# THE CAMPUS AND FACILITIES

New College's home is a 105-acre campus, stretching from the intertidal shores of Sarasota Bay to the edge of the Sarasota-Bradenton airfield. There are three named sub-units of the campus—Bayfront, Pei, and Caples. The College lies within a public educational, cultural, and historic district that includes the John and Mable Ringling Museum of Art and the Asolo Repertory Theatre, now part of Florida State University. The district's four Gilded Age Mansions, three on the campus and one on the museum grounds, are listed in the National Register of Historic Places. The campus mansions are in regular use as classrooms, offices, and reception areas.

The campus is also home to boldly modern buildings designed by I.M. Pei. These include a complex of student residences, a cafeteria and student center, offices, and classrooms.

Most first-year students live in the Pei-designed residences which border a large quadrangle planted with stately royal palms that is a popular gathering spot for New College students. Dort and Goldstein Residence Halls are connected to the Pei dorms by a walkway lined with Washingtonia Palms.

The College completed five new residential halls in 2007. Four of them provide apartment-style living for about 100 students. These halls feature some beautiful architecture, including high-timbered roofs with arched windows and an abundance of natural light. The fifth hall, the Rhoda Pritzker Residence Hall, provides housing for 90 students. The hall features a third-story open-air lounge and a central courtyard.

The Harry Sudakoff Lecture and Conference Center and the Jane Bancroft Cook Library were added to the campus in the 1980s. The flexible plan of Sudakoff Center allows its 600-seat auditorium to be subdivided into meeting rooms for groups of 50 to 400. A pedestrian bridge between Sudakoff Center and Cook Library spans the highway that bisects the campus. As a group, the bridge, Sudakoff Center, and Cook Library harmonize I.M. Pei's modernist buildings to the east with the traditional estate architecture on the campus bayfront. A professionally-managed indoor fitness center with racquetball courts, Nautilus room, dance/exercise room, and lockers is the centerpiece of a campus recreation area that includes lighted tennis and basketball courts, a 25-meter swimming pool, a whirlpool, and a multipurpose playing field (softball, soccer, Frisbee, etc). The Caples bayfront (lying south of the Ringling Museum) hosts the waterfront program with a boathouse and dock. Canoes, kayaks, sailboats, and the Marine Science research vessel are located here.

Since 1993, the campus has seen the construction of a comprehensive music and art quadrangle at Caples, the R.V. Heiser Natural Sciences Complex, the Rhoda and Jack Pritzker Marine Biology Research Center, the Public Archaeology Laboratory, and the Academic Center.

New College and USF Sarasota-Manatee share some campus facilities and services. Only New College students reside on campus.

## Academic Center and Plaza

New College completed construction in 2011 on an $11 million signature Academic Center and Plaza, known as ACE, that boldly announces the entrance to the state's honors college for the arts and sciences. The new building and its spacious interior plaza form the cornerstone of the College's Campus Master Plan and the building has attained LEED gold certification.

Located immediately north of the Jane Bancroft Cook Library, the 35,000 square-foot facility is home to the Division of Humanities. It also houses faculty offices, classrooms, computer labs, and a small student lounge. The Center, together with a large plaza connecting it with Cook Library, has become the campus hub, the natural meeting point throughout the week for students, faculty, and staff. Its location enables the College to maximize the benefits associated with the organizational and technological changes occurring at the library.

## The Jane Bancroft Cook Library

The Jane Bancroft Cook Library (https://www.ncf.edu/library/), completed in 1986 and honored by the American Institute of Architects for its outstanding design, is central to the academic life of New College of Florida. Its diverse resources, congenial atmosphere, and distinguished collections and programs have all been structured to foster independent work. The Cook Library collections contain several hundred thousand items while access to over 10 million items through the State University Libraries system is available to students, faculty, and staff. A research-level e-resource collection of books, journals, and databases is accessible via the library website. Most print materials are arranged by Library of Congress classification in an open stack format making materials readily accessible to users. An online catalog and discovery tool of the holdings of the State University System of Florida libraries enables users to borrow materials directly from other SUS libraries. The Helen N. Fagin Holocaust, Genocide, and Human Rights Collection is located on the first floor of the library. The College Archives and Special Collections are housed on the second floor with access by appointment. Many items are available online through the New College Digital Collections (https://ncf.sobek.ufl.edu/). The library offers both traditional and electronic reserve services to students.

Cook Library receives many daily and weekly local, national, and international print and electronic newspapers. The library has numerous current subscriptions to scholarly journals in print and electronic format. Internet access is provided through multiple computer workstations and through wireless connectivity. Remote access to licensed electronic resources is available to currently enrolled students, faculty, and staff. Librarians offer engaged instruction to students, both individually and in group settings, to assist them in learning to navigate the extensive resources that are available. Online Research Guides assist in the location of available reference tools. Librarians are available to assist students, faculty and staff with library resources. Click here (https://www.ncf.edu/departments/jane-bancroft-cook-library/) to learn about library staff.

Cook Library has seating for more than 400 persons. Among the features in the library are a variety of settings such as lounges, display areas, and research carrels for students and faculty. An enclosed Collab, located opposite the first-floor service desk, is designed for collaborative work and study. Exhibits and displays are presented throughout the year in the lobby and elsewhere in the building. A first floor workshop room is used for seminars, workshops, and other educational activities. The library has a silent study room on the first floor where one can work in silence at all times. Three group study rooms are available on the first floor of Cook Library along with other designated areas for individual and collaborative study. There are card-operated printers and photocopiers available on the first floor as well as computer workstations and flexible seating.

The Writing Resource Center, Educational Technology Services, and the Quantitative Resource Center are located in the Academic Resource Center on the first floor of Cook Library. The Center for Career Engagement and Opportunity and the Off-Campus Study/Study Abroad Office are accessible on the first floor.

Cook Library staff welcome the opportunity to serve students at every level of their research need and education process.

# Humanities Facilities

The Caples Fine Arts Complex is comprised of buildings and spaces dedicated to the study of art, music, and interdisciplinary arts. The Mildred Sainer Music and Arts Pavilion, also known as the Sainer Auditorium (257 seats plus 3 wheelchair positions), is suitable for chamber music recitals, lectures, film screenings, and small dramatic productions, and houses a 7-foot Steinway B grand piano. The lobby doubles as a reception area and a space for art exhibits. The Christiane Felsmann Fine Arts Building features studio space for faculty and advanced art students, and a printmaking studio/arts lab, which includes eight Macintosh computers and peripherals that support the art and music programs. The Betty Isermann Fine Arts Building provides gallery space for the display of work by New College students alongside work of the artist for whom the building is named, Betty Isermann. The Isermann Building also includes a drawing and a painting studio and a small seminar room for slides, lectures, and discussions. The Sculpture Building features woodworking and welding facilities, a tool room, an outdoor slab, and a sculpture studio with a 21-foot ceiling. Practice rooms, classrooms, and storage space for students' instruments can be found in the Lota Mundy Music Building, which also makes available three Kawai upright and two Kawai grand pianos to students for practice. These buildings enclose a large grassy area that can serve as a unique teaching space as well as an outdoor exhibition space. A small outdoor stage constructed in back of Sainer Auditorium provides an additional place for informal gatherings, class meetings, practice, concerts, lectures, or theatrical performances. Students are required to get permission from a faculty member to use these facilities after regular business hours.

In 2010, the 1,820 square-foot Black Box Theater was constructed in Hamilton Center to support student and college-based performances and instructional offerings in Theater, Dance, and Performance Studies.

# Natural Sciences Facilities

The Natural Sciences Division is housed in the Heiser Natural Sciences Complex. Two wings (34,000 square feet) were completed in 2000 and a third wing (22,000 square feet) was added in 2017. The Heiser Natural Sciences Complex consists of the William G. Selby and Marie Selby Building for Biology and Chemistry, the Paul H. Hanson Building for Mathematics and Physics, the Soo Bong Chae Memorial Auditorium, and the new wing. The entire complex was designed to enhance the close collaboration between teacher-scholars and student-scholars crucial to the mission of New College. It contains 26 well-equipped research and teaching laboratories, including a 20-station computer laboratory and instrument rooms. Research and teaching laboratory spaces are in close proximity, and faculty offices in the laboratory sciences have windows with views into the laboratories, closely connecting faculty with student work at all times. A highlighted feature is the 24-station chemistry-teaching laboratory with twelve transparent fume hoods and the three new 24-station teaching laboratories. Situated at the vertex of the complex, the Soo Bong Chae Memorial Auditorium is a multimedia lecture and demonstration space with three tiers of seating for nearly 80 participants. In keeping with the New College policy of actively engaging students in research projects, research education is emphasized, and students learn to use instruments early in their program. Highly sophisticated equipment is available to research students in biology, chemistry, biochemistry, computer science, mathematics and physics.

## Biology/Marine Biology

The biology laboratories are equipped with a variety of microscopes including research-grade analytical light microscopes, a fluorescence microscope, and a scanning electron microscope, to offer an unusually rich experience. In addition, the biology laboratories have a photographic darkroom, incubators for culturing organisms and testing animal behavior, controlled temperature chambers, digital imaging computers, and analytical instrumentation including an HPLC. A greenhouse and a herbarium of regional plants are available. Students interested in field ecology have access to a variety of sampling equipment including secchi discs, DO meters, nephelometers, salinometer/conductivity meters, Nansen bottles and nets.

In both biology and biochemistry laboratories, extensive equipment is available for molecular biology projects. Equipment for analyzing DNA, RNA, and proteins includes vertical (large and small) and horizontal gel boxes for electrophoresis, high voltage power supplies, western transfer boxes, and automatic pipetters. Temperature cyclers for performing the polymerase chain reaction (PCR), as well as a laminar flow hood for eukaryotic cell culture, are also available. A real-time PCR instrument for quantitative gene expression analysis and genetic variation detection was recently purchased with a grant from the National Science Foundation.

The Jack and Rhoda Pritzker Marine Biology Research Center (PMBRC) provide aquaria and holding facilities for marine organisms, laboratories, and tools that facilitate scientific experimentation. Seawater is pumped from Sarasota Bay, then preconditioned and treated prior to entering research aquaria. The Living Ecosystem Teaching and Research Aquarium includes five medium-sized aquaria, one large aquarium, and a single shallow tank. Each aquarium features a different captive ecosystem. Included are bay shore and local water ecosystems, and a diversity of near shore systems from non-local tropical to temperate regions. Cameras have been installed in the large aquarium and the medium live coral aquarium and send images to a streaming video server. This allows sharing of data on the web and permits detailed analysis of animal behavior in the tanks. Another camera in the invertebrate tank will be equipped with infrared capabilities for observations in near dark conditions, for expanded research opportunities. Faculty research laboratories, student research laboratories, and ground level tanks provide holding and culture facilities for maintaining organisms (both fish and marine invertebrates) for research and research education. The PMBRC's classroom contains a "wet" section with holding tanks and shallow sea tables. The sea tables are well suited to handling and observing small marine organisms. We have recently acquired a new stereomicroscope with pixel shift technology to produce high-resolution images.

A marine science research and sailing dock was completed in spring of 2022. The L-shaped dock is six feet wide and extends 294 feet west from the shore of the Caples campus and then 144 feet to the southwest, and the site was selected for its environmental compatibility and proximity to deep water. The dock was constructed with environmentally-friendly materials: Surestep PVC open deck grating, designed for maximum sunlight penetration to underwater aquatic life; and high-density

polyethylene piling wraps that protect the water from any chemicals in the treated wood pilings.

The dock currently serves the marine biology program's 32-foot pontoon research boat, Limbatus; a smaller research skiff; and a rigid inflatable rescue vessel. The dock bolsters New College's strong and popular programs in marine biology and environmental studies, as well as its summer marine biology education programs for teens in Sarasota and Manatee counties.

### Chemistry

Chemistry laboratories provide excellent research and teaching facilities for chemical synthesis, separation and structure determination, and for a variety of studies of structure, bonding, and reactivity. Specialized glassware, photochemical apparatus, and glove boxes for work in controlled atmospheres allow many different synthetic methods to be used. A spin - coater is available for constructing ultra-thin organic films down to a fraction of a nanometer. Gas and high-pressure liquid chromatography are available for separations, and structure determination can be carried out by use of nuclear magnetic resonance, infrared, ultraviolet-visible spectroscopy, and mass spectrometry. In addition to the recently upgraded 60 MHz nuclear magnetic resonance spectrometer used in the introductory labs, there is a research grade 250 MHz nuclear magnetic resonance spectrometer. A sensitive, new gas chromatograph mass spectrometer was purchased with a grant from the EPA.

A research-grade electrochemical apparatus allows study of fast electrochemical reactions, and chemical kinetics can be studied using computer-controlled ultraviolet-visible spectrophotometers. Three Fourier transform infrared spectrophotometers are used for teaching and research as well as for characterization of inorganic and organic molecules and for experiments in physical chemistry.

The physical chemistry laboratory is also equipped with tools for modern surface characterization techniques, which include a state-of-the-art dynamic surface tensiometer, a single wavelength ellipsometer, and a static tensiometer. Most of the more specialized instruments for teaching and research are computer-controlled through LabView. Our PTI fluorescence research instrument is the most sensitive bench-top fluorometer available and is used in the physical chemistry laboratory for energy transfer and kinetics studies.

### Computer Science/Data Science

New College has a number of servers that support students and faculty in the computer science and data science programs. These include 5 HP physical servers with NVIDIA graphics processing units (Tesla, Titan X and 1080 Ti); 1 SuperMicro physical server with 4 NVIDIA graphics processing units (Quadro RTX 6000); 1 SuperMicro physical server with 4 NVIDIA graphics processing units (RTX A5000 and 1080 Ti); and 12 virtual servers used in a variety of computer science, data science, and statistics courses.

### Mathematics

The mathematics program at New College has built a strong sense of community, resting in part on the existence of a place for faculty and students to gather and do mathematics—the Math Reading Room. This large seminar/study room is used for an active schedule of seminars, presentations, workshops, problem sessions, tutoring, and discussions. This stimulating interaction is highly valued by students, and contributes greatly to their growth and development in mathematics. The Math Reading Room is equipped with a computer that supports many different types of software (Mathematica, Maple, Illustrator, and others) and provides Internet access. Beginning and advanced laboratories are equipped with a variety of microcomputers, with additional workspace for upper-level students. Recent additions in the areas of computer science and applied mathematics complement the theoretical areas of algebra, geometry, topology, analysis, and theoretical computer science, allowing the faculty to offer a variety of courses and tutorials to challenge students with different backgrounds.

### Physics

The physics program has space for laboratory work at all levels, including a specially equipped laser lab with vibration-sensitive equipment mounted on Newport pneumatic isolation tables. In addition, the physics program contains a computer lab as part of its dedicated introductory lab, allowing access to software such as Maple.

The physics labs are equipped to support full semester courses in Introductory Lab (2 semesters), Modern Physics Lab, Electronics Lab, and Optics Lab. The introductory physics lab is fully computerized to allow interfacing of equipment to computers, and instant analysis and display of results. Beyond the regular course level, there are laboratories for doing advanced projects. These include measuring the speed of light with a rotating mirror apparatus, measuring the strength of gravity with a Cavendish setup, studying crystal structure with X-rays, making electronic measurements on semiconductors, performing optical experiments with lasers, doing precision optical interferometry, analyzing acoustical signals with a spectrum analyzer, making nuclear counts with a multichannel analyzer, and measuring optical spectra with a UV-VIS miniature fiber optic apparatus. Physics has two computer-controlled optical telescopes, a Meade 10.5" LX200, and a Meade 127ED 5" refractor.

At the research level, the labs have a Quesant Q-scope 250 Atomic Force Microscope, a micro-Raman spectrometer, an X-ray diffractometer, an X-ray fluorescence spectrometer, a micro-spectrophotometer, a Q switched Nd:YAG laser with second and fourth harmonic emission, lock-in amplifiers, an FFT signal analyzer, a motorized micropositioning stage and pyroelectric energy meter, a 1000X LOMO Multiscope optical microscope with a trinocular head and attached Nikon digital camera, and a spin-coating apparatus for thin film preparation.

### Statistics

The statistics program provides access to RStudio,Tableau, SAS, and remote New College servers for computationally intensive tasks.

## Social Sciences Facilities

The **Social Science Research Laboratory** (SSRL) is a resource dedicated to aiding advanced and thesis students in the Social Sciences with empirical data analyses and research design. It is staffed by a part-time director. The SSRL is available to Social Science AOC students needing resources to do research and to work on their theses. The facility, located in the Academic Center, has seven computers (6 PCs and 1 Macintosh) and a laser printer all of which are connected to the campus network and the Internet. Software available includes Microsoft Office, Adobe Creative Suite, Maple, SAS, SPSS, EViews, Stata, R, HypeResearch, NVivo and MicroCase ExploreIt. As a member of the Inter-University Consortium for Political and Social Research, the SSRL provides access to over 500,000 on-line databases.

### Anthropology

The **Hal C. Ball Anthropology Laboratory and Seminar room** houses a 2,000-volume library on Mesoamerican anthropology. It also contains a

collection of anthropology texts and manuals, a series of hominid and primate skulls, a slide collection, an oral history archive, audio-visual and photographic equipment, and a computer workstation for student use.

The **New College Public Archaeology Lab** (NCPAL) serves to facilitate student learning in archaeological methods and techniques by providing workspace for student projects. NCPAL features laboratory space for processing and interpreting artifacts, an office for archaeological site reports and geographic information systems, and storage space for excavated finds. The Lab facilitates faculty and student research on local history and regional heritage.

## Psychology

Centrally located on our Bayfront Campus in the Palmer C building, the **Developmental/Social Laboratory** includes an observation/testing room with an adjacent computer coding room that are available throughout the year to students in Psychology. The observation room can be used for testing individuals or small groups, with or without video recording of the interactions. The adjacent computer room can be used to monitor the activities live via video links on a computer monitor and to code the recorded interactions at a later time. Other rooms in the lab are available for running computerized, survey, or observational studies. Two handheld camcorders and an IP camera are available for video recording, either in the observation room or with laptop computers for offsite recording. A large, central room in the lab is also available for group studies or as a waiting room for research participants. The computers in this facility are equipped with stimulus presentation software (DirectRT) and statistical analysis software (R, SAS, and SPSS).

The **New College Comparative Cognition Laboratory** (NCCCL), located in Bon Seigneur House, offers resources for students to analyze animal vocalizations and behavior. Although the focus of the lab is on dolphins, students have also studied other species (e.g., manatees, lemurs, and birds) using the lab's hydrophones, microphones, and specialized acoustic processing software and video analysis equipment. The software available here includes Avisoft Recorder, Avisoft SASLAb-Pro, Mangold Interact 9, SAS, SPSS, and R. The lab also has equipment to fashion stimuli that allow us to ask questions of other species.

The **Psychology Computer Lab**, located in Bon Seigneur House, offers Psychology students software both for data collection (such as Superlab and DirectRT) and analysis (such as Mangold Interact 9, SAS, and SPSS). Analysis software to conduct linguistic analyses and statistical analyses are available. It includes specialized data collection hardware, such as response pads, voice keys, a heart rate monitor, microphones, camcorders, and tripods. The department also lends out equipment to students for off-site research and has a SurveyMonkey account for the collection of survey data.

The **Psychology Behavioral Endocrinology Lab** allows active brain scanning of human participants using fNIRS (functional near-infrared spectroscopy, a non-invasive technology that uses near-infrared light to monitor brain functions by detecting changes in optical absorption of hemoglobin) technology.

The **Comparative Brain Imaging Lab** includes software and data files from multiple species that allow analyses of how different areas of the brain interact.