are available?

Firestone Library and its twenty satellite libraries offer students access to three million printed works, five million manuscripts, and thirty thousand journals. The new Social Science Reference Center at Firestone houses the five separate collections listed below.

►*The Pliny Fisk Library of Economics and Finance* contains materials dealing with economic conditions, banking, international trade, business, finance, and statistics.

►*The Documents Collection* stores current United States government documents beginning chiefly with 1979 imprints and the Ninety-sixth Congress.

►*The Industrial Relations Library* contains information on labor-management relations, unions, personnel administration, manpower utilization, and social insurance programs.

►*The Public Administration Collection* includes publications of New Jersey government documents, administration of justice, comparative politics, elections, political parties, public opinion, urban affairs, and court reports.

►*The United Nations Collection* is the official depository collection of the publications of the United Nations and its specialized agencies.

The library of the Woodrow Wilson School of Public and International Affairs specializes in materials on current issues. A small departmental library in Dickinson Hall contains journals and current working papers.

The Princeton Computer Center offers noncredit instruction. Courses in econometrics provide specific guidance in the use of the computer in economics, and students are encouraged to make use of the computer in pursuing their independent research. Free computer time for this purpose is provided by both the Computer Center and the economics department. The department also has some funding to support other research expenses for concentrators.

Qualified students may apply to foreign schools of economics such as the London School of Economics and the Institut d'Etudes Politiques (Paris) for study away from Princeton, usually during the junior year. The departmental representative helps students plan these programs so that some of the work done abroad can be credited toward Princeton's Bachelor of Arts degree.

EXCERPTS FROM

Wit & Wisdom of Woodrow Wilson on Education

SELECTIONS BY

William McCleery

FROM

The Papers of Woodrow Wilson

ILLUSTRATIONS

EXCERPTS FROM

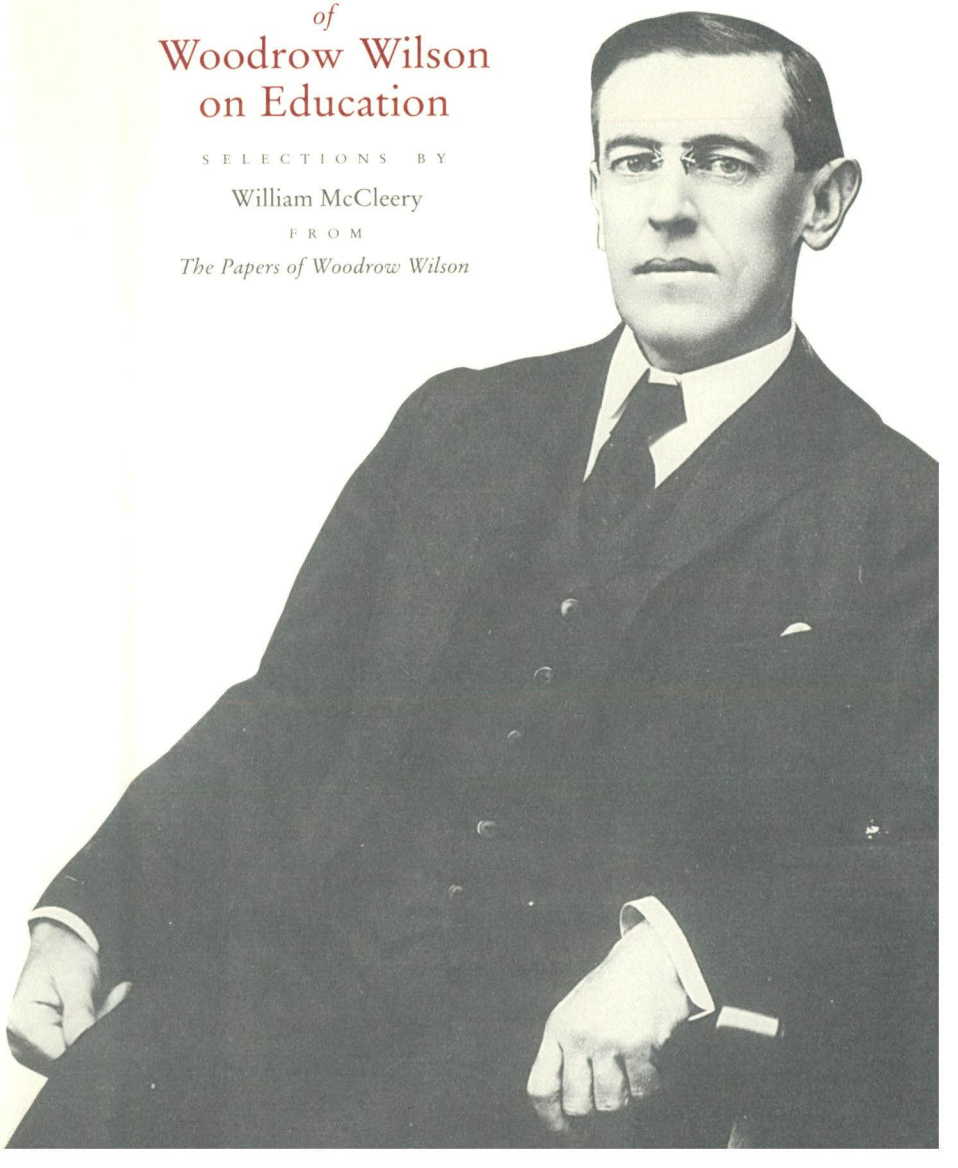
Wit & Wisdom *of* Woodrow Wilson on Education

SELECTIONS BY

William McCleery

FROM

The Papers of Woodrow Wilson



PUBLISHED BY
the Office of Communications/Publications
Stanhope Hall
Princeton University

DESIGNED AND ILLUSTRATED BY
Laurel Masten Cantor

CONCEPT FOR THE BOOK SERIES
DEVELOPED BY
Mary Jane Lydenberg
Annual Giving

TYPESET AND PRINTED BY
the Office of University Printing Services
Princeton University

ABOUT WILLIAM McCLEERY

As a playwright he is the author of 10 professionally produced and published full-length plays including two that made it to Broadway. He taught a playwriting workshop at Princeton from 1966 until his retirement in 1977.

As a journalist Mr. McCleery has been a reporter on the *Omaha World Herald* and in the Washington bureau of the Associated Press; executive editor of the AP Feature Service in New York; on the staff of *Life*; Sunday editor of the New York newspaper *PM*; fiction editor of the *Ladies Home Journal*; editor of *University: A Princeton Quarterly.*

His children's book *Wolf Story* was published by Knopf in 1947, republished by Simon & Schuster in 1962, and again by the Shoe String Press in 1988.

He is still working on *Wit & Wisdom* and, over the last year or so, has "played" Wilson in a 30-minute stand-up version of the book before University, alumni, and church groups and the Nassau Club of Princeton.

PREFACE

Many of the scholars I interviewed for the 1986 book *Conversations on the Character of Princeton* told me that Woodrow Wilson as president of the University (from 1902 to 1910) had had a deep and lasting effect on Princeton—and also on American education in general at all levels—but that his contributions as an educator had been largely washed out of the public mind, and out of the history books, by the waves he made as a controversial president of the United States. I was also told some stories that made him out to be much warmer, wittier, and less austere than I had supposed.

One story was about Wilson after Princeton. He was always a great one for doing things for himself, so when the phone rang in the White House one evening he picked it up. The caller identified himself as a loyal New York machine Democrat and said, "Mr. President, the collector of the Port of New York died this afternoon, and I wonder if I might take his place." "Well," said Wilson, "if you can arrange it with the undertaker it's all right with me." (I have since heard that story told of Abraham Lincoln, but I did hear it of Wilson—from, as I recall, a historian.)

I also liked what he said when, after soliciting Andrew Carnegie for a large cash gift to Princeton, he got instead the lake that bears Carnegie's name: "I asked for bread and he gave me water."

When he lost an acrimonious battle to establish colleges, or quadrangles, on the Princeton campus, he told a friend, "I didn't get the quads, but I got the wrangles."

When asked how long it would take him to prepare a five-minute talk, Wilson said "About two weeks." A ten-minute talk? "One week." A two-hour talk? "I am ready now!"

It struck me that a man with that much wit and humor, who was also a distinguished historian and creative educator, had probably said some things about education in his time that would be usefully and pleasurably readable today.

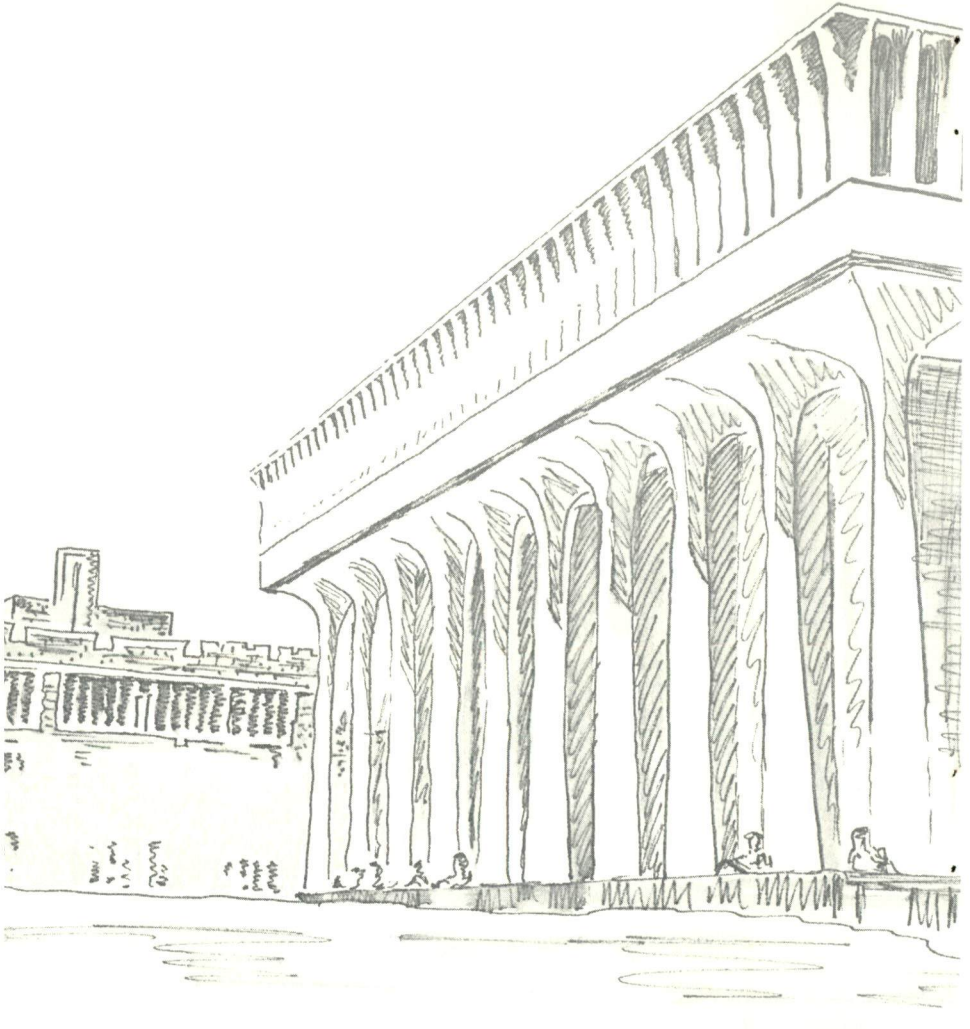
Might it not be a good idea, given the current concern about American education, to read through everything Wilson had said on that subject during his years as a history professor at Johns Hopkins, Bryn Mawr, Wesleyan, and Princeton, and then as president of Princeton, and pick out the best — wisest, wittiest, most relevant — of his remarks and arrange them in a small anthology?

I asked my friend Professor Arthur S. Link, editor of *The Papers of Woodrow Wilson,* if anyone had ever done this. No, he said, not to his knowledge. I figured he would know. Was it a good idea? Yes, he thought it was. So I did it. Following are excerpts from the book I'm calling *Wit & Wisdom of Woodrow Wilson on Education.* They shed a good deal of light on Princeton's educational philosophy today.

ABOUT WOODROW WILSON

Thomas Woodrow Wilson (1856–1924), son of a Virginia clergyman, graduated from Princeton in 1879, studied law at the University of Virginia, and practiced briefly in Atlanta. Disillusioned by the tedium and materialism of damage suits, he decided to become an academic and did graduate work at Johns Hopkins University. Later he taught at Bryn Mawr College and Wesleyan University before returning to Princeton in 1890. At the University's sesquicentennial celebration in 1896 he delivered his famous address "Princeton in the Nation's Service."

"Year in and year out he was voted the most popular teacher on the faculty; he was also a friend and counselor to numberless students who worshipped him for his warmth and highmindedness," writes Arthur S. Link in *A Princeton Companion*. In 1902 he became president of Princeton and in 1905 launched the preceptorial, or small-group, system of teaching still in use. He largely reorganized the University, losing some battles and winning others, until in 1910 he left to run successfully for governor of New Jersey. In 1912 he was elected president of the United States and served for two terms. He died at his home in Washington, D.C., and was interred in the Washington Cathedral.

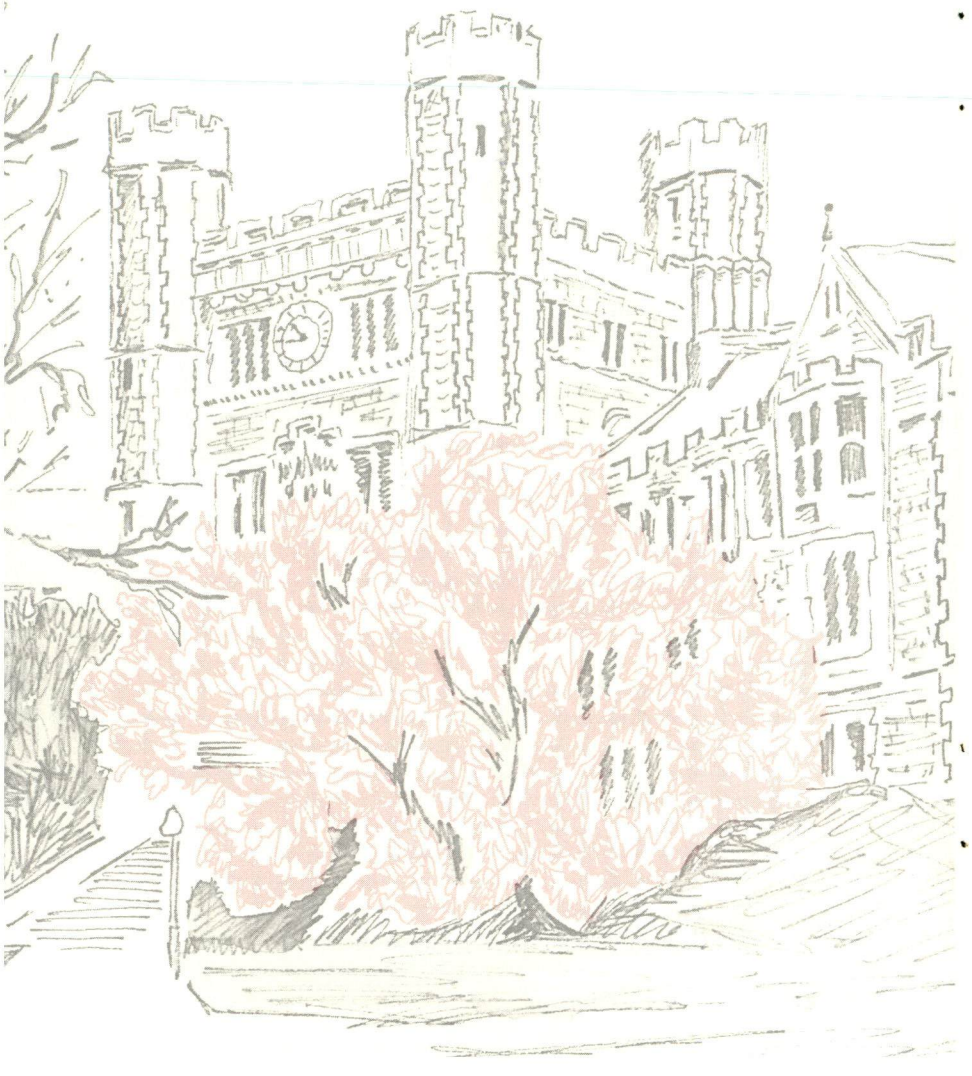


When I thought the book was completed I told my doctor, David A. Willard, about it, and he pressed on me a three-volume set of Wilson's works published 60 years ago that he had inherited from his doctor grandfather of Bryant Pond, Maine. In it I came across this uncannily relevant passage:

Wit does not make a subject light;
it simply beats it into shape
to be handled readily . . . .
Wit is not a steady light,
but Ah!
its flashes give you sudden glimpses
of unsuspected things . . . .
It is the summer lightning,
which will bring more
to your startled eye in an instant,
out of the hiding of the night,
than you will ever . . . observe
in the full blaze of noon.

Wilson did not compose this as poetry, but like much of what is quoted in the pages that follow, it seemed to deserve this typographic arrangement.

—William McCleery



man who has used his mind knows, that they have not discovered the real pleasure of life, and that if you can put them in the way of that discovery, they will be your debtors for the rest of their lives, and that those will be happier rooms than they are now. That is the fine thing that impels a teacher. He has treasure on board, if he can make the persons with whom he consorts know that it is treasure, and value it as such.

(Princeton Baccalaureate; June 12, 1910)

There is a sense, a very real sense, not mystical but plain fact of experience, in which the spirit of truth, of knowledge, of hope, of revelation dwells in a place like this . . . .

occasion at Princeton heard some young voice raised in exposition of the principles of liberty. Then at last he got his presbytery to rescind its rule, and there began to be spoken from his own pulpit those things which were so helpful in changing the history of the world.

THE PLEASURES OF EDUCATION

(To the Schoolmasters' Association of New York and Vicinity, New York City; December 12, 1903)

Sometimes, when I go through the [Princeton campus] at night, and see the brilliant display of lighted windows, I know perfectly well what is going on in those rooms. I have lived [there] myself. . . . There is some studying . . . a lot of good fellowship . . . a lot of fun; but . . . except where here and there the lamp of an advanced student burns, they have not found out what fun it is to use their minds; that the best fun in the world is to do something hard with the mind, and do it successfully. . . . I have told the boys that my ambition was, if possible, before I die, to bring them within sight of the time when those lights would burn for another purpose, and when there would be more fun in those rooms than there is now. I would not undertake the job, if I thought I was going to deprive them of pleasure; but I know, and you know, and any

SPEAKING TO STUDENTS

(To the high school students of Jersey City, New Jersey; November 11, 1908)

The pathos of the situation [is] that I cannot impart to you from my experience anything that will keep you from being just as great a fool as I was at your age.

(To the high school students of Kansas City, Missouri; May 12, 1905)

You are not as beautiful as some animals or as cunning as others, but you have the one great power of mind and the power to draw from the reservoir of the minds of all the men and women in the world. The cultivation of the mind is the best and most profitable thing you can do.

(Princeton Baccalaureate; June 9, 1907)

Learning is knowledge purged of all that is untested and ephemeral. . . . It has been purified and sifted in quiet rooms to which passing fashions of thought do not penetrate. It has passed through mind after mind like water through the untainted depths of the earth, and springs to the places of its revelation. . . .

And so the fountains of learning become the fountains of perpetual youth. . . .

We are renewed by learning in the sense that our minds are . . . brought back to the originals . . . to all that is primitive and permanent and beyond analysis or conjecture.

SPEAKING OF STUDENTS

(To a political gathering in New York; January 21, 1910)

I remember sitting beside a very severe lady at a banquet who turned upon me the eye of suspicion when she understood I was connected with a college and introduced the subject of the habits of the students in respect of temperance. She said, "If I had anything to do with the college I would absolutely forbid any of the students to drink." I said, "Have you ever thought of how you would enforce that prohibition?" "Why," she said, "I would have them watched." "Well," said I, "how many persons would it take to watch a thousand students?" She said she didn't know. I said, "I think it would take about a thousand."

(To a high school teachers' banquet in Newark, New Jersey; December 6, 1902)

We hear arguments now in favor of a shorter college term. It is said that the lessons of the first two years of

WITHERSPOON AND CIVIL LIBERTY

(Commemorative Address in Washington, D.C.; May 20, 1909)

There is an interesting passage in one of Dr. Witherspoon's lectures to his [Princeton] classes, in which he asks this question: "What is the advantage of civil liberty?" "I suppose," he replies, "that it chiefly consists in its tendency to put in motion all the human powers . . . it promotes industry, and in this sense happiness; it produces every latent quality and improves the human mind. Civil liberty is the nurse of riches, literature, and heroism."

[A Scotsman, Witherspoon] did not need to be schooled in the legal case for the colonies. . . . As an ecclesiastical lawyer he knew that the legal case for the colonies was . . . very weak indeed. The true case for the colonies was that they had grown up such men, and had made for them such communities, as rendered the domination of a foreign government no longer tolerable. . . .

The presbytery to which he belonged in New Jersey . . . forbade its representatives to speak of politics in the pulpit; but there is a grave suspicion at Princeton that Mr. Witherspoon wrote many of the speeches of the undergraduates. They contained with singular exactness an image of his own thought . . . so that every public

become a pope. Society would have died of dry rot had it not been for this rich soil. It is in a similar way that the colleges are the fountains for the renewals of the nation. There is coming into our colleges a revival of learning, but we cannot have it until there is a revival of democracy.

college are learned in the high school now. Two years is enough for a college course, these persons say, so graduate the men when they have finished their sophomore year and give them their degree. Well, no man who ever knew a sophomore can use that argument. The sap is rising in the sophomore, but it has not got to his head yet.

(To a Madison, Wisconsin, meeting of the Association of American Universities; January 5, 1910)

The average undergraduate is interested in modern life; but he is not interested in understanding modern life, or mastering modern life. If, however, you once get him imbued with the fundamental questions, then his mind will lie awake at nights and think until he answers them. That is all I want—to get him wide awake.

(Address at Union College, Schenectady, New York; June 6, 1909)

I have often thought of the extraordinary position of Plato, who for a whole lifetime had Aristotle for a pupil. I am happy to think that our pupils last only four years.

DEMOCRACY AND EDUCATION

(An article dated February 24, 1910; written for *Scribner's Magazine* but withheld because he "did not want to . . . heat up" on-campus controversy over his quadrangle plan, according to *The Papers of Woodrow Wilson*. This article was written during Wilson's final year at Princeton, before he became governor of New Jersey on his way to the White House.)

There is a happy coincidence between the spirit of learning and the true spirit of American life. They are both essentially democratic. Learning knows no differences of social caste or privilege. . . . Genius comes into what family it pleases, and laughs at the orders of society, takes delight in humble origins, and yet will appear in palaces if it please. It cannot be wooed by good form or bought at any price. It creates peers without royal patent. And that, too, is the spirit of American life.

(To New England alumni in Boston; November 13, 1909)

Every society has been renewed from the bottom and not from the top, and in this respect is like a tree. I have told many of you in the classroom that the Roman Catholic church kept political society alive in the Middle Ages. It was a democracy in which there was no peasant who could not become a priest and no priest who could not

IN PRAISE OF WORK

(Article in *The Delineator;* manuscript dated July 6, 1909)

Students in a modern college cannot all follow the same road, and it is not desirable that they should. . . .The college should be a place of various studies, alive with a great many different interests.

The common discipline should come from very hard work, from the inexorable requirement that every student should perform every task set him, whether general or special, whether of his own choice or exacted by the general scheme of study prescribed for all, with care and thoroughness. The spirit of work should pervade the place—honest, diligent, painstaking work.

ON WRITING HISTORY

(To the Annual Convention of the Western Association of Princeton Clubs, Cleveland, Ohio; May 5, 1906)

It affords me great satisfaction [when] I see how certain public men are misjudged . . . to know that quiet [scholars], sitting in university chairs will, when the noise of that generation is over, readjust the balance and tell . . . who really were the great men. . . . We are the jury that sits last.

ON TEACHING

(To a convention of the Association of Colleges and Preparatory Schools of the Middle States and Maryland; November 29, 1907)

I think the impression I got when I was a boy [was that history] was something that had happened long ago but wasn't happening now. I certainly got the impression that . . . Caesar's *Commentaries* were written for a schoolbook. If I had ever been [told] that this book was written by a famous general of what he did himself, I think I would have sat up nights and taken notice; but . . . I was simply asked, "In what case is that noun?"

(To the Princeton alumni of New York City: a trial balloon for the preceptorial system of small-group teaching; December 9, 1902)

I am not going to propose that we compel the undergraduates to work all the time; but I am going to propose that we make the undergraduates want to work all the time, and there is a way to do that. . . . The only way I know of to make a man see that a subject is interesting is to get him on the inside of it. The only way to get him on the inside . . . is to throw him on his own resources in becoming acquainted with it.

(Report to the Trustees of Princeton; December 14, 1905;
with the preceptorial system now in place)

The greater subjects of study pursued at a university . . . are of course intrinsically interesting; but the trouble has been that the undergraduates did not find it out. They did tasks, they did not pursue interests. Our pleasure in observing the change that has come about by reason of our new methods of instruction comes from seeing the manifest increase of willingness and interest with which the undergraduates now pursue their studies.

(An essay dated June 1, 1905; printed in *The Independent*
October 3, 1905)

The governing idea [of the preceptorial system] is that [students] are getting up *subjects*—getting them up with the assistance of lecturers, libraries and a body of preceptors who are their guides, philosophers and friends.

(An essay dated October 2, 1907; printed in *The Youth's Companion*
September 12, 1907)

The personal factor in education is the chief factor. For the young it is necessary, in order that they may get the real zest of learning into their hearts, that learning should live in their presence in the person of some man or

(To the Barnard Club of Providence, Rhode Island;
November 12, 1905)

The educated man knows where and how to get his information; the ignorant man does not.

The men who have fertilized the world of knowledge are those who have leaped into the world of hypothesis, deserting the world of facts.

INFORMATION IS NOT EDUCATION

(To an Atlantic City Meeting of the New Jersey State Teachers' Association; December 28, 1909)

Information, I dare say, is the raw material of education; but it is not education. . . . Some of the best informed men I ever knew were among the most useless . . . and inconvenient; because they were always throwing at you some chunk of information which you could not deny and by which you felt floored, but which you knew in your heart was perfectly irrelevant to the matter you were discussing. These men who go about carrying encyclopedias in their heads . . . are useful to be referred to upon occasion . . . but they make very poor reading. . . . You know the famous remark of the old lady who said the dictionary was very interesting, but it [kept changing] the subject? That . . . is the characteristic of . . . most of our school processes—that they change the subject about every forty minutes, and are just about as disconnected . . . as you could make them.

woman whom they can love and must admire; whose force touches them to the quick . . . .

No system of teaching which depends upon methods and not upon persons, or which imagines the possibility of any substitution of the written word for the living person, can work any but mechanical effects. The teacher's own spirit must, with intimate and understanding touch, mold and fashion the spirit of the pupil; there is no other way to hand the immortal stuff of learning on.

(Address in Hanover, New Hampshire, at the inauguration of Ernest Fox Nichols as president of Dartmouth; October 14, 1909)

If I tell you too many things that you don't know, I merely make myself hateful to you. If I am constantly in the attitude towards you of instructing you, you may regard me as a very well informed and superior person, but you have no affection for me whatever; whereas if I have the privilege of coming into your life . . . then fire calls to fire and real life begins, the life that generates, the life that generates power.

ON LECTURING

(To the Schoolmasters' Association of New York and Vicinity, New York City; December 12, 1903)

I have to lecture a great deal, [but] I know perfectly well that lecturing is not the way to communicate a great subject of study. I know exactly what happens in a lecture. . . . The [problem] is not noise or confusion necessarily, but a great attention to the windows and to the ceiling, and to the rest which was not completed the night before, and the thoughts are everywhere but on the lecture. I have often told the men in my classes that they can do anything that is quiet, but that there are men present who want to listen, and they must not disturb them. . . .

What is the lecture for, then? . . .

The best thing that a lecturer can do for you is simply to get hold of you and keep hold of you . . . for fifty minutes, so that afterwards you cannot get all of the fascination . . . of that great topic out of your head. You will know that, having touched this thing, you have touched something that lives. . . . But don't you see that very few lecturers can be used for that purpose, because very few lecturers are able to take fire, even from subjects which burn, and unless the lecturer can glow, he cannot communicate any heat? . . .

Most speakers are absolutely incombustible: they are asbestos, and you cannot use them for this purpose.

ON DISCIPLINE

(Address at the Hotchkiss School; November 12, 1908)

I used to be a member of . . . our faculty . . . "Committee on Discipline," . . . and I [had] the notion that if a fellow had good stuff in him, it was worthwhile not to be too hard on him, to urge the faculty to mitigate the ordinary punishment, to, as the general phrase goes, give him another chance. . . . And I have to say, with great regret, that I was never rewarded by amendment on [a student's] part. Not in a single instance. I at last came to [realize] that the only way to save a lad is to make him lie in the bed that he has made for himself, first [making] sure that he made it. . . . Then there is a chance . . . a probability that he will pull himself together. But if you excuse him, then life will look to him like a thing where the natural consequence does not ensue; where there is no certainty of nature taking her own course in the moral world as well as in the physical world, and where he will begin to hope . . . that he will be excused for his delinquencies when it comes to the world of business and to the world where great enterprises hang upon the absolute fidelity of those who are entrusted with . . . them.