

# All About Camp Reach at WPI

## July 19 – July 31, 2009

For more information, please see our website:  
<http://www.wpi.edu/+reach>

### *Overview*

Camp Reach is a summer academic program at WPI for girls entering the 7th grade in Fall 2009. The goal of the program is to generate interest in engineering and technology and to enhance self-confidence and motivation toward education. Thirty girls from Massachusetts or Providence County, RI will participate in the two-week residential program. The program includes hands-on workshops, a design project for a community organization, field trips, recreational activities, and follow-up programs during the academic year. Camp Reach has been operating since 1997 and received the Women in Engineering Program Award from a national women in engineering advocacy organization in 2003.

### *Program Activities*

The design project is the major focus of the program. The campers will meet with a customer from an organization in the Worcester community to learn about a carefully pre-selected problem or need of the customer. During the entire two-week program, they will work in teams of ten to develop a solution to the problem, with the support of staff members. Engineering roles will be explained and assigned to each team member so that the problem can be divided and worked on by the entire team. They will present their solution to the customer, who will implement their plans after the conclusion of the program.

Campers will be invited back during the 2009-10 academic year to see their plans put into action. It is important that the campers and their families realize that coming to these events is important. The expectation is that the camper comes to the two-week program AND the follow-up events.

The design projects for 2009 have not yet been selected. But to give an example, in a recent program year, one team of ten girls worked with the Henry Lee Willis Center, a non-profit organization in Worcester. Their Family Care Program places troubled youth in specialized family foster care. The Reach team of engineers developed a plan for how they could transform a small, multipurpose room in their current facility into an educational and functional study area and computer lab for their foster care children. The team worked to understand the customer's needs, then created a detailed floor plan of ideas for computer and furniture location, lighting, rug and wall colors, and a list of educational supplies for the room. Other examples of design projects can be found on our website.

Discovery workshops emphasize hands-on learning in pairs or small teams to experience engineering, math, and science concepts through everyday activities. Topics may include: rehabilitation engineering, bio-medical engineering, electrical engineering, sandcastle building as an engineering experience, forensic science, and other areas of engineering and science.

Field trips will be made to the design project customers and to visit engineers in industry.

During the evenings, there are recreational activities which may include swimming, bowling, movie nights, arts and crafts, games, etc.

### *Daily Schedule*

Each day begins with breakfast at 7:30am. From 8-9am there is computer time to keep in touch with friends and family by e-mail. Design project work occurs from 9-noon, followed by lunch. The afternoon hours are used for discovery workshop activities, with dinner at

5pm. Recreational activities occur from 6-9pm, with free quiet time beginning at 9pm. Camp Reach has a strict lights-out policy of 9:30pm so that everyone has plenty of energy to enjoy activities during the day. *Before applying, girls and their parents are asked to consider carefully whether they are open to these waking hours and bedtimes and for lots of cooperative teamwork during the day.*

### ***Cape Cod Weekend***

During the middle weekend of the program, we typically travel to Cape Cod for several fun engineering- and nature-oriented activities. On Saturday night we stay at the Fellowship Hall (not the sanctuary) of the First Congregational Church in Falmouth, and we return to Worcester late Sunday afternoon.

### ***Staff Information***

#### *Co-Directors:*

**Shelley Errington Nicholson** is WPI's Director of Women's Programs. The Office of Women's Programs provides services to current and incoming students as well as conducts pipeline programs with the goal of encouraging more young women to enter the fields of science and engineering. Shelley received her bachelors of arts in corporate communications with a minor in music from Roger Williams University – Bristol, R.I. and her masters of science in human development and family studies from the University of Rhode Island – Kingston, R.I. She provides oversight for the residential aspects of Camp Reach.

**Chrys Demetry**, Associate Professor of Mechanical Engineering, co-founded the program with Prof. Denise Nicoletti in 1997, and has co-directed the program from 1997-1998 and 2002-present. Chrys received a B.S. in Mechanical Engineering from WPI in 1988 and a Ph.D. in Materials Science and Engineering from MIT in 1993. She has been on the faculty at WPI since 1993, involved with teaching and research in materials science and in engineering education. She provides oversight for the academic aspects of Camp Reach.

**Sue Sontgerath**, is a K-12 Program Manager at WPI. She received a B.S. in Mechanical

Engineering from WPI in 1988. After working in industry for a number of years, she joined WPI to work on various outreach projects including Camp Reach. In addition to assisting with camp supervision, Sue will serve as Academic Coordinator for Camp Reach.

#### *Workshop leaders:*

The Academic Coordinator, coordinates the workshops. Many are also led by WPI professors. Safety training is provided to all staff and campers utilizing laboratories for workshops.

#### *Other daytime staff:*

Three middle school math and science teachers are with the campers from 9am-5pm, along with six to nine female high school students called "Teaching Assistants." All are carefully selected to provide girls with many positive role models.

#### *Evening staff:*

Campers are supervised during the evening by four carefully selected and trained female college student "Residential Advisors" (RAs) and the After-Hours Coordinator.

Throughout the program, staff supervision exceeds the state regulations for the number of girls attending the program.

### ***Licensure***

The Camp Reach program complies with regulations of the Massachusetts Department of Public Health and is licensed by the City of Worcester Board of Public Health. Copies of background checks, health care and discipline policies, filing of grievances, and other policies and procedures can be provided upon request.

### ***Eligibility***

In order to be eligible for the program, girls must: 1) be entering 7<sup>th</sup> grade in the fall of 2009; 2) be at least 11 years old at the start of the program; and 3) live in Massachusetts or in Providence County, RI.

### ***Application Material***

Application material can be obtained by calling 508-831-5819 or can be downloaded from our website.

*Parents should not pressure their daughter to apply if she is not interested in doing so. We have found that girls who felt pressure to apply almost always have a difficult experience at Camp Reach.*

### ***Selection Process***

The criteria used for acceptance will be an essay written by the student and the completed application form. Then, campers will be selected at random from all completed applications, targeting percentages from different racial and ethnic groups that are representative of Worcester County. If an applicant is not drawn in the lottery, that does not reflect the quality of her application or her potential to do well in engineering and science.

### ***Cost and Payment***

The program tuition of \$575 covers everything: instructional materials, food, housing, field trips and recreational activities. Some participants enjoy having a small amount of money to buy a souvenir in WPI's bookstore. Tuition will be due in full by June 15, 2009.

### ***Financial Aid***

Financial assistance is available to families with need. To receive aid, parents or guardians must provide the family's adjusted gross income as reported to the IRS for 2008. To apply for financial aid, applicants should check off that they wish to be considered for financial aid on the application form and provide IRS data in the space provided. If selected for the program, the applicant will be notified about the amount of the award in the acceptance letter.

### ***Refund Policy***

Refunds of tuition will be made up to two weeks before the start of the program *if* there is someone on the waiting list who can fill the spot on such short notice. Pro-rated refunds will be made after the start of the program only in cases where the camper's departure was caused by something outside of her control (e.g., family emergency.) *Refunds will not be made for departures that are within the camper's control* (e.g., asking repeatedly to go home after staff have made all reasonable attempts to engage her, not abiding by the behavior agreement or eating agreement.)

### ***Housing***

Participants will reside in a WPI residence hall during the summer program. Staying in residence at WPI for the entire duration of the program is required, even for girls who live nearby. The thirty girls will be supervised in the residence hall by four female college student counselors and at least six female high school students, all of whom are carefully screened and trained. Depending on the specific residence hall that we are assigned to, each camper will have one or two roommates. We do not consider requests for roommates, so that all girls can have the same opportunity to make friends with roommates whom they don't initially know. Each girl will have her own bed, a dresser, desk, and closet. Sheets and pillow are supplied; see "What To Bring" for more information.

### ***Transportation***

Transportation to project sites and for field trips is provided by licensed bus operators. For short trips to project sites by small groups, WPI vans may be used but can be driven only by adult operators from the Office of Women's Programs whose driving records have been approved for insurance purposes.

### ***Meals***

Three meals per day will be provided by WPI Dining Services. Plenty of choices are available, including vegetarian options. With advance notice, special meals can be prepared for those with other dietary restrictions. For the Cape Cod trip we have bag lunches, take-out pizza dinner, a simple breakfast, snacks, and lots of water.

More information about food choices will be sent to accepted applicants in advance of the program, and girls will be asked to sign a food agreement with their parents, agreeing upon examples of healthy food choices at each meal.

### ***Registration and Check-In***

Registration will be held on Sunday, July 19 at 2 p.m.; details will be sent to participants prior to the program. Room assignments will be given upon arrival. A formal welcome for students and parents begins at 3 p.m., and the

orientation activities for parents will conclude by 4:30 p.m.

### ***What To Bring***

Participants will be provided with a WPI notebook and other work materials. Campers will be asked to bring:

casual clothes                      bathing suit  
quarters for laundry              beach towel  
toiletries (shampoo, soap, etc.)  
sleeping bag for Cape Cod trip

**and**, for sun protection:

sunblock (SPF 15 or greater)  
wide brim hat                      long sleeve shirt  
long pants                          lip balm

**and** at your own discretion, please bring feminine hygiene supplies.

We will provide bed linens and towels for each participant and will exchange dirty linens once a week. You may wish but are not required to bring the following items:

alarm clock, calculator  
umbrella  
hangers  
fan (no air conditioners in residence hall)  
plastic shower shoes  
small bucket for toiletries  
small water bottle for drinking  
backpack (the kind used for carrying schoolbooks)  
stamps for mailing letters  
a disposable camera  
a favorite bedspread  
waste basket for dorm room

Meals and an afternoon snack are provided, but you may wish to bring some cash for miscellaneous expenses (e.g., bookstore souvenirs) and for laundry. Washers and dryers are available on campus for campers to do laundry at \$2.00 per load. (Staff members supervise and assist campers during laundry time.) Staff try to have one laundry period after returning from Cape Cod on Sunday. Therefore, please plan your clothing needs by assuming that campers will not be able to do laundry until Sunday afternoon or evening. Laundry detergent will be provided.

It is strongly advised that campers not bring any valuables (expensive jewelry, televisions,

games, portable stereos) with them. *Please note our program policy that campers are not allowed to bring cell phones.*

### ***Mail***

Campers may send and receive mail while at WPI. Mail is distributed daily and should be sent to campers at the following address:

(Camper's Name)  
WPI Camp Reach  
Office of Women's Programs  
100 Institute Rd.  
Worcester, MA 01609-2280

### ***Electronic Mail and Internet Access***

Campers will receive individual WPI computer accounts for the program duration, and can read and send email from 8-9am each day (except for the weekend at Cape Cod). Computer account names will be provided during the opening program, and campers will be instructed how to use the computer facilities. Campers may also access any personal e-mail accounts they have on yahoo, hotmail, or similar services.

Personal correspondence with family and friends via the internet is limited to 8-9am each day. Girls who are familiar with using Instant Messenger may do so during that time period if they wish. Staff do not provide training in use of Instant Messenger, however. Access to social networking sites such as MySpace is *not* allowed at any time.

Access to the internet at all other times of the day other than 8-9am is for academic purposes only (e.g., to do research for the design projects.) Girls are not allowed to email or IM during that time.

### ***Closing Ceremonies***

Closing ceremonies will take place on Friday, July 31, beginning at 2:30pm. Parents, family and friends are invited for the closing program and the dinner that will follow. Campers will be allotted two dinner guests per camper; additional tickets will be available for purchase in advance of the program.

### ***Program Policies***

Camp Reach may be the camper's first prolonged stay away from home. We have

learned in the past that forming a nurturing and supportive community is the best thing we can do for the campers. Closer to the program we will distribute some guidelines that parents can use to prepare their daughters for the experience.

*Unless there is an emergency, phone calls to or from campers will be restricted to ONE phone call on Sunday, July 26, half-way through the program. Phones will be supplied; campers are not allowed to bring cell phones. We have found from experience that this policy is effective in reducing homesickness and helps us meet program goals. Parents, family and friends are encouraged to send email, cards, letters, and care packages, and can contact the program staff at any time. (Phone numbers will be distributed on Opening Day). Please see the "Electronic Mail and Internet Access" section earlier in this document for our policies in those areas.*

All campers will be held to a high (and age appropriate) standard for their behavior. To benefit the most from the Camp Reach program and to assure a safe and pleasurable stay on the WPI campus, campers must adhere to the following rules and guidelines:

- Campers are expected to participate fully in all program activities, as long as they are physically able to.
- Campers must treat each other, their roommates, and staff members with respect. Campers will be provided guidance in living with roommates in a respectful manner.
- Campers are expected to eat three balanced meals a day.
- Campers must ALWAYS be accompanied by a staff member when walking on campus; they cannot wander off alone.
- Campers may not leave campus unless in the presence of a staff member, and will not be allowed to leave campus unless it is with someone previously authorized by a parent, and under the direct supervision of one of the Co-Directors or her designates.
- Campers must not bring or invite any outside guests to campus during the program.

- In accordance with the Drug-Free Schools and Communities Act Amendment of 1989, WPI prohibits the unlawful possession, use, and/or distribution of illicit drugs and alcohol on its property and/or as part of its activities. Student members of the WPI Community who are in violation of this policy are subject to local, state, and federal law as well as disciplinary action by the College. Violations will result in immediate expulsion from the program with no tuition refund.

Consistent disregard for these rules will be brought to the attention of the camper and her parents/guardians, and can lead to expulsion from the program. Please address any concerns to the Co-Directors about whether or not a particular camper is going to be able to meet these expectations.

In addition to the above rules, we ask that campers be mindful of sharing the campus with other WPI summer students.

Please be advised that campers will be held responsible for any damage to residence hall rooms and property. The cost of replacing a lost residence hall key is \$50. (Girls are given lanyards so that keys can be put around their neck.)

<p><b>ADDITIONAL QUESTIONS?</b> Please call WPI's Office of Women's Programs at (508) 831-5819.</p> <p><b>INTERESTED IN APPLYING?</b> <b>Remember to return your:</b></p> <ul style="list-style-type: none"><li>• Application Form (front and back)</li><li>• Essay and Self-Assessment Survey (front and back) <i>postmarked by April 15, 2009</i></li></ul>
---