

General Information

Arizona State University provides an opportunity for students from all racial, cultural, and economic backgrounds to pursue a full range of high-quality academic programs. The university actively seeks to have reflected within its student body and among its employees the rich diversity of cultures found within the state, the nation, and the world.

Active research programs contribute to and expand knowledge, thereby serving the instructional needs of students, contributing to the professional advancement of the faculty, and enhancing economic, social, cultural, and technological progress.

The university's teaching, research, and service programs seek to instill in students sensitivity to other races and cultures and a spirit of critical inquiry and challenge them to seek answers to fundamental questions of human concern. The university's support programs contribute to the academic success and personal development of all students.

The university seeks to expand cultural horizons, enhance respect for human diversity, improve moral and ethical standards, and educate for responsible citizenship while preparing its graduates to accept and perform capably in rewarding careers in our pluralistic society.

MISSION

Arizona State University has emerged as a leading national and international research and teaching institution with a primary focus on Maricopa County, Arizona's dominant population center. This rapidly growing, multicampus public research university offers programs from the baccalaureate through the doctorate for approximately 49,000 full-time and part-time students through ASU Main in Tempe; ASU West in northwest Phoenix; a major educational center in downtown Phoenix; ASU East, located at the Williams Campus (formerly Williams Air Force Base) in southwest Mesa; and other instructional, research, and public service sites throughout Maricopa County. ASU is a modern university that applies its research capabilities to the rapidly evolving needs of Maricopa County and the state.

As a leading public university, Arizona State University's goal is to be-

come a world-class university in a multicampus setting, one of the very best public universities in the nation. The university's mission is to provide outstanding programs in instruction, research, and creative activity, to promote and support economic development, and to provide service appropriate for the nation, the state of Arizona, and the state's major metropolitan area. To fulfill its mission, ASU places special emphasis on the core disciplines and offers a full range of degree programs—baccalaureate through doctorate. To become competitive with the very best public universities, the institution recognizes that it must offer quality programs at all degree levels in a broad range of fundamental fields of inquiry. ASU will continue to dedicate itself to superior instruction, to excellent student performance, to original research, creative endeavor, and scholarly achievement, and to outstanding public service and economic development activities. As a result of this dedication, ASU was awarded the prestigious Research I university status in 1994, recognizing ASU as a premier research institution.

ORGANIZATION

Arizona State University is part of a university system governed by the Arizona Board of Regents, a body corporate and politic with perpetual succession under the constitution and laws of Arizona. The board consists of eight citizens appointed by the governor of the state for terms of eight years, and one student regent serving for one year with the elected governor and state superintendent of public instruction as members *ex officio*.

The regents select and appoint the president of the university, who is the liaison between the Arizona Board of Regents and the institution. The president is aided in the administrative work of the institution by the senior vice president and provost, other provosts, vice presidents, deans, directors, department chairs, faculty, and other officers. Refer to "Academic Organization," page 9, and "Administrative and Academic Personnel," pages 522–527.

The academic units develop and implement the teaching, research, and service programs of the university, aided by the university libraries, museums, and other services.

The faculty and students of the university play an important role in educational policy, with an Academic Senate, joint university committees and boards, and the Associated Students serving the needs of a large institution.

EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

It is the policy of ASU to provide equal opportunity through affirmative action in employment and educational programs and activities. Discrimination is prohibited on the basis of race, color, religion, national origin, citizenship, sex, sexual orientation, age, disability, special disabled veteran or Vietnam-era veteran status. Equal employment opportunity includes but is not limited to recruitment, hiring, promotion, termination, compensation, benefits, transfers, university-sponsored training, education, tuition assistance, and social and recreational programs.

ASU is committed to taking affirmative action in increasing opportunities at all levels of employment and to increasing participation in programs and activities by all faculty, staff, and students. Affirmative action is directed toward minority persons, women, special disabled veterans, Vietnam-era veterans, and persons with disabilities.

University Policy Prohibiting Discriminatory Harassment

Harassment Prohibited. Subject to the limiting provisions of "Freedom of Speech and Academic Freedom" specified below, it is a violation of university policy for any university employee or student to subject any person to harassment on university property or at a university-sponsored activity.

Harassment Defined. Actions constitute harassment if (1) they substantially interfere with another's educational or employment opportunities, peaceful enjoyment of residence, physical security, and (2) they are taken with a general intent to engage in the actions and with the knowledge that the actions are likely to substantially interfere with a protected interest identified above. Such intent and knowledge may be inferred from all the circumstances.

Freedom of Speech and Academic Freedom. Neither this nor any other university policy is violated by actions that amount to expression protected by the state or federal constitutions or by

related principles of academic freedom. This limitation is further described in the ASU First Amendment Guidelines, the current version of which supplements this policy and is available in the Office of the General Counsel.

Relationship to the Work of the Campus Environment Team. If harassment is discriminatory, it falls within the education, monitoring, reporting, and referral functions of the Campus Environment Team. Harassment is discriminatory if taken with the purpose or effect of differentiating on the basis of another person's race, sex, color, national origin, religion, age, sexual orientation, disability, or Vietnam-era veteran status.

HISTORY OF ARIZONA STATE UNIVERSITY

On February 26, 1885, House Bill 164, "An Act to Establish a Normal School in the Territory of Arizona," was introduced in the 13th Legislative Assembly of Arizona Territory by John Samuel Armstrong. The bill, strongly supported by Charles Trumbull Hayden of Tempe, passed the House on March 6 and the Council on March 11 and was signed by Governor F.A. Tittle on March 12, 1885, thereby founding the institution known today as Arizona State University. Under the supervision of Principal Hiram Bradford Farmer, instruction was instituted on February 8, 1886, when 33 students met in a single room on land donated by George and Martha Wilson of Tempe.

The institution began with the broad obligation to provide "instruction of persons...in the art of teaching and in all the various branches that pertain to good common school education; also, to give instruction in the mechanical arts and in husbandry and agricultural chemistry, the fundamental law of the United States, and in what regards the rights and duties of citizens."

With the growth of the state, especially the surrounding Phoenix metropolitan area, the school has carried forward this charter, accompanied by successive changes in scope, name, and governance.

The Early Years. For the first 14 years, the school was governed by six principals. At the turn of the century and with another new name, Normal School of Arizona, President Arthur John Matthews brought a 30-year tenure of progress to the school.

He assisted in changing the school to an all-college student status; the Normal School had enlisted high school students who had no other secondary educational facilities in Arizona. He embarked on a building schedule that included the state's first dormitories. Of the 18 buildings constructed while Matthews was president, six are still in use. His legacy of an "evergreen campus," with the import of many shrubs and trees and the planting of Palm Walk, continues to this day: the main campus is a nationally recognized arborum.

Matthews also saw to it that the Normal School was accredited outside the state. His service on national education organization boards was conducive to this recognition. The school remained a teacher's college in fact and theory during Matthews' tenure, although the struggle to attain status as a university was ongoing.

An extraordinary event occurred March 20, 1911, when former President Theodore Roosevelt visited the Tempe school and spoke from the steps of Old Main. He had dedicated the Roosevelt Dam the day before and was impressed with Arizona. He noted that construction of the dam would benefit central Arizona's growth and that of the Normal School. It would be another year before the territory became a state.

During the Great Depression, Ralph W. Swetman was hired as president to "sweep clean," firing those faculty who did not have master's or doctoral degrees in order to follow North Central Association of Colleges and Secondary Schools guidelines.

The Gammage Years. In 1933, Grady Gammage, then president of Arizona State Teachers College at Flagstaff, became president of Arizona State Teachers College at Tempe, a tenure that would last for nearly 28 years.

On March 8, 1945, the three state institutions of higher learning came under the authority of one Arizona Board of Regents, which oversees ASU today.

The phenomenal growth of the college began after the end of World War II. Dr. Gammage had foreseen that the G.I. Bill of Rights would flood campuses everywhere with returning veterans. Many of the veterans who had received military training in Arizona had fallen in love with the state and vowed to return after the war. The numbers within one year were staggering: in the

fall semester of 1945, 553 students were enrolled; over the weekend semester break in January 1946, enrollment increased 110% to 1,163 students. Successive semesters saw continuing increased enrollment.

Like his predecessor, Dr. Gammage oversaw the construction of a number of buildings. His greatest dream, that of a great auditorium, came five years after his death. He laid the groundwork for it with Frank Lloyd Wright, who designed what is now the university's hallmark building, Grady Gammage Memorial Auditorium, built in 1964.

Years of Growth and Stature. During the 1960s, with the presidency of Dr. G. Homer Durham, Arizona State University began its academic rise with the establishment of several new colleges (the College of Fine Arts, the College of Law, the College of Nursing, and the School of Social Work) and the reorganization of what became the College of Liberal Arts and Sciences and the College of Engineering and Applied Sciences. Perhaps most important, the university gained the authority to award the Doctor of Philosophy and other doctoral degrees.

The next three presidents—Harry K. Newburn, 1969–71, John W. Schwada, 1971–81, and J. Russell Nelson, 1981–89—and Interim President Richard Peck, 1989, led the university to increased academic stature, expansion of the campuses, and rising enrollment. With approximately 49,000 students, ASU is the fifth largest university in the nation.

On January 1, 1990, Dr. Lattie F. Coor, a native Arizonan, became 15th in the institution's succession of principals and presidents. He has highlighted undergraduate education, research, cultural diversity, and economic development as the "four pillars" of the university's agenda. He has taken steps in these areas by further defining the role of ASU West and by initiating the establishment of ASU East.

Research I Status. ASU was named a Research I university by the Carnegie Foundation for the Advancement of Teaching in early 1994. Nationally, 88 universities have been granted this status, indicating successful garnering of support for research projects and educating future scientists.

Athletics

The original nickname for the Normal School of Arizona athletic teams was the Owls. Athletics other than Sunday hikes and lawn tennis were not part of the early curriculum.

During President Matthews' tenure, some team competition began. The Tempe Bulldogs saw some interesting and rough competition with the University of Arizona Wildcats (almost always on the losing end), but usually they competed against smaller schools around the state.

Dr. Gammage realized that athletics was a way to garner monetary support from the community. With the establishment of the Sun Angel Foundation in 1946, a new era began. The college's teams became the Sun Devils and, with a succession of fine coaches and an increasingly strong commitment to sports, became known worldwide. Today the university attracts students from throughout the world to its athletic programs.

In 1979, the university joined the Pacific-10 Conference. In 1987, ASU became the first Arizona football team to play in the Rose Bowl, defeating the University of Michigan Wolverines 22–15. ASU made its second appearance in 1997 versus Ohio State.

In 1997, Arizona State University finished 13th nationally in the Sears Directors' Cup which recognizes the top athletic programs in the country. The women's golf team won its fourth NCAA championship in five years in 1996–97.

UNIVERSITY CAMPUSES AND SITES

ASU Main. ASU Main is located near the heart of metropolitan Phoenix in the city of Tempe (population 160,000). Nearby are the municipalities that make up the fast-growing Valley of the Sun: Chandler, Gilbert, Glendale, Mesa, Scottsdale, and other communities.

ASU Main comprises more than 700 acres and offers outstanding physical facilities to support the university's educational programs. Buildings are modern, air-conditioned, and attractively designed.

Broad pedestrian malls laid out in an easy-to-follow grid plan, bicycle lanes connecting all parts of the university, and spacious lawns and subtropical landscaping characterize a campus

servicing the physical, aesthetic, and educational needs of students, faculty, and staff.

ASU East. The university's third campus, ASU East, opened at the Williams Campus in the fall of 1996, serving more than 1,000 students in degree programs offered by the College of Technology and Applied Sciences and School of Agribusiness and Resource Management, programs offered at no other Arizona campus. In 1997, East College was created to provide support courses for existing programs and to generate new degree programs at ASU East.

ASU East has joined with Chandler-Gilbert Community College (CGCC) in the New Partnership in Baccalaureate Education that allows students to graduate in four years with an ASU baccalaureate degree earned entirely at the Williams Campus, at some savings in tuition.

The campus includes excellent educational facilities and unique residential opportunities, including a choice of traditional residence halls or two- to five-bedroom homes.

ASU East is a student centered campus that offers many of the features of a small college in a rural area while providing access to the resources of a major research university and the amenities of a large metropolitan area. A shuttle service provides transportation between ASU East and ASU Main. The 600-acre ASU East campus is easily accessible via major interstate routes. For more information, see pages 434–465.

ASU West. ASU West is a campus of Arizona State University that offers upper-division undergraduate and graduate programs in the arts and sciences and in selected professional fields.

The campus is located between 43rd and 51st Avenues on West Thunderbird Road in Phoenix. Immediately west of the campus is the city of Glendale. The core campus was completed in March 1991 and includes the Fletcher Library, the Sands Classroom Building, the Classroom Laboratory/Computer Building, the Faculty and Administration Building, Kiva Lecture Hall, and the University Center Building.

For more information, see pages 532–544 of this catalog. For complete information and course listings, see the *ASU West 1998–99 Catalog*.

ASU Extended Campus. The ASU Extended Campus goes beyond the boundaries of the university's three physical campuses to provide access to academic credit and degree programs for working adults through flexible schedules; a vast network of off-campus sites; classes scheduled days, evenings, and weekends; plus innovative delivery technologies, including television, the Internet, CD-ROM, and independent learning. The Extended Campus offers programs in partnership with the campuses and colleges of ASU. The Extended Campus also offers a variety of professional continuing education programs and community outreach. The ASU Downtown Center is the anchor location of the Extended Campus. Through the Extended Campus, lifelong learning opportunities are offered to students of all ages via stimulating courses, lecture series, and educational travel. Programs in the Sun Cities area are geared toward the retirement communities and include a wide variety of courses from approximately 30 disciplines. These programs are in the process of expansion throughout Maricopa County.

ASU Downtown Center. Located in downtown Phoenix at the Mercado, 502 E. Monroe, the ASU Downtown Center offers a variety of daytime and evening courses of interest to employees in private businesses and government agencies and to individuals seeking personal growth and enrichment. These courses are offered either in a traditional classroom manner or via interactive television. In addition, microcomputer training classes are taught during daytime and evening hours. Professional continuing education and certificate programs are offered to working professionals. ASU mainframe and Internet access is available through the center's computer lab and library services.

For more information, see page 243.

ASU Research Park. The mission of the ASU Research Park is to enhance Arizona's high value research-based economic development and to build the university's capacity to educate and advance knowledge. To this end, the Research Park serves to attract to Arizona new corporate and regional headquarters and research and development firms that broaden the base for potential research among ASU departments, interact with graduate students, consult with university faculty, cosponsor

seminars on research topics, and provide employment opportunities for graduates at ASU.

Long-term excess revenues from ground leases within this 324-acre park flow back to the ASU foundation to be used for scholarships. The Research Park has several major tenants—Iridium North America, Fiberite, VLSI, Walgreens Healthcare Plus, Motorola University, Motorola Flat Panel Display Division facility, and the National Association of Purchasing Management—who occupy a 50,000-square-foot multitenant building developed by Transamerica Corporation and the Lakeside Technology Center, and a 44,000-square-foot building developed by Price-Elliot Research Park, Inc. The Research Park is part of the ASU effort to become a major research university by attracting high-quality private and public research firms and institutions.

Camp Tontozona. Located in the famed Mogollon Rim country near Kohl's Ranch, northeast of Payson, this continuing education facility of the university serves the needs of academic departments conducting teaching and research in mountain terrain. The camp is also available to faculty, staff, graduate students, and alumni for family use. For more information, call 602/965-6851.

The Arboretum. The Arboretum at Arizona State University is a flourishing oasis of plants from around the world. Dedicated on November 20, 1990, this virtual outdoor classroom includes 162 species/varieties of trees and 172 species/varieties of other woody ornamental and herbaceous plants from diverse geographic regions as well as the Sonoran Desert. It contains one of the best collections of palms and conifers in the desert Southwest and a growing collection of native Southwestern plants.

The Arboretum actually began with Arthur J. Matthews. By the time Matthews' 30-year reign as president was finished, nearly 1,500 trees of 57 varieties and more than 5,700 feet of hedges were planted. One of his most enduring landscape projects was the planting of Palm Walk in 1916, which extends from University Drive south to Orange Mall.

Several Arboretum walking tours are designated on campus, including the historic north campus tour, the green trail tour, and the red trail tour.

UNIVERSITY LIBRARIES AND COLLECTIONS

The collections of the university's libraries comprise more than 3 million volumes, approximately 6.6 million microform units, and more than 36,000 periodical and serial subscriptions. Computer access to commercially and locally produced databases and the ability to borrow research materials from other libraries enhance local resources. ASU is a member of the Association of Research Libraries and the Center for Research Libraries.

For telephone numbers, see the "ASU Main Directory" on pages 528-530.

Charles Trumbull Hayden Library. The Charles Trumbull Hayden Library, designed by Weaver and Drover in 1966, houses the largest multidisciplinary collection. In addition to the open stack areas, separate collections and service areas include Current Periodicals and Microforms; Government Documents; Interlibrary Loan and Document Delivery Services; Labriola National American Indian Data Center; Library Instruction, Systems, and Technology (L.I.S.T.); Reference; Reserve; Special Collections; and Archives and Manuscripts, which includes the Arizona Collection, the Chicano Research Collection, and the Visual Literacy Collection.

Specialized collections include comprehensive holdings of the Pre-Raphaelite period, a 14th-century manuscript on algebra, the child drama collection, the Thomas Mosher collection, the William S. Burroughs collection, and the papers of several major Arizona political figures.

Architecture and Environmental Design Library. The Architecture and Environmental Design Library, located in the College of Architecture and Environmental Design/North building, contains books and periodicals pertinent to areas of study within the college. See page 114 for more information.

Arizona Historical Foundation Library. Under a cooperative agreement with ASU, the Arizona Historical Foundation houses a library of several thousand volumes, manuscript collections, maps, and photographs, and a

large collection of audio/visual materials. Housed in the Charles Trumbull Hayden Library, the collection's focus is on the history of Arizona and the Southwest.

Fletcher Library. Located at the ASU West campus, Fletcher Library utilizes a range of electronic systems, from compact discs to telecommunications networks, to provide access to resources and delivery of materials. Its holdings include over 280,000 volumes, 3,600 serial subscriptions, and 1.4 million microfilms selected to complement ASU West course offerings.

Law Library. The John J. Ross-William C. Blakley Law Library is located on McAllister Avenue. See page 296 for more information.

Music Library. A large collection of music scores, recordings, books, music reference materials, and listening facilities for individuals and groups are located on the third floor of the Music Building, West Wing.

Daniel E. Noble Science and Engineering Library. The Daniel E. Noble Science and Engineering Library houses books, journals, and microforms in the sciences and engineering, the Map Collection, and the U.S. Patent and Trademark Depository.

University Archives. The University Archives collection (1885–present) of university theses and dissertations, administrative records of the university, historical photographs and personal papers of faculty, staff, and alumni as well as student, faculty, and official university publications are available for use at the Luhrs Reading Room in Hayden Library. The historic University Archives Building on Tyler Mall is the home of the 1907 Gallery, which hosts exhibits of historical photographs from the collections of the Department of Archives and Manuscripts.

PERFORMING AND FINE ARTS FACILITIES

Computing Commons Gallery. One of the unique features of the Computing Commons building is an art gallery, located off the main lobby in the northwest corner of the building. The gallery has design features that are unique for

showcasing technology-based artwork and displays. The Computing Commons gallery can support display of national online computer art networks (e.g., via Internet) and holographic displays, as well as more traditional two-dimensional graphic presentations. This is an exciting decade for the arts as new technology-based tools and techniques open new avenues for creativity, as demonstrated by the exhibits in the Computing Commons Gallery.

Dance Studio Theatre. Located in the Physical Education Building East, the Dance Studio Theatre is a 6,000-square-foot dance studio that also serves as a proscenium-style performance space. The 300-seat theatre is devoted to informal and formal showcases of student and faculty choreographic work.

Drama City. Representing a synthesis of the creative energies of the Institute for Studies in the Arts and the Department of Theatre, Drama City is an 1,800-square-foot black-box theatre that serves as a laboratory for the development and presentation of experimental and innovative theatrical and interdisciplinary works.

Gallery of Design. Housed in the College of Architecture and Environmental Design, the Gallery of Design features traveling exhibitions on design and urban issues.

Paul V. Galvin Playhouse. Built to stage the largest productions of the ASU Theatre, the Paul V. Galvin Playhouse is a 496-seat proscenium-stage theatre set at the east end of the Nelson Fine Arts Center. The Department of Theatre's annual season of 12 to 15 plays also includes productions in the Lyceum and Prism theatres and the Fine Arts Center Studios.

Grady Gammage Memorial Auditorium. A versatile center for the performing arts designed by Frank Lloyd Wright and named for the late President Grady Gammage, Grady Gammage Memorial Auditorium seats 3,000 and has won wide acclaim for its design and acoustics. In addition to the great hall and related facilities—including the Aeolian-Skinner organ contributed by Hugh W. and Barbara V. Long—the building contains classrooms and workshops for the College of Fine Arts.

Katzin Concert Hall. Located in the new music building expansion, the Katzin Concert Hall seats 350 people. Primarily used for solo and chamber music recitals, the hall houses a nine-foot Hamburg concert Steinway piano. The acoustics are enhanced by the maple-paneled stage and the multifaceted walls and ceiling.

Louise Lincoln Kerr Cultural Center. Located in Scottsdale, the Louise Lincoln Kerr Cultural Center offers cultural events, especially in the performing arts, to the community.

Lyceum Theatre. A small but technically sophisticated 164-seat proscenium-theatre, the Lyceum Theatre is a theatre laboratory devoted to the work of student playwrights, directors, and actors.

Music Theatre. As part of the music complex, the Music Theatre, modeled after the Wagnerian Theatre in Bayreuth, Germany, rises five stories and seats an audience of 500. This theatre is the home of many opera and musical productions.

J. Russell and Bonita Nelson Fine Arts Center. Designed by Albuquerque architect Antoine Predock, the J. Russell and Bonita Nelson Fine Arts Center is a spectacular, 119,000-square-foot village-like aggregate of buildings that includes five galleries of the ASU Art Museum, the Paul V. Galvin Playhouse, the University Dance Laboratory, seven specialized theatre and dance studios, a video studio, and a variety of scenic outdoor features, including courtyards, fountains, pools, and a 50-by-100-foot projection wall designed for outdoor video.

Northlight Gallery. The Northlight Gallery is dedicated to museum-quality exhibitions of historical and contemporary photography. Located in Matthews Hall, it is open during the academic year.

Organ Hall. Located in the new music building expansion, the Organ Hall houses the Fritts Organ. This tracker-action pipe organ is designed to capture the qualities of baroque European organs. The hall is designed to complement the organ with a barrel-vaulted ceiling and wooden benches to seat 175 persons.

Prism Theatre. The Prism Theatre is an alternative black box space devoted to multiethnic, new, or experimental works.

Recital Hall. Located on the fifth floor of the music building, the Recital Hall is an intimate 125-seat facility that opens onto a rooftop courtyard.

Sundome Center for the Performing Arts. As America's largest single-level theatre, the Sundome Center for the Performing Arts in Sun City West has 7,169 seats. The theatre is equipped with sophisticated and state-of-the-art lighting systems, and a single-span roof affords each seat a clear view. As one of Arizona's premier entertainment venues, the Sundome provides a varied array of top entertainment from Las Vegas concerts to classical ballets to celebrity lectures.

Television Station KAET. KAET, Channel 8, is the university's PBS station. Studios of the award-winning station are located in the Stauffer Communication Arts Building. To operate 24 hours a day, KAET employs more than 50 ASU students and interns. To learn more about KAET-TV, visit its Web site at www.kaet.asu.edu or call 602/965-3506.

University Art Museum. The University Art Museum collections are housed in a large complex of galleries and art study rooms in two locations: the Nelson Fine Arts Center and the second floor of the Matthews Center. The Oliver B. James Collection of American Art ranges from the early 18th century to the contemporary and includes major works by Stuart, Ryder, Homer, and the Ash Can School painters. Master works by great printmakers such as Durer, Rembrandt, Whistler, and Hogarth are often featured in special exhibitions selected from the university's extensive print collection.

The gallery devoted to Latin American art features folk art as well as paintings by celebrated contemporary artists Rivera, Siqueros, and Tamayo. The museum also displays many fine examples of 19th- and 20th-century crafts, paintings, and sculpture.

The contemporary art holdings include works by Vernon Fisher, Leon Golub, Sue Coe, Luis Jimenez, and Robert Colescott. Exhibitions curated by the museum emphasize contempo-

rary art and new media, crafts, and Mexican art.

University Dance Laboratory. A flexible performance space within the Nelson Fine Arts Center, the University Dance Laboratory is designed specifically for experimental dance productions. Along with the Dance Studio Theatre in the Physical Education Building East, the University Dance Laboratory is used by the Department of Dance for its season performances.

Harry Wood Gallery. Housed in the Art Building (ART 120), the Harry Wood Gallery provides temporary exhibitions of the visual arts during the academic year.

COMPUTING FACILITIES AND SERVICES

Computers are a fundamental tool for research, instruction, and learning in every college and department at ASU. A variety of computing equipment and services are available for use by students, faculty, and staff.

Information Technology (IT) services provide programming, statistical, graphics, and other applications for microcomputers and mainframe computing systems. These services, including university-wide electronic mail and the library's online catalog, are accessible through a communications network from many sites and offices on and off campus via telephone connection. Communication with other research facilities is possible through the Internet.

A wide range of information on campus activities and related topics is available online. Faculty, staff, and students can access the ASU Home Page on the World Wide Web at www.asu.edu.

This Web site features a complete source of ASU information with text, photos, audio, and video. Via the Internet, ASU students, faculty, and staff also have access to the thousands of information systems around the world. The ASU server contains such information as a phone and electronic mail directory, the *Schedule of Classes*, the athletic calendar of events, weather forecasts from around the United States, and information from various colleges, departments, and organizations.

Educational services to assist faculty, students, and staff include online documentation, online consulting facilities,

online tutorials, videotaped and written materials, and noncredit seminars.

IT provides the following service centers for the ASU academic community.

Computing Commons. The Computing Commons building (CPCOM) was opened in 1993 to provide the university with an ideal setting to learn and experience the vast new frontier of high-performance computing. The Computing Commons draws together students, faculty, and staff from all disciplines, creating an environment designed to foster maximum interaction. The building and its facilities have drawn national recognition and acclaim as a model facility for the support of instruction and research in a technology-based environment. The Computing Commons houses a 200-workstation computing site, nine electronic classrooms, a Visualization Center, the Computing Assistance Center (COMPASS), a computer store, and a technology-based art gallery.

Computing Assistance Center. The Computing Assistance Center (COMPASS) has a library of reference manuals, computing periodicals, and other information concerning computing systems and software. Self-paced training is available for a variety of subjects on Windows, DOS, Macintosh, and mainframe computers. COMPASS also distributes communication, virus protection, and other site-license software.

Computer Training. ASU faculty and staff may register for hands-on, instructor-led classes on many PC applications, electronic mail, Internet applications, Web page development, statistical applications, and operating systems. Self-paced training is also available to faculty, staff, and students for a variety of subjects on Windows, DOS, Macintosh, and mainframe computers in COMPASS, CPCOM 202. To register for a class or to request a training schedule, call 602/965-2700 or access the training information online at www.asu.edu/it/fyi/help/trainingschedule.html.

Computing Consulting. ASU faculty, staff, and currently enrolled students can obtain computing consulting by calling 602/965-6500 or on a walk-in basis at COMPASS, CPCOM 202.

Consulting services are offered for ASU systems and software, including

1. networks and communications (data communications, utilizing ASU facilities; departmental local area networks; data communications software support);
2. electronic mail (VM/CMS, Exchange/Outlook, or microcomputer based electronic mail software; electronic post office; conferencing software; Internet);
3. microcomputing (support for faculty and staff who use microcomputers in their homes or offices, including assistance with a variety of software [e.g., word processing, spreadsheets, and database management systems]); and
4. research computing (statistical computing [e.g., SAS, SPSS]; programming questions [e.g., FORTRAN and C]; and software use on Academic Workstation Cluster, MVS, UNIX, National Supercomputing Centers, most workstation class machines, and the Visualization Center).

Instructional Support. Instruction Support (is.asu.edu) serves as a development center for the design and delivery of instruction utilizing technology. The Instruction Support Group is composed of interrelated units under which a wide range of talent and expertise is centrally available. Instruction Support is staffed by students, faculty, and researchers skilled in the areas of system design, graphics, interactive software, networked delivery, and digital video. The group facilitates not only the development of instruction within the realm of currently available technology, but also extends the potential to drive innovation and development. From this perspective, Instruction Support takes on the flavor of a research and development unit, a production group, and a training facility, in addition to providing an incubator for technological innovation.

The Instruction Support Group works in collaboration with faculty in the coordination of cross-disciplinary research and production projects relating to the integration of technology with education. Through partnerships with faculty and groups outside ASU, grant writing teams are able to leverage for support that may not otherwise be

attainable by a single academic unit or faculty member. Central to effective support service is the establishment of a partnership among the various support units within the university. Instruction Support coordinates the efforts of groups, including the College of Extended Education, University Libraries, Disabled Student Resources, and the Office of Research and Creative Activities, providing faculty with a wide array of support services.

Instruction Support offers courses tailored toward enhancing the instructional use of technology by the university teaching community. Courses range from an introduction to technology in education through advanced and customized approaches for instructors in specific programs.

Instruction Support (IS) Lab. The IS Lab provides an environment in which faculty may seek and receive one-on-one, guided or independent support for course development and delivery. Expert staff work closely with faculty to refine and develop their skills and confidence in the design and delivery of instruction through a variety of technology supported means, including synchronous and asynchronous learning. Located on the second floor of the Computing Commons, the IS Lab provides faculty, university professionals, and graduate students with a unique opportunity to integrate technology with instruction. The IS Lab sponsors workshops and demonstrations, and serves as a dynamic clearinghouse of information and referrals for effective integration of technology with education.

Research Support. Research Support provides assistance to faculty, staff researchers, and students in both scientific and creative endeavors. Research Support encompasses both processing and operations. Processing involves consulting with software tools and program coding directly related to projects or specific research. Operational activities support the overall work flow of university computing facilities. Activities include consulting for Computation, Statistics, Visualization and Geographical Information System platforms in conjunction with software package installation/use, training, media conversion, and product evaluation.

A variety of computation facilities are provided in support of research and creative endeavors within the ASU community. Computing facilities range from individual workstations to SMP/MPP servers and mainframes. Extended computer capabilities are available through access to national computing centers.

Geographic Information Systems (GIS) Lab and Visualization Center.

The GIS Lab and Visualization Center both seek to establish partnerships with faculty, staff, and students to acquire, create, and enhance research and creative endeavors through the effective use of Visualization and GIS technologies.

The Visualization Center is located in CPCOM 235. The center offers faculty, staff, and graduate students hardware and software resources and services for high-level graphics and visualization used in research. Researchers can receive assistance with interactive viewing of scientific data with topics from both the Liberal and the Performing Arts and other visually related endeavors. The Visualization Center serves as an incubator for developing technologies in software, hardware, and communications.

The GIS Lab staff assists researchers with hardware and software to facilitate the creation of geographic information systems for spatial analysis, query, and display. The Lab supports research from various disciplines and provides additional resources to students who are enrolled in classes for GIS instruction. The GIS Lab, also located in CPCOM 235 serves as a focal point for GIS users to meet and share information and technical expertise.

ALUMNI ASSOCIATION

Founded in 1894, the Alumni Association is a volunteer-led organization committed to serve and unite alumni for the purpose of advancing Arizona State University. The association provides a variety of services for ASU alumni as well as a series of events scheduled around the country.

With more than 200,000 alumni living in every state and throughout the world, the association plays an important role as the university's primary support organization. Comprising more than 40 groups, the campus, college, club, and chapter organizations (4Cs)

of the association provide opportunities for all alumni to stay involved with the part of ASU that interests them most.

Members of the ASU Alumni Association Board of Directors are elected each summer.

The association's professional staff is led by Executive Director Susan Clouse Dolbert.

For information about the association or its board of directors, call 1-800-ALUMNUS or 602/965-ALUM (2586).

PROGRAM ASSESSMENT AND THE OFFICE OF UNIVERSITY EVALUATION

The Office of University Evaluation is a research and service facility that focuses on assessing and improving the effectiveness of the university's academic and support programs. The office conducts, coordinates, and manages research designed to measure the degree to which courses, curricula, and academic programs impart knowledge and skills to students as well as the quality of support provided to students. The results of these studies, or assessments, are used to enhance both the support provided to students and the intellectual integrity of an ASU education.

In order for the university to assess and improve its programs, periodic measurement of student experiences, perceptions, and intellectual growth must be obtained. When asked by the university, students are expected to participate in one or more evaluative procedures, such as the ASU Report Card. These evaluative procedures are designed to assess the efficacy of the total university experience, including teaching and learning and support programs and are not used in individual grading. The information obtained is one of the means used to improve the quality of the educational experience for this and future generations of ASU students.

DIVISION OF UNDERGRADUATE ACADEMIC SERVICES

The Division of Undergraduate Academic Services was formed in 1993 to provide a focus for the university's undergraduate initiative.

The goals of the division are to improve the five-year graduation rate of ASU undergraduates, increase the retention of first-year students, improve

the foundational skills (numeracy and literacy) of undergraduates, and increase employer and graduate satisfaction with an ASU education.

The division includes the Writing Across the Curriculum program (for course listings, see page 330), the Service Learning Project, the University 100 program (see UNI courses below), the Cross-college Advising Services (see page 69), and the Degree Audit Report System (DARS). The Bachelor of Interdisciplinary Studies (B.I.S.) is administered through this division (see pages 110-111).

UNIVERSITY (UNI)

UNI 100 Academic Success at the University. (3) F, S, SS

Mastery in time management, notetaking, test taking, college text reading, university library use, goal setting, and use of university resources. Lecture, discussion, co-op learning. Prerequisite: freshman or sophomore or transfer student standing.

UNI 101 Student Success Seminar. (1) F, S, SS

Understanding human diversity, perspectives, and values as they relate to student success. Orientation to ASU resources, study skills, and academic and social issues for students. Seminar, discussion.

SERVICE LEARNING INTERNSHIPS

Service Learning uses community service to enhance education. The project is based on the concept of reciprocal learning. Service Learning sections of regular courses are linked to credit-bearing internships where students apply what they are learning in the community. For example, English composition classes provide structured academic components for ASU students who contribute one-on-one homework tutoring, reading development, educational enrichment workshops, and learning readiness programs for children and youth from the Roosevelt School District for six hours per week for a full semester. In turn, their community experiences and research form the basis of the tutors' classroom research and papers.

Students in service learning Plant Biology labs for nonmajors are teaching Julian Middle School and Salt River Elementary School fifth-grade students simplified versions of the science and math concepts they are learning themselves.

Students in a 100-level Physical Geography lab also partner with sixth-grade students at the Salt River Elementary School to share their knowledge of the physical environment. ASU students are required to prepare personalized lesson plans for every tutoring session. All one-on-one tutoring is done in an after-school environment at our partner agencies and schools, while the sciences have been written into the core curriculum in two of our partner schools.

Students may enroll in the internships with previous or current enrollment in the following linked courses.

Call 602/965-3097 for internship requirements and enrollment information.

Linked Courses

Composition and Linguistics Courses

ENG 102	First-Year Composition	3
ENG 213	Introduction to the Study of Language	3
ENG 216	Persuasive Writing on Public Issues <i>LI</i>	3
ENG 217	Personal and Exploratory Writing <i>LI</i>	3
ENG 301	Writing for the Professions <i>LI</i>	3
ENG 312	English in Its Social Setting <i>HU/SB</i>	3

See ENG course listings for more details.

Sciences and Additional Courses

GLG 103	Introduction to Geology I—Laboratory	1
GPH 111	Introduction to Physical Geography <i>SI/S2</i>	4
NUR 119	Introduction to Nursing and Health	3
PLB 108	Concepts in Plant Biology	4
SHS 250	Introduction to Phonetics	3
SHS 402	Modifying Communicative Behavior	3

See appropriate course listings for more details.

INTERNSHIPS

ENG 484 Composition Internship. (3) F, S Links courses with internships which involve tutoring children in after-school programs in the community and assisting them with reading, homework, and computer skills. Three afternoons a week from 3:00-5:00 P.M., Monday through Thursday.

GLG 484 Geology Internship. (3) F, S Assist in teaching seventh-grade students a simplified version of the GLG 101 lecture and GLG 103 laboratory in the context of hands-on activities.

GPH 484 Geography Internship. (3) F, S Assist in teaching sixth-grade students a simplified version of the GPH 111 course and laboratory in the context of hands-on activities.

NUR 484 Nursing Internship. (3) F, S
Plan and conduct health issues workshops for high school students at Desert Eagle School.

PLB 484 Science Internship. (3) F, S
Assist in teaching fifth-grade students a simplified version of the PLB 108 lecture in the context of designing and planting decorative, food-producing, and experimental gardens.

SHS 484 Speech and Hearing Internship. (3) F, S
Observe, test, and develop techniques and theories learned in either SHS 250 or 402. (See Speech and Hearing Science [SHS] course offerings for more details.)

RESEARCH CENTERS, INSTITUTES, AND LABORATORIES

These units serve the university's mission in research. They are overseen by seven of the colleges and the vice provost for Research.

College of Architecture and Environmental Design

Herberger Center for Design Excellence. The Herberger Center for Design Excellence serves the Phoenix area through research, publications, and symposia regarding urban design, design, and environmental planning issues. For more information, call 602/965-6693.

College of Business

Arizona Real Estate Center. The Arizona Real Estate Center, established in 1980, serves a multifunction research and educational role to foster better understanding of the real estate sector of the Arizona economy. Housing, commercial real estate, and construction activity data for Arizona and Maricopa County are collected by the center and are utilized for a variety of ongoing projects, including the calculation of affordability indexes and the computation of housing appreciation figures for the metropolitan Phoenix area. The center's annual outlook series provides a public forum for prominent members of the real estate industry to present their perceptions of market conditions.

For more information, contact the director, Arizona Real Estate Center, BA 319, 602/965-5440. The center's Web site is www.cob.asu.edu/seid/arec.

Bank One Economic Outlook Center. The Bank One Economic Outlook Center (EOC), established in 1985, specializes in economic forecasts of Arizona

and the Western states. The center publishes the *Bank One Arizona Blue Chip Economic Forecast* (monthly), *Greater Phoenix Blue Chip Economic Forecast* (quarterly), *Western Blue Chip Economic Forecast* (10 issues per year), and *Blue Chip Job Growth Update* (monthly), an update of current job growth in the United States. The center also publishes *Mexico Consensus Economic Forecast* (quarterly), a forecast and historical data on the Mexican economy.

For more information, contact the director, Bank One Economic Outlook Center, BA 319, 602/965-5543. The center's Web site is www.cob.asu.edu/seid/eoc.

Center for the Advancement of Small Business. The Center for the Advancement of Small Business (CASB) is the 21st century leader in business education, practice, and research that provides high-quality, relevant programs, and information services focused on small business since 1994. The center enables students and existing small and medium-sized businesses to participate, contribute, and compete in the global economy.

The center provides students from all disciplines with programs and resources that prepare them for positions of leadership in small and medium-sized businesses, and aids small and medium-sized businesses in the continuous improvement of their human resources and business practices. CASB also engages in applied research on entrepreneurship and the emerging changes and trends in small business.

For more information, contact the director, Center for the Advancement of Small Business, BAC 111, 602/965-3962. The center's Web site is www.cob.asu.edu/seid/casb.

Center for Advanced Purchasing Studies. The Center for Advanced Purchasing Studies (CAPS) was established in November 1986 by a national affiliation agreement between the ASU College of Business and the National Association of Purchasing Management (NAPM). It is the first and only program of its kind in the nation and is located in the Arizona State University Research Park, about eight miles south of the main ASU campus. CAPS conducts in-depth research into the problems facing the purchasing profession today and, through its studies, seeks to

improve purchasing effectiveness and efficiency, and the overall state of purchasing readiness.

For more information, call 602/752-2277, or contact

DIRECTOR, CENTER FOR ADVANCED
PURCHASING STUDIES
ASU RESEARCH PARK
2055 E. CENTENNIAL CIRCLE
PO BOX 22160
TEMPE AZ 85285-2160

Center for Business Research. The Center for Business Research (CBR) has been a consistent source of information on the Arizona and metropolitan Phoenix economies since 1951. Both the business community and the public have had access to the economic indicators produced by the ongoing projects of the center, including quarterly net migration estimates for Arizona and Maricopa County, and the metropolitan Phoenix Consumer Price Index. The center also conducts projects under the sponsorship of private and public agencies. Recent examples include the economic impact of Super Bowl XXX, a study of seasonal migration to Arizona, and an analysis of the state's hospital industry. A monthly publication of the center, *AZB/Arizona Business*, plays a major role in disseminating to the public the economic information compiled by the research centers of the College of Business. The staff within the center is available to respond to inquiries and to provide available data.

For more information, contact the director, Center for Business Research, BA 319, 602/965-3961. The center's Web site is www.cob.asu.edu/seid/cbr.

Center for Services Marketing and Management. The Center for Services Marketing and Management (SMM Center) is a leading university-based hub devoted to the study of services marketing and management since 1985. The SMM Center addresses how any company can improve internal service processes and use service and customer satisfaction as a competitive advantage. The center is cross-industry in nature, encouraging firms to share the best ideas and practices for adaptation across industries. Though grounded in marketing, the center's work is also cross-functional, integrating concepts and techniques from marketing, operations, human resources, and management.

The center's areas of expertise include customer retention and loyalty; service quality; service delivery; professional services such as healthcare, accounting and consulting services; customer satisfaction; services strategy; service culture; and service recovery. A leader in the business and academic communities, the SMM Center's work advances the knowledge base in the field and provides applicable frameworks, concepts, and tools.

The SMM Center partners with 26 charter member firms, a who's who list of companies recognized for their service orientation—AT&T, Marriott, Federal Express, Harley Davidson, Xerox, MicroAge, Lucent Technologies, Ford, and Prudential.

The center offers its partner firms top flight executive education in services through the annual "Activating Your Firm's Service Culture" symposium, the annual "Services Marketing and Management" institute, and the annual "Information Technology Services Marketing" course, and provides customized executive education programs and research projects which are tailored to and conducted for charter member firms.

The center also actively supports the College of Business' M.B.A. program that offers a certification in Services Marketing and Management. The services track infuses strong company-based experience and encourages summer internships.

For more information, contact the director, Center for Services Marketing and Management, BAC 440, 602/965-6201.

Center for the Study of Finance. The Center for the Study of Finance (CSF), established in 1986, serves the national financial, policy-making, and academic communities through research, publications, conferences, and educational programs. The focus of such activities is on the changing nature of the domestic and international financial system with such specific areas as the interaction between financial markets, deposit insurance reform, the deregulation of financial institutions, the financing of mergers and acquisitions, and the effect of government policy on financial markets receiving recent attention.

For more information, contact the director, Center for the Study of Finance, BAC 519, 602/965-5229.

Joan and David Lincoln Center for Applied Ethics. The Joan and David Lincoln Center for Applied Ethics (LCAE) has provided training and sponsored research in applied ethics for organizations since 1980. The center's research focuses on the connection between valued-based businesses and their financial performance. Its study of companies with 100 years of consistent dividend payments has been reported in *The Wall Street Journal* and numerous academic and professional journals.

The center sponsors an annual conference on organizational ethics as well as on ethics for lawyers beyond the profession's code and model rules. Examples of topics covered in the center's published research reports include lawyers and ethics, ethics and international labor practices, the rogue employee and ethics in organizations, and ethics and cultural variances in international business.

Each year the center recognizes an outstanding business leader for exemplary ethical standards. Recipients of the Lincoln Center award in the past have been Lewis W. Lehr of 3M, the center's first recipient; Sir Adrian Cadbury of Cadbury Schweppes; Robert W. Galvin of Motorola; James Houghton of Corning Glass Works; R. William Taylor of the American Society of Association Executives; Jerry Junkins of Texas Instruments; Bowen McCoy of Buzz McCoy Associates, Inc.; and Aaron Feuerstein of Malden Mills Industries, Inc.

For more information, contact the director, Joan and David Lincoln Center for Applied Ethics, BA 352B, 602/965-2710.

Manufacturing Institute. See page 32 for information about this joint venture of the College of Business and the College of Engineering and Applied Sciences.

College of Education

Center for Bilingual Education and Research. Bilingual education is an internationally significant field that crosses many disciplines. In 1980, the College of Education formally instituted a Center for Bilingual Education and Research with a multidisciplinary perspective addressing local, national, and international concerns. The center initiates and coordinates research ventures in bilingual/bicultural education

and is responsible for assembling faculty and staff expertise and outside resources to accomplish research goals.

The center also supports instructional activity in bilingual curricula and related program efforts within the college. Because of the cross-disciplinary nature of bilingual education programs, a collegewide effort is necessary to develop, evaluate, and strengthen such programs.

The center is committed to

1. enhancement of broadly based faculty participation in research;
2. acquisition of external research and training resources;
3. enhancement of communication networks with other local, state, national, and international institutions and agencies that can increase the center's ability to achieve its objectives; and
4. development of a scholarly dissemination strategy incorporating colloquia, conferences, and publications.

For more information, contact the director, Center for Bilingual Education and Research, ED 414, 602/965-7134.

Center for Indian Education. The Center for Indian Education is an interdisciplinary research and service center established in 1959. It promotes studies in American Indian policy and administration that contribute to scholarship and effective practices in education, professional training, and tribal capacity building. It is structured to foster relations between the university and sovereign tribes, and to provide training and technical assistance for community programs. The center publishes the *Journal of American Indian Education* and sponsors workshops and colloquia that bring together scholars and tribal community leaders.

The center provides leadership through a group of American Indian faculty and is organized on the basis of scholarly expertise of the faculty. In addition to College of Education faculty, responsibilities are shared by faculty from the School of Social Work, the School of Justice Studies, the College of Liberal Arts and Sciences, and the College of Law. Areas currently studied include administrative leadership, policy analysis, bilingual education, health and welfare policy, justice studies, and program development in professional studies.

For more information, contact the director, Center for Indian Education, ED 415, 602/965-6292.

College of Engineering and Applied Sciences

Center for Innovation in Engineering Education (CIEE). This center, established in September 1994, promotes and encourages visionary approaches to educating engineering students. The center seeks support for the research, development, and assessment of new educational paradigms, unique curricula, improved courses, and new delivery systems that embrace a range of learning models, alternative classroom management strategies, improved pedagogies, and advanced educational technologies. The center also develops and offers workshops and seminars to encourage wide-scale implementation of those approaches that are shown to be effective in developing the attributes that will be needed by graduates.

The vision of the center is that its programs will (1) create and continuously improve educational systems that will develop in graduates the skills, knowledge, and attitudes required for them to quickly and effectively become world-class engineers; and (2) develop an expanding team of scholars that desires to actively explore new and improved educational theories, methods, and technologies to improve teaching and learning.

For more information, contact the CIEE director, EC G205, 602/965-5350.

Center for Research in Engineering and Applied Sciences. The Center for Research in Engineering and Applied Sciences supports the faculty and students in the knowledge creation and discovery mission of the university. The center provides research support services for all research in the college as well as interfacing with the research offices of the university and other colleges. The center area also supports the contribution of the college to the state's economic development through collaborative research partnerships with and technology transfer to industry. Specialized and interdisciplinary efforts are currently in place in such areas as acoustics, air pollution, alternative energy, applied mechanics, artificial intelligence, automated manufacturing, bioengineering, communications, computational microelectronics, computer-

aided design and manufacturing (CAD/CAM), computer-integrated manufacturing (CIM), computer science, control systems, data and information systems, electrical characterization, environmental resources and control, expert systems, fluid mechanics, fuels and combustion, materials, mass transfer, metallurgy, nuclear radiation, photovoltaics, plasma, plastics, power systems, analyses, robotics, semiconductor materials and fabrication, semiconductor processing, signal processing, soil mechanics, solar thermal energy, solid-state electronics and systems design and analysis, telecommunications, thermodynamics, transportation systems, turbines, very-large-scale integrated (VLSI) circuits, waste management, and water resources.

For more information, contact the director, Center for Research in Engineering and Applied Sciences, EC G136, 602/965-1725.

Center for Low Power Electronics.

The technical areas of focus include

1. basic materials, alternative materials, and their fabrication;
2. device design optimization;
3. design of digital, analog, and hybrid low power circuits; and
4. power-based physical design for single and multi-chip VLSI systems.

For more information, contact the director, Center for Low Power Electronics, ERC 115, 602/965-3708.

Center for Solid-State Electronics Research. CSSER focuses on research in the areas of semiconductors crystal growth, both by bulk and epitaxial techniques, device characterization and modeling, defect behavior in semiconductors material characterization, processing, fine line lithography, surface analysis, and transport. Major programs address semiconductor device modeling, transport theory, optoelectronics, ferroelectrics, semiconductor processing, microwave devices, and ultra-submicron devices. New programs address synthetic neural systems and their impact on VLSI design. Research in the specially designed facilities includes various aspects of submicron dimension devices.

For more information, contact the director, Center for Solid-State Electronics Research, ENGRC 115, 602/965-3708.

Manufacturing Institute. The Manufacturing Institute is a joint venture of the College of Business and the College of Engineering and Applied Sciences, established to enhance manufacturing research and industrial collaboration at the interface between the two colleges. The mission of the institute involves integrating aspects of manufacturing in both the business and engineering areas, helping to fulfill the university's goal of becoming one of the leading educational and research institutions in both manufacturing enterprise and manufacturing process technology issues. The institute has two academic codirectors, one each from the College of Business and the College of Engineering and Applied Sciences, and has active industry involvement.

For more information, contact one of the directors in GWC 402, 602/965-3709.

Center for System Science and Engineering Research. The Center for System Science and Engineering Research has established four focus areas: nonlinear dynamical systems, control theory and its applications, mathematical neuroscience, and scientific computing and interdisciplinary systems engineering. The center is jointly sponsored by the College of Engineering and Applied Sciences and the College of Liberal Arts and Sciences. Its main goals are the creation and enhancement of interdisciplinary and cooperative research, graduate education, and public service programs in the areas of systems science, applied mathematics and computation.

For more information, contact the SSERC director in GWC 606 at 602/965-8382.

Telecommunications Research Center. Telecommunications play a vital role in home, commercial, entertainment, educational, scientific, and military systems. The Telecommunications Research Center focuses its interests and activities in research and educational programs. The approach is to conduct basic and applied research, develop technologies, and provide education programs in all major areas of telecommunications, from signal generation to reception. The targeted areas of excellence are antennas, propagation, and scattering; microwave circuits, devices, and measurements; optical communications; signal processing; broad-

band switching; and communication systems. Ultramodern laboratories and computational facilities are associated with the center.

For more information, contact the director, Telecommunications Research Center, GWC 411, 602/965-5311.

College of Fine Arts

Institute for Studies in the Arts. As the research center for the College of Fine Arts, the Institute for Studies in the Arts (ISA) serves as a laboratory for the research and development of new art forms, new ideas and concepts, and innovative technologies for artistic expression; a network for communication among creative scholars both within and outside the arts; and a resource base for the documentation, evaluation, and dissemination of research in the arts. ISA addresses the needs of a variety of populations through technical and monetary support and sponsorship of research projects, performances, exhibitions, and symposia.

ISA facilities include an experimental performance studio at Drama City and a state-of-the-art video production and post-production laboratory in Matthews Center. ISA maintains a database of interdisciplinary scholarship in the arts and actively seeks to communicate with researchers from diverse backgrounds in the ASU community and worldwide.

ISA is open to a wide range of research proposals from both faculty and graduate students, provided such proposals address the ISA mission of experimentation and innovation in the arts.

For information, contact the director, Institute for Studies in the Arts, MCENT 252, 602/965-9438, or visit ISA's Web site at researchnet.vprc.asu.edu/isa.

College of Law

Center for the Study of Law, Science, and Technology. Located in the College of Law, the center conducts research, edits the *Jurimetrics Journal of Law, Science and Technology* in cooperation with the American Bar Association Section on Science and Technology, and sponsors seminars, workshops, and conferences. Through these activities, the center seeks to contribute to the formulation and improvement of

law and public policy affecting science and technology and to the wise application of science and technology in the legal system. Current areas of research include communications and telecommunications law, computer-related law, forensic science and statistics, legal issues and biotechnology, law and medicine, and law and social science.

For more information, contact the director, Center for the Study of Law, Science, and Technology, LAW 102, 602/965-2124.

College of Liberal Arts and Sciences

Arizona Center for Medieval and Renaissance Studies (ACMRS). The Arizona Center is a research unit serving affiliate scholars from ASU, Northern Arizona University, and the University of Arizona. It represents a variety of disciplines including history, literature, philosophy, religion, language, music, art, and science. ACMRS enriches academic offerings in medieval and renaissance studies by sponsoring one or two visiting professors each year. Graduate research assistantships are also available through the center.

Significant opportunities for the study of the Middle Ages and the Renaissance exist at ASU. Hayden Library has an extensive microfilm collection and many rare books in medieval and renaissance studies. ACMRS also sponsors a lecture series each semester covering a variety of topics.

Other programs include an annual conference, a public symposium, a summer study abroad program at University of Cambridge (United Kingdom), and student exchange programs with the University of Copenhagen (Denmark) and the University of Kalmar (Sweden).

Since 1996, ACMRS has published *Medieval & Renaissance Texts & Studies (MRTS)*, a major series of editions, translations, and reference works. In collaboration with the University of Massachusetts at Dartmouth and the Medieval and Renaissance Committee of the University of Michigan, ACMRS sponsors and coedits *Mediterranean Studies*, an annual interdisciplinary journal publishing articles on all aspects of the Mediterranean region. ACMRS also sponsors a book series titled "Arizona Studies in the Middle Ages and the Renaissance," published by Brepols (Belgium).

ACMRS also partners with the Renaissance Society of America and the University of Toronto in "Iter," a massive, retrospective, online medieval and renaissance bibliography covering all languages and disciplines, and is the official site of the Medieval Academy of America's online data project offering information on medieval centers, programs, committees, and regional associations in North America.

For more information, contact the director, Arizona Center for Medieval and Renaissance Studies, SS 224, 602/965-5900.

Cancer Research Institute. Significant advances in the treatment of human cancer and other serious medical problems depend upon scientists well trained in organic chemistry, biochemistry, and biology. The Cancer Research Institute provides graduate students with the specialized training necessary for research in the discovery and development of effective anticancer drugs. Among various activities, laboratory personnel are pursuing a unique program concerned with isolation, structural identification, and synthesis of naturally occurring anticancer agents from marine animals, plants, and marine microorganisms.

For more information, contact the director, Cancer Research Institute, CRI 209, 602/965-3351.

Center for Asian Studies. Through its East Asian and Southeast Asian studies programs, the center serves as research coordinator for Asian studies' faculty and graduate students in a variety of disciplines. The center sponsors colloquia and research conferences. It also publishes two scholarly *Monograph Series* and a newsletter on Southeast Asian studies, *Suvannabhumi*, which have an international readership. Graduate students may apply for research assistantships in the center and its program.

The center administers student exchange programs with a number of universities in Asia. The center also sponsors a graduate student colloquium and film series on Asian topics. A reading room is located in the center office suite offering a variety of Asian and English language publications and newspapers from and about Asia.

For more information, contact the director, Center for Asian Studies, WHALL 105, 602/965-7184.

Center for Latin American Studies.

Arizona maintains an ever-growing interest in Latin America that draws upon an extensive experience of historical and geographical ties. The Center for Latin American Studies is the focal point for these interests at ASU.

Through its program, the center serves the university community and maintains strong ties with various Latin American organizations in the state and the nation. Principal activities are coordinating Latin American studies at the undergraduate and graduate levels; sponsoring student exchange programs, organizing events featuring Latin American arts and culture, numerous seminars, and research conferences; publishing a wide range of professional materials; and undertaking and facilitating research about the region.

The center administers student exchange programs with the Catholic University of Bolivia and three Mexican universities—the Autonomous University of Guadalajara, the Autonomous University of Nuevo Leon, and the University of Sonora. Each spring several ASU students are selected to attend courses at the Latin American universities while Bolivian and Mexican students attend ASU.

Each year the center publishes several scholarly books as well as shorter monographs in its Special Studies Series.

The center is a member of the American Modern Language Association, the Consortium of U.S. Research Programs for Mexico, the Consortium for Latin American Studies Association, Pacific Coast Council on Latin American Studies, Rocky Mountain Council for Latin American Studies, Consortium of Latin American Studies Programs, and Conference on Latin American History.

The center directly encourages research, not only through its publications program and research conferences, but also through close coordination with the Latin American collection of Hayden Library and networking with Latin American universities.

For more information, contact the director, Center for Latin American Studies, SS 213, 602/965-5127.

Center for Meteorite Studies. One of the nation's largest collections of extraterrestrial materials is available for research in the Center for Meteorite Studies. Teaching and research on meteor-

ites, meteorite craters, and related areas of space and planetary science are accomplished through the regular academic units in cooperation with the center.

For more information, contact the director, Center for Meteorite Studies, PS C151, 602/965-6511.

Center for Solid-State Science. The Center for Solid-State Science is a research unit within the College of Liberal Arts and Sciences.

The membership comprises faculty and academic professional researchers and research support personnel, most of whom hold simultaneous appointments in affiliated academic units. The Center for Solid-State Science is the ASU focal point for interdisciplinary research on the properties and structures of condensed phases of matter. Current research topics include, among others, electronic materials, ceramics, composites, rare earth oxides, intercalation compounds, and ionic conductors.

Members of the center operate modern and sophisticated research facilities, organize regular research colloquia and symposia, and collaborate extensively with other researchers on projects of mutual interest. The principal topical research area in the center is the science and engineering of materials, with emphasis on the structure and reactivity of interfaces and surfaces; synthesis and processing of new materials; high resolution microstructural and chemical analysis; and research computing, consultation, and analysis with high speed computer graphics for physical modeling and visualization.

The Goldwater Materials Science Laboratories of the center include

1. the Materials Preparation Facility (MPF), which provides a wide range of synthesis and processing capabilities for preparation of specimen materials. MPF also provides thermal analysis for study of solid-state reactions and Auger and X-ray photoelectron spectroscopy for analysis of surface compositions and electronic structure of surfaces;
2. the Materials Science Electron Microscopy Laboratory (MSEML), which provides state-of-the-art electron microscopes for analysis of microstructures, including imaging and diffraction, and high spatial resolution chemical analysis using

energy dispersive X-ray and electron energy loss microspectroscopy;

3. the Ion Beam Analysis of Materials (IBeAM) Facility, which provides compositional and structural determination of the surface and near-surface regions (0–2mm) of solids by ion beam analysis where elemental composition and depth distribution information are needed. Channeling experiments are used to determine crystal perfection and site occupancy;
4. the Facility for High Resolution Electron Microscopy (HREM), which operates several ultra high resolution and ultra high vacuum electron microscopes and supports microscopy methods and instrumentation development, including holography, position- and time-resolved nanospectroscopy and energy-filtered imaging and diffraction. The center provides high-resolution capability for a large external group from other universities and industry; and
5. the Secondary Ion Mass Spectrometry (SIMS) laboratory, which provides depth profile and point composition analysis with very high chemical sensitivity, on the order of one part per billion, including isotopic analysis for many materials. SIMS is also used as a chemical microscope, to image elemental distributions on specimen surfaces.

The Goldwater Materials Science Laboratories of the Center for Solid-State Science are the primary teaching and research resources used by students in the Science and Engineering of Materials interdisciplinary Ph.D. program and the undergraduate option for Materials Synthesis and Processing. They are used for the same purposes by students from affiliated departments.

Special laboratories for other relevant research are available in affiliate departments. These include nuclear and electron resonance spectroscopy laboratories, X-ray diffraction and fluorescence laboratories, mechanical properties measurements capability over a wide range of temperatures, optical (laser) spectroscopy laboratories, and scanning tunneling and atomic force microscope laboratories. Additional laboratories for related research are available in affiliate departments.

For more information, contact the director, Center for Solid-State Science, PS B234, 602/965-4544.

Center for the Study of Early Events in Photosynthesis. This center, located in the College of Liberal Arts and Sciences, was established at ASU in 1988 as part of the USDA/DOE/NSF Plant Science Centers Program. The center serves as an infrastructure supporting ASU scientists who study photosynthesis using a variety of methods and approaches, ranging from molecular biology and biochemistry to organic chemistry, ultrafast laser spectroscopy, X-ray crystallography, and theoretical chemistry. It is designed to enhance undergraduate, graduate, and postdoctoral education through multidisciplinary cooperative research projects.

The ultimate objective of the research is the elucidation of the basic principles governing the biochemical and biophysical processes of photosynthetic energy storage. This goal is being realized via investigation of the early events of photosynthesis, including: light absorption and excitation transfer in photosynthetic antennas; the mechanism of primary photochemistry in plant and bacterial systems; secondary electron transfer processes; structure and assembly of photosynthetic antennas, reaction centers, and electron transfer proteins; pigment-protein interactions; artificial and biomimetic photosynthetic solar energy conversion systems; and mechanisms of biological electron transfer reactions.

The center is equipped with state-of-the-art instrumentation which allows students to do frontier research in a broad range of disciplines. Equipment includes a variety of pulsed lasers for measurements with time resolution ranging from sub-picoseconds to seconds; a 500 MHz NMR instrument; an EPR spectrometer; a protein X-ray facility; spectrophotometers; fluorometers; a protein sequencer; and an amino acid analyzer.

The center sponsors a weekly Photosynthesis Seminar Series and brings in visiting scientists from around the world to carry out collaborative research. Undergraduate, graduate and postdoctoral training programs in the Department of Chemistry and Biochemistry and the Department of Plant Biology are central components of the activities of the center.

For more information, contact the director, Center for the Study of Early Events in Photosynthesis, PS D207, 602/965-1963.

Deer Valley Rock Art Center. Deer Valley Rock Art Center, located two miles west of the Black Canyon Freeway on Deer Valley Road, is operated by the ASU Department of Anthropology in consultation with the Hopi, Yavapai, and Gila River Indian tribes. It includes more than 1,500 petroglyphs that cover the eastern slope of Hedgepeth Hills. For more information, call 602/582-8007.

Exercise and Sport Research Institute. The Exercise and Sport Research Institute (ESRI) is an interdisciplinary research unit located in the Department of Exercise Science and Physical Education and serves, in part, as a research facility for the interdisciplinary doctoral program in exercise science.

The major research areas can be described as follows. *Biomechanics* applies the laws of physics to the study of human movement. It examines internal and external forces applied to the human body and the effects these forces have on the body. *Exercise physiology* studies the acute responses of the body to exercise and its chronic adaptations to training. It also studies the interrelationships among physical activity, performance, and health. *Exercise biochemistry* focuses on the study of subcellular systems involved in the provision and regulation of energy transfer during exercise. *Exercise endocrinology* studies interrelationships of exercise and training with stress, hormones, neurotransmitters, and the immune system. *Motor behavior and sport psychology* study human behavior in fundamental motor activity and sport. *Motor behavior* includes the subdomains of *motor learning, control, and development*. Motor learning focuses on skill acquisition, motor control studies how movement is regulated and controlled via the nervous system in normal and pathological populations, and motor development studies how growth and maturation affect performance and learning across the lifespan. Within the context of sport and exercise, *sport psychology* examines the influence of psychological variables on performance or health and the influence of participation on psychological phenomena.

The ESRI is affiliated with a number of medical institutions in the Phoenix area.

Faculty and graduate students at the ESRI are investigating a wide range of topics concerning human physical activity, including different ages, levels of health, levels of ability and fitness, and environments; and levels and types of training, body composition, nutrition, and physical and emotional stresses. Where applicable, these aspects are studied using an interdisciplinary approach.

For more information, contact the director, Exercise and Sport Research Institute, PEBE 159, 602/965-7473.

Hispanic Research Center. The Hispanic Research Center (HRC) at ASU is an interdisciplinary unit, dedicated to research and creative activities, that is university-wide but administered through the College of Liberal Arts and Sciences. The HRC performs basic and applied research on a broad range of topics related to Hispanic populations, disseminates research findings to the academic community and the public, engages in creative activities and makes them available generally, and provides public service in areas of importance to Hispanics.

Faculty, staff, and advanced graduate students organize into working groups to develop a broad range of specific projects and lines of inquiry within the general categories of Hispanic entrepreneurship, science and technology, information and data compilation and dissemination, the Hispanic polity, and the arts. Ongoing activities of the HRC, primarily funded by external grants, include the Arizona Hispanic Business Survey, the *Bilingual Review Press*, the Coalition to Increase Minority Degrees, the Community Art and Research Outreach (CARO), *Compañeros en la Salud*, Project 1000, and the Western Alliance to Expand Student Opportunities.

CARO sponsors creative activities and action research in collaboration with community-based organizations and ASU faculty.

For more information, contact the director, Hispanic Research Center, CFS 104, 602/965-3990.

Institute of Human Origins. The Institute of Human Origins (IHO), founded in 1981 by Donald Johanson, became part of the College of Liberal

Arts and Sciences in 1997. IHO is a multidisciplinary research organization dedicated to the recovery and analysis of the fossil evidence for human evolution and the establishment of a chronological framework for human evolutionary events. IHO's scientists carry out field research at sites in Africa, the Middle East, and Asia. IHO houses the largest collection of *Australopithecus afarensis* casts (including "Lucy," a 3.2 million-year-old human ancestor) in the world as well as an extensive collection of other fossil hominid casts. IHO's library contains more than 3,000 volumes, numerous journals, videotapes, audiotapes, and slides related to human evolution and fossil sites. IHO produces periodic newsletters, offers lecture series, conducts tours and workshops, and supports numerous informal science education outreach projects.

For more information, visit the Institute of Human Origins, SS 103, or call 602/727-6570.

College of Public Programs

Morrison Institute for Public Policy.

Established in 1981 by the Morrison family of Gilbert, Arizona, the Institute conducts research on public policy matters, informs policy makers and the public about issues of importance, and advises leaders on choices and actions. Morrison Institute offers a variety of services to public and private sector clients and pursues its own research agenda. Services include policy re-

search, program evaluation, and public outreach. The institute's interests, research, and publications span such areas as education, urban growth, human services, workforce development, economic development, and arts and culture.

For more information, call 602/965-4525, visit the Web site at www.asu.edu/copp/morrison, or write

MORRISON INSTITUTE FOR PUBLIC
POLICY
ARIZONA STATE UNIVERSITY
PO BOX 874405
TEMPE, AZ 85287-4405

Vice Provost for Research

Center for Environmental Studies.

Established in 1974, the center encourages and coordinates interdisciplinary environment-related activities in the natural and social sciences within the university.

Research programs within the center emphasize ecosystem and human impact studies; riparian and aquatic studies; wildlife biology; environmental regulation and policy issues; covering environmental risk assessment; hazardous materials; waste management; and studies relating to environmental problems on the U.S.-Mexico border. The center also organizes a variety of training programs for practitioners on current federal environmental regulations.

The center encourages communication among academic, government, and private sectors through research, work-

shops, seminars, and working papers. It manages the Sierra Ancha Research Station for the university. The station is located at an elevation of 5,000 feet in the desert-pine forest transition. It offers research potential in biology, geology, anthropology, resource management, and nuclear engineering. Research space and living accommodations are also available for academic and research organizations.

For more information, contact the director, Center for Environmental Studies, Tempe Center (University and Mill), 602/965-2975.

ASU East

For information on the Center for Agribusiness Policy Studies, see page 455.

CONSORTIUM FOR INSTRUCTIONAL INNOVATION

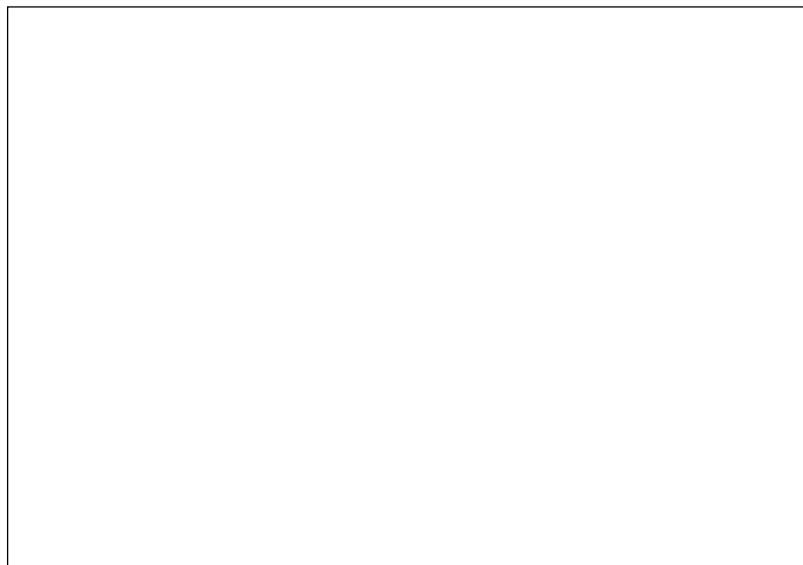
The Consortium for Instructional Innovation (CII) is a multidisciplinary unit committed to developing and supporting new pedagogical and technological approaches to teaching. CII uses a vast system of university resources to provide members of the university teaching community the opportunity to combine their talents and expertise with the latest technologies in producing beneficial new teaching methods.

CII combines existing teaching methods with technological options such as the use of computers, videotape, computer animation, and laser disks to create the best possible instructional methods.

CII offers assistance and financial aid to members of the teaching community who seek to develop projects in improving the quality of education at ASU. In evaluating proposals for curricular innovation, CII considers the applicability of projects to other areas and settings, the impact of projects on both students and faculty, and the commitment from the college or department in support of proposed programs.

In addition to developing teaching methods, CII periodically sponsors workshops and serves as a clearing house for information and referrals.

The units that make up CII are Computer and Network Consulting Services, University Libraries, University Media Systems, the University Program for Faculty Development, and the Writing Across the Curriculum program.



A pedestrian bridge makes crossing University Drive easy and safe for students.

Tim Trumble photo

Student Services

The university is committed to the belief that an education involves more than attending class. While the assimilation of information is a central part of the university experience, learning about others, about independence and leadership, and about living in a complex society are equally important. Student Affairs' services and developmental programs reflect this philosophy.

UNDERGRADUATE ADMISSIONS

For many undergraduates, the first introduction to ASU is through the recruitment and admission programs of Undergraduate Admissions. Personal contact with prospective students through high school and community college visits and through student visits on campus are some of the approaches that provide information about the academic programs and support services available at ASU. A primary goal of Undergraduate Admissions is to identify, inform, motivate, recruit, and enroll students from ethnic groups underrepresented at ASU. Orientation programs ease the students' (and parents') transition to the ASU campus. Undergraduate Admissions also coordinates and supports the ASU Parents Association. For more information, call 602/965-7788.

STUDENT FINANCIAL ASSISTANCE

Approximately two-thirds of the full-time students at ASU rely on some form of financial assistance to meet their educational expenses. The purpose of Student Financial Assistance is to review and award financial resources from a variety of private, federal, state, and institutional sources. Information about and applications for scholarships, grants, loans, and student employment are coordinated by this department. From these types of assistance, 30,400 students received approximately \$225 million in 1996-97.

Computerization and an understanding of students' needs have contributed to the efficient and responsive operation of this student resource. Assistance in student loan counseling and debt management services are innovative programs offered through this agency. ASU is nationally recognized for providing this unique financial aid service. For more information, call 602/965-3355.

REGISTRAR

Management of the registration system and maintenance of academic records are the primary responsibilities of the Office of the Registrar. InTouch, the ASU touch-tone telephone system for registration and fee payment, and the online registration system, accessible at any registrar site, including one at ASU West, ease the enrollment process and make ASU a national leader in the use of computerized registration. The Student Information System stores academic records and improves the quality of data used in academic advising. The Office of the Registrar coordinates applications for graduation and undergraduate readmission, course changes and scheduling, transcript services, applications for residency, and verification of enrollment. Additional information is available on the Web at www.asu.edu/registrar or by phone at 602/965-3175.

Veterans Services

This office offers complete educational services for US veterans and their eligible dependents. Counseling about admissions, registration, and veterans benefits is available. Veterans programs provide service by advising all interested veterans and dependents about educational benefits and their optimum use. Students must apply each semester to receive veterans benefits. The program also assists veteran students in obtaining suitable paid tutors, when needed, using their federal benefits. Veterans must achieve adequate GPAs and semester-hour progress toward their academic programs for continued educational benefits. The university must report this progress each semester. Students receiving veterans educational benefits are not eligible to receive pay for audited courses. The Veterans Services Section is located in SSV B117. For more information, call 602/965-7723.

RESIDENTIAL LIFE

Living in one of the ASU Main residence halls provides students the opportunity to make the most of their college experience. Special residential communities for freshmen, honors students, students participating in fraternities and sororities, and students in particular academic areas offer opportunities to enrich campus life.

ASU East housing includes residence halls as well as two- to five-bedroom homes. Call 602/988-9160 for further information. For additional information about ASU East housing, see page 435.

The Freshman Year Experience program provides a unique environment of classrooms, live-in tutors, academic advisors, and other support services designed to help freshmen develop skills for success.

The Campus Communities program (see the Institute for Cocurricular Programs and Service [ICPS] on this page) provides residential communities for students with interests in a variety of areas. Students who do not want to participate in a campus community can benefit from the activities of other residential communities, including halls that feature apartment-style or single rooms, or one that promotes a study-intensive environment.

Students are encouraged to apply for housing early. While applications are accepted at any time, assignment to a residence hall is not made until a student is admitted to the university. Residence hall assignments are made based upon the date of receipt of both the completed application and deposit. Requests for specially modified rooms for students with disabilities should be noted on the application.

ASU Main residence hall application information may be obtained by calling 602/965-3515 or writing

RESIDENTIAL LIFE
ARIZONA STATE UNIVERSITY
PO Box 870212
TEMPE AZ 85287-0212

Information about ASU Main voluntary meal plans may be obtained by calling 602/965-3464 or writing

CAMPUS DINING
ARIZONA STATE UNIVERSITY
PO Box 871101
TEMPE AZ 85287-1101

Information about ASU Main residential Campus Communities may be obtained by calling 602/965-9600 or writing

INSTITUTE FOR COCURRICULAR
PROGRAMS AND SERVICE
ARIZONA STATE UNIVERSITY
PO Box 870212
TEMPE AZ 85287-0212

STUDENT DEVELOPMENT

Student Organization Resource Center. The Student Organization Resource Center provides opportunities for students to get involved with established campus organizations and helps students start new organizations. The center maintains a list of all registered groups, schedules mall activities, and provides a resource desk where students can get information on student activities and leadership opportunities. The REACH information desk is also in the Student Organization Resource Center located on the third floor of the Memorial Union. For more information, call the center at 602/965-2249 or REACH at 602/965-2255.

Learning Resource Center. The Learning Resource Center (LRC) seeks to provide academic support services to students in an easily accessible manner. Services offered include tutoring, supplemental instruction, peer advising, and computer-assisted instruction. For more information, call 602/965-6254.

Student Leadership Programs. Student Leadership Programs serves as a resource to students interested in leadership development. Resources include a leadership library and information about the ASU Leadership Development Model and other campus, local, and national leadership programs. Staff are available for presentations; workshop facilitation; and advisement, guidance, and coordination of efforts in leadership development. For more information, call 602/965-2249.

Child and Family Services. Child and Family Services (CFS) provides resources and referral services to students, faculty, and staff. Information about the Campus Children's Center (602/921-2737), Child Development Laboratory (602/965-7267), Child Study Laboratory (602/965-5320), and the College of Education Preschool (602/965-2510) may be obtained at CFS or by calling the programs directly. CFS maintains a child care referrals database and coordinates workshops and discussion groups on child and elder care issues. Educational materials and listings of additional on- and off-campus activities, programs, and services for children and their families are available at the CFS office, MU 14C. Appointments are recommended.

For more information, call 602/965-9515.

Fraternities and Sororities. Involvement in a fraternity or sorority is one of the most rewarding aspects of a student's college experience. Twenty-two fraternities and 14 sororities provide opportunities for leadership development, academic success, campus involvement, community service, social interaction, brotherhood/sisterhood, and intramural participation. These organizations are governed by the Interfraternity Council and the Panhellenic Council. The National Panhellenic Council offers nine predominantly African American organizations for involvement with community service, cultural learning, and a deep sense of tradition. The Hispanic Greek Council, consisting of two fraternities and two sororities, offers Hispanic students an opportunity to work on service projects, give back to the Latina/Latino culture, and network within the Hispanic community. In addition to the benefits of life-long membership, many of the fraternities and sororities have chapter houses or residence hall floors that provide a rewarding living/learning option for their members. For more information, call 602/965-2288 or 602/965-2249.

Institute for Cocurricular Programs and Service

Institute for Cocurricular Programs and Service (ICPS) is an interdisciplinary program designed to connect students and faculty who share common interests. The program has both curricular and cocurricular elements, enabling students and faculty to meet in small seminars for course credit, or in informal discussion or workshop settings.

Involvement in the institute's programs enables students to explore real-world issues and gain experience with larger, nonuniversity communities. A number of academically based activities allow for close contact between students and professors, in-depth discussion of interdisciplinary themes, and service or research experiences centered around an interest area. ICPS activities are open to all undergraduate students with an interest in exploring a theme or building community among like-minded students and faculty.

ICPS offers various options for involvement in this program. Students may choose to participate in any or all

aspects of the program, ranging from drop-in participation in seminars to living in a community in one of the university's residence halls.

Residential Communities. Students with a deep commitment to their interest area might choose to live in a community, regularly sponsoring their own programs around their interdisciplinary theme interest. These communities share space in one of the ASU residence halls, participating in regular residential activities, but working through their own leadership and with the Institute for Cocurricular Programs and Service staff to create a sense of place for community residents. In 1996–97, the Institute for Cocurricular Programs and Service offered nine residential communities: The Arts, from performance and studio arts to literature and other creative activities; Athena focuses on architecture, environmental design, and the humanities, from the classical to the cutting edge; Deaf Pride addresses deaf, hard-of-hearing issues and American Sign Language; Diana focuses on how women develop as leaders and creative individuals in our society; El Zócalo studies Chicana/Chicano life; Fitness focuses on exercise, health, and nutrition; Four Winds focuses on Native American issues and culture; 21st Century has emphasis on technology, culture, and society, including the Internet; and UMOJA, the African American experience. Students interested in developing a residential community may propose to live in the community early in spring for the following academic year.

Community Service Internships. Students with a 2.50 GPA from any academic program may enroll for three to six hours of internship credit for working in an area of community service. The Institute for Cocurricular Programs and Service internship program is designed as a service learning experience that brings internship students together with various faculty members regularly during the internship experience to explore topics and issues that relate to community, service, citizenship, and student involvement.

Research Internships. The Institute for Cocurricular Programs and Service provides opportunities for students who wish to assist faculty in research that is

multidisciplinary. Students may register for up to three hours of internship credit for working on specific projects that help them to learn about the research process, methodology, and implications of academic research. The Institute for Cocurricular Programs and Service works in conjunction with various faculty groups that have coordinated multidisciplinary research projects in the greater ASU community.

Seminar Discussion Classes. A highlight of the Campus Communities program is the one-hour seminar discussion course that is offered in multiple sections each semester. These courses meet for a total of 15 hours in one regular semester and are designed as small-group discussion seminars with one or two faculty members, exploring a particular theme. Some discussion seminar participants choose to work on a particular project; others engage in individual study and discussion; still others explore selected readings. Students and faculty are able to propose theme interest areas to the Campus Communities program.

Seminar Series. Throughout the academic year, the Institute for Cocurricular Programs and Service sponsors a series of small group seminars with individual faculty across disciplines to explore theme areas that students indicated as an interest area. Students are invited to propose and develop seminars along with the Institute for Cocurricular Programs and Service staff.

Capstone Course. A three-hour course that explores the nature of academic community; citizenship; what it means to be a college-educated person in the U.S. and world society; and the relationships among service, research, and education. The course is taught by faculty across disciplines and provides students with a service learning opportunity to reinforce the themes explored in class.

Community Theme Programs. As students' interdisciplinary interests bring them together, they often develop their own ideas for group activities. These include such programs as film series, dance and music programs, holiday events with educational components, and joint events with agencies, schools, and groups in the greater ASU community.

Academic transcript recognition for participating in the Campus Communities program is based on fulfilling approved course work, including participation in the Campus Communities seminar series and designating a particular interdisciplinary theme area of interest.

Students interested in participation in Campus Communities may do so by attending a sponsored event, enrolling in a Campus Communities course, or by calling the program office for further information at 602/965–9600. The Institute for Cocurricular Programs and Service is housed in Student Affairs.

EDUCATIONAL DEVELOPMENT

Educational Development comprises four programs designed to assist students with special needs and serves as an educational outreach program for ASU. The ASU/Phoenix Educational Opportunity Center, located off campus, provides information for college admissions and financial aid; the Upward Bound program provides college preparation for high school students that are first generation and low income; Disability Resources for Students is a comprehensive support program for students with disabilities who are attending ASU; and Veterans Upward Bound is a program that prepares veterans for postsecondary enrollment. All Educational Development programs are fully or partially funded by the U.S. Department of Education and are known nationally as TRIO programs.

The ASU/Phoenix Educational Opportunity Center. This community outreach service focuses on low-income individuals. The center has a main office at 1000 E. Apache Boulevard, Suite 118, Tempe, AZ, and satellite offices around Maricopa County. It offers vocational testing and guidance as well as assistance in application for admission, scholarships, and financial assistance at a postsecondary institution suited to particular individuals' needs. Services are free. For more information, call 602/894–8451.

Disability Resources for Students. Disability Resources for Students (DRS) ensures that qualified students with disabilities, upon request, are provided with reasonable and effective accommodations. DRS facilitates equal access to educational and cocurricular

programs, campus activities, and career and employment opportunities for qualified students with disabilities by offering a wide range of academic support services that include, but are not limited to, the following: academic and career consultation; campus and community program coordination and/or referrals; supplemental readers in coordination with Recording for the Blind and Dyslexic (RFB&D); an in-class note taking program; nonstandard academic testing accommodations; specialized equipment for specific disabilities; the Hewlett-Packard Adaptive Technology Center; American Sign Language or oral interpreters; TTY access including campus pay phones; educational materials, e.g., braille/alternative print production, large print, raised line charts and graphs; braille campus map; campus mobility services; and the Access Employment Program. Although students are responsible for their own personal care attendants, DRS does provide an Attendant Management Training Program for students with disabilities and maintains a current listing of applicants (untrained) for personal care attendants. Also, a U.S. Department of Education TRIO Student Support Services Grant allows DRS to incorporate a unique academic enhancement model into the disability support services program for 270 selected students with disabilities who meet TRIO eligibility requirements.

Some classroom accommodations, such as braille, audio tapes, interpreting services, enlarged print, and lab material conversions, require an extended preparation time, i.e., one semester. To ensure the availability of accommodations from the first day of class, students are required to preregister for classes and notify the appropriate DRS program coordinator immediately upon submitting a Course Request Preregistration form. Although DRS will attempt to provide requested appropriate accommodations for students who miss preregistration, they cannot be guaranteed and effective alternatives may be necessary.

Documentation is required and information regarding disabilities is confidential. For more information, call 602/965-1234 (Voice) or 602/965-9000 (TTY).

The Upward Bound Program. This program is designed to increase the academic skills and motivational levels

of participants (low income, potential first-generation college students) to the extent that they will complete high school and enter postsecondary institutions. The year-round program includes summer residential components. For more information, call 602/965-6483.

Veterans Upward Bound. This program is designed for veterans who wish to pursue postsecondary education but whose life experiences did not adequately prepare them for the educational requirements of today. College preparation instruction in writing, reading, mathematics, general science, social science, study skills, and computer literacy are provided to suit each veteran's individual needs. Veterans lacking a high school diploma can also prepare for obtaining their General Education Development (GED) while participating in Veterans Upward Bound. Interest inventory assessments and career advisement are also available. For more information, call 602/965-3944.

STUDENT LIFE

Working closely with a variety of student populations, Student Life strives to increase student involvement in the ASU experience. Opportunities for leadership and community involvement help students prepare for their roles as responsible citizens. Through their involvement in student activities, workshops, community service, and student governance, students learn the qualities of student leadership and the skills to be successful students.

Programs and services are targeted to an increasingly multicultural student community as Student Life places high priority upon the promotion of civic responsibility and the celebration of diversity. An emphasis is placed upon empowerment of individual students and student organizations, including international students, adults re-entering higher education, and commuter students.

ASU and Student Life encourage student volunteerism and community involvement. Concern for the social environment is reflected in the activities of the Cultural Diversity Committee, Student Judicial Affairs, the Re-entry Student Center, and the International Student Office.

Understanding the University Experience (Hispanic Mother/Daughter Pro-

gram) involves precollege women in early preparation for college.

The Student Life staff works closely with the academic- and student-support service areas of the university to make sure that students are aware of and use available resources. Staff members also act as advocates for students with other campus departments. For more information, call 602/965-6547.

COUNSELING AND CONSULTATION

Counseling and Consultation provides confidential counseling services to all ASU students. The psychologists and counselors on staff help students with almost any type of problem or issue related to adjusting to college life. The staff is particularly committed to helping minority students and nontraditional students adjust to campus life.

Counseling and Consultation offers counseling groups for career exploration, relationship difficulties, stress management, depression, assertiveness, eating disorders, family problems, and other common student issues. Individual therapy and couples counseling are offered on a short-term basis. Counseling and Consultation also provides emergency counseling to students experiencing an emotional crisis.

A career interest testing program is available to both students and nonstudents. Other services available to the ASU community include consultation and outreach services to faculty and staff, academic instruction, research, a master's-level practicum training program, and an APA-approved clinical internship program for doctoral students in counseling and clinical psychology. Students may schedule an initial counseling appointment either by phone (602/965-6146) or in person. After an initial personal consultation and four free individual sessions, students are charged \$10.00 per session. Counseling and Consultation is located in SSV B317.

The Multicultural Advancement Program (MAP). This program is a separate component within Counseling and Consultation and is built upon a student development model providing cultural, emotional, and academic support services to the university's minority student populations. MAP counselors provide this support through programs, workshops, summer institutes, academic classes, personal and

educational counseling, and sponsorship of student organizations. Students may schedule an appointment with a MAP counselor by phone (602/965-6060) or in person. The MAP office is located in SSV A361.

Testing Support Services. Testing Support Services (TSS) offers workshops to help students prepare for the following graduate entrance exams: The Graduate Record Exam (GRE), the Graduate Management Admissions Test (GMAT), the Law School Admission Test (LSAT), and the Medical College Admissions Test (MCAT). In addition, students may select individual tutoring sessions or a workshop (Basic Math Review) to enhance their math and/or quantitative analysis skills. Students may sign up for test preparation workshops by phone (602/965-6777) or in person. The TSS office is located in SSV B322.

STUDENT HEALTH

Services. Student Health offers fully accredited outpatient health care to all students enrolled at ASU. The professional staff, consisting of physicians, nurse practitioners, registered nurses, psychiatrists, social workers, counselors, dietitians, and health educators, has special interest and training in college health care. Consultant physicians in dermatology, orthopedics, and ear, nose, and throat are on-site and are available by referral from a member of the Student Health professional staff.

Additional services include comprehensive women's health care, immunizations, a wart clinic, and an allergy clinic for students needing periodic injections. The pharmacy at Student Health provides many prescription and over-the-counter medications. Radiology and laboratory services are also available.

Substance abuse services are available at Student Health for students experiencing problems as a result of the use of alcohol or other substances and wishing to address the problems in a confidential setting.

For information about Student Health Services at ASU East, call 602/222-6568.

Health Education. Student Health provides educational programs on nutrition, stress management, alcohol and other drug use and abuse, sexuality and sexually transmitted diseases, including

the Human Immunodeficiency Virus (HIV). Peer education programs provide students an opportunity to gain experience in health education and to enhance presentation skills. Services and educational brochures are available at Student Health and at various locations throughout the campus.

Hours. Students are strongly encouraged to schedule appointments to minimize waiting time and to allow students the opportunity to establish a relationship with one clinician. Appointments are available by calling 602/965-3349. Patients with urgent health care problems may be seen at Student Health's ASAP clinic.

Days	Hours
Mon., Wed., Fri.	8:00 A.M.–5:00 P.M.
Tues., Thurs.	9:00 A.M.–5:00 P.M.

Fees. Full-time students are not charged for primary care visits at Student Health. Part-time students are charged a visit fee. There are charges for consultant visits, continuing mental health visits, radiological procedures, laboratory procedures, medications, certain special or surgical procedures, and certain health education services. Patients receiving medical treatment off campus, such as consultations, emergency care, and hospitalization, are responsible for any resulting charges.

Insurance. *While Student Health provides comprehensive ambulatory care, it is not a substitute for health insurance.* Medical insurance coverage is strongly recommended for all students and is required for international students. Eligible students and dependents may enroll in health insurance coverage arranged by ASU. Dependents must complete an application and may require underwriting approval by the insurance carrier. The coverage assists students in paying for laboratory and radiology procedures, off-campus consultations, hospitalization, surgery, emergency, and after-hours care. Students may purchase health insurance through InTouch, the ASU touch-tone telephone registration system, or at any registrar site. For more information, call the Student Health insurance office at 602/965-2411.

STUDENT PUBLICATIONS

The activities of Student Publications are most visible in the *State Press*. The campus newspaper, one of the largest daily newspapers in Arizona, is published five days a week by ASU students who make editorial decisions with the support of an experienced university staff director.

The *State Press* provides students with on-the-job training in newswriting, photography, editing, advertising, and production work. The *State Press* also addresses the many informational needs of the university community, not only through stories about the campus, and local and national events, but through paid advertisements by area merchants, campus groups, and university faculty, students, and staff. The *Digiguide* is Student Publications' online community guide and includes complete listings of restaurants, hotels, apartments, transportation, campus maps, and fun places to go within the community surrounding ASU. Visit the site at <http://news.vpsa.asu.edu>.

Student Publications publishes *Hayden's Ferry Review* twice a year. This literary magazine features fiction, poetry, photography, and illustrations submitted from people throughout the country.

Student Publications provides complete prepress services to the university community. For more information, call 602/965-7572.

MEMORIAL UNION

The Memorial Union (MU) is a major center of student, faculty, and staff activity. Students have many opportunities for involvement, including the student-directed MU Activities Board (MUAB). The MUAB plans and delivers programs and daily events through the following committees: Comedy, Culture and Arts, Film, Gallery, Marketing, Recreation, Special Events, and the Executive Board. For more information, call 602/965-6822.

The MU is staffed primarily by students, providing students the opportunity to develop leadership skills and a customer service orientation. Student employment is available in building management, conference room setup, clerical support, film projection, food services, gallery installation, information desk services, and recreation center services.

The MU also sponsors one of the finest intercollegiate bowling programs in the United States, with men's and women's teams competing throughout the country. For more information, call 602/965-3642.

MU facilities include student lounges, a gallery, a cinema, meeting rooms, and ballrooms. Student government and other student organization offices are located on the third floor. Recreational activities include billiards, bowling, and amusement games. The MU provides a diversity of dining options for individual and group needs and provides catering and conference services. The building houses a card and gift shop, copy center, credit union, dry cleaners, hair salon, photo shop, post office, record shop, travel agency, and four automated teller machines (ATMs). The MU operates the university information desk and lost and found. For more information, call 602/965-5728.

ASSOCIATED STUDENTS OF ARIZONA STATE UNIVERSITY (ASASU)

ASASU is the student government of the university and the official representative of the student body in matters of university governance and budgeting. Students can take advantage of the Bike Co-op Repair Service, Campus Clubs and Organizations, College Councils, the Counseling and Health Advisory Committee, Community Support Program, Entertainment Events, Environmental Issues, the Executive Committee, Graduate Research Support Opportunities (GRSO), Homecoming, Info Devils, Lecture Series, the Multicultural Awareness Board, Off-Campus Student Services, Public Relations, the Safety Escort Service, Special Events, State Relations, Student Legal Assistance, and the Student Senate. For more information, call 602/965-3161.

CAREER SERVICES

Career Services provides advisement for individual career planning concerns and offers information about numerous career fields and permanent positions. Students are encouraged to use the Career Development Center throughout their academic careers. A computerized career planning system assists students in evaluating and making career choices. Career Services offers work-

shops and classroom presentations on career planning, interviewing skills, résumé writing, and a myriad of additional career-related topics. Advisors are available to assist students on an individual basis in career planning and employment.

Hundreds of employers from business, industry, government, social service agencies, health organizations, and school districts come to ASU to interview students seeking permanent and career-related summer, intern, and co-op employment. Career Services schedules these interviews for both employers and students to meet each group's needs and interests. In addition, career and job fairs are scheduled throughout the year.

The agency's services support students' career development throughout their college experience, and Career Services encourages participation in programs as early as the student's freshman year. The offices are located in SSV C359 and C363. For more information, call 602/965-2350.

STUDENT RECREATION COMPLEX AND RECREATIONAL SPORTS

Students who want to get involved or meet people with similar interests should visit the Student Recreation Complex (SRC) to learn more about Recreational Sports. Student Affairs' Recreational Sports is one of the largest programs of its kind in the country, serving more than 20,000 students annually. Programs offered include intramural sports, informal recreation, fitness, aquatic and sports skills classes, outdoor recreation, children and family programs, sport clubs, adaptive recreation for individuals with long- or short-term disabilities, a wellness center, safety education, and special events.

Located on the south end of Palm Walk, the SRC is one of the finest student recreation facilities in the United States. Features include a variety of resistance and cardiorespiratory equipment, a 9,000 square-foot weight room, three large gymnasiums, 14 indoor racquetball courts and one squash court, martial arts, aerobics and sport club rooms, outdoor equipment rental, and an adaptive weight area. Outdoor facilities include a lighted, multiuse complex with four fields, a .43-mile perimeter walking and jogging path, four

sand volleyball courts, 14 tennis courts, and a 70-meter swimming pool with two movable bulkheads that allow the pool to be divided into three parts for simultaneous multiuse programming.

For more information, stop by for a tour or call 602/965-8900.

ARIZONA PREVENTION RESOURCE CENTER

The Arizona Prevention Resource Center (APRC) is a partnership among ASU, the Governor's Division of Drug Policy, the Arizona Department of Education, and the Arizona Department of Health Services.

The APRC serves as a centralized source for individuals, schools, and communities throughout Arizona to support, enhance, and initiate programs focused on the prevention of the use of tobacco products and the use and abuse of alcohol and other drugs; gangs and violence; and other areas, such as health promotion, domestic violence, and dropout prevention. The APRC operates in the following program areas:

1. clearinghouse—to provide accurate, timely, and personalized prevention information and materials through in-house collection, access to national sources, and linkages between prevention programs in Arizona;
2. training and technical assistance—to provide high quality, responsive training and technical assistance for organizations and individuals undertaking prevention programs in local communities and schools;
3. evaluation and research—to coordinate and provide leadership for a statewide evaluation strategy for alcohol and other drug prevention programs; to produce an annual inventory of substance abuse prevention, education, and treatment programs in Arizona; to design and conduct contracted evaluations of community-based prevention programs; and to promote quality and accountability in all aspects of APRC operations; and
4. planning and special projects—to promote effective collaboration between prevention and treatment program leadership, to broaden the funding base for prevention programs, and to develop and strengthen partnerships.

For more information, call the APRC at 602/727-2772 or write

ARIZONA PREVENTION RESOURCE
CENTER
ARIZONA STATE UNIVERSITY
PO Box 872208
TEMPE AZ 85287-2208

Information can also be obtained at

ASU DOWNTOWN CENTER
BUILDING B
641 EAST VAN BUREN SUITE B2
PHOENIX AZ
602/727-5400 (FAX)
800/432-2772
(TOLL-FREE IN ARIZONA/TTY)

The Arizona Drug and Gang Prevention Resource Center (ADGPRC), located with the APRC, provides similar information and technical assistance for communities to help them focus strategically on drug and gang prevention issues.

The ADGPRC can be contacted at 602/727-5015 or toll-free at 800/981-3702.

INTERCOLLEGIATE ATHLETICS

The university is a member of the National Collegiate Athletic Association, Division I, and the Pacific-10 Conference. The university has 21 varsity intercollegiate sports and more than 500 participants. Intercollegiate athletics at ASU are governed by a board of faculty, students, and staff under the regulations of the Arizona Board of Regents, the NCAA, the Pacific-10 Conference, and the university. Policies are administered by Intercollegiate Athletics. All athletic grants-in-aid and scholarships are administered in coordination with Intercollegiate Athletics.

RELIGIOUS ACTIVITIES

Various religious centers representing most major religious groups are available near the main campus and provide students with the opportunity to participate in programs of religious worship and to meet other students through social activities. For more information, call the Campus Interfaith Council at Danforth Chapel, 602/965-3570.

OTHER OPPORTUNITIES FOR STUDENT INVOLVEMENT

Dance. The Department of Dance and Dance Arizona Repertory Theatre, a student touring outreach company,

present 12 to 14 faculty- and/or student-directed concerts each year. Interested students should attend open auditions, which are held at the beginning of each semester. For more information, call 602/965-5029.

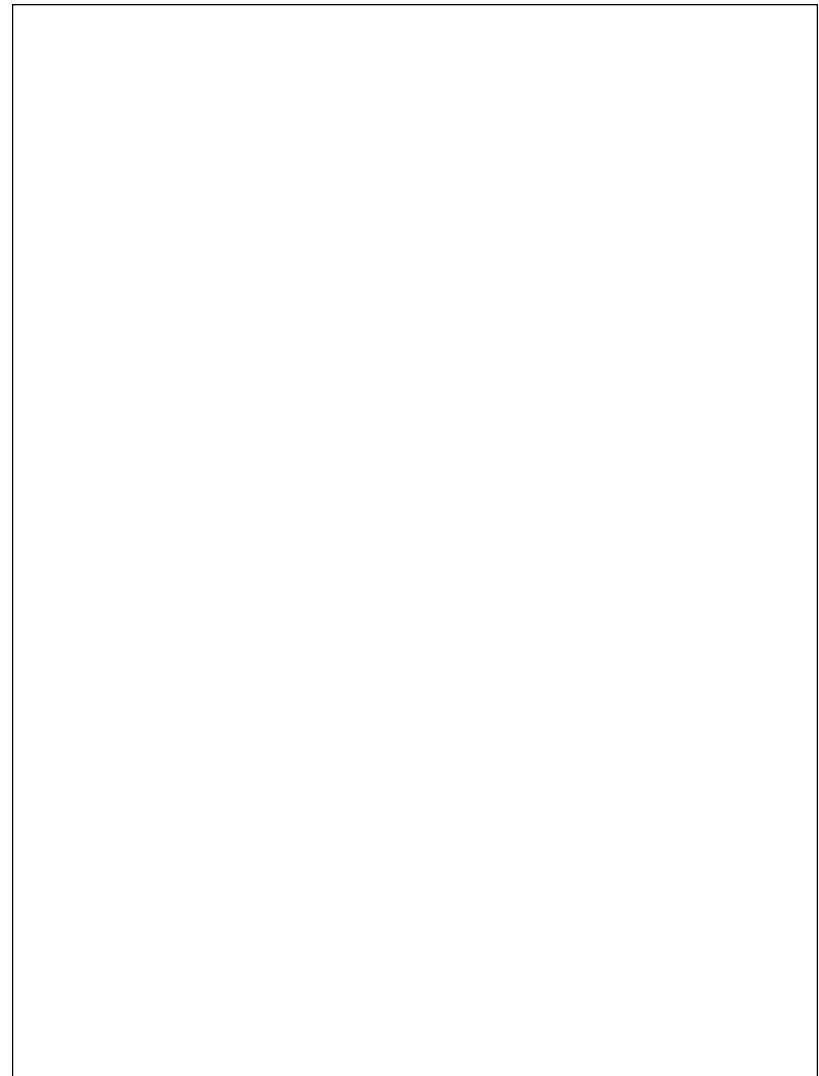
Forensics. The Sun Devil Forensic squad, associated with Pi Kappa Delta, national forensic honorary association, travels to trophy tournaments across the country. For more information, call Dr. Clark D. Olson, director of Forensics, at 602/965-3825.

Interpreters Theatre. Participants write, compile, and perform scripts for presentation in diverse on- and off-campus settings through the Department of

Communication. For more information, call 602/965-4111 or 602/965-5061.

Music. Performing organizations with the School of Music provide opportunities for involvement and credit, including bands, Lyric Opera Theatre, symphony orchestra, and university choral organizations. For more information, call the School of Music at 602/965-3371.

Theatre. The University Theatre presents four to six faculty-directed productions and eight to 14 student-directed productions each year. Audition information is available from the Department of Theatre office, GHALL 232.



Jeremy Veal sees an opening and begins a drive to the basket against UCLA.

Conley Photography

Fees, Deposits, and Other Charges

The Arizona Board of Regents reserves the right to change fees and charges without notice. The current semester *Schedule of Classes* generally reflects up-to-date fee amounts.

The following fees apply to both credit and noncredit (audit) registrations and are subject to change.

DEFINITIONS

Resident tuition refers to the charge assessed to all resident students who register for classes at ASU. *Nonresident tuition* refers to the charge assessed to nonresident students, as established in Arizona Board of Regents' Policy 4-102.

ACADEMIC YEAR TUITION

The resident and nonresident tuition for fall and spring semesters is shown in the "1997-98 Resident and Nonresident Tuition" table on this page. The amounts listed are per semester hour each academic term. For more information on classification for fee status, see "Residency Classification Procedures and Policies," pages 47-48.

Students registered for seven or more hours are considered full-time for tuition payment purposes. See "Enrollment Verification Guidelines," page 72.

Note: The rate for one hour is charged if the student is registered for only a zero-hour class.

College of Business Fee. Beginning with the 1997-98 academic year, an annual program fee will be assessed for resident and nonresident M.B.A. and select professional business master's

degree students who begin their first year in the programs in the fall of 1997 or thereafter (i.e., 1997-98 academic year, \$1,000.00; 1998-99 academic year, \$2,000.00). Contact the College of Business for more information.

College of Law Fee. Effective fall 1998, rates for admitted full-time law students will be \$1,187.50 more per semester than standard resident or nonresident rates. In fall 1999, those rates will increase to \$1,375.00 more per semester. See the current semester *Schedule of Classes* for fee amounts.

College of Nursing Fee. Effective summer 1998, a one-time program fee of \$6,300.00 will be assessed for students admitted into the off-campus Post-Master's Family Nurse Practitioner program. Contact the College of Nursing for more information.

Off-Campus and Independent Learning Courses. For information on fees for off-campus and independent learning courses, see "Instructional Programs" and "Distance Learning," pages 241-242.

Summer Sessions Fees. The 1998 registration fee per semester hour is \$105.00 except for law students. The registration fee per semester hour for law students is \$209.00. For more information on the summer sessions, see page 431 and the *Summer Sessions Bulletin*.

1997-98 Resident and Nonresident Tuition¹

Semester Hours	Resident Tuition ²	Nonresident Tuition
1	\$105	\$ 360
2	210	720
3	315	1,080
4	420	1,440
5	525	1,800
6	630	2,160
7	994	2,520
8	994	2,880
9	994	3,240
10	994	3,600
11	994	3,960
12 or more	994	4,320

¹ Tuition is subject to change for 1998-99.

² In addition to tuition, students are charged other fees (e.g., the Student Recreation Complex fee and financial aid trust fee). Specialized fees adopted by the Arizona Board of Regents for selected graduate professional programs apply to students in the colleges of Business, Law, and Nursing (see above).

OTHER FEES, DEPOSITS, AND CHARGES

Special Class Fees and Deposits. Certain university classes require payment of fees or deposits for materials, breakage, and rentals. These fees and deposits are listed in the *Schedule of Classes* for each semester. See the “Special Class Fees and Deposits” table on pages 51–55.

Student Recreation Complex Fee. All students (except university employees) who take at least one class at ASU Main must pay a mandatory Student Recreation Complex fee. Full-time (seven or more hours) students are charged \$25.00 per semester. Part-time students pay \$12.00 per semester, and summer students pay a per semester hour fee. See the current semester *Schedule of Classes* for more information.

Financial Aid Trust Fee. All students must pay a financial aid trust fee. Full-time (seven or more hours) students are charged no more than one percent of the current tuition. The fee for students enrolled six or fewer hours is half that charged full-time students. The total summer sessions fee does not exceed the amount for a full-time student. Fees collected from students are matched by the State of Arizona and used to create a Financial Aid Trust Fund, from which student grants are awarded under the usual financial aid eligibility criteria available at the ASU Student Financial Assistance office in the Student Services Building.

Arizona Students’ Association (ASA) Fee. The ASA is a nonprofit lobbying organization that represents Arizona’s public university students to the Arizona Board of Regents, State Legislature, and U.S. Congress. During 1997, students at the state universities voted to change the mechanism for funding the ASA. A \$1.00 fee will be charged to each student each semester. Any refunds for this fee will be provided through the ASA Central Office at 602/966–6358.

Late Registration
 Fee assessed on registrations beginning with the first day of each session \$10.00
 A \$10.00 late fee is also assessed on registration payments received after the fee payment deadline but processed before the class enrollment purge.

Transcripts
 Official transcripts for currently enrolled students \$1.00 each
 Official transcripts for nonenrolled students \$5.00/copy
 Additional copies ordered at the same time are \$1.00 each. Requests for official transcripts should be made at least two weeks in advance of the time desired.

Copies of Educational Records Other Than ASU Transcripts

<i>Number of Pages</i>	<i>Total Charge</i>
1 to 5	free
6 to 10	\$2.00
11 to 15	\$3.00

Copies of additional pages cost \$1.00 per each five pages copied.

Graduation Application or Reapplication
 Undergraduate \$12.00
 Graduate \$17.00
 A late fee of \$5.00 is added to the charge noted above if not paid on or before the deadlines shown in the “University Calendar,” pages 12–14.

Comprehensive Examination. This fee is paid by all students seeking to establish credit by examination and is \$7.50 per semester hour.

Private Music Instruction
 One-half hour of instruction weekly \$40.00
 One hour of instruction weekly \$60.00
 More than one hour of instruction weekly—
 music majors only \$60.00

Musical Instrument Rental Charge
 Charge for use of university-owned musical instruments \$25.00
 Consult the School of Music for specific information.

Binding and Microfilm Fees
 Binding fee for thesis or dissertation \$17.00 per copy
 This fee is subject to change. Additional charges may be required depending on the size and nature of the document.
 Dissertation microfilming fee \$50.00
 This fee is subject to change.

Sun Card/ID Card
 Replacement fee \$10.00

Parking Decals. A parking decal must be purchased, in person or by using the Park Smart touch-tone telephone sys-

tem 602/921–PARK (7275), for motor vehicles parked on campus except in areas where metered parking or visitor lots are available. Photo identification is required. Annual decals range from \$45.00 to \$105.00 for controlled access parking. For more decal sales information, call 602/965–6124.

Each vehicle registered at ASU Parking and Transit Services must comply with Arizona emission standards (A.R.S. § 15–1627G) during the entire registration period. The fee for this emission inspection is \$10.00 to \$20.00 per vehicle.
 Everyone is encouraged to support travel reduction measures by using mass transit, the university shuttle bus, carpooling, bicycling, or walking whenever possible. See “Transportation” on page 46 for more information.

Parking Violations. Due to high demand, parking regulations are strictly enforced. Fines range from \$10.00 to \$50.00. Appeals to parking citations may be filed within 14 calendar days to Parking and Transit Services and, after payment, may be further appealed to the Parking Citation Appeals Board. Unpaid parking citations are delinquent financial obligations subject to provisions of the “Delinquent Financial Obligations” section, page 47. Any person owing three or more unpaid parking citations or \$100.00 in unpaid parking citations is subject to impoundment. A \$85.00 minimum fee is assessed if impoundment is required. For more information, call 602/965–4527.

Returned Checks. Checks returned by a bank are assessed a \$10.00 service charge with repayment needed within five business days of notification. A second \$10.00 service charge is made if the returned check is not repaid within this five-day period. Repayment of a returned check must typically be in cash.

The university may have arrangements with its bank to redeposit automatically for a second time checks for which there are insufficient funds. No service charge is assessed by ASU until a check is returned to ASU; however, the payer may be assessed a service charge by the payer’s financial institution.

Students paying registration fees and tuition with a check that is subsequently not honored by a financial institution are subject to involuntary

withdrawal from the university if repayment is not made. All students involuntarily withdrawn are charged tuition and/or registration fees according to the standard refund schedule as of the involuntary withdrawal date, as determined by the university.

On-Campus Housing. The cost of Main campus housing varies. In 1997–98 the most typical cost is \$2,730.00 per academic year. Meal plans are purchased separately. For more information, see “Residential Life,” pages 37–38 or call 602/965–3515.

TRANSPORTATION

To reduce air pollution and traffic congestion, students are encouraged to travel to and from campus by means other than automobile. Nearby on-campus automobile parking space is limited and tightly controlled.

Alternative transportation modes are used by thousands of ASU students. ASU is served by a Phoenix-area regional bus service; monthly and reduced-fare semester passes are available on campus. In addition, an inexpensive express shuttle runs between ASU Main in Tempe and ASU West in northwest Phoenix; another shuttle runs among ASU Main, Mesa Community College, and ASU East in Mesa; and a Free Local Area Shuttle (FLASH) is available around the periphery of ASU Main.

Bicycle ridership at ASU is estimated to be more than 15,000 students daily. Ample racks in many locations enable the parking and securing of bicycles. Bicycle use is restricted only in those areas of campus where pedestrian traffic is sufficiently heavy to make such use a hazard. The Bike Co-op Repair Service provides assistance with bicycle maintenance.

Also, careful class scheduling, when possible, can reduce a student’s transportation needs. For more information on commute alternatives, call 602/965–1072.

PAYMENT METHODS AND DEADLINES

InTouch. The InTouch system, at 602/350–1500, allows students to register for classes, to drop/add, and to make fee payment from any touch-tone phone. Fees can be paid from any touch-tone phone with available financial aid, debit cards, VISA, and MasterCard. Refer to the *Schedule of*

Classes for available dates and times and more information about the InTouch system.

Debit/Credit Cards. ASU accepts debit cards, VISA, and MasterCard. Debit/credit card payments through InTouch are processed online with the bank. See the *Schedule of Classes* for information about using debit/credit cards by mail or campus payment boxes.

Check. Checks payable for the exact amount of charges and without a restrictive endorsement are generally acceptable, except for students on check use suspension due to a previously returned check.

Financial Aid. Students receiving financial aid may use their expected aid to pay university charges, including tuition and fees. Students who wish to do so must follow specified procedures. See the current semester *Schedule of Classes* for more information.

Veterans Deferred Payment. The Veterans Readjustment Assistance Act allows veterans to apply for deferred payment of registration fees. A Certificate of Eligibility must be presented. Contact the Veterans Services Section for information on meeting the necessary requirements at SSV B117 or call 602/965–7723. The university may deny this privilege to students with previous delinquent obligations.

Payment Deadlines. Fees must be paid by the deadline dates and times indicated or the registration is voided. A fee payment deadline is printed on all Schedule/Billing Statements and in the *Schedule of Classes*.

REFUNDS

Academic Year Resident and Non-resident Tuition. Students withdrawing from school or individual classes receive a refund as follows:

Withdrawal Date	Refund
Before first day of the semester	100% less \$10.00
One through 7 calendar days	80%
8 through 14 calendar days	60%
15 through 21 calendar days	40%
22 through 28 calendar days	20%
After the 28th calendar day	No refund

The university provides a prorated refund for first-time students receiving

financial aid; therefore, the refund schedule is the minimum amount refundable to these students.

Withdrawal occurs on the calendar day that withdrawal is requested, either in person at a registrar site or by phone using InTouch, the ASU touch-tone telephone system for registration and fee payment. Students withdrawing for medical or other extenuating circumstances may contact the Comptroller’s Office Student Fee Payment Section, SSV B235, for refunds that may be available under these circumstances.

Summer Sessions Fees. Students withdrawing from any summer session or individual classes receive a refund as follows:

Withdrawal Date	Refund
Before first day of session	100%*
First and second days of session	80%
Third day of session	60%
Fourth day of session	40%
Fifth day of session	20%
After fifth day of session	No refund

* A \$10.00 processing fee is subtracted per session.

Refunds are based on the session days and not the class meeting dates for any particular class.

Special Class Fees and Deposits. Refunds, if any, are determined by the department offering the course. Refund determination is based on withdrawal date, type of activity, and costs already assessed by the department.

Private Music Instruction. If a student must drop a music course because of illness or other emergency beyond the student’s control, not more than half of the instruction charge may be refunded, as determined by the School of Music.

Late Registration. This fee is not refundable.

Student Recreation Complex Fee. This fee is refundable only upon complete withdrawal in percentage increments per the refund schedule.

Financial Aid Trust Fee. This fee is not refundable.

Official Transcripts. Overpayments by mail of \$5.00 or less are only refunded by specific request.

Graduation Fee. Overpayments by mail of \$5.00 or less are refunded only by specific request.

Residence Halls. Refunds to students departing from ASU Main residence halls before the end of the academic year are computed on the following basis.

Charges and Deposits. Housing payments and deposits are refunded as prescribed by the Residential Life License Agreement that students sign when they apply for residence hall accommodations. Students should refer to this document for specific information on refunds.

Other University Charges. Other university charges are normally not refundable, except for individual circumstances.

Payment of Refunds. Refunds require student identification and are made for the net of amounts due the university. When the last day of a refund period falls on a weekend or holiday, a withdrawal form must be submitted to one of the registrar sites during operating hours on the workday preceding the weekend or holiday. Refunds are normally paid by check and are mailed to the student's local address.

Parking Decals. Prorated refunds are available through the last business day in April.

Forfeiture of Refunds. Refunds are subject to forfeiture unless obtained within 90 days of the last class day of the semester for which the fees were originally paid.

DELINQUENT FINANCIAL OBLIGATIONS

Arizona Board of Regents' Policy 4-103B, which applies to ASU, states the following:

1. Each university shall establish procedures to collect outstanding obligations owed by students and former students.
2. Each university shall maintain a system to record all delinquent financial obligations owed to that university by students and former students.
3. Students with delinquent obligations shall not be allowed to register for classes, purchase parking decals, receive cash refunds, or ob-

tain transcripts, diplomas, or certificates of program completion. The university may allow students to register for classes, obtain transcripts, diplomas, or certificates of program completion if the delinquent obligation is \$25.00 or less.

4. Unpaid obligations shall remain a matter of record until students and former students satisfy their financial obligations or until satisfactory arrangements for repayment are made with the university.
5. The university may write off delinquent financial obligations of students according to accepted accounting principles and after appropriate collection efforts. No such write-off shall operate to relieve the student of liability for the obligation nor shall such write-off entitle the student to release of any transcripts, diplomas, certificates of program completion, or to register for further university classes until such obligation is actually paid.
6. Each university shall include this policy in its bulletin or catalog.

A late charge of \$10.00 is made for any balances due the university not paid within 30 days of the initial due date, with a second \$10.00 late charge being made if these amounts are not paid within 30 days of the first late charge. Procedures to be followed for disputed charges are available from the Accounts Receivable Section of the Business Services Office, located in ADM A109.

RESIDENCY CLASSIFICATION PROCEDURES AND POLICIES

The Arizona Board of Regents is required by law to establish uniform guidelines and criteria for classifying students' residency to determine those students who must pay nonresident tuition. The following is a summary of the general guidelines used to determine residency for tuition purposes. All of the evidence is weighed under the presumption that a nonresident student's presence in Arizona is primarily for the purpose of education and not to establish domicile and that decisions of an individual about the intent to establish domicile are generally made after the completion of an education and not before.

To obtain resident status for tuition purposes, independent students must

establish their residence in Arizona at least one year immediately before the last day of regular registration for the semester in which they propose to attend ASU. Arizona residence is generally established when individuals are physically present in the state with the intention of making Arizona their permanent home.

Mere physical presence in Arizona for one year does not automatically establish residency for tuition purposes. Adult students and emancipated minors must combine physical presence in Arizona for one year with objective evidence of their intent to make Arizona their permanent home. If these steps are delayed, the one-year period is extended until both presence and intent have been demonstrated for one full year. In addition to physical presence and intent, the student must demonstrate financial independence for the two tax years immediately preceding the request for resident classification. The student must demonstrate objective evidence of self-support and that he or she was not claimed as an income tax deduction by his or her parents or any other individual for two years. An adult student is defined as being at least 18 years of age at the beginning of the domicile year. For a complete definition of an emancipated minor, refer to the Arizona Board of Regents' residency classification policies, available in the Residency Classification Section, SSV B115.

No person is considered to have gained or lost resident status merely by attending an out-of-state educational institution.

Aliens. Students who are aliens are subject to the same requirements for resident status as are U.S. citizens. In establishing domicile, aliens must not hold a visa that prohibits establishing domicile in Arizona.

Refugees. Refugees may qualify as resident students by virtue of having been granted refugee status in accordance with all applicable laws of the United States and having met all other requirements for residence in Arizona.

Exceptions to the General Residency Rule

Students may be eligible for resident status for tuition purposes if they can meet one of the following criteria on or before the last day of regular registration.

Legal Dependents. If a student and his or her parents are domiciled in Arizona and have not met the one-year residency requirement but the parents are entitled to claim the student as a dependent for federal and state tax purposes, the student may be eligible for resident status for tuition purposes.

Transferred Employees. If students are domiciled in Arizona and have not met the one-year residency requirement but are employees or spouses of employees who have been transferred to Arizona by their employers for employment purposes, the students may be eligible for resident status for tuition purposes.

Members of the Military. If students are not domiciled in Arizona but are members of the U.S. Armed Forces stationed in Arizona or are the spouses or dependent children of a member (as defined in A.R.S. § 43-1001), the students may be eligible for resident status for tuition purposes. If military service is concluded while they are enrolled, students do not lose resident status while they are continuously enrolled in a degree program. If individuals are domiciled in Arizona immediately before becoming members of the U.S. Armed Forces, they do not lose resident status because of their absence while on active duty with the military as long as they maintain Arizona affiliations and file Arizona state tax.

Native Americans. Students who are members of a Native American tribe whose reservation lies both in Arizona and an adjacent state and who are residents of that reservation may be eligible for resident status for tuition purposes.

Procedures for Establishing Residency Status

All students are responsible for obtaining residency classification for tuition purposes before registering and paying their fees. This procedure requires students to complete and file a domicile affidavit form. This form is required of all new and returning students as part of the admission or readmission process. Students classified as nonresidents who believe they may qualify for resident status must file a petition with the Residency Classification Section. This petition must be filed by the last day of regular registration. A student seeking resident status must also file supporting documentation necessary to provide a basis for resident classification (source[s] of support, driver's license, voter's registration, vehicle registration, etc.). Students whose residency petitions are in process at the fee payment deadline are responsible for paying nonresident tuition and fees. However, an appropriate refund is issued if residency is later granted for that semester.

Any student found to have made a false or misleading statement concerning residency or tuition status is subject to dismissal from the university.

Failure to file a timely written petition for reclassification of residency status for tuition purposes constitutes a waiver of the student's right to apply for the given semester. Petition deadlines are published each semester in the *Schedule of Classes*.

Residency classification is an extremely complex issue. The information presented here is a summary and does not address each individual's situation; therefore, students are encouraged to make a personal visit to the Residency Classification Section to discuss their individual circumstances as soon as possible. Guidelines for determination of residency for tuition purposes are subject to review and change without notice. For more information, call the Residency Classification Section at 602/965-7712.

Financial Aid

The primary responsibility for financing a college education belongs to students and their families. Student Financial Assistance helps students meet this responsibility by evaluating applications through the use of a standard financial need analysis system. Student Financial Assistance determines the cost of a student's attendance as

1997-98 Typical Student Budgets

Item	Dependent on-campus	Dependent off-campus	Dependent with parents	Independent
Rent	\$ 2,700	\$ 3,600	\$ 900	\$ 4,600
Food	1,800	1,800	1,800	2,125
Personal (including loan fees)	<u>2,500</u>	<u>2,500</u>	<u>2,500</u>	<u>3,000</u>
Total living	\$ 7,000	\$ 7,900	\$ 5,200	\$ 9,725
Tuition	\$ 1,988	\$ 1,988	\$ 1,988	\$ 1,988
Special fees	71	71	71	71
Books	<u>700</u>	<u>700</u>	<u>700</u>	<u>700</u>
Resident total	\$ 9,759	\$10,659	\$ 7,959	\$12,484
Nonresident tuition	\$ <u>8,640</u>	\$ <u>8,640</u>	\$ <u>8,640</u>	\$ <u>8,640</u>
Nonresident total	\$16,411	\$17,311	\$14,611	\$19,136

well as how much students and their families can afford to contribute toward that cost. It is the student's responsibility to complete all applications in an accurate and timely manner and to notify Student Financial Assistance of any changes in circumstances that might affect eligibility (e.g., loss of parent's income or change in residency classification). Financial assistance is available as scholarships, grants, loans, and employment. This aid has been made available collectively by the university, alumni, private foundations, civic groups, individuals, and state and federal governments.

To be considered for financial aid, all students must complete an application separate from the admission application. The Free Application for Federal Student Aid (FAFSA) is the only required application. It is not necessary to complete any other application that may require an application fee. The form should be completed in January or February preceding the academic year the student anticipates attending ASU. The priority date for applying is March 1. Applications completed by this date are considered for all grant funds. Applications completed after this date are processed; however, they are considered late applications. Late applications may receive limited grant dollars and a higher proportion of loan or work dollars.

A statement-of-need letter is sent to all applicants. This letter estimates expenses and contribution for the school year and specifies the amount of the applicant's financial need. Students are notified by mail regarding any additional items or documents needed to complete their applications. These items may include copies of federal tax returns, proof of valid visa, and proof of registration with the Selective Service. Students receive a separate Financial Aid Notification. This letter informs them of the types and amounts of aid they are eligible to receive through ASU. Applicants should read carefully all correspondence received from Student Financial Assistance.

Students receiving aid from Student Financial Assistance are required to meet minimum standards of satisfactory academic progress. In addition to maintaining the minimum GPA defined for good academic standing, undergraduate students awarded on a full-time basis must complete a mini-

mum of 24 semester hours within the academic year. Failure to meet these standards results in the suspension of aid funds for subsequent semesters until the deficiency is satisfied.

Students can access personal information regarding financial aid through the Financial Aid Services Through Technology (FASTT) phone system at 602/968-4400 or on the FASTT Web site at www.asu.edu/fastt. Students can check on

1. documents still needed to complete a financial aid file;
2. award information; and
3. financial aid forms, both for printing on a printer for mailing and interactive forms that can be sent across the Web.

For help on how to use the Web, contact ISURF at 602/965-2410.

TYPES OF FINANCIAL AID AND MAJOR PROGRAMS

More than 30,000 students receive financial aid resources that total more than \$225 million. There are four categories of financial aid: scholarships, grants, loans, and employment.

Scholarships

There are two sources of scholarships at ASU: university-funded scholarships and private donor scholarships. Many scholarships are offered on the basis of academic merit. However, financial need criteria may also be included in the selection of recipients. Other considerations are GPA, leadership qualities, and community service.

The Scholarship Office coordinates all scholarship programs. High school students should contact their high school counselors to determine the appropriate process for obtaining a variety of scholarships available to entering freshmen. Other undergraduate students may contact the Scholarship Office. In addition, many academic units provide scholarship funding and select students based on a variety of criteria, which include artistic talent, musical ability, and athletic performance.

Private Donor Scholarships. More than 6,200 students at ASU receive private donor scholarships. Most of these scholarship funds are provided by employers, private individuals, organizations, and corporations. In most cases, the private donor specifies the

criteria used by the Scholarship Office to identify candidates for a particular scholarship.

University Scholarships. More than 5,400 ASU students receive a scholarship from university sources that is generally in the value of tuition and/or fees. The largest source for university scholarships is the waiver program authorized by the Arizona Board of Regents. In addition, many scholarships are funded from a general endowment fund. Some of the typical areas targeted for these scholarships are top academic seniors in Arizona high schools, underrepresented minority students, students who demonstrate leadership, students who demonstrate scholastic or scientific abilities, students with disabilities, and nontraditional students.

Grants

Like scholarships, grants are provided to students without repayment or service obligation. However, the criterion to receive a grant is generally a calculation of financial need. More than 12,000 ASU students receive some form of a grant.

Federal Pell Grant. The Federal Pell Grant program is funded by the federal government and is a basic financial resource to low- and moderate-income students. Eligibility is determined through the financial aid application process by the federal government. Under this program, the university converts entitlements to cash grant payments. A student may be eligible for a maximum grant of \$2,700.00 per year.

Federal Supplemental Educational Opportunity Grant. Funds are received from the federal government by the university, which is required to match the funds. Student Financial Assistance then determines the eligibility of a student based on a specific calculation of exceptional financial need. Generally, recipients of the Federal Pell Grant are eligible to receive a Federal Supplemental Educational Opportunity Grant. Maximum grants are \$800.00.

Arizona State Grant. This program is a three-partner program of federal, state, and university funding. Students with a high financial need may receive this particular form of funding. It is

restricted to residents of Arizona. Maximum grants are \$1,500.00.

Arizona Trust Fund. This grant source is provided in partnership between ASU students and the state legislature. These funds are provided primarily to resident, undergraduate, or underrepresented students with a high financial need. Maximum grants are \$1,500.00.

University Grant. University Grants are generally reserved as the last financial aid program to be used to resolve a student's need. Grants range from \$200.00 to \$2,000.00.

Loans

About 19,000 students borrow approximately \$124 million annually. A variety of loan programs provide assistance to students and, in some cases, parents in the financing of a university education.

William D. Ford Direct Student Loan. Through the William D. Ford Direct Student Loan program, the federal government loans money to students based on the university's determination of the student's financial need and cost of education, and the student does not begin repayment until after graduation. Under this program students have two loan options: subsidized and unsubsidized. With a Subsidized Direct Student Loan, the federal government pays the interest on the loan principle during the student's in-school status, grace, and other authorized periods of deferment. The school bases eligibility for a subsidized loan on the student's financial need which is determined by subtracting the expected family contribution from the cost of education. The school may determine the student to have eligibility for an Unsubsidized Direct Student Loan. In this program, the federal government does not pay the interest during the student's in-school status, grace, or other authorized periods of deferment; thus, as the student proceeds through school interest will accrue and will be added once the student enters repayment. Otherwise, conditions and terms for the two programs are the same.

There is a variable interest rate that is adjusted every July 1. Interest cannot exceed 8.25%. The federal government provides several options for re-

payment once the student has left school. For students who are considered dependent based on their financial aid application, the following total annual loan limits for subsidized and unsubsidized apply: freshman may borrow up to \$2,625.00 per year; sophomores, up to \$3,500.00 per year; and juniors and seniors, up to \$5,500.00 per year. For students who are considered independent, the following annual loan limits apply: freshman may borrow up to \$6,625.00, of which only \$2,625.00 can be subsidized; sophomores, up to \$7,500.00 of which only \$3,500.00 can be subsidized; and juniors and seniors, up to \$10,500.00, of which only \$5,500.00 can be subsidized.

Federal Perkins Loan. The Federal Perkins Loan program is funded by the federal government; the school is the actual lender, and repayments after graduation are made to the university at a 5% interest rate. Like the Subsidized Student Loan, no interest accrues on the Perkins Loan during the enrollment period. ASU students could be awarded a maximum loan of \$3,000.00. If funding is available, deferment and cancellation provisions may apply to graduates working in community service, qualifying law enforcement, and teaching occupations.

Federal Direct Parent Loan for Undergraduate Students. Under the Federal Direct Parent Loan for Undergraduate Students (PLUS), parents may borrow money from the federal government on behalf of their dependent students. With this loan, interest is not deferred and repayment begins 60 days after disbursement of the loan to the parent. The PLUS approval is based on the parent's credit history. If parents are determined ineligible for a PLUS and students need additional funds, they should contact the Student Financial Assistance office for their eligibility for an Unsubsidized Direct Student Loan. The interest rate for the PLUS loan is variable, but cannot exceed 9% through July 1, 1998. The maximum loan amount is determined by subtracting all other financial aid from the student's cost of education.

Employment

Approximately 7,000 students earn \$26 million from on-campus part-time student employment programs.

Federal Work-Study. Funds for this program are provided on a matching basis by the federal government and the university. Students employed under this program receive the same pay rates as other students being employed at the university. In this program, students must demonstrate a financial need. Employers are encouraged to hire minority and needy students.

University Hourly. The university, with its own resources, hires many students on a part-time basis. Although the jobs are similar to those under the Federal Work-Study Program, the university provides the entire amount of the student's wage.

Part-Time Off-Campus. The university receives requests for assistance from many agencies and corporations throughout the area to help them recruit and hire students on a part-time basis. The referral service at the university provides opportunities for students not only to earn funds to support their education but to gain experience in the areas of their majors or career interests.

Taxability of Financial Aid Programs

Scholarships, grants, fellowships, and stipends (but not loan funds) are taxable income to the recipient, except for the portion of these funds used for tuition, registration, and other university fees, or books, supplies, and equipment required for the courses being taken. Special tax regulations also apply to nonresident alien students and may require withholding of taxes at the time of aid disbursements to these individuals. Information on the taxability of scholarships can be obtained from the following Internal Revenue Service (IRS) publications and forms: *Publication 4—Student's Guide to Federal Income Tax*; *Publication 519—U.S. Tax Guide for Aliens*; *Publication 520—Scholarships and Fellowships*; Form 1040EZ and Instructions—Income Tax Return for Single and Joint Filers with no dependents; and Form 1040NR and Instructions—U.S. Nonresident Alien Income Tax Return.

These publications and forms can be obtained from the IRS at its toll-free number 1-800-829-FORM (3676). These publications and forms can also be accessed online at www.irs.ustreas.gov/prod/forms_pubs.

Special Class Fees and Deposits for ASU Main and ASU East

Refunds of special class fees and deposits are processed automatically if the related course is dropped during the first week of class. After the first week, refunds, if any, are determined by the department offering the course. Refund determination is based on withdrawal date, type of activity, and costs already incurred by the department. For special class fees and deposits at ASU West, see the *ASU West 1998–99 Catalog*. For more information, see “Other Fees, Deposits, and Charges,” pages 44–46, and “Refunds,” pages 46–47.

Special Fees

AMT 222	Instrument Pilot Ground School	\$100.00	ART 407	View Camera	\$25.00
AMT 280	Aerospace Structures, Materials, and Systems	10.00	ART 414	Advanced Life Drawing	25.00
AMT 314	Commercial Pilot Ground School	100.00	ART 415	Art Anatomy	20.00
ART 115	Three-Dimensional Design	10.00	ART 423	Advanced Painting (fall only)	40.00
ART 201	Photography I	25.00	ART 425	Advanced Figure Painting	25.00
ART 214	Life Drawing I	25.00	ART 427	Advanced Watercolor	40.00
ART 227	Watercolor I	40.00	ART 431	Special Problems in Sculpture	40.00
ART 231	Sculpture I	40.00	ART 432	Neon Sculpture	45.00
ART 260	Ceramics for Nonmajors	25.00	ART 436	Architectural Sculpture	40.00
ART 261	Ceramic Survey	25.00	ART 437	Film Animation	20.00
ART 272	Jewelry I	25.00	ART 438	Experimental Systems in Sculpture	40.00
ART 274	Wood I	25.00	ART 444	Computer Art I	40.00
ART 276	Fibers I	25.00	ART 446	Computer Art II	35.00
ART 294	ST: Fibers for Nonmajors	25.00	ART 448	Computer Animation	20.00
ART 294	ST: Introduction to Printmaking	30.00	ART 451	Advanced Intaglio	40.00
ART 301	Photography II	25.00	ART 452	Advanced Lithography	40.00
ART 304	Advanced Photography	25.00	ART 454	Advanced Screen Printing	35.00
ART 305	Color Photography I	30.00	ART 455	Advanced Photo Processes for Printmaking	30.00
ART 314	Life Drawing II	25.00	ART 456	Fine Printing and Bookmaking I	30.00
ART 315	Life Drawing III	25.00	ART 457	Fine Printing and Bookmaking II	30.00
ART 324	Painting III (fall only)	40.00	ART 458	Papermaking	20.00
ART 325	Figure Painting	25.00	ART 459	Monoprinting	20.00
ART 327	Watercolor II	40.00	ART 460	Ceramic Clay	25.00
ART 331	Sculpture II	40.00	ART 463	Ceramic Glaze	25.00
ART 332	Sculpture III	40.00	ART 466	Special Problems in Ceramics	25.00
ART 333	Foundry Casting Methods	40.00	ART 472	Advanced Jewelry	15.00
ART 351	Intaglio I	40.00	ART 473	Advanced Metalworking	15.00
ART 352	Lithography I	40.00	ART 474	Advanced Wood	25.00
ART 354	Screen Printing I	35.00	ART 476	Fibers: Multiple Harness Weaving	25.00
ART 355	Photo Process for Printmaking I	25.00	ART 477	Printed Textiles	30.00
ART 360	Ceramic Throwing	25.00	ART 494	ST: Advanced Sculpture	20.00
ART 364	Ceramic Handbuilding I	25.00	ART 494	ST: Carving	25.00
ART 365	Ceramic Handbuilding II	25.00	ART 494	ST: Color for Jewelry	15.00
ART 372	Jewelry II	15.00	ART 494	ST: Computer Animation II	40.00
ART 373	Metalworking I	15.00	ART 494	ST: Computer Animation III	40.00
ART 374	Wood II	25.00	ART 494	ST: Experimental Paper	25.00
ART 376	Fibers: Loom Techniques	25.00	ART 494	ST: Fibers and Surface	25.00
ART 377	Surface Design	25.00	ART 494	ST: Forging Techniques	15.00
ART 394	ST: Carving	25.00	ART 494	ST: Foundry	40.00
ART 394	ST: Ceramics	15.00	ART 494	ST: Introduction to Printmaking	30.00
ART 394	ST: Fibers Design for Nonmajors	25.00	ART 494	ST: Mold Making and Casting	15.00
ART 394	ST: Relief Printmaking	35.00	ART 494	ST: Neon Workshop	40.00
ART 394	ST: Turning	25.00	ART 494	ST: Photo Design	25.00
ART 401	Nonsilver Photography	30.00	ART 494	ST: Portraiture Photography	25.00
ART 403	Senior Photographic Projects	25.00	ART 494	ST: Print Textiles	25.00
ART 404	Portraiture Photography	25.00	ART 494	ST: Relief Printmaking	35.00
ART 405	Advanced Color Photography	35.00	ART 494	ST: Turning	25.00
			ART 494	ST: Vapor Glazes	15.00

Special Class Fees and Deposits for ASU Main and ASU East (continued)

Special Fees (continued)

ART 494	ST: View Camera	\$35.00	BIO 370	Vertebrate Zoology	\$25.00
ART 494	ST: Watercolor	40.00	BIO 502	Transmission Electron Microscopy	20.00
ART 494	ST: Wood Carving	30.00	BIO 505	Scanning Electron Microscopy	20.00
ART 498	PS: Landscape Photography: Theory	25.00	BLE 401	Teaching Science and Social Studies to Children	5.00
ART 551	Intaglio Projects	40.00	BLE 496	Field Experience	10.00
ART 594	Carving	25.00	BUS 502	Managerial Communication	8.00
ART 594	Turning	25.00	CHI 101	Elementary Chinese	15.00
ART 598	ST: Advanced Color Photography	35.00	CHI 102	Elementary Chinese	15.00
ART 598	ST: Advanced Photo Processes for Printmaking	30.00	CHI 107	Chinese for International Professions I	15.00
ART 598	ST: Advanced Screen Printing	35.00	CHM 101	Introductory Chemistry ¹	15.00
ART 598	ST: Advanced Sculpture	20.00	CHM 107	Chemistry and Society ¹	15.00
ART 598	ST: Architectural Sculpture	40.00	CHM 113	General Chemistry ¹	15.00
ART 598	ST: Art Anatomy	20.00	CHM 114	General Chemistry for Engineers ¹	15.00
ART 598	ST: Ceramic Clay	25.00	CHM 115	General Chemistry with Qualitative Analysis ¹	15.00
ART 598	ST: Ceramic Glaze	25.00	CHM 116	General Chemistry ¹	15.00
ART 598	ST: Experimental Paper	25.00	CHM 117	General Chemistry for Majors I ¹	15.00
ART 598	ST: Experimental Systems in Sculpture	40.00	CHM 118	General Chemistry for Majors II ¹	15.00
ART 598	ST: Fibers and Surface	25.00	CHM 235	Elementary Organic Chemistry Laboratory ¹	15.00
ART 598	ST: Figure Painting	25.00	CHM 319	Organic Chemistry Laboratory for Majors I ¹	15.00
ART 598	ST: Fine Printing and Bookmaking I	30.00	CHM 320	Organic Chemistry Laboratory for Majors II ¹	15.00
ART 598	ST: Fine Printing and Bookmaking II	30.00	CHM 326	Analytical Chemistry Laboratory ¹	15.00
ART 598	ST: Forging Techniques	15.00	CHM 335	General Organic Chemistry Laboratory ¹	15.00
ART 598	ST: Foundry	40.00	CHM 336	General Organic Chemistry Laboratory ¹	15.00
ART 598	ST: Introduction to Printmaking	30.00	CHM 343	Physical Chemistry Laboratory ¹	15.00
ART 598	ST: Jewelry Metalworking	15.00	CHM 367	Elementary Biochemistry Laboratory ¹	15.00
ART 598	ST: Life Drawing	25.00	CHM 422	Instrumental Analysis Laboratory ¹	15.00
ART 598	ST: Lithography	40.00	CHM 424	Separation Science ¹	15.00
ART 598	ST: Mold Making and Casting	15.00	CHM 431	Qualitative Organic Analysis ¹	15.00
ART 598	ST: Monoprinting	20.00	CHM 444	General Physical Chemistry Laboratory ¹	15.00
ART 598	ST: Neon Sculpture	45.00	CHM 452	Inorganic Chemistry Laboratory ¹	15.00
ART 598	ST: Neon Workshop	40.00	CHM 464	Biophysical Chemistry Laboratory ¹	15.00
ART 598	ST: Nonsilver Photography	30.00	CHM 467	General Biochemistry Laboratory ¹	15.00
ART 598	ST: Papermaking	20.00	CHM 480	Methods of Teaching Chemistry ¹	15.00
ART 598	ST: Photo Processes for Printmaking I	25.00	CHM 593	Applied Project: Glass Blowing ¹	25.00
ART 598	ST: Portraiture Photography	25.00	CLS 310	Principles of Clinical Chemistry I	25.00
ART 598	ST: Printed Textiles	30.00	CLS 320	Principles of Clinical Microbiology I	25.00
ART 598	ST: Relief Printmaking	35.00	COM 484	Communication Internship	20.00
ART 598	ST: Screen Printing	35.00	COM 584	Communication Internship	20.00
ART 598	ST: Special Problems in Ceramics	25.00	DCI 396	Field Experience I	10.00
ART 598	ST: Special Problems in Sculpture	40.00	DCI 397	Field Experience II	10.00
ART 598	ST: View Camera	35.00	ECD 496	Field Experience	10.00
ART 598	ST: Watercolor	40.00	EDP 560	Individual Intellectual Assessment	12.50
ART 598	ST: Wood	25.00	EED 320	Teaching Science to Children	5.00
ART 598	ST: Wood Carving	30.00	EED 401	Teaching Science and Social Studies to Children	5.00
ART 621	Studio Problems: Ceramics	25.00	EED 478	Student Teaching in the Elementary School	25.00
ART 621	Studio Problems: Metals	15.00	EED 496	Field Experience	10.00
ART 621	Studio Problems: Printmaking	25.00	EED 578	Student Teaching in the Elementary School	25.00
BIO 181	General Biology	10.00	EED 598	ST: Using Math Manipulatives/ Elementary Schools	5.00
BIO 301	Field Natural History	25.00	EED 598	ST: Using Math Manipulatives/Middle Schools	5.00

¹ Chemistry classes may also carry a deposit. See "Deposits."

Special Class Fees and Deposits for ASU Main and ASU East (continued)

Special Fees (continued)

EPE	105	Physical Education Activity (Archery)	\$15.00	GLG	490	Clastic Sedimentology and Petrology	\$20.00
EPE	105	Physical Education Activity (Bowling)	25.00	GLG	490	Topics in Geology: Moon	10.00
EPE	105	Physical Education Activity (Fencing)	45.00	GLG	490	Topics in Geology: Pyroclastic Rocks	25.00
EPE	105	Physical Education Activity (Golf)	45.00	GLG	490	Topics in Geology: Remote Sensing	10.00
EPE	105	Physical Education Activity (Quest Boxing)	30.00	GLG	490	Topics in Geology: Volcano	25.00
EPE	105	Physical Education Activity (Rock Climbing)	35.00	GLG	510	Advanced Structural Geology	10.00
EPE	110	Movement Analysis Laboratory (Golf)	45.00	GLG	520	Advanced Physical Volcanology	35.00
EPE	110	Movement Analysis Laboratory (Fencing)	45.00	GLG	524	Advanced Igneous Petrology	20.00
EPE	205	Physical Education Activity (Archery)	15.00	GLG	525	Advanced Metamorphic Petrology	5.00
EPE	205	Physical Education Activity (Bowling)	25.00	GLG	591	Volcanology	35.00
EPE	205	Physical Education Activity (Golf)	45.00	GLG	598	ST: Advanced Field Geology	35.00
EPE	305	Physical Education Activity (Golf)	45.00	GLG	598	ST: Clastic Sedimentology and Petrology	20.00
EPE	335	Biomechanics	15.00	GLG	598	ST: Cordilleran Regional Geology	10.00
EPE	340	Physiology of Exercise	15.00	GLG	598	ST: Geology of Mars	10.00
EPE	345	Motor and Developmental Learning	15.00	GLG	598	ST: Ore Deposits	20.00
EPE	370	Advanced First Aid	8.00	GLG	598	ST: Petrology-Petrography	5.00
EPE	505	Applied Exercise Physiology Techniques	15.00	GLG	598	ST: Principles of Stratigraphy	20.00
FON	142	Applied Food Principles	35.00	GLG	598	ST: Sedimentology	15.00
FON	341	Introduction to Planning Therapeutic Diets	15.00	GLG	598	ST: Volcanology	35.00
FON	442	Experimental Foods	15.00	GPH	111	Introduction to Physical Geography	8.00
FON	445	Quantity Food Production	15.00	GPH	211	Landform Processes	15.00
FON	446	Human Nutrition Assessment Lecture/ Laboratory	25.00	GPH	418	Landforms of the Western United States	20.00
FON	545	Recent Developments in Institutional Feeding	15.00	GPH	491	Geographic Field Methods	20.00
FON	598	Research Methods in Nutrition	15.00	HEB	101	Elementary Modern Hebrew	15.00
FRE	101	Elementary French	15.00	HEB	102	Elementary Modern Hebrew	15.00
FRE	102	Elementary French	15.00	HEB	201	Intermediate Modern Hebrew	15.00
FRE	107	French for International Professions I	15.00	HEB	202	Intermediate Modern Hebrew	15.00
FRE	111	Fundamentals of French	15.00	HES	394	ST: Step Aerobics	20.00
FRE	201	Intermediate French I	15.00	IDN	101	Elementary Indonesian I	15.00
FRE	202	Intermediate French II	15.00	IDN	102	Elementary Indonesian II	15.00
FRE	207	French for International Professions II	15.00	IDN	201	Intermediate Indonesian I	15.00
GER	101	Elementary German	15.00	IDN	202	Intermediate Indonesian II	15.00
GER	102	Elementary German	15.00	IEE	591	Seminar: Manufacturing Strategy	50.00
GER	111	Fundamentals of German	15.00	IEE	591	Seminar: Effects of Economics/New Products Market	50.00
GER	201	Intermediate German	15.00	IEE	591	Seminar: Strategic Product Development	50.00
GER	202	Intermediate German	15.00	IEE	591	Seminar: New Product Strategic	50.00
GLG	102	Introduction to Geology II (Historical)	20.00	ITA	101	Elementary Italian	15.00
GLG	103	Introduction to Geology I—Laboratory	5.00	ITA	102	Elementary Italian	15.00
GLG	294	Geology of the Planets	10.00	ITA	201	Intermediate Italian	15.00
GLG	305	Geology of the Earth, Moon, and Planets	10.00	ITA	202	Intermediate Italian	15.00
GLG	310	Structural Geology	5.00	JPN	101	Elementary Japanese	15.00
GLG	336	Invertebrate Paleontology	10.00	JPN	102	Elementary Japanese	15.00
GLG	405	Geology of the Moon	10.00	JPN	107	Japanese for International Professions I	15.00
GLG	406	Geology of Mars	10.00	JPN	201	Intermediate Japanese	15.00
GLG	420	Volcanology	35.00	JPN	202	Intermediate Japanese	15.00
GLG	424	Petrology	5.00	JPN	207	Japanese for International Professions II	15.00
GLG	435	Sedimentology	15.00	JUS	484	Internship	20.00
GLG	436	Principles of Stratigraphy	20.00	JUS	584	Internship	20.00
GLG	441	Ore Deposits	20.00	MIC	206	Microbiology Laboratory	25.00
GLG	455	Advanced Field Geology	35.00	MIC	302	Advanced Bacteriology Laboratory	25.00
GLG	456	Cordilleran Regional Geology	10.00	MIC	421	Experimental Immunology	20.00
				MIC	470	Bacterial Diversity and Systematics	25.00

Special Class Fees and Deposits for ASU Main and ASU East (continued)

Special Fees (continued)

MUP 111	Studio Instruction	\$60.00	SPA 107	Spanish for International Professions I	\$15.00
MUP 121	Studio Instruction	40.00	SPA 111	Fundamentals of Spanish	15.00
MUP 127	Studio Instruction	60.00	SPA 201	Intermediate Spanish	15.00
MUP 311	Studio Instruction	60.00	SPA 202	Intermediate Spanish	15.00
MUP 321	Studio Instruction	40.00	SPA 207	Spanish for International Professions II	15.00
MUP 327	Studio Instruction	60.00	SPE 478	Student Teaching in Special Education	25.00
MUP 511	Studio Instruction	60.00	SPE 496	Field Experience	10.00
MUP 521	Studio Instruction	40.00	SPE 498	PS: Field Experience	10.00
MUP 527	Studio Instruction	60.00	SWE 101	Elementary Swedish	15.00
MUP 727	Studio Instruction	60.00	SWE 102	Elementary Swedish	15.00
NOR 101	Elementary Norwegian	15.00	SWE 201	Intermediate Swedish	15.00
NOR 102	Elementary Norwegian	15.00	SWE 202	Intermediate Swedish	15.00
NOR 201	Intermediate Norwegian	15.00	THA 101	Elementary Thai I	15.00
NOR 202	Intermediate Norwegian	15.00	THA 102	Elementary Thai II	15.00
NUR 211	Nurse-Client Relationships	15.00	THA 201	Intermediate Thai I	15.00
NUR 214	Health Assessment in Nursing Practice	15.00	THA 202	Intermediate Thai II	15.00
NUR 217	Basic Clinical Skills	15.00	THP 113	Techniques of Theatrical Makeup	5.00
NUR 314	Health Assessment for Registered Nurses	15.00	THP 213	Introduction to Technical Theatre	40.00
NUR 330	Care of Acute and Chronically Ill Adults	15.00	THP 312	Puppetry with Children	10.00
NUR 427	Community Health Nursing	9.00	THP 340	Scene Design	5.00
NUR 428	Management of Client in Health Care Settings	30.00	THP 345	Lighting Design	15.00
NUR 429	Community Health Nursing: Clinical	15.00	THP 440	Advanced Scene Design	5.00
NUR 430	Home Health Care	15.00	THP 441	Scene Painting	20.00
NUR 560	Advanced Health Assessment (spring 1998)	45.00	THP 444	Drafting for the Stage	5.00
NUR 580	Adult Health Nursing Assessment/ Promotion Practicum (fall 1998)	45.00	THP 445	Advanced Lighting Design	5.00
PLB 108	Concepts in Plant Biology	10.00	THP 506	Scenography	5.00
PLB 260	Plants in Cities: Introduction to Urban Horticulture	20.00	THP 512	Puppetry Workshop	10.00
PLB 300	Comparative Plant Diversity	15.00	UET 415	Electronic Manufacturing Engineering Principles	10.00
PLB 308	Plant Physiology	30.00	WST 294	Women and Social Action	20.00
PLB 310	The Flora of Arizona	20.00			
PLB 362	Landscape Plants I	10.00			
PLB 370	Landscape Practices (spring 1998)	25.00			
POR 101	Elementary Portuguese	15.00			
POR 201	Intermediate Portuguese	15.00			
REC 463	Senior Internship	20.00			
REC 494	ST: Tourism and Public Lands	15.00			
RUS 101	Elementary Russian	15.00			
RUS 102	Elementary Russian	15.00			
RUS 201	Intermediate Russian	15.00			
RUS 202	Intermediate Russian	15.00			
RUS 211	Basic Russian Conversation	15.00			
RUS 212	Basic Russian Conversation	15.00			
SED 478	Student Teaching in Secondary Schools	25.00			
SED 496	Field Experience	10.00			
SED 578	Student Teaching in the Secondary Schools	25.00			
SED 598	ST: Using Math Manipulatives/Middle Schools	5.00			
SPA 101	Elementary Spanish	15.00			
SPA 102	Elementary Spanish	15.00			

Deposits

ADE 321	Architectural Studio I	\$25.00
ADE 322	Architectural Studio II	25.00
ADE 421	Architectural Studio III	25.00
ADE 422	Architectural Studio IV	25.00
ADE 510	Foundation Architectural Studio	25.00
ADE 511	Core Architectural Studio I	25.00
ADE 512	Core Architectural Studio II	25.00
ADE 521	Advanced Architectural Studio I	25.00
ADE 522	Advanced Architectural Studio II	25.00
ADE 621	Advanced Architectural Studio III	25.00
ADE 622	Advanced Architectural Studio IV	25.00
CHM 101	Introductory Chemistry ²	10.00
CHM 107	Chemistry and Society ²	10.00
CHM 113	General Chemistry ²	10.00
CHM 114	General Chemistry for Engineers ²	10.00
CHM 115	General Chemistry with Qualitative Analysis ²	10.00
CHM 116	General Chemistry ²	10.00
CHM 117	General Chemistry for Majors I ²	20.00

¹ Chemistry classes may also carry a deposit. See "Deposits."

² Chemistry classes may also carry a nonrefundable special class fee. See "Special Fees."

Special Class Fees and Deposits for ASU Main and ASU East (continued)

Deposits (continued)

CHM 118	General Chemistry for Majors II ²	\$20.00	INT 364	Interior Design Studio I	\$25.00
CHM 235	Elementary Organic Chemistry Laboratory ²	20.00	INT 365	Interior Design Studio II	25.00
CHM 319	Organic Chemistry Laboratory for Majors I ²	20.00	INT 464	Interior Design Studio III	25.00
CHM 320	Organic Chemistry Laboratory for Majors II ²	20.00	INT 465	Interior Design Studio IV	25.00
CHM 326	Analytical Chemistry Laboratory ²	20.00	INT 466	Interior Design Studio V	25.00
CHM 335	General Organic Chemistry Laboratory ²	20.00	INT 467	Interior Design Studio VI	25.00
CHM 336	General Organic Chemistry Laboratory ²	20.00	PLA 361	Landscape Architecture III	25.00
CHM 343	Physical Chemistry Laboratory ²	25.00	PLA 362	Landscape Architecture IV	25.00
CHM 367	Elementary Biochemistry Laboratory ²	20.00	PLA 461	Landscape Architecture V	25.00
CHM 422	Instrumental Analysis Laboratory ²	25.00	PLA 462	Landscape Architecture VI	25.00
CHM 424	Separation Science ²	25.00	PUP 361	Urban Planning III	25.00
CHM 431	Qualitative Organic Analysis ²	20.00	PUP 362	Urban Planning IV	25.00
CHM 444	General Physical Chemistry Laboratory ²	25.00	PUP 461	Urban Planning V	25.00
CHM 452	Inorganic Chemistry Laboratory ²	20.00	PUP 462	Urban Planning VI	25.00
CHM 464	Biophysical Chemistry Laboratory	20.00	PUP 572	Planning Studio I: Data Inventory and Analysis	25.00
CHM 467	General Biochemistry Laboratory ²	20.00	PUP 574	Planning Studio II: Options and Implementation	25.00
CHM 525	Spectrochemical Methods of Analysis ²	25.00			
CHM 526	X-ray Methods of Analysis ²	25.00			
CHM 527	Electrical Methods of Chemical Analysis ²	25.00			
DSC 593	Applied Projects	25.00			
DSC 599	Thesis	25.00			
IND 360	Industrial Design III	25.00			
IND 361	Industrial Design IV	25.00			
IND 460	Design Project I	25.00			
IND 461	Design Project II	25.00			

Class Fees Paid in Class or at Location Listed

AET 300	Aircraft Design I	\$0-40.00
AMT 100	Flight Safety I ³	
AMT 200	Flight Safety II ³	
AMT 300	Flight Safety III ³	
AMT 387	Multiengine Pilot Ground School	17.00/hr
EPE 105	Physical Education Activity: Scuba	35.00
EPE 305	Physical Education Activity: Advanced Scuba	35.00

¹ Chemistry classes may also carry a deposit. See "Deposits."

² Chemistry classes may also carry a nonrefundable special class fee. See "Special Fees."

³ Fees are variable and paid directly to contractor for rental of aircraft.