



# UNDERGRADUATE CATALOG

2001-2002



## THE UNDERGRADUATE EXPERIENCE

“Strive for clarity, but accept and understand ambiguity.”

That phrase captures one way in which an educated person approaches the world and its challenges. Students who graduate from the University of Maryland have been exposed to the tools that allow them to put that perspective to work. Imparting such a perspective may be an ambitious project for undergraduate education, but to aim for anything less would be unworthy of a great university’s goals for its students. In 1988, *Promises to Keep*, a plan for undergraduate education at Maryland, articulated those goals so eloquently we repeat them here.

Undergraduate education at Maryland “aims to provide students with a sense of identity and purpose, a concern for others, a sense of responsibility for the quality of life around them, a continuing eagerness for knowledge and understanding, and a foundation for a lifetime of personal enrichment.”

As we learn with and from one another, we try to “develop humane values,” “celebrate tolerance and fairness,” “contribute to the social conscience,” “monitor and assess private and collective assumptions,” and “recognize the glory, tragedy, and humor of the human condition.” Your years at the University of Maryland can provide you with all the tools you need to accomplish these goals. Students here are “educated to be able to read with perception and pleasure, write and speak with clarity and verve, handle numbers and computation proficiently, reason mathematically, generate clear questions and find probable arguments, reach substantiated conclusions, and accept ambiguity.”

And we also hope you enjoy the journey.





## A HISTORICAL TIMELINE

In 1859, on the site now occupied by Morrill Hall, Charles Benedict Calvert, a wealthy planter and later a congressman from Riverdale, established the Maryland Agricultural College. Its purpose was to educate the sons of Maryland farmers and to cultivate the free flow of ideas. After the Civil War, the college became one of the nation's first land-grant colleges under the Morrill Act of 1867, and by 1900 had begun to bring prosperity to the state through its agricultural outreach programs. As it did so, it changed the state and was itself transformed.

By the early 20th century, the college had expanded its offerings into engineering, business and the liberal arts. Women were admitted as students in 1912; by 1929, they numbered more than 300, had graduated from every college in what now was a university, and had become active participants in all aspects of campus life. Shortly before World War I, graduate programs began. In 1920, the college merged with the long-established professional schools in Baltimore, and the Maryland Agricultural College changed its name to the University of Maryland.

Along with much of American society, the university was further transformed by World War II. The university revised its curriculum to provide a strong foundation in the liberal arts and sciences and reshaped its offerings in advanced studies to create a series of "majors" that would serve the emerging needs of industry, government and society for

highly educated citizens. However, like the state of which it was a part, the University of Maryland was segregated by race, and barred African-Americans from attending. Beginning in the post-war period, Maryland's black citizens asserted their right to attend the state's premier public university with ever greater force and power.

In 1950 a successful lawsuit required the university to allow a young black man, Parren Mitchell of Baltimore, to attend graduate classes at College Park. In the following year, Hiram Whittle, another Baltimorean, became the first African-American undergraduate student admitted to this institution. Still, it was not until the 1954 landmark Supreme Court ruling in *Brown vs. Board of Education* that the University of Maryland Board of Regents agreed to accept all qualified students without regard to race. Today this institution is a multicultural, international university, ranking 7th among all non-historically black institutions in the number of African Americans earning bachelor's degrees.

The evolution of the University of Maryland mirrored the pattern of social change in other ways as well. In the 1960s, students here as elsewhere sought more opportunities for self-expression as they joined in the movement to create an egalitarian society. Their concerns in part led to the expansion of curriculum offerings into new areas, such as Afro-American Studies and Women's Studies. A wider choice of electives encouraged students to explore various disciplines; the Individual Studies Program was developed to accommodate students who wanted to pursue cross-disciplinary studies; teacher evaluations encouraged students to critique the quality of classroom instruction, and periodic reviews of programs and administrators became standard.



## A QUEST FOR KNOWLEDGE

Seven libraries make up the University of Maryland library system: McKeldin (main) Library, Architecture Library, Art Library, Engineering and Physical Sciences Library, Hornbake Library, Performing Arts Library, White Memorial (Chemistry) Library.

Each of these libraries maintains specialized units and collections in its disciplines. Overall, the libraries' holdings include more than 2.7 million volumes, more than five million microform units, more than 30,000 current periodical and newspaper subscriptions, one million government documents, 350,000 maps, and extensive collections of phonorecords, music CDs, films, filmstrips, slides, prints, and music scores. The libraries also feature a Technical Reports Center collection of more than two million items—an outstanding collection.

Over 200 bibliographic and full-text electronic resources are available to University of Maryland students and faculty through the Libraries' home page and through MdUSA (Maryland University System Access) on the Web at <http://www.lib.umd.edu/UMCP/>. In addition, electronic resources are available in each of the libraries on campus.

the Web at the same address. VICTORWeb provides access to bibliographic records of most materials in the collections of all 13 University System of Maryland institution libraries as well as other libraries all over the country.

Hornbake Library is home to Nonprint Media Services, the central audio-visual department for all campus libraries. Special collections housed there include the National Public Broadcasting Archives and Library of American Broadcasting.

Other outstanding special collections located in Hornbake include the National Trust for Historic Preservation Library; Marylandia and rare books; University Archives and significant holdings of historical and literary manuscripts; the Katherine Anne Porter Collection and the Katherine Anne Porter Room.



The Performing Arts Library is located in the Clarice Smith Performing Arts Center. Also housed there are materials pertinent to the performing arts, and special collections and manuscripts, including the International Piano Archives, a world-renowned collection of piano performance materials.

The Theodore R. McKeldin Library is the main library on the campus. McKeldin's collections are especially strong in the life sciences, social sciences and humanities, including over 1.6 million volumes, along with over 2.3 million microforms. Among the special collections housed in McKeldin are the Gordon W. Prange Collection of Japanese-language publications, 1945-49; the Government Document and Maps Collection; and the East Asia Collection. The U.S. Patent and Trademark Depository Library is based in the Engineering and Physical Sciences Library.



## ASKING QUESTIONS, QUESTIONING ANSWERS

The university's commitment to quality education in a research environment is key to its academic reputation and the success of its graduates. Opportunities for conducting research abound at the University of Maryland and in the surrounding area, both for faculty to advance their own expertise and bring their insights with them into the classroom, and for students to begin their exploration of their special interests with practical experience. On campus, special facilities and a number of organized research centers, bureaus, and institutes promote the acquisition and analysis of new knowledge in the arts, sciences and applied fields.

The university's enviable location—just nine miles from downtown Washington, D.C., and approximately 30 miles from both Baltimore and Annapolis—enhances the research of its faculty and students by providing access to some of the finest libraries and research centers in the country including the Library of Congress, Folger Shakespeare Library, National Archives, National Library of Medicine and National Agricultural Library. In the Baltimore area are the Enoch Pratt Free Library and the Maryland Historical Association Library. The state capital at Annapolis is home to the Maryland Hall of Records. In

recent years, several research opportunities have been created specifically for undergraduates. As early as the second semester of freshman year, students are eligible to participate in the Undergraduate Research Assistant Program. As research assistants, students develop close intellectual relationships with faculty mentors and collaborate on faculty research projects. Multidisciplinary Senior Summer Scholarship grants enable students to spend the summer between their junior and senior years working closely with faculty mentors on scholarly research or artistic projects while earning academic credit.

Additional discipline-specific research opportunities are available off-campus. The University of Maryland is leading a cooperative excavation of the ruined city of Caesarea Maritima in Israel, where Pontius Pilate lived while serving as Roman governor of Judea. Students also participate in archeological digs in Historic Annapolis and in ongoing historical restoration and research projects at Cape May, N.J., and Kiplin Hall in England. Aided by the Maryland Sea Grant, University of Maryland zoologists and microbiologists study the fisheries of the Chesapeake Bay.



Research internships are available through academic departments and experiential learning programs. The sites include federal agencies and private organizations such as the National Zoological Park, Congressional Arts Caucus, Smithsonian Institution, Women's Legal Defense Fund, the National Institutes of Health, National Archives and the U.S. Department of Agriculture. Students may work in Annapolis or on Capitol Hill through the Maryland Legislative Internships.

## A WIRED COMMUNITY

Students at the University of Maryland are part of an academic and social community that makes extensive and creative use of its rich computing resources. There is widespread computer use in the dorms; every resident student can hook up his or her own computer for individual high speed access to our data networks and the internet, and more than 90 percent of them did so last year. The university encourages computer ownership; however, laboratories with modern computers and a full suite of software serve university community members without personal machines, and some of these labs are open 24 hours a day. Students living off campus can dial in through our large modem pool, or they can have access directly through the internet via an Internet Service Provider such as AOL or Verizon. Everyone gets a university e-mail account, and space is available to put up individual or organizational web pages. There is plenty of help available, from friends, from "peer training" courses taught by fellow students, from more formal courses, and from the Help Desk maintained by the Office of Information Technology.

Students can apply for admission, work out their schedules and register for classes, check their grades, track their progress towards their degrees, get online advising, see their student aid accounts, find out if their library books are due, and do many more administrative chores online. The library catalog is online, and students can also access an immense and growing array of online information resources through the library web site, ranging from dictionaries and encyclopedias through complete books to the most advanced scholarly journals. University specific information is found on web pages maintained by each department and college and many other campus units. More and more instructors are posting course syllabuses, homework assignments, and other materials on the web, and more and more faculty interact with students in their courses through e-mail, listservs, and chat rooms. Many courses have web-based research projects or encourage electronic collaboration among students.



The University of Maryland's Web site offers a window into the dynamic world of the university. Its home page connects to the major academic units, to a virtual campus tour, to student activities and services, and to news from all parts of this vital community of 40,000 students, staff, and faculty. You will also find links there to an array of publications, including an online version of this catalog, and award-winning publications such as the student newspaper, *The Diamondback*, and the university's magazine, *College Park*.

### STATEMENT ON THE USE OF COMPUTERS

Students at the University of Maryland are provided with a wide array of information technology-based resources, including network and internet access, e-mail accounts, training in computer usage, online student services, public computer laboratories, and online information sources through the libraries and elsewhere. Many academic courses and programs rely heavily on student use of these resources. While ownership of personal computers is not required for all students at this time, access to computers and facility in using them will be essential to academic success for most students. Some colleges or academic majors may also have special requirements for computer ownership or usage. Any course at the university may require the knowledge of basic computer skills (e.g. e-mail use, web browsing, word processing) without special notice being given in advance.

## TEACHING AND LEARNING AT MARYLAND

From its pre-Civil War roots as the state's first agricultural college and one of America's original land grant institutions, the University of Maryland has emerged as a public research university of national stature, highly regarded for its broad base of excellence in teaching and research. The momentum of recent years has poised the university to move into the top ranks of higher education and take leadership in shaping the research university of the 21st century.

In 1988, the University of Maryland, College Park, was designated as the flagship institution for the University System of Maryland. Increased undergraduate opportunities for research and individual study; the development of the College Park Scholars Program and the expansion of the University Honors Program; the creation of CORE, the general studies program; and the establishment of the Center for Teaching Excellence all affirmed the legislature's designation of flagship.

The qualifications of entering students have risen each year for the past 10 years, and SATs now range from 1170 to 1330 for the mid-50 percent tier of students. In Fall 2000, 500 of the nearly 4,000 admitted first-year students scored above 1400 on their SATs.

There are 13 colleges and schools within the organizational structure of the University of Maryland. Seven of these units—the Smith School of Business, the College of Education, the Clark School of Engineering, the Merrill College of Journalism, the College of Computer, Mathematical and Physical Sciences, the College of Information Studies and the School of Public Affairs—have been recognized by their peers and in various rankings as among the 25 best in the nation. The breadth of this excellence is a source of pride for students, faculty and staff, and is endorsement for the university's flagship status among the state's institutions of higher education.



## UNDERGRADUATE PROGRAMS OF STUDY

### COLLEGE OF AGRICULTURE AND NATURAL RESOURCES (AGNR)

Animal Sciences  
Agricultural and Resource Economics  
Biological Resources Engineering  
Crop Science  
Dietetics  
Environmental Science and Policy  
Food Science  
General Agricultural Sciences  
Landscape Architecture  
Natural Resource Management  
Natural Resource Sciences  
Nutritional Science

### SCHOOL OF ARCHITECTURE (ARCH)

### COLLEGE OF ARTS AND HUMANITIES (ARHU)

American Studies  
Studio Art  
Art History and Archaeology  
Chinese  
Classic/ Languages and Literature  
Communication  
Dance  
Dramatic Arts  
English Language and Literature  
French Language and Literature  
German Language and Literature  
History  
Italian Language and Literature  
Japanese  
Jewish Studies  
Linguistics  
Music/ Music Performance  
Philosophy  
Romance Languages  
Russian Area Studies  
Spanish Language and Literature  
Women's Studies

### COLLEGE OF BEHAVIORAL AND SOCIAL SCIENCES (BSOS)

Afro-American Studies  
Anthropology  
Criminology and Criminal Justice  
Economics  
Environmental Science and Policy  
Geography  
Government and Politics  
Hearing and Speech Sciences  
Psychology  
Sociology

Business/Law Decision and Information Technology  
Finance  
General Business and Management  
Human Resources Management  
Logistics and Transportation  
Management Science of Statistics  
Marketing  
Operation and Quality Management  
Production Management

### COLLEGE OF COMPUTER, MATHEMATICAL, AND PHYSICAL SCIENCES (CMPS)

Astronomy  
Computer Engineering  
Computer Science  
Environmental Science and Policy  
Geology  
Mathematics  
Physical Sciences  
Physics

### COLLEGE OF EDUCATION (EDUC)

Early Childhood Education  
Elementary Education  
Secondary Education  
Special Education  
Art  
English  
Foreign Language  
Mathematics  
Music  
Science  
Social Studies  
Speech and English  
Theatre and English

### A. JAMES CLARK SCHOOL OF ENGINEERING (ENGR)

Aerospace Engineering  
Biological Resources Engineering  
Chemical Engineering  
Civil Engineering  
Computer Engineering  
Electrical Engineering  
Engineering (B.S. in)  
Fire Protection Engineering  
Materials Science and Engineering  
Mechanical Engineering

Medicine  
Veterinary Science

### COLLEGE OF HEALTH AND HUMAN PERFORMANCE (HLHP)

Family Studies  
Health Education  
Kinesiological Science  
Physical Education

### PHILIP MERRILL COLLEGE OF JOURNALISM (JOUR)

### COLLEGE OF LIFE SCIENCES (LFSC)

Biochemistry  
Biological Sciences  
Environmental Science and Policy  
Microbiology

### UNDERGRADUATE STUDIES (UGST)

Civicus  
College Park Scholars  
Division of Letters and Sciences  
Gemstone  
Individual Studies Program  
Law and Health Professions  
Pre-Dental Hygiene  
Pre-Dentistry  
Pre-Law  
Pre-Medical Technology  
Pre-Medicine  
Pre-Nursing  
Pre-Occupational Therapy  
Pre-Optometry  
Pre-Osteopathic Medicine  
Pre-Pharmacy  
Pre-Physical Therapy  
Pre-Podiatric Medicine  
University Honors Program

### CAMPUS-WIDE CERTIFICATES

Afro-American Studies  
East Asian Studies  
Latin-American Studies  
Science, Technology, and Society  
Women's Studies

### MULTI-COLLEGE PROGRAMS

Computer Engineering (CMPS, ENGR)  
Environmental Science and Policy (AGNR, BSOS, CMPS, LFSC)

### COMBINED PROGRAMS