EXX-Treme Engineering

Mission to Planet Goldilocks
June 10 – 22, 2012
University of South Alabama
Mobile, AL

Do you have a child interested in Science, Math, Engineering and Technology who wants to help plan and build the first resort on the imaginary, earth-like planet Goldilocks? At the ExxonMobil Bernard Harris Summer Science Camp hosted by the University of South Alabama, your middle school child can do this and more.

Each day, campers will attend highly-interactive classes in the natural sciences, engineering, mathematics and technology, taught by a teaching team of secondary classroom teachers and USA faculty. All camp activities will culminate in designing and building a model sustainable resort on Planet Goldilocks.

Who may apply

EXX-Treme Engineering is open to rising 6th, 7th, and 8th graders enrolled in Baldwin, Choctaw, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington County Alabama Schools. It is designed to support historically underserved and underrepresented students with limited opportunities. Immediate family members of University of South Alabama employees*, EMBHSSC camp staff and ExxonMobil employees are not eligible.

How to apply

Parent/Guardian and student complete the application form available electronically at: http://www.theharrisfoundation.org/sitecontent/666/university-of-south-alabama/category/466/embhssc-universities.aspx or receive a paper copy from:

Marcy Matherne
Center for Continuing Education
University of South Alabama
1504 Springhill Avenue, Suite 2515
Mobile, AL 36604
Telephone: 251-405-9930

- Student writes a 250-word essay.
- Parent/Guardian or student gives the request for records to child’s school registrar.
- Parent/guardian or student gives a recommendation form to child’s current science teacher and current mathematics teacher.

All application documents are to be sent to:
Marcy Matherne
Center for Continuing Education
University of South Alabama
1504 Springhill Avenue, Suite 2515
Mobile, AL 36604
The Student Application Form, records and recommendations are due by April 9, 2012.

If all requested documents are not received by the deadline date, the application will not be considered. You will receive written notification on the status of the application no later than May 6, 2012.

If you have questions or need additional information, call MARCY MATHERNE at 251-405-9930 or mmatherne@usouthal.edu.

ONLY COMPLETE APPLICATIONS WILL BE CONSIDERED

Camp schedule

The Bernard Harris Summer Science Camp, EXX-Treme Engineering, will start on Sunday afternoon June 10, 2012 and conclude on Friday afternoon June 22, 2012.

This camp is a two-week, free, residential program with students returning to their homes for the weekend in the middle of the camp. Specific check-in/check-out times, program schedule, and a list of things to bring will be provided to those selected to attend.

During the week students attending the camp will live on the USA campus in student dormitories and have most meals in the university’s student dining facilities. There will be at least one off-campus event each week.

Camp counselors will stay in the dorms and accompany campers to meals, classes, field trips and other activities. Additionally a camp nurse will be on-site throughout the camp.

Camp attendance

Students must participate in all camp activities. Before applying for the camp, please be sure that your child’s schedule is free for the full two weeks. Campers will not be excused for any purpose, unless it is an unforeseen emergency.

The University of South Alabama expresses sincere appreciation to

ExxonMobil Foundation
Bernard Harris, M.D.
and
The Harris Foundation
for making this camp possible
About the program

Working in teams, students will establish their own international engineering consulting groups. Camp instruction and activities will revolve around a central theme that exposes the children to real world use of Science, Technology, Engineering and Math (STEM). The teaching/learning model is very interactive to allow students to learn by doing. In addition to STEM topics, written and verbal communication skills and foreign language and culture will be addressed.

Our goal is for the student to have fun while they gain knowledge and skill in STEM subjects.

Students will:

- Design and build a bridge and other structures
- Build a robot
- Create a water and power system
- Conduct scientific experiments
- Collect scientific data
- Work as part of a team
- Learn about foreign culture and language
- Learn about Communicating with others
- Learn how to make a presentation

To give students an opportunity to see real-life application of classroom learning, students will be taken on at least one field excursion each week. Transportation will be by USA bus or other licensed public carrier.

During the evening hours, campers will participate in supervised recreational and educational activities, that may include: visiting the USA football field house and practice field, learning Karate or Zoomba at new USA Recreation Center, movies and visiting area attractions.

About Bernard Harris

Defining himself as a “dreamer who believes nothing is impossible,” Bernard A. Harris, Jr., M.D. is an accomplished NASA astronaut, physician and businessman. He currently serves as president of The Harris Foundation, Inc., a non-profit organization he founded in 1998 to develop math/science education and crime prevention programs for America’s youth. Because he credits his personal achievements to self-empowerment and self-determination, he uses this foundation to inspire young people that they can do anything, if they only set their mind to it.

Harris himself has accomplished many feats throughout his life. In 1990, he was selected as a NASA astronaut and flew his first mission three years later. Harris accomplished his childhood dream by completing a walk in space, becoming the “First African American to walk in Space”.

A native Texan born in 1956, Harris earned a bachelor’s degree in biology from the University of Houston and later obtained a doctorate of medicine from Texas Tech University School of Medicine. A trained aerospace flight surgeon, he completed his residency at the Mayo Clinic and fellowship at the NASA Ames Research Center. Other degrees include a Master of Medical Science from the University of Texas Medical Branch at Galveston, a Master of Business Administration from the University of Houston Clear Lake and two Honorary Doctorate of Science degrees from Morehouse School of Medicine and Stony Brook University (SUNY).

Throughout his life, Harris has received numerous awards and recognition, including election as Fellow of the American College of Physicians, NASA Space Flight Medal, NASA Award of Merit, a fellow of the American College of Physicians, and was the recipient of the 2000 Horatio Alger Award.

The University of South Alabama does not discriminate in its student and employment practices in violation of any applicable laws. The University of South Alabama is an Equal Opportunity/Equal Access educational institution.
Camp Information:
The ExxonMobil Bernard Harris Summer Science Camp (EMBHSSC) is organized to provide activities, experiments, projects, and field experiences for students entering 6th, 7th, or 8th grade in the fall of 2012. The camp promotes science, technology, engineering and mathematics (STEM) education and supports historically underserved and underrepresented students with limited opportunities. Students attend the camp free of charge. Students currently in grade 5, 6, or 7 who have an interest in science and mathematics, at least a B average in science and mathematics courses and a passing score on the state’s standardized science and mathematics tests are eligible to apply. Immediate family members of University of South Alabama employees, EMBHSSC camp staff and ExxonMobil employees are not eligible.

The EMBHSSC is a two-week, academic, residential camp that emphasizes increasing students’ mathematics and science knowledge and skills while introducing them to college life and stimulating their interest in science and engineering as a potential career path. Each day, campers will attend classes that include problem solving, research, critical thinking and communication skills incorporated with biology, chemistry, physics, environmental sciences, earth sciences, engineering, technology, design concepts, and field excursions. Certified secondary teachers and university faculty will teach the classes.

The camp will be held on the campus of the University of South Alabama. Students will be housed in a dorm on the university’s campus.

Camp participants will be selected from the following counties in Alabama: Baldwin, Choctaw, Clarke, Conecuh, Escambia, Mobile, Monroe, and Washington.

Application Process:
- Parent/Guardian and student complete the attached student application form.
- Parent/Guardian or student gives the request for records to the student’s school registrar.
- Parent/Guardian or student gives a recommendation form to the student’s current science teacher and current mathematics teacher.
- Student writes a 250-word essay.

The Student Application Form, records and recommendations are to be sent to Marcy Matherne, Center for Continuing Education, University of South Alabama, 1504 Springhill Avenue, Suite 2515, Mobile AL 36604. All requested documents are due by the deadline date, April 23, 2012. If all requested documents are not received by the deadline date, the application will not be considered. A committee will select campers on May 1, 2012. Students may be interviewed prior to being selected, if deemed necessary. You will receive notification on the status of the application no later than May 6, 2012. If you have questions or need additional information, call Marcy Matherne or Catherine Drake at 251-405-9930. You may also submit your question by email to Marcy Matherne at mmatherne@usouthal.edu.

PLEASE KEEP THIS PAGE FOR YOUR REFERENCE
STUDENT APPLICATION FORM 2012
University of South Alabama

APPLICATION DEADLINE IS April 23, 2012

Please print in blue or black ink or type. Please provide all requested information.

Name of Student: _____________________________________________________________

Home Address: ________________________________________________________________

City ___________________________ State ___________________________ Zip Code + 4

Ethnicity: ______________________ Date of Birth (month/date/year):__________________

Gender (check one): Female_____ Male:_______

Adult T-Shirt Size: ______________________________

Name of School student is currently attending: ________________________________

Type of School (Check all that apply):

_______ Elementary (K-5)  ______ Middle (Grades 6-8)  ______ K-8  ______ K-12

_______ Public  ______ Parochial  ______ Private  ______ Charter

Current Grade level ________ School District/Parish: ______________________________

Courses Taken during the 2011-2012 academic year:

Mathematics: ___________________________ Science: _____________________________

Courses Enrolled or plan to enroll in for the 2012-2013 academic year:

Mathematics: ___________________________ Science: _____________________________

How did you find out about the EMBHSSC?

__________________________________________________________________________

____________________________________________________________________________
Name of Student: _____________________________________________

School: ____________________________________________________ Grade level: __________

Please list school organizations, any science and/or mathematics activities (Science Fair, math club, after school programs, summer programs, etc.) you have participated in 2010, 2011 and/or 2012. Include awards received and offices held. You may attach a separate sheet, if needed.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Please list any community activities and/or community groups that you have been a part of.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Please list any other activity or achievement that you would like to share with the selection committee.

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

A student-written essay must be included with this application. The student essay is to be typed or neatly hand written. If typed, use Arial, Helvetica, or Times New Roman and a font size of 12 points. The essay should not exceed 250 words. In your essay tell the selection committee why you are interested in attending the 2012 ExxonMobil Bernard Harris Summer Science Camp at the University of South Alabama. Include in your essay what you hope to gain from this experience, how you think it will help you in the future and why you think you should be selected to attend this camp. Be sure to write your name, current grade level, school and school district at the top of your essay.

__________________________________________________________________________

Signature of Student ___________________________ Date ____________________________
Name of Student: ____________________________________________________________

School: ___________________________________________ Grade level: ____________

Parent/Guardian Information

Instructions: Please complete the following information for at least one custodial parent or guardian, both, if available.

Name of Parent or Guardian: _______________________________________________

Employer: __________________________________________________________________

Occupation: __________________________________________________________________

Daytime Phone No.: ___________________ Home Phone No.: _____________________

Cell Phone No.: ____________________________

E-mail Address: ________________________________

__________________________________________  _____________________________
Signature of Parent or Guardian                  Date

Name of Parent or Guardian: _______________________________________________

Employer: __________________________________________________________________

Occupation: __________________________________________________________________

Daytime Phone No.: ___________________ Home Phone No.: _____________________

Cell Phone No.: ____________________________

E-mail Address: ________________________________

__________________________________________  _____________________________
Signature of Parent or Guardian                  Date

Number of People in the Household: ______

Household Yearly Income Level:

_________ Under $15,000      _______ $15,001 to $30,000      _______ $30,001 to $45,000

_________ $45,001 to $60,000       _______ $60,001 to $75,000
REQUEST FOR RECORDS – You or your child must give this form to the registrar at his/her school. A parent or guardian must sign this request so that the registrar can release the records.

Dear Registrar:
Please forward a copy of official records for this student (grades and standardized test scores) and this form to: Marcy Matherne, Executive Director, ExxonMobil Bernard Harris Summer Science Camp, Center for Continuing Education, University of South Alabama, 1504 Springhill Avenue, Suite 2515, Mobile, AL 36604.

The records must include a copy of the most recent grades/report card and standardized test scores. This form must accompany the records.

I hereby grant permission to the release of the information that this form is requesting on my child.

_________________________ ____________________________
Signature of Parent or Guardian Date

_________________________
Name of Student (please print)

_________________________
Student ID Number

_________________________
Signature of Student

_________________________
School

_________________________
Grade Date of Birth

_________________________
Homeroom Teacher

Does this child receive FREE or REDUCED lunch?

_____ Yes  _____ No

If yes, which?  _________Free Lunch  _____Reduced Lunch
Recommendation from Current SCIENCE Teacher
For a Student applying for
The ExxonMobil Bernard Harris Summer Science Camp (EMBHSSC) 2012 at
University of South Alabama

Name of Teacher _____________________________________________________________

Directions to teacher:
The student who has given you this form is applying to attend the EMBHSSC this summer. You have
taught this student, so you can tell if she/he is a good candidate for this two-week residential program.
Please complete the chart below and write a letter of recommendation for this student. When you
finish, put this form and letter of recommendation into an envelope, seal it, and write your name
across the sealed flap, so that your comments will be private. Please return the sealed envelope to the
student as soon as possible or mail to Marcy Matherne, Executive Director, EMBHSSC, Center for
Continuing Education, University of South Alabama, 1504 Springhill Avenue, Suite 2515, Mobile, AL
36604 to be received by the deadline date of April 23, 2012.

Name of student______________________________________________________________

Course taken with this teacher: Subject _____________________________ Year 2011-2012

Please put an X in the appropriate column for each of the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very Much</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>This student was eager to learn.</td>
<td></td>
<td></td>
<td></td>
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<td>This student cared about other students.</td>
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<td>This student worked independently and as a team member.</td>
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<td>This student participated in co-curricular activities (science fair, science club, etc.).</td>
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Circle the best answer to the following question: Would you like to teach this student in another class?

Yes, definitely                           Maybe                               Definitely not

Below please write 2-3 sentences about the student that makes this student stand out from the rest. If you
prefer, include all of your comments in the letter of recommendation that includes outstanding school
achievements, any concerns you would like to share, and the qualities this student possess that makes
him/her stand out from the rest. Your comments will be especially useful in the selection process. Thank
you.
Recommendation from Current MATHEMATICS Teacher
For a Student applying for
The ExxonMobil Bernard Harris Summer Science Camp (EMBHSSC) 2012 at
University of South Alabama

Name of Teacher ____________________________________________________________

Directions to teacher:
The student who has given you this form is applying to attend the EMBHSSC this summer. You have
taught this student, so you can tell if she/he is a good candidate for this two-week residential program.
Please complete the chart below and write a letter of recommendation for this student. When you
finish, put this form and letter of recommendation into an envelope, seal it, and write your name
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Name of student ____________________________________________________________

Course taken with this teacher: Subject _________________________ Year 2011-2012

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Yes, definitely     Maybe     Definitely not

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prefer, include all of your comments in the letter of recommendation that includes outstanding school achievements, any concerns you would like to share, and the qualities this student possess that makes him/her stand out from the rest. Your comments will be especially useful in the selection process. Thank you.