

2009 National Space Club Scholars Program

for High School Students

A student intern program with space scientists and engineers
sponsored by

NASA Goddard Space Flight Center

Greenbelt, MD

and

NASA Wallops Flight Facility

Wallops Island, VA

in cooperation with

The National Space Club

Washington, DC



Monday, June 29 through Friday, August 7, 2009

The purpose of this program is to provide students with an opportunity to experience how research and development organizations operate on a day-to-day basis. Participants will be assigned to work with a technical professional in a field related to the student's stated interests and expertise. The available areas of interest include earth and space systems science, computer science, and engineering. Virtually all placements include computer applications. Biological laboratory experiences are generally not available. After completing the internship, students interested in pursuing aerospace-related fields are able to make more informed decisions regarding their university-level studies and career focus.

Up to thirty academically talented students interested in a career in science or engineering will be selected for this program (up to twenty-five at Goddard Space Flight Center and five at Wallops Flight Facility). In order to be considered, applicants must meet the following eligibility criteria:

- Must be a U.S. citizen.
- Live (maintain permanent, year-round residence) within reasonable commuting distance from the Goddard Space Flight Center or Wallops Flight Facility.
- Have completed their sophomore year by June, 2009.
- Be at least sixteen (16) years of age before the starting date of the program: June 29, 2009.

The National Space Club will provide \$1000 to help defray transportation expenses and meals during this six-week summer program. For more information about the Scholars Program, please visit the program website at <http://www.spaceclub.org/scholars.html>.

A special committee has been established and will conduct the competitive selection process to fill the small number of available positions. It is important that you understand that it is your responsibility to insure that a complete application package is received at the address listed below and is postmarked no later than **Tuesday, February 17, 2009**. To be considered for participation in this program, a student must submit a complete application package which includes all of the following items:

- **Student Application Form**

You must use the current year's Student Application Form (2009). Previous forms will not be accepted. A copy of the current form can be downloaded at <http://education.gsfc.nasa.gov/pages/placement.html>. The application should be typed or printed legibly in black ink. Be sure all requested information has been supplied. You may wish to make a copy of your application materials for your records but the originals should be submitted for use by the Selection Committee.

(continued→)

- **Personal Statement**
*An essay not to exceed 300 words describing your personal goals and why you wish to participate in this program. The statement **must be typed** on standard-size paper (8 ½" x 11") and be **signed and dated by the applicant**.*
- **Interest and Career Area Inventory**
This information is useful in selecting participants as well as matching them up with mentors.
- **Computer/Technical Skills Assessment**
While this information is not primarily used during the selection process, it is very helpful in making appropriate placements for selected students.
- **Parental Consent Form**
Parents are asked to read and sign the form. Please note that participants must commit to attend for the entire six-week period of the program during the dates specified (June 29 – August 7, 2009). There are no provisions for changing the dates of the program nor for unapproved absences especially for the opening and closing days. Transportation to and from the Center each day is the responsibility of the participant and their family.
- **Teacher Recommendations**
Two recommendations are required using the forms provided. One must be from the applicant's teacher of science, math, or computer science. The second recommendation must be from the applicant's English teacher. If you wish to submit additional recommendations, make copies of the blank forms before distributing them to your teachers.
- **Current Transcript**
The transcript should include any standardized tests scores during your high school career. Unofficial transcripts are acceptable.
- **Copy of most recent report card**
Please submit the report card from the end of the first semester. It should include attendance data as well as academic grades. Photocopies are acceptable.

All application materials must be submitted on the current year's form and as a complete package. Your materials must be sent by mail and be postmarked no later than
Tuesday, February 17, 2009.

Applications will not be processed unless they are complete and all materials have been received. An incomplete application package will not be forwarded to the Selection Committee. There are no provisions for accepting applications by fax or Email. Applicants are usually notified of their selection status by the end of March. If selected, assignments are based on the information provided in the application.

Retain this cover page for your information and mail the completed application package, including all required documentation, to:

National Space Club Scholars Program
c/o Diane Cockrell, Coordinator
P.O. Box 92
Lisbon, MD 21765-0092

If you have any questions regarding program activities at the Goddard Space Flight Center, please contact the Program Coordinator by e-mail at nsdsp@yahoo.com or by phone at 410-489-6113.



National Space Club Scholars Program

June 29 – August 7, 2009

STUDENT APPLICATION FORM

(All information must be typed or printed legibly using black ink.)



STUDENT DATA

LAST NAME: _____ FIRST NAME: _____ M.I.: _____

DATE OF BIRTH: _____ AGE(as of 6/29/09): _____ GENDER: FEMALE MALE

HOME ADDRESS: _____
STREET CITY STATE ZIP

HOME PHONE NO: (_____) _____ - _____ E-MAIL ADDRESS: _____

NEAREST NASA CENTER: GODDARD SPACE FLIGHT CENTER (GREENBELT, MD)
 WOLLOPS FLIGHT FACILITY (WOLLOPS ISLAND, VA)

U.S. CITIZEN? YES NO SOCIAL SECURITY NUMBER: _____ - _____ - _____

EDUCATION

HIGH SCHOOL: _____ SCHOOL SYSTEM: _____

SCHOOL ADDRESS: _____
STREET CITY STATE ZIP

CURRENT ACADEMIC STANDING: SOPHOMORE JUNIOR SENIOR

CURRENT CUMULATIVE GRADE POINT AVERAGE AS OF THE END OF THE FIRST SEMESTER THIS ACADEMIC YEAR:

UNWEIGHTED (4-POINT SCALE) = _____ (OUT OF 4)

WEIGHTED = _____ OUT OF _____ POINTS (MAXIMUM)

STANDARDIZED TEST SCORES:

| TEST (PSAT/SAT) | DATE TAKEN | WRITING SCORE | MATH SCORE | CRITICAL READING SCORE |
|-----------------|------------|---------------|------------|------------------------|
| | | | | |
| | | | | |

I hereby certify by my signature below that I understand and agree that any misrepresentation or inaccurate information on my application form or any other submitted materials will be cause for my disqualification from consideration and participation in the National Space Club Scholars Program. I also understand that if selected to participate, I must participate for the full duration of the Program within the dates specified. I understand that failure to do so may result in the immediate termination of my internship.

Student's Signature: _____ Date _____

2009 NATIONAL SPACE CLUB SCHOLARS PROGRAM
STUDENT APPLICATION FORM (continued)
Application Deadline: February 17, 2009

Applicant's Name:

STUDENT PROFILE

What is your career goal?

List your special skills and abilities:

List your hobbies and special interests:

List honors, awards, and commendations you have received: (attach separate sheet if needed)

A COMPLETE APPLICATION PACKAGE MUST INCLUDE:

- ✓ Student Application Form
- ✓ Personal Statement
- ✓ Interest and Career Area Inventory
- ✓ Computer/Technical Skills Assessment
- ✓ Parental Consent Form
- ✓ Teacher Recommendations (2)
- ✓ Current transcript
- ✓ Copy of most recent report card

All application materials must be submitted by mail to the address below. *No fax or electronic submissions will be accepted.* Please note the deadline for submitting your complete application package requires that it be postmarked by **Wednesday, February 17, 2009**. Send your application package to:

**National Space Club Scholars Program
c/o Diane Cockrell, Coordinator
P.O. Box 92
Lisbon, MD 21765-0092**

ACADEMIC BACKGROUND

List each of the Science, Mathematics, and Technology courses you have taken or are currently enrolled in for high school or college credit.

| SCIENCE Courses | Grade Earned | Credit Earned | Indicate if Honors, AP, or College (if applicable) | Grade Level When Taken (8,9,10,11,12) |
|-----------------|--------------|---------------|--|---------------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| MATHEMATICS Courses | Grade Earned | Credit Earned | Indicate if Honors, AP, or College (if applicable) | Grade Level When Taken (8,9,10,11,12) |
|---------------------|--------------|---------------|--|---------------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| COMPUTER/TECHNOLOGY Courses | Grade Earned | Credit Earned | Indicate if Honors, AP, or College (if applicable) | Grade Level When Taken (8,9,10,11,12) |
|-----------------------------|--------------|---------------|--|---------------------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

PERSONAL STATEMENT

Attach a **typed** personal statement or essay not to exceed 300 words describing your personal goals and your reason(s) why you wish to participate in the National Space Club Scholars Program. This statement must be **signed and dated by the applicant**.

TRANSCRIPT AND CURRENT REPORT CARD

Include a current transcript and a copy of your most recent report card, preferably as of the end of the first semester of the current school year. The report card should include attendance data as well as academic grades. Unofficial transcripts are acceptable.

**2009 NATIONAL SPACE CLUB SCHOLARS PROGRAM
INTEREST AND CAREER AREA INVENTORY
Application Deadline: February 17, 2009**

Applicant's Name:

INTEREST AND CAREER AREAS

This information is helpful in selecting participants as well as developing their summer assignments. Please indicate your interest or career area with the strength of your interest using the preference scale provided.

4 = Very strong interest
3 = Strong interest
2 = Some interest

1 = Little or no interest
0 = No desire to pursue

| INTEREST AREA | STRENGTH OF INTEREST | INTEREST AREA | STRENGTH OF INTEREST |
|-------------------------------|----------------------|-------------------------|----------------------|
| SCIENCES | | SCIENCES (cont.) | |
| Biology | | Engineering | |
| Biochemistry | | Aerospace | |
| Biotechnology | | Biomedical | |
| Botany | | Chemical | |
| Cell Biology | | Civil | |
| Ecology/Environmental Science | | Computer | |
| Genetics | | Electrical | |
| Microbiology | | Environmental | |
| Zoology | | Material Science | |
| Other: | | Mechanical | |
| Chemistry | | Other: | |
| Analytical | | | |
| Biochemistry | | | |
| Environmental | | | |
| Inorganic | | | |
| Organic | | | |
| Physical Chemistry | | | |
| Other: | | | |
| Physics | | | |
| Astronomy, Astrophysics | | | |
| Atomic, Molecular, Quantum | | | |
| Electromagnetism | | | |
| Fluid Dynamics | | | |
| Mechanics | | | |
| Optics and Lasers | | | |
| Particle and Nuclear | | | |
| Thermodynamics | | | |
| Other: | | | |
| Earth/Space Sciences | | | |
| Astronomy | | | |
| Cartography | | | |
| Geology | | | |
| Meteorology | | | |
| Oceanography | | | |
| Other: | | | |
| Computer Science | | | |
| Computer Graphics | | | |
| Database Management | | | |
| Programming | | | |
| Software Design | | | |
| Other: | | | |
| Mathematics | | | |
| | | | |

**2009 NATIONAL SPACE CLUB SCHOLARS PROGRAM
COMPUTER/TECHNICAL SKILLS ASSESSMENT
Application Deadline: February 17, 2009**

Applicant's Name:

COMPUTER/TECHNICAL SKILLS ASSESSMENT

Using the definitions provided below, please indicate below your experience/skill level with the computer software categories listed including specific software you have used. You may add other relevant software experience in the spaces marked "Other" or list them on a separate sheet. (Note: Prospective mentors and program staff will use this information to determine appropriate student placements and to help enrich the student's experience.)

| EXPERIENCE/ SKILL LEVEL | DEFINITIONS |
|------------------------------------|---|
| 4 | Am very experienced with the software's basic, intermediate, and advanced features. Have completed many varied assignments and projects using the advanced features of this software and am able to instruct others. |
| 3 | Have mastered all the basic and intermediate functions. Have completed several assignments and projects of varied types using the software and am able to instruct others about basic and intermediate software features. |
| 2 | Am familiar with basic features as well as some intermediate features. Have completed assignments using the software and am able to instruct beginners about software basics. |
| 1 | Am familiar with basic features only. |
| 0 | Have not used this type of software. |

| SOFTWARE | EXPERIENCE/ SKILL LEVEL | SOFTWARE | EXPERIENCE/ SKILL LEVEL |
|--------------------------|------------------------------------|--|------------------------------------|
| Operating Systems | | Desktop Publishing/WebPage Design | |
| Windows (Version _____): | | MS Front Page | |
| MAC (Version _____): | | MS Publisher | |
| Linux | | HTML | |
| Unix | | Other: | |
| Other : | | Computer Graphics | |
| Word Processing | | Adobe PhotoShop | |
| MS Word | | Adobe Illustrator | |
| WordPerfect | | Corel Draw | |
| Other: | | Other: | |
| Spreadsheets | | Programming Languages | |
| MS Excel | | C | |
| Other: | | C++ | |
| Other: | | JAVA | |
| Data Bases | | JAVAScript | |
| MS Access | | Visual Basic | |
| Other: | | Other: | |
| Other: | | Data Analysis | |
| Internet Browsers | | GIS | |
| MS Internet Explorer | | ArcGIS | |
| Safari | | ENVI | |
| Other: | | Other: | |
| Presentation | | Design, Analysis, Modeling | |
| MS PowerPoint | | MATLAB | |
| Other: | | MathCAD | |
| | | Mathematica | |
| | | AutoCAD | |
| | | IDEAS | |
| | | Pro-Engineer | |
| | | Other: | |

PARENTAL CONSENT

DIRECTIONS FOR PARENTS: This form must be signed by a parent or guardian and, if necessary, be presented to the teacher who will complete the Teacher Recommendation Form and the school official who will prepare the school transcript. This form must also be included in your student's application package.

***Please read the following statements carefully.
Your signature indicates your agreement with these provisions.***

- ◆ I hereby grant my permission for teachers (selected by my son/daughter) to complete the recommendation forms which will be used as one of the selection factors for the 2009 National Space Club Scholars Program.
- ◆ I also grant my permission for school officials to provide a current school transcript which may include information on achievement and aptitude test scores. I understand that these materials may be used by the selection committee and other program staff in the selection process.
- ◆ I further understand that this is a highly competitive program and only a few students will be selected. If selected, I understand that my son/daughter will be offered the opportunity to participate in this program. **If the offer is accepted, my son/daughter agrees to participate for the entire six-week period from June 29, 2009 to August 7, 2009, inclusive***. My son/daughter will be responsible for his/her own transportation to and from the participating Center each day. (*-Please note that because of the short, six-week duration of this program, there are no provisions for camps, workshops, retreats, or family vacations during the program dates. If you have any questions about this policy, please contact the Coordinator.)
- ◆ Finally, I have reviewed and verified the information provided by my son/daughter in completing the application materials and will attest to its accuracy and truthfulness.

Signature _____

Printed Name _____

Date _____



2009 NATIONAL SPACE CLUB
SCHOLARS PROGRAM
TEACHER RECOMMENDATION FORM
Application Deadline: February 17, 2009



Applicant's Name: _____

SCIENCE, MATHEMATICS, OR COMPUTER SCIENCE TEACHER RECOMMENDATION

Teacher's Name/Title: _____

School: _____

How long have you known the student and in what capacity? _____

How would you rate the student in the following areas?

1. Ability to follow rules and directions

- Always follows
- Sometimes follows
- Seldom follows
- Never follows

2. Accepts responsibility

- Always accepts responsibility
- Usually accepts responsibility
- Sometimes irresponsible
- Often irresponsible

3. Leadership ability

- Strong leadership ability
- Sometimes exhibits leadership
- Seldom exhibits leadership
- Always follows others

4. Initiative/Independence

- Seeks extra tasks
- Prepares assigned tasks
- Needs occasional reminders
- Needs constant reminding
- Seldom shows initiative

5. Ability to work well with others

- Always works well
- Sometimes works well
- Seldom works well
- Does not work well

6. Oral communication skills

- Very articulate
- Articulate
- Somewhat articulate
- Difficulty in articulation
- Inarticulate

7. Written Communication

- Excellent writing skills
- Good writing skills
- Average writing skills
- Poor writing skills

8. Level of interest

- Exhibits high interest
- Often interested
- Seldom interested
- Lacks interest

9. Motivation

- Highly self-motivated
- Sometimes motivated
- Seldom motivated
- Lacks motivation

10. Maturity

- Always exhibits maturity
- Sometimes exhibits maturity
- Seldom exhibits maturity
- Immature

Identify the strengths and skills that will most promote this student's success in our Program: (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Oral Communication | <input type="checkbox"/> Time Management |
| <input type="checkbox"/> Leadership Skills | <input type="checkbox"/> Interpersonal Skills |
| <input type="checkbox"/> Written Communication | <input type="checkbox"/> Research Technique |
| <input type="checkbox"/> Career Awareness | <input type="checkbox"/> Computer/Technology |

Overall Recommendation for the Program

- Very Highly Recommended (top 5%)
- Highly Recommended (top 10%)
- Recommended
- Recommended With Reservations
- Not Recommended

Teacher Comments: _____

Signature: _____

May we contact you for additional information? Yes No

Telephone No. _____
(____)____-____

Date: _____

E-mail: _____

THIS FORM SHOULD BE RETURNED AS PART OF THE STUDENT'S APPLICATION PACKAGE



2009 NATIONAL SPACE CLUB
 SCHOLARS PROGRAM
 TEACHER RECOMMENDATION FORM
 Application Deadline: February 17, 2009



Applicant's Name: _____

ENGLISH TEACHER RECOMMENDATION

Teacher's Name/Title: _____

School: _____

How long have you known the student and in what capacity? _____

How would you rate the student in the following areas?

1. Ability to follow rules and directions

- Always follows
- Sometimes follows
- Seldom follows
- Never follows

2. Accepts responsibility

- Always accepts responsibility
- Usually accepts responsibility
- Sometimes irresponsible
- Often irresponsible

3. Leadership ability

- Strong leadership ability
- Sometimes exhibits leadership
- Seldom exhibits leadership
- Always follows others

4. Initiative/Independence

- Seeks extra tasks
- Prepares assigned tasks
- Needs occasional reminders
- Needs constant reminding
- Seldom shows initiative

5. Ability to work well with others

- Always works well
- Sometimes works well
- Seldom works well
- Does not work well

6. Oral communication skills

- Very articulate
- Articulate
- Somewhat articulate
- Difficulty in articulation
- Inarticulate

7. Written Communication

- Excellent writing skills
- Good writing skills
- Average writing skills
- Poor writing skills

8. Level of interest

- Exhibits high interest
- Often interested
- Seldom interested
- Lacks interest

9. Motivation

- Highly self-motivated
- Sometimes motivated
- Seldom motivated
- Lacks motivation

10. Maturity

- Always exhibits maturity
- Sometimes exhibits maturity
- Seldom exhibits maturity
- Immature

Identify the strengths and skills that will most promote this student's success in our Program: (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Oral Communication | <input type="checkbox"/> Time Management |
| <input type="checkbox"/> Leadership Skills | <input type="checkbox"/> Interpersonal Skills |
| <input type="checkbox"/> Written Communication | <input type="checkbox"/> Research Technique |
| <input type="checkbox"/> Career Awareness | <input type="checkbox"/> Computer/Technology |

Overall Recommendation for the Program

- Very Highly Recommended (top 5%)
- Highly Recommended (top 10%)
- Recommended
- Recommended With Reservations
- Not Recommended

Teacher Comments: _____

Signature: _____

May we contact you for additional information? Yes No

Telephone No. _____
 (____) _____ - _____

Date: _____

E-mail: _____

THIS FORM SHOULD BE RETURNED AS PART OF THE STUDENT'S APPLICATION PACKAGE