

Information Systems (Reynolda Campus)

Information Systems supports University instruction, research, and administrative needs through computing and telecommunications services. The campus computer network offers wired and wireless high-speed connectivity from all residence hall rooms, all academic and administrative buildings, and in common areas such as Benson University Center.

All students on the Reynolda Campus are given a network login ID; the login is maintained as long as the student is enrolled. This account provides students with access to networked computer resources such as electronic mail, client-server software packages, various courseware applications, and administrative services. Upon matriculation, and again at the beginning of the junior year, undergraduate students receive a new IBM ThinkPad as part of their tuition. The current ThinkPad model has an Intel Pentium M 1.5 GHz processor, 768 MB RAM, 32 MB video ram, 15" active matrix screen, 80 gigabyte hard drive, and a combination CD-RW/DVD-RW drive. Software on the ThinkPad includes Windows XP Professional Edition, Microsoft Office 2003 Professional, and Mozilla, Internet Explorer and Macromedia Dreamweaver, among other Internet applications. The ThinkPad also has a variety of research, analytical, and development tools, as well as the latest versions of Symantec Antivirus and LavaSoft Ad-Aware programs. Maintenance and support for the laptop computers is provided on campus through an award-winning service center. Loaner computers are available for students as needed. In addition to the ThinkPad, all first-year students receive an HP PSC 1350 color inkjet printer/scanner/copier.

The department also supports an extensive information system that includes documentation, class schedules and grades, University-wide activity calendars, the Wake Forest University Libraries information system, the electronic version of the student newspaper *Old Gold and Black*, and the new student-run Web site, <http://student.wfu.edu>. The Wake Forest Information Network (WIN) provides the University community with faculty, staff, and student databases and directories, an alumni directory, class registration and degree audit services, and customizable links to news, weather, and research sites.

The University has an extensive collection of computing facilities that serve both academic and administrative needs. Two Hewlett-Packard series 3000s, 18 Windows 2000-03 servers, and six Intel-based Linux servers provide for administrative computing needs. An extensive LINUX and AIX-based infrastructure provides messaging, virus filtering, security, systems management, courseware, Intranet, and scientific and other research needs. Included among the LINUX systems is a supercomputing cluster containing 128 compute nodes. These systems are used exclusively for scientific computing by departments such as Computer Science and Physics. Wake Forest is one of few universities that provide undergraduate and graduate students access to such a cluster. Approximately 37 Windows 2000-03 servers provide basic authentication, file and print services. Windows 2000 servers, LINUX servers and IBM RD/6000 pSeries systems provide a variety of library services. Regular weekly maintenance, scheduled each Saturday from 9 a.m. until noon, may affect access to some or all of these services.

Programming languages available on the Academic Computing (AC) system include C, C++, Java, Perl, Tcl/Tk, Pascal, Cobol, Fortran77, and Fortran95. Statistical packages such as SPSS and SAS can be used for data analysis, forecasting, and financial modeling. Maple, a symbolic algebra package, is also available. Using the ThinkPads, students have access to a large variety of instructional, classroom, and research resources through the campus network including the online catalog, databases, and electronic journals provided by the Z. Smith Reynolds Library. Many departments on campus have their own computing resources in addition to those available through the Information Systems Department.

Wake Forest students, faculty, and staff also have access to computing resources outside the University. The University is a member of the Inter-University Consortium for Political and Social Research (ICPSR), located at the University of Michigan. Membership in ICPSR provides faculty and students with access to a large library of data files, including public opinion surveys, cross-cultural data, financial data, and complete census data. The University is also a member of EDUCAUSE, a national consortium of colleges and universities concerned with computing issues.

Information Systems supports an extensive high-speed data network infrastructure on the Reynolda Campus. This infrastructure includes a Gigabit Ethernet network core, Fast Ethernet (100MB) to the desktop and Gigabit connections to the Internet. Each residence hall room is equipped with one wired network connection per resident and wired connections are available in most classrooms. In addition, all Wake Forest students have access to a campus-wide pervasive wireless infrastructure offering 802.11 a and g wireless access. This network currently connects all academic, administrative and residence buildings and provides robust interconnectivity.

Wake Forest has a redundant Gigabit Ethernet Internet connection to WinstonNet, which provides a Gigabit Ethernet ring around the Winston-Salem academic community with a 622 Mbps OC-12 connection to the Internet. Through this connection, Wake Forest has access to extensive LINUX and AIX-based supercomputing facilities located at the MCNC/North Carolina Supercomputing Center in the Research Triangle and to all the premier research networks in the World, including Internet II and Abilene. Wake Forest is also working closely with the North Carolina Research and Education Network on other advanced networking technologies.

Information Systems also provides telephone and cable television services to the students, faculty, and staff of Wake Forest. All telephone users receive voice mail. The cable TV system is provided through an agreement with Time

Warner Cable. Currently, more than 70 channels are available on the campus cable TV system, including HBO and several satellite-fed stations. Cable channel 2 is the Wake Forest University information channel, providing updated technology information, current weather conditions, and a calendar of campus events. WFDD-FM, National Public Radio from Wake Forest University, provides background music for this channel. Channel 6, the WAKE-TV channel, provides a forum for student talk shows and other student-oriented programming. Channels 20 and 22 carry SCOLA, a non-profit educational service that features television programming from more than fifty different countries in their original languages.

Information Systems provides assistance by telephone, e-mail, and online through ResolveIT. Students, faculty and staff can receive assistance in person at the Help Desk from 8 a.m. - 9 p.m., Monday through Thursday; 8 a.m. - 5 p.m. on Friday; and 5-9 p.m. on Sunday. A voice mail retrieval system is activated on Saturdays to respond to campus-wide emergency calls. On-site computing support is available in residence halls through Resident Technology Advisors (RTAs).

More than 160 students are involved in Information Systems student technology programs. This extensive student-centric computing environment is a key component of our educational support mission. Students work in a number of settings that include providing direct support for students, faculty, and staff; providing technology training in the community; and delivering technology management and consulting services for external clients. In addition, students participate in unique leadership and community outreach programs including technology-focused residence halls, a student technology council, and community network implementation.

Libraries

The libraries of Wake Forest University support instruction and research at the undergraduate level and in the disciplines awarding graduate degrees. The libraries of the University hold membership in the Association of College and Research Libraries, and in the Association of Southeastern Research Libraries. They rank among the top libraries in the Southeast in expenditures per student.

The Wake Forest University libraries include the Z. Smith Reynolds Library, the Professional Center Library (serving the Law School and the Babcock Graduate School of Management), and the Coy C. Carpenter Library of the Wake Forest University School of Medicine.

The three libraries maintain collections totaling over 1.7 million print volumes and subscriptions to more than 16,000 periodicals and serials, largely of scholarly content. The Z. Smith Reynolds Library holds over 1.4 million volumes in the general collection, over 1 million reels of microfilm and pieces of microtext, and over 10,000 videos and DVD's. As a congressionally designated selective federal depository and depository of North Carolina government information, the ZSR Library holds nearly 170,000 government documents. The Professional Center Library holds over 200,000 volumes and the Coy C. Carpenter Library holds over 158,000 volumes. The three libraries share an online catalog that also provides access to electronic resources, databases, and an ever-expanding collection of electronic journals, all accessible via the campus network and remotely.

The Z. Smith Reynolds Library provides comprehensive reference and research services, including assistance with online searching, directed and independent research as well as discipline-related library instruction, information literacy classes, and general library orientation. Reference tools are available in electronic and print formats. Library staff offer undergraduates a one-credit course, LIB100: Accessing Information in the 21st Century, which focuses on effective use of research strategies, search techniques, and evaluation of resources. Wake Forest students, faculty and staff may use interlibrary loan services to borrow materials from other libraries throughout the country at no charge. Special collections in the Z. Smith Reynolds Library include the Rare Books Collection, which emphasizes American and British authors of the late nineteenth and early twentieth centuries. The Ethel Taylor Crittenden Baptist Historical Collection and the Wake Forest College/University Archive are maintained here as well.

Facilities in the Z. Smith Reynolds Library include the Information Technology Center which is equipped for multimedia viewing, editing and scanning, and has a computer lab for student use. Training in computer and multimedia technologies is provided through the ITC. Several small group study rooms are located throughout the library and may be reserved. Two 24-hour study areas and a cyber café are accessible by key-card. The entire library is equipped for wireless internet access.

The Coy C. Carpenter Library of the Wake Forest University School of Medicine houses special collections including the written and oral history of the School of Medicine, the history of neurology, and the Suzanne Meads Art in Medicine collection. The Dorothy Carpenter Medical Archives also contain the papers of the American Neurological Association, the American Society of Neuroimaging, the Association of Medical Illustrators, the Society of Neurological Surgeons, the Association for Research in Nervous and Mental Disease, the North Carolina Surgical Association, and the North Carolina Baptist Hospital Nursing School.