



## UArizona NASA Space Grant Graduate Fellowship

### Overview

The UArizona NASA Space Grant Program, in collaboration with the UArizona Graduate College and the applicant's nominating department, funds six graduate fellowships per year. Space Grant fellowships are offered to those pursuing degrees in Planetary Sciences, Astronomy, Physics, Earth Sciences and Global Change-related fields (Atmospheric Sciences, Geosciences, Hydrology and Water Resources, Geography, Ecology and others), Evolutionary Biology, Mathematics, Remote Sensing and Spatial Analysis, and in space-related fields or fields that use space-related science and tools (e.g. Public Policy, the Social Sciences, Science Education, etc.).

Graduate Fellowships are for one year, and can be renewed for a second year with sufficient evidence of effort exerted toward meeting an outreach program goal. Awards include a \$16,000 stipend, full in- or out-of-state tuition and registration fees waivers, student health insurance, and a travel grant of \$750 to attend professional conferences. Successful candidates will show a strong commitment to science education.

These awards are funded with Space Grant and UArizona Graduate College monies, plus a required department cost-share. Specifically, **Space Grant provides:** \$10,000 stipend, out-of-state tuition waiver, and student health insurance. **Departments provide:** \$6,000 stipend, in-state tuition/registration fee waiver, and \$750/year travel funds. For a breakdown of tuition costs, please review this PDF document [link embedded here](#).

**Notice of Intent:** Submit a notice of intent to apply by **March 18, 2022** to Michelle Coe (Arizona Space Grant Consortium Manager) at [macoe@arizona.edu](mailto:macoe@arizona.edu) with the header "NOI Space Grant Fellowship" and a simple email noting your intent to apply for this award. Please note, if you do not submit an NOI you are still welcome to apply.

**Application Workshop:** Students that submit an NOI will be contacted to attend a Zoom application workshop the **last week of March**. This workshop is intended to offer a space for applicants to ask questions and receive advice from Space Grant staff about common application mistakes. For applicants that did not submit an NOI or are unable to attend, the link to this meeting and recording will be posted on our website (<https://spacegrant.arizona.edu/students/fellowships>) under 'Future Students'.

**Final Application:** The application form, transcripts (unofficial or official), two letters of recommendation, and any (optional) letters of support from those cooperating in your proposed education outreach effort should be submitted to your department for review to receive the appropriate signatures required below. **Final applications are due by April 18, 2022 at midnight MST** and are to be sent via email to Michelle Coe ([macoe@arizona.edu](mailto:macoe@arizona.edu)) as one PDF document, organized as section A, B, C....and ending with your transcripts. Individual applicants or their nominating department can submit the final application. Applicants will be notified of awards by early May 2022.

For further information or questions, please contact Michelle Coe at [macoe@arizona.edu](mailto:macoe@arizona.edu).



## UArizona NASA Space Grant Graduate Fellowship Application

### A. APPLICATION COVER SHEET

**Affiliate:** University of Arizona\* **Project:** Graduate Fellowship Program

*\*Must be US Citizen and accepted by a UArizona graduate degree program (future student) or enrolled as a full-time graduate student at UArizona upon application. See website for definition of full-time student.*

**First Name:** \_\_\_\_\_ **Middle Initial:** \_\_\_\_\_

**Last Name:** \_\_\_\_\_ **Student ID:** \_\_\_\_\_

**Date of Birth:** \_\_\_\_\_ **Major:** \_\_\_\_\_

**UArizona Department:** \_\_\_\_\_ **Minor:** \_\_\_\_\_

**Enrolled for M.S. or Ph.D.?** \_\_\_\_\_ **Anticipated Graduation Date:** \_\_\_\_\_

**Advisor/Mentor:** \_\_\_\_\_ **GPA:** \_\_\_\_\_

*The following questions are viewed by Space Grant staff only and are required for our NASA (federal) reporting requirements. It will not adversely affect your application if you choose 'prefer not to say'.*

<p><b>Do you identify as:</b></p> <ul style="list-style-type: none"> <li>African American or Black</li> <li>American Indian or Alaskan Native</li> <li>Asian</li> <li>Hispanic</li> <li>Native Hawaiian or other Pacific Islander</li> <li>White</li> <li>Prefer to self-identify</li> </ul>	<p><b>Do you identify as:</b></p> <ul style="list-style-type: none"> <li>Male</li> <li>Female</li> <li>Non-binary</li> <li>Prefer not to say</li> <li>Prefer to self-identify</li> </ul> <p><b>Do you identify as a person with a disability?</b></p> <ul style="list-style-type: none"> <li>No</li> <li>Yes</li> <li>Prefer not to say</li> </ul>	<p><b>Are you considered an in-state student (AZ Resident) by UArizona?:</b></p> <ul style="list-style-type: none"> <li>Yes, in-state student</li> <li>No, out-of-state student</li> </ul> <p><b>Military Service?</b></p> <ul style="list-style-type: none"> <li>No</li> <li>Yes</li> </ul> <p><b>Citizenship:</b></p> <p>U.S. --U.S. citizenship required due to NASA (Federal) funds used.</p>
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**Local Address:**

City:

State:

Zip:

**Permanent Address (if different):**

City:

State:

Zip:

Cell Phone:

Primary Email:

Secondary Email:

**Outreach Project Affiliate Partners (if applicable):**

NASA Center

**Specify:**

Industry/Contractor

**Company Name:**

Institution of Higher Education

**Specify:**

Other Affiliated Partners in Outreach Program

**Specify:**

**NASA Mission Directorates:** All NASA-funded projects are required to align with one or more NASA Mission Directorates (MDs). Please review the information on our website at [https://spacegrant.arizona.edu/students/internships/NASA\\_MD](https://spacegrant.arizona.edu/students/internships/NASA_MD) to find out more about the four NASA MDs. Use the space below to specify up to two MD(s) and the research priority area(s) your project most closely aligns with.

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**UArizona NASA Space Grant Graduate Fellowship Application**  
**B. DEPARTMENT NOMINATION AND APPROVAL OF COST SHARE**

\_\_\_\_\_  
(Official Department Signature)                      (please print signatory name)

nominates \_\_\_\_\_ from the Department of  
(student's name)

\_\_\_\_\_ for a **2022-2023** Space Grant  
(Department)

Fellowship and agrees to provide the Department cost-share noted on page 1 of this document.



## **UArizona NASA Space Grant Graduate Fellowship Application**

### **C. PROJECT PROPOSAL GUIDELINES**

The UArizona NASA Space Grant Program, in collaboration with the UArizona Graduate College and the applicant's nominating department, funds six graduate fellowships per year to exceptional graduate students *interested in promoting the understanding of space-related research to the public*. Space Grant Fellowships are offered to those pursuing degrees in Planetary Sciences, Astronomy, Physics, Earth Sciences and Global Change-related fields (Atmospheric Sciences, Geosciences, Hydrology and Water Resources, Geography, Ecology and others) Evolutionary Biology, Mathematics, Remote Sensing and Spatial Analysis, and in space-related fields or fields that use space-related science and tools (e.g. Public Policy, the Social Sciences, Science Education, etc.).

Applicants are asked to propose a 1-2 year project focused on educational outreach, knowledge transfer, technology transfer, science for society, and/or the promotion of science, technology, engineering and mathematics (STEM) to those traditionally underrepresented in STEM.

In keeping with National Space Grant College and Fellowship Program goals, Space Grant Fellows will develop a project that promotes the understanding of space-related research to the public through original research and outreach efforts. Successful applications tend to partner with existing educational programs (e.g. primary/secondary schools, science museums, parks/forests/reserves, 4-H and other Cooperative Extension agents, etc.). Examples include:

- developing curricular and/or educational outreach materials designed to communicate science to a specific audience (all precollege-related program materials should align with Arizona and/or National Math, Science, Geography or Technology Standards);
- developing a web application with science education and/or knowledge transfer;
- developing skills in science writing and journalism;
- developing a demonstration project and associated educational materials for an existing educational program;
- developing a program that encourages those traditionally underrepresented in science, technology, engineering, and mathematics to learn more about these disciplines and/or pursue associate careers;
- designing and carrying-out some other creative science, technology, engineering, and/or mathematics outreach project;

Links to descriptions of fellowship projects from 1995 to the present can be found at <https://spacegrant.arizona.edu/students/fellowships/years>.

**Project Description** (maximum of 4 pages, including graphics but excluding references)

Margins: 1 inch, minimum

Font: 12 pt. minimum, Times New Roman

Title: (maximum 10 words or 100 characters, with spaces)

Headings: Please use the headings listed below.

**A. Problem**

- What is the nature and significance of the educational challenge you propose to address?
- Describe your target audience (numbers, demographics, etc.).
- Who are your institutional partners?<sup>1</sup>
- Briefly mention why you personally are motivated and qualified to address this challenge (i.e., your academic, research and/or professional experience, goals and/or philosophy).

**B. Technical Approach**

- What are your methods and how will you address the proposed educational challenge?
- List the *major* educational materials, data, technology, and/or research results you plan to use in your educational outreach effort and their source.<sup>2</sup>
- Why is your approach appropriate? (e.g., proven track record and/or grounding in accepted education/knowledge transfer/pedagogic theory).<sup>3</sup>
- Note any permissions / approvals that might be required.

**C. Milestone Chart** (see template on next page)

- Summarize the major tasks / phases of the project.
- Use the template on the next page (you may change font size/color/dates but keep column headers for consistency)

**D. Expected Outcomes**

- Estimate/quantify the impact of your proposed project.

**E. Evaluation**

- For education activities, how will learning be assessed?
- For educational materials, how will effectiveness be determined?
- For the overall project, how will impact be measured?<sup>4</sup>

**F. Sustainability Plan**

- What steps will you take during the project to help ensure that its impact can be sustained beyond the fellowship period?

**G. References Cited** (not included in page limit)

<sup>1</sup> Proposals that partner with an existing educational program must carefully delineate between what is already provided by the program and what you will introduce that is *new* to the program.

<sup>2</sup> Though not required, it is encouraged that at least some of the science, data, or technology involved in the project come from NASA or NASA-funded initiatives.

<sup>3</sup> Any pre-college oriented program materials should align with Arizona and/or national math, science, writing, geography, and/or technology standards.

<sup>4</sup> This could be the adoption of an innovation or technology, a sought-after change in behavior, a broader understanding of a concept or idea, and/or the spread of an idea/knowledge/technology to a larger audience.

**EXAMPLE TEMPLATE**

**UArizona Graduate Fellowship Milestone Chart**

**Graduate Fellow Name:**

**Academic Year: 2022-23**

<b>Month (August - August)</b>	<b>Task</b>	<b>Short Description of Task</b>
September 1st	Develop Full lesson 3 & 4	Lesson 3: The Water Cycle, Lesson 4: The Carbon Cycle
September 15th		
October 1st		
October 15th		
November 1st		
.....		



## UArizona NASA Space Grant Graduate Fellowship Application

### D. REFERENCE FORM

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**Name of Applicant:**

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**Name of Referee:**

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Thank you for agreeing to write a reference for the above applicant. Please ensure that you reply on a separate sheet of headed university/institution notepaper and sign the reference. Please address the following questions in your reference letter, attach your letter to this sheet, and return it to the applicant via email for transmission to Space Grant.

1. How long and in what capacity have you known the applicant?
2. What are your impressions of the applicant's interest/motivation in promoting the understanding of science, technology, engineering and/or mathematics to the public?
3. What are your impressions of the applicant's proposed outreach project?
  - a. Are the applicant's objectives compelling and are the methods appropriate?
  - b. Is the project feasible and is it achievable while the applicant pursues their graduate degree?
4. Please very briefly comment on the applicant's self-reliance and independence, academic abilities, and professional goals as they relate to proposed outreach project.

Your assistance is greatly appreciated.





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3. What are your impressions of the applicant's proposed outreach project?
  - a. Are the applicant's objectives compelling and are the methods appropriate?
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4. Please very briefly comment on the applicant's self-reliance and independence, academic abilities, and professional goals as they relate to proposed outreach project.

Your assistance is greatly appreciated.



## **UArizona NASA Space Grant Graduate Fellowship Application**

### **E. LETTER OF SUPPORT FORM (OPTIONAL)**

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Successful applicants often establish a relationship with an organization or institution (i.e., a school, museum, park/forest, or an existing educational program) as they develop their outreach project proposal. These applicants identify an "educational outreach advisor" representing this organization or program who will provide an initial letter of support that indicates their willingness to cooperate with the applicant's proposal.

**Name of Applicant:**

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**Name of Partner Organization:**

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**Name of Partner Organization Advisor:**

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Thank you for agreeing to write a letter of support for the above applicant. Please ensure that you reply on a separate sheet of headed institution/organization notepaper and sign the letter. Address the following questions in your reference, attach your letter to this sheet, and return it to the applicant via email for transmission to Space Grant.

1. What are your impressions of the applicant's proposed outreach project?
  - a. Are the student's objectives compelling and are the methods appropriate?
  - b. Who will be impacted?
  - c. Is the project feasible and achievable in the time frame given?
2. Please indicate your willingness to support the applicant's project.