

KANSAS STATE UNIVERSITY

2021-2022 Campus Application Instructions for the Barry S. Goldwater Scholarship

Dear Student:

Kansas State University can nominate up to four students to compete nationally for the Goldwater Scholarship. **Here are the steps to be considered for campus nomination.**

1. Review the “Eligibility Checklist” on *Page Two* of this document to ensure that we can consider you for nomination.
2. Create an account at <https://apply.scholarsapply.org/barrygoldwater> and then complete the **Student Profile** and **Pre-Application** as instructed. You will be asked to identify potential recommenders for letters of reference. See *Page Three* of this document for some guidance regarding those letters of recommendation.
3. Once you submit the pre-application (it is very short and should not take long to complete) I will be automatically notified as the Goldwater Faculty Representative for Kansas State.
4. I will, then, review that pre-application and either A) Approve it and give you access to the full Goldwater application or B) Contact you if I have concerns about your eligibility/competitiveness based on the information provided.
5. If I approve your pre-application, you will need to complete the full **Online Goldwater Application** by **November 5, 2021** to be considered for nomination. I offer some guidance about the research essay on *Page Four* of this document. You can also find extensive instructions on the Goldwater website: <https://goldwaterscholarship.gov>.
6. An interdisciplinary faculty panel will, after the November 5 campus deadline, review complete applications and choose up to four students to nominate for national consideration. We can also nominate a fifth student if they are a transfer student.
7. Nominees will then be able to revise and refine their applications prior to the national deadline at the end of January 2022.
8. We appreciate the fact that our candidates represent the University in the national applicant pool and will, to recognize that fact, award a **\$1000** scholarship to each nominated student.

If you still have questions after reading this document, please contact me. I am more than happy to talk with prospective applicants. The campus committee looks forward to reading your application.

Sincerely,



Jim Hohenbary
Goldwater Faculty Representative
Kansas State University
204 Leadership Studies
Manhattan, KS 66506
(785) 532-3422
jjmlth@ksu.edu

Goldwater Eligibility Checklist

- ❑ Sophomore or Junior status. *Sophomores* are defined as students who plan two more years of full-time undergraduate study *after* May 2022. *Juniors* are defined as having one more year of full-time undergraduate study *after* May 2022. Students planning five years of undergraduate study are eligible to apply during the third or fourth year.
- ❑ Officially: 3.0 minimum GPA and upper quarter of your class. Practically: 3.8 or higher is typically needed to remain credibly competitive.
- ❑ Plan to pursue a PhD in the natural sciences, mathematics or engineering. Plan to pursue a research-related career in one of those areas. Research is broadly defined. Possible settings might include work within a university, research lab, government agency or corporate R&D unit. Applicants should aspire to careers in knowledge creation and innovation.
 - Students who plan to study medicine are eligible for the Goldwater **if** they plan to work in a research setting and plan to pursue an MD/PhD. Research work and clinical work can overlap. However, the research component must be an essential part of the career vision.
 - Goldwater Trustees have historically considered *scientific engineering*, rather than *applied engineering*, more appropriate for Goldwater Scholars. Talk with me if you have concerns that this might pertain to you. They are looking for students who are interested in adding to the knowledge base/advancing & developing new technologies.
- ❑ US citizen, permanent resident or US national.
- ❑ If you are too close to graduation to qualify for the Goldwater but would qualify in other ways, please talk with me. The NSF Graduate Fellowship and several other options may apply to you, depending on your research focus. Some of these national graduate fellowship deadlines are also in October.
- ❑ If your interests relate to ecology or environmental science, you should also consider applying for the Udall and/or possibly the Hollings . . . which are also undergraduate awards with similar eligibility windows.

Wildcat Success

K-Staters have won 78 Goldwater Scholarships since the award was introduced in 1986. This makes Kansas State one of the most successful public universities in America when it comes to the Goldwater. Kudos to all the K-Staters whose undergraduate excellence is reflected in those numbers.

Goldwater Recommender Advice

We want Letters of Recommendation to be submitted by the **November 5** campus deadline. Here are some things to consider as part of that process of soliciting those letters.

1. Start by asking your letter writers if they are willing to write strong letters on your behalf. Find a different recommender if they are hesitant. Lukewarm letters will not help you.
2. Seek letters from people who know you well and have a good vantage point for evaluating your past performance and future potential as a research scientist or engineer.
3. It is always advisable to share your résumé and some information about your goals with people you ask to write for you.

The Goldwater website provides good guidance on assembling information for recommenders: <https://goldwaterscholarship.gov/information-packet>. One caveat: while it never hurts to share your completed application with your recommenders, **do not** wait until you have completed that full application before you make the initial ask:

4. At least two of the three letters should be from folks with whom you have worked in undergraduate research and/or faculty in your field or a closely related STEM field.
5. Letters from family friends, pastors and high school teachers are NOT typically helpful in this competition.
6. Remember to be courteous in asking for a letter (both in terms of the timeline and your demeanor). A letter of recommendation is not a right. Three weeks or more is considered an appropriate etiquette window ahead of the campus deadline.
7. Remember to thank those who take the time to write on your behalf. Good letters take time.
8. If your recommenders have questions, they should contact Jim Hohenbary at (785) 532-3422 or jjmlth@ksu.edu.
9. Letters of recommendation will be treated as *confidential documents*. They will be shared with the Goldwater Nominating Committee. However, students will **NOT** be allowed to access letters written on their behalf.

Guidance Regarding the Research Essay

Make time to prepare an organized, thoughtful and precise application. The campus committee is often confronted with more strong applicants than nomination slots, and attention to detail may make the difference.

What Goldwater says about the Research Essay:

The strongest Research Essays are typically based on prior or current research experience. The Research Essay should include 1) description of the issue or problem, 2) discussion of the research methodology, and 3) discussion of the student's findings. It is very important that the essay details the student's specific contributions to the project and indicate the specific skills/expertise the student developed as a result of participation in the project. To demonstrate that the applicant "thinks like a scientist," the essay might, as an example, describe future work the experimental data suggests or describe an entirely new work that is based on the skills and insights the student learned from the experience.

A student who has had research experience may, of course, choose to write about something other than work he/she has previously done. In this case, if applicable, the student might discuss how the previous work has influenced the proposed work and/or provided the student with applicable skills.

Formatting and length guidelines:

The Goldwater Research Essay should be no more than **three pages** (single spaced). **You must use 12-point Arial font.** Margins should be 1 inch on all sides. The essay must include your name and the name of your academic institution in the header at the top of each page. It may be formatted in either one or two columns.

You can/should include a bibliography, references, illustrations, and graphs as appropriate (those items do count as part of the three pages). Figures and captions may use 10-point Arial font. If mathematical equations are used, LaTeX or other document preparation software may be used to properly format them.

Please title and sign your essay.

Some additional K-State perspective

Consonant with what Goldwater recommends, almost all successful essays by K-State applicants discuss research that they are currently involved in at the undergraduate level. We recommend that you:

- Provide some background regarding the larger problem that animates the project. What is the significance and context of the research?
- Detail the more particular aims of your research project. What specifically are you trying to find out and what is the experimental setup for doing so?
- Narrate what has been accomplished with a particular emphasis on what your role has been. First-person narration is expected.
- Overview any results thus far and provide a sense of where you expect your research to go in upcoming months and what you anticipate in terms of your contribution. It is also compelling if you are able to relate the anticipated direction of your research to broader scientific frontiers in your field.

As the prompt indicates, this should be a technical essay that demonstrates your ability to handle the technical jargon of your field with clarity and precision. Expect your readers to be scientists and engineers who want to understand the details. We also want to understand how active you have been in shaping and advancing the direction of the research.

Sample essays are available for review in 204 Leadership Studies, but you must read them in the office. Duplication is not permitted.