

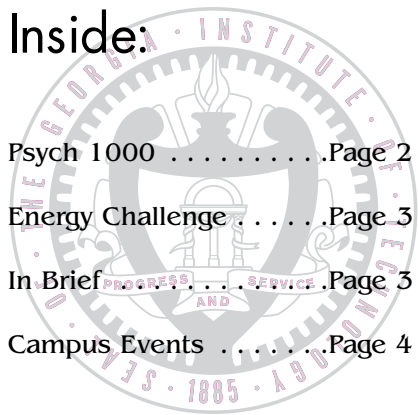
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THE WHISTLE

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THE GEORGIA INSTITUTE OF TECHNOLOGY

Fit for a kid



photo by Nicole Cappello

Children gather around alumnus R. Kirk Landon during the dedication ceremony for the joint Georgia Tech-Home Park daycare center bearing his name. Open since January, the R. Kirk Landon Learning Center has a capacity of 130 children aged 6 weeks to 4 years old.

Women at Tech mark a golden anniversary

David Terraso
Institute Communications
and Public Affairs

When Elizabeth Herndon and Diane Michel strode onto campus in 1952 as the first female students, they had no idea of the events they would set in motion.

"To think I thought I wouldn't be noticed, that I'd just sneak in," Herndon said with a laugh.

Not only were they noticed, but their numbers quickly grew. In just 50 years, Tech has gone from having just two women students to producing more female engineers than any other university in the country.

"Other schools have been admitting females longer than Georgia Tech, but I don't think they've made the concerted effort that Tech has," said Mary Frank Fox, professor in the Ivan Allen College and co-director of the Center for the Study of Women, Science and Technology.

For the 2002 fall semester, 2,045 women were enrolled as engineering majors at Tech, compared to 1,773 at the University of Michigan and 1,285 at the Massachusetts Institute of Technology (MIT).

Ironically, MIT began admitting

female students in 1883, five years before Tech, then known as the Georgia School of Technology, opened its doors. It wasn't until 1968 that the Regents voted to allow women to enroll in all programs at Tech.

"We didn't go there to change Georgia Tech. We went there for an education," explained

Shirley Mewborn, one of two first students to get a degree from Tech and the first female president of the Alumni Association.

But whether they meant to or not, their presence set in motion a complete overhaul of science and technology education in Georgia, and opened the

doors for more women to enter the traditionally male dominated fields of science and engineering.

The diversity of backgrounds and ideas that women students and faculty have brought have been extremely important to the quality of education at Tech, said Sue Rosser, dean of the Ivan Allen College and Tech's first female academic dean. "Women faculty and students often have a different perspective on problems. They often are much more interested in the social applications that a particular technology will have. Given all the amazing technological problems that need to be solved, we need to have people with as much creativity, with as many different backgrounds as possible working on these solutions," she said.

Part of the success Tech has had in recruiting women into engineering can be chalked up to its Women in Engineering program (WIE), currently run by civil and environmental engineering professor Mimi Philobos. WIE seeks to recruit female engineers and provide them opportunities for professional growth and development.

"We have a technological society, and we have a shortage of women in the tech professions. If we want to be competitive in a global marketplace, we cannot afford to overlook the talents of half of our population,"

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Bookstore sale hopes to reduce inventory before move

Michael Hagearty
Institute Communications
and Public Affairs

A combination of factors may make this one of the best times for faculty and staff to stock up on discounted merchandise from the Georgia Tech bookstore.

According to Bobby Pearson, store manager, the semi-annual customer appreciation sale — running Mar. 24-30 — offers 20 percent off clothing, gifts and supplies. As usual, the sale

excludes textbooks, computer hardware and software, and Burdell's convenience store. Together with the state's first tax-free shopping days on Mar. 28-29, the savings can be substantial.

"We also have some deeper discounts on items we're hoping to sell before we start moving to the new store at Technology Square this June," Pearson said. The new facility, managed through Barnes and Noble College Bookstores, will occupy 50,000 square feet — an increase of

almost 70 percent over its current location — and will house the very latest in technological materials.

"With an opening date of July 12, our timeline is short and we wanted to give the faculty, staff and students a chance to take advantage of our need to reduce inventory," he said. "We really need to make room for all the new products we plan to carry, and the sale is a great way to move merchandise. We hope to see everyone the week of March 24!"

“QUOTE— UNQUOTE”

“More than anywhere else on Earth, there has been some substantial warming in the Arctic. It is the most credible analysis, to date, of Arctic cloud properties.”
—*Judy Curry, chair of the School of Earth and Atmospheric Sciences, on a recent study by researchers at the University of Wisconsin-Madison showing the Arctic has warmed by about 1.8 degrees Fahrenheit over the last 20 years.* (Milwaukee Journal Sentinel)

“Part of his personality is that he’s a stud. A real ladies’ man, but also a gentleman.”
—*Michelle Cherwa, head cheerleading coach, on the appeal of Buzz, Georgia Tech’s mascot.* (Atlanta Magazine)

Introductory course helps ease adjustment to college life

Michael Hagearty
Institute Communications
and Public Affairs

For students, adjusting to college life remains one of the most difficult transitions of their young lives. For universities, it can be a principal reason why academically gifted individuals transfer before completing their freshman year. For Georgia Tech, it’s an issue that’s getting particular attention.

Every student comes to Tech knowing its reputation for intellectual rigor, yet few may be prepared for the psychological toll that comes from their newfound independence. As freshmen encounter academic, social and personal obstacles knowing where to seek assistance can make all the difference.

Meanwhile, Georgia Tech’s administration had become concerned that its retention rates — the percentage of students who matriculate from freshmen to sophomores — weren’t competitive with the top public universities.

Enter the Office of Success Programs, which attempted to address this concern in 1986 with a special course on adjusting to college life. In the 16 years since, the course has been modified, the last iteration coming during semester conversion in 1998 when it was reduced to a one-credit course — listed in the general course catalog as Psychology 1000 — on “a discussion of topics related to academic and professional success including time management, learning skills, career planning, psychological hardiness, teamwork and leadership.”

To put it another way, the class was “designed as a first semester course that assists students in their transition to college and to Tech,” according to John Stein, director of Success Programs. By familiarizing new students with the resources, options and opportunities available to them, the thinking goes, freshmen are more likely to become engaged and involved at Tech and less likely to seek their degree elsewhere.

Now the course is under review again, as educators and administrators look for ways to refine its purpose and its role as part of the Freshman Experience (FE). FE is a seven-point program covering issues from housing to nutrition to community involvement that works collectively to help ease students into the collegiate lifestyle. Lee Wilcox, vice president for Student Affairs, appointed the review committee last November.

“Since the course had not been reviewed since the change from quarters to semesters and the subsequent loss of contact hours, I felt it was time to take a hard look at it,” he said. “After all, the course is taken by (nearly) 1,300 freshmen each year and is an important part of the Freshman Year Experience Program.

“The committee was asked to look at every aspect of the course,” he added. “I’ve been particularly



A course such as Psych 1000 can make students aware of tutorial opportunities, such as those sponsored by the OMED: Educational Services, above.

impressed with the empirical data they have collected to assist in their review.” The committee’s report and recommendations are expected next month.

Academic value in Psych 1000?

There is evidence that programs such as FE are working: in 1999, Tech’s retention rate cracked 90 percent for the first time. Still, the course encounters some opposition from some faculty members who see the course as diluting the academic integrity of the institution, both in the quality of its content and its instructors.

Stein disputes that claim, believing the course strikes an appropriate balance between an initial orientation and preparing students for life beyond Tech. As a member of the review committee, he is developing a statistical evaluation showing students who complete the course are better informed students more likely to take advantage of academic opportunities, seek experience through internships and co-op or take leadership roles on campus.

In order to keep compliance with guidelines set by the Board of Regents, instructors need to have a master’s degree — though not in a particular field — and have a desire to work with first-year students and help to assist them through the high school-to-college transition. A two-day summer retreat led by Success Programs helps to give would-be instructors a sense of what to expect, and gives returning instructors a chance to improve their skills in leading class discussions.

In addition, each instructor is assigned several team leaders — volunteer upperclassmen — working in support to help plan lessons and facilitate dialogue.

The team leaders are essential, Stein says, in helping to reinforce the instructor, whether discussions concern study services, ways to get involved, or leadership and research opportunities. Sometimes, he admits, this information is best heard from a fellow student.

Major-specific sections

While Psych 1000 takes a generic,

wide-angle view of topics such as career development, some are finding additional benefit in altering the course to address a specific group of students. The College of Sciences chose such a path last fall when it decided to tailor the program specifically to science majors.

Rather than a departure, Sciences hoped to take the program further. Kent Barefield, associate dean of the College, said the biggest factor was a desire to build a sense of community within its majors.

“Because our numbers are small,” he said, “and our students mostly take the same classes as other students at Georgia Tech, there is little chance that they will identify with one another. We believe that this adversely impacts retention within the major and possibly retention in Georgia Tech.

“By having major-specific sections, students can have their classes in the buildings housing their majors, see the facilities available to them in upper-division classes, and meet faculty with whom they will have classes and with whom they could reasonably expect to do undergraduate research.”

Barefield said that such an approach was met with high approval, and that other Colleges have contacted him about doing the same. Stein welcomes such an evolution.

“We’re trying to reach as many first-year students as possible with a combination of generic and specific sections,” he says.

Still, certain misperceptions exist. Stein is hoping that his data, combined with faculty endorsements, will help to “educate people about the course, let them know a review is going on for a new model to emerge. Psych 1000 will be successful if we’re in partnership (with the faculty).”

For more information...

Freshman Experience
www.freshmanexperience.gatech.edu

Success Programs
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**Georgia
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Georgia Tech is a unit of the
University System of Georgia.

Student team hopes to 'hang one' for big money

Larry Bowie
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Georgia Tech undergraduate Vicky Hsu could have spent her spring break vacation relaxing. Instead, the chemical engineering senior hit the sand dunes of North Carolina, learning how to hang glide from the pros.

She'll need the practice. On April 5, she'll pilot a homemade glider with wings made almost entirely of paper products.

"The higher I flew, the easier it was to sail," said Hsu, who along with four other Tech students is representing the Institute during the Energy Challenge 2003 competition in Nags Head, N.C. The competition pits the Tech team against teams from nine other colleges across the country.

They'll see who built the best glider, as well as who can "hang one" — or fly it the farthest — from atop an 80-foot dune, a spot close to where Wilbur and Orville Wright recorded the first powered flight in 1903.

With a top prize of \$15,000 at stake, the team has been working intently, building their hang glider in a large cargo bay at the Atlanta Technology Center. Much of the sail is being built using materials such as paperboard and linerboard, and various chemicals during the finishing and bonding stages.

"We're testing the strength and elasticity of the paper today," said Jabulani Barber, a chemical engineering student and team member, as he



Chemical engineering undergraduate Vicky Hsu, who spent her spring break learning to hang glide for next month's Energy Challenge, stands with the glider's aluminum frame.

placed a strip of paper into a machine measuring how much pressure the paper can take before it snaps in half. The information will be useful as the team selects the best paper to use for the glider.

The next step was to select a glue to piece the different types of paper together. Eventually, the paper is laid out on the ground and cut to the specs of the hang glider's metal frame — a modified Rogallo wing design. From there, they'll attach the paper sail to the glider and frame.

"We think it'll do very well when we test it on the dunes," Hsu said.

Judges will score the teams on each of three flights. The combined distance of those flights weighs heavily in determining the winner. Other factors

to be considered include which hang glider weighs the least, which team made the best use of recycled products, and which glider looks the best in flight.

The Energy Challenge is an annual event sponsored by the U.S. Department of Energy and the Institute of Paper Science and Technology, promoting awareness of energy efficiency, manufacturing design, recycling, waste minimization, package maximizing and pulp and paper industrial processes.

Last year, another Georgia Tech team entered the Energy Challenge and sailed away with the \$15,000 prize. The competition required teams to build a paper sailboard and windsurf it at Lake Lanier.

The team's faculty advisor is Jeffery Hsieh, a professor of chemical engineering at Tech.

IN BRIEF:

McMath poses questions to faculty

Last week, in an op-ed piece for The Technique, Tech's student newspaper, Vice Provost for Undergraduate Affairs Bob McMath issued faculty and students an interesting challenge. In seeking to initiate a dialogue about Tech's academic environment, McMath posed a pair of questions specifically aimed at the faculty:

"In your years of teaching at Tech, what are you most proud of? Based on what you have seen, what most needs changing in order to improve on teaching and learning here?"

Making things better, he asserted, involves more than pointing out what doesn't work, but offering suggestions that could make it better. To that end, he asked that faculty — specifically those who spend each day in the classroom or the lab — to visit the Web site his office has set up at

www.gatech.edu/speakup to solicit this kind of feedback.

"The administration wants to know what you think," he concluded. "I strongly believe that by speaking up you can make a difference."

Sponsored Programs on the move

Effective April 1, the Office of Sponsored Programs staff will be moving into their new offices in the Research Administration Building (RAB), the new building adjoining its current offices at 505 Tenth Street. Proposals should be brought to the new first floor entrance to the Research Administration Building. The entrance is on the back of the building, and not facing 10th Street.

The offices of the associate vice provost for Research and director of Sponsored Programs will be on the first floor. The Industry Contracting Office and the Office of Technology Licensing will be on the second floor, and The Office of Contract Administration will be on the third floor. Document Control, the OSP Distribution Center, and the OSP database group will be located on the ground floor.

E-mail addresses and telephone numbers should not be affected by the move. For calls that otherwise go unanswered, call 894-3870.

Refer to the Sponsored Programs Web page at www.osp.gatech.edu for updates.

City & Regional Planning Program turns 50

The Georgia Tech City and Regional Planning Program celebrates its 50th Anniversary next month with a free symposium examining the future of Atlanta's growth.

The event, "Regional Equity, Economies, and Environments: Competition and Connections Between Suburbs and Centers," will be held on April 11 from 1:15 - 5 p.m. in the Sheraton Colony Square Hotel in Midtown.

Invited speakers include Atlanta Mayor Shirley Franklin; John Sibley, president of The Georgia Conservancy; Catherine Ross, former executive director of the Georgia Regional Transportation Authority; and Robert Yaro, president of the Regional Plan Association of New York City.

This event is sponsored in part by Georgia Tech's Center for Quality Growth and Regional Development. Space for the event is limited, and registration is required at www.coa.gatech.edu/crp/sympreg.htm.

50 Years, cont'd from page 1

said Philobos.

Tech's Center for the Study of Women in Science and Technology is another way Tech is meeting the needs of women both on and off campus. The Center offers a minor in gender studies as well as programs aimed at female students who are entering fields in science and technology.

But a university also has to meet the needs of the female faculty, too. Through the ADVANCE program, sponsored by the National Science Foundation, Tech is working to increase the representation of women both in academia and in industry. Jane Ammons is one of four ADVANCE professors and has been at Tech as a student since 1976. As one of Tech's first female professors of engineering, she's seen first hand how the Institute has changed through the years from a place

that merely tolerated female faculty to a university that actively seeks to recruit and advance them. One of her fondest memories, she said, is fighting to get a woman's restroom put in her academic building in the late 1970's.

"I jumped into the fray with an industrial engineering study based on the numbers of males and females in the building. Making my logical engineering arguments, I approached key administrators at Tech," she said, "with no luck."

Knowing a complaint to the U.S. Department of Justice could withhold federal funding to Tech, she made one last stop at the vice president's office.

"Instead of simply changing the sign on the door, which was my request, he found the money to renovate the building and add a larger women's restroom. For the remainder of our time in that building, the women secretaries and students threatened to put up a plaque

in the bathroom."

Whatever changes Tech makes over the next 50 years, Rosser said, they will all meet the same high standards the women of the past 50 years have worked so hard to meet.

"We were just students. We weren't looking behind or ahead. We were just looking to get out, if you will," explained Mewborn. "Today, I see the accomplishments of so many of our women students and what they have meant to science and technology. I'm just so happy to see the contributions that women have made. I guess had we not started this, then it wouldn't have happened, so that makes me very proud."

On March 28, Georgia Tech will host a banquet dinner to celebrate the accomplishments and contributions of women over the last 50 years, featuring a keynote address from Atlanta Mayor Shirley Franklin.