Innovation Challenge
Proposal Format

This program requires participation from a faculty mentor and a team of students from two or more colleges. The aim of the program is to fund environmental sustainability projects on UNO's campus. Applicants are encouraged to seek additional matching funds from off-campus constituents.

For FY 2022-2023, the Office of Research encourages proposals to focus on environmental sustainability efforts on UNO's campus. For instance: pollution prevention, environmental management, natural resource use, energy efficiency. This would include the charter schools of Benjamin Franklin High School and Edward Hynes UNO. Using the campus as a living lab for teaching and research will provide experiential learning opportunities for our students. When possible, projects should also reduce operating and maintenance costs.

APPLICATION DEADLINE: December 9, 2022

Submission Instructions

All submissions must utilize the Internal Grant Program (IGP) Application and the UNO Proposal Routing form.

1. Open and save the Internal Grant Program (IGP) Application, which is available in the right-hand sidebar of the IGP SharePoint site.

2. Complete your proposal. Your proposal must follow the format given in the IGP Application. Please include the current payroll benefits for appropriate salary lines.

3. Sign the IGP Application. A typed signature is acceptable.

4. Fill out the UNO Proposal Routing form.
    a. Attach your proposal and budget as indicated.
    b. Enter the email addresses for your department head/chair/director and your dean/VP.
    c. Submit the form.
    d. All PIs and Co-PIs must then electronically sign the form by signing the Conflict of Interest statements.
    e. The form will forward the proposal to your department head/chair/director and your dean/VP for their review and approval.

Proposal Format & Contents

1. **COVER PAGE**: The required cover page format is enclosed in the IGP Application. Each item on the cover page must be completed. The cover page MUST appear on the top (the first page) of the application.

2. **PROJECT SUMMARY**: The project summary may contain a maximum of 250 words and must be provided in the format supplied in the IGP Application. It should be a concise

description of the project, containing a clear statement of objectives and an outline indicating how the project will operate to achieve its goals. The project summary should also explain concisely why and how the proposed project has strong potential to meet the objectives of the subprogram under which it was submitted. **Note: This is phase 1.** The Office of Research may assist in finding external funding opportunities, and/or successful applicants may be eligible for additional funding in a potential phase 2 opportunity.

3. **TABLE OF CONTENTS**: List all sections and subsections of the proposal, including appendices.

4. **GOALS AND OBJECTIVES**: The final goal to be reached by the end of the grant period must be clearly specified. Major changes in research/scholarly/creative programs and/or relevant personnel that can be expected when these goals are achieved must be described. This section of the proposal must be no longer than the equivalent of one, single-spaced, typewritten page.

   The Interim and Final Report should state the progress made on the goals and objectives during the lifetime of the award as outlined in the proposal.

5. **NARRATIVE AND BIBLIOGRAPHY**: The narrative should be single-spaced pages with a type size of 12 point or greater. Pages must have 1-inch margins and be numbered. Reviewers are not required to read additional narrative pages. Information applicable in several places may be referenced by page and paragraph. The narrative should conform to the following outline, including all major sections and subsections. If an item does not apply to the project, include the appropriate heading followed by "Does not apply." Proposal reviewers will assign points based on the quality and specificity of each section.

   a. **Rationale of the Project (1 page max)**
      i. Describe the environmental challenge that the team is addressing
      ii. Contribution of the project as an innovative solution to a problem
      iii. Likely impact of the project on the quality of the University (e.g. environmental or reduced operating costs)

   b. **Project Plan (3 pages max)**
      i. Briefly summarize the expected significance, limitations, and design of the project.
      ii. Provide a schedule of proposed activities within the grant period with benchmarks.
      iii. Include performance measures. *Indicate how the Office of Research will determine whether your project has been a success and the degree to which it has achieved its goals.*
      iv. Describe how this project would advance environmental sustainability practices, initiatives, and awareness at UNO and beyond.
      v. Describe how the activity achieved during the period of the grant would be maintained after IGP financing ends, as appropriate.
      vi. If the project is related to a course, degree program, certificate program, etc. then explain any benefit of having a demonstration project or experiential learning project related to academic recruiting or retention.

   c. **Involvement and Qualifications of Investigators, Other Faculty, and Students (1 Page)**

Qualifications of scholars/investigators to undertake the proposed project should be indicated. A brief statement should be included that describes the responsibilities of each person involved. A full-time faculty or staff member must serve as the PI and mentor to a team of **at least three currently-enrolled UNO students** from **at least two different colleges**. The students may be undergraduate or graduate students in any combination.

Note: Projects related to campus grounds or facilities (e.g. bioswales, water monitors, composting) **will need to be cleared with UNO Facility Services prior to receiving an award or being implemented**. **Projects related to other administrative units on campus** (e.g. green labs, green offices, green purchasing) **will likewise require coordination with the relevant unit prior to any project being awarded**.

d. Bibliography (1 page)

6. BUDGET AND BUDGET NARRATIVE: Cap: $10,000 (direct costs)

a. Format

A completed budget must be submitted using the standard Office of Research budget template in Excel that is on the Office of Research website; it can also be found embedded in the UNO Proposal Routing Form. A justification page(s) must be attached to the budget page(s) which fully explains every item for which the expenditure of IGP money is proposed.

b. Project Activation Date and Anticipated Date of Completion

Activation date – July 1
Interim Progress report due – January 1
Final Progress report due – July 30
Completion date – June 30

c. Budget Justification

A budget estimating required costs for a successful project should be submitted. This project does not support additional compensation or stipends

No-cost extensions granted by the Office of Research will not entitle PIs or Co-PIs to re-budget funds for additional salary support.

7. BIOGRAPHICAL SKETCH: Biographical sketches for all key personnel are limited to two (2) pages and **must** use the form provided in the IGP Application.

8. PROPOSAL APPENDIX:

a. Supplemental Information

Essential material supplementary to the text of the proposal should be included in a single appendix. The appendix must be referenced in the proposal narrative, and under no circumstances may the total page count for all materials exceed ten (10) pages.

b. Attachments

All general supporting materials (e.g., charts, photos) to which reference is made in the narrative section must be clearly marked and included in this section.

c. Letters of Support
Letters of support should NOT be included.

In acceptance of the award you are acknowledging the following:

Interim and Final Report – An interim and final report will be submitted to inform us as to the outcome(s) and product(s) of the work. The report should be no more than one (1) page and should include deliverables based on the rationale of the proposal. Eligibility for future Office of Research IGP awards will be jeopardized if the report is not submitted. Continuation of grant funds will be contingent upon submission of an acceptable interim report and demonstration of project progress.

Compliance – IRB and IACUC committee approved protocols must be submitted to the Office of Research, if applicable, before a grant number will be provided.

***Innovate*UNO** – The Office of Research hosts *Innovate*UNO, an annual symposium for all IGP awardees to **present** their findings. By applying for this program, you agree to participate in *Innovate*UNO in November.

Below are some additional resources and examples that are meant to inspire, but not limit, possible projects at UNO**.**

Additional Resources:
UNO Campus Master Plan: Campus Master Plan | The University of New Orleans (uno.edu)
Eco Leaders: EcoTopics - NWF EcoLeaders
Bee Campus USA: Home - Bee City USA
EPA Campus Rainworks Challenge: A Green Infrastructure Design Challenge for Colleges and Universities: campus_rainworks_campaign_brief_2021_6-29-21.pdf (epa.gov)
Tree Campus USA: https://www.arborday.org/programs/tree-campus-higher-education/
NWF Certified Wildlife Habitat: https://www.nwf.org/certifiedwildlifehabitat
Eco-Schools USA: Eco-Schools USA (nwf.org)
Campus Race to Zero Waste (formerly RecycleMania): https://recyclemania.org/
The Campus Wild: How College and University Green Landscapes Provide Havens for Wildlife and "Lands-on" Experiences for Students: The Campus Wild - EcoLeaders | National Wildlife Federation (nwf.org)
Campus Pollinator Pledge: Campus Pollinator Pledge
Earth Week Program: Welcome | Earth Week (yale.edu)
U.S. Department of Education Green Ribbon Schools: Eligibility - U.S. Department of Education Green Ribbon Schools
Higher Education: An Overview of Energy Use and Energy Efficiency Opportunities EPA_T1542_SECTOR_HigherEdA (energystar.gov)
Campus Sustainability Efforts: https://www.ou.edu/sustainability/campus-efforts
The Best Green Colleges: The Top 25 Green Colleges | BestCollegeReviews
Higher Education in a Warming World: The Business Case for Climate Leadership on Campus
Campus Environment 2008: A National Report Card on Sustainability in Higher Education
Four Louisiana Schools Honored As Earth Day-Green Ribbon Schools by U.S. Department of Education | Louisiana Department of Wildlife and Fisheries

Three Louisiana Schools Honored as 2017 U.S. Department of Education Green Ribbon Schools | Louisiana Department of Wildlife and Fisheries
Complete Streets: Complete Streets | US Department of Transportation
Comparing Benefits & Costs of Pursuing Bee Campus Certification: https://youtu.be/sW5XbfQ2HRg
Louisiana Native Plant Society – Louisiana Certified Habitat: https://www.lnps.org/certifiedhabitat/
A Guide to Conducting Student Food Waste Audits: A Resource for Schools: https://www.epa.gov/sustainable-management-food/guide-conducting-student-food-waste-audits-resource-schools

Project Examples:
Survey campus and create database of native flora and fauna

- Develop an interactive website that provides information about the tree or plant, its place in the eco system and what animals rely on it for a host plant or food
- Partner with a photographer to take pictures for the website
- Invite a biology student to help identify native versus invasive plants

Design and install a native plant garden. There are an unlimited number of combinations and purposes for gardens with native plants.

- Design a garden for monarch butterflies, create informational signs about the plant or migratory patterns of the butterflies
- Create garden of medicinal plants and describe how Native Americans or early settlers used them
- Create an Adopt a Garden program similar to the Adopt a Highway program
- Edible landscapes can incorporate food for students on campus

Work with Facility Services to design an integrative pest management program.

- Managing pests in schools can be sustainable by reducing the use of pesticides
- Properly design programs can be cost effective and healthier for students

Prevent storm drains from discharging untreated water into Lake Pontchartrain

- Design an engineering solution to prevent trash from going into the lake
- Start a media campaign or education program to education the UNO community about the importance of not putting chemicals or invasive species in the drain

Research history of environmental sustainability at UNO

- Create a history of efforts to make UNO and its students more eco friendly
- Include degree programs, certifications, student groups and research centers

Food waste audit

- Organize a good waste audit day to determine how much food is wasted
- Can this waste be reduced and not go in a landfill?
- Conduct feasibility plan for composting

Stormwater management

- Measure and test storm water run-off from parking lots
- Identify flood prone areas on campus and present solutions

Labs and art studios

- Are there greener alternatives for chemicals?
- Can 3D printing waste be recycled or reused?
- Conduct energy usage and find solutions for reduction
- Study indoor air quality

Energy audit and reduction

- Take inventory of energy monitors on buildings
- Gather base line data and for energy consumption in buildings and suggest ways to reduce energy use
- Suggest passive warming and cooling solutions for energy efficiency

Office program

- Research best practices and available audit documents for green office programs
- Find offices willing to participate and report on findings

Dorm programs

- Swap meet for dorms when students move out and new ones move in
- Energy reduction in the dorms
- Study indoor air quality and solutions to improve

Policies for an eco-friendly campus

- Sustainability plan to supplement the master plan
- Tree maintenance policy

Events for education and outreach

- Organize a campus beautification day
- Host a beach sweep project
- Create a website for UNO community about environmental sustainability efforts on campus

Campus Sustainability Grants | Student Programs | Sustainable UGA
These examples are selections from University of Georgia website
"Farmers Market Friends: Connecting UGA & the Athens Community through On-Campus Farmers Markets submitted by Abraham Lebos and Reese MacMillan, undergraduate students pursuing degrees in Biochemistry & Molecular Biology and Neuroscience. The goal of the project is to bring a regularly occurring farmers market to the University of Georgia campus in order to improve access to fresh produce for UGA students, faculty, staff, and Athens citizens, foster a healthy culture and lifestyle, and promote the local food economy. Project partners include UGA Auxiliary Services and interdisciplinary student collaborators Naveen Bateman (Biology, Genetics) and William Muller (Graphic Design, Advertising).

UGA Edible Landscape Project submitted by Abbie Dillon, an undergraduate Horticulture major, under the direction of Chris Swann in the Facilities Management Division Grounds Department. The goal of the project is to install regionally appropriate fruiting trees and shrubs near Lake Herrick to provide experiential learning, onsite education, and long-term fruit foraging opportunities for students and visitors. Other project partners include the State Botanical Garden of Georgia and Sofia Franzluebbers, undergraduate Horticulture major in the College of Agricultural and Environmental Sciences.

Diversion of Academic Wastes for Green and Sustainable Research (DAWGS Research) submitted by Megan Lott, PhD student in Environmental Health Sciences, under the direction of Dr. Erin Lipp, Associate Dean and Professor of Environmental Health Science in the College of Public Health. The goal of the project is to implement a pilot-scale recycling program that is specifically dedicated to the diversion of research consumables from landfill waste streams. Other project collaborators include Star Scott in the Green Labs Program and Environmental Health Sciences undergraduate student Ameila Foley.

A window of opportunity: Preventing bird-window collisions on the UGA campus submitted by Isabella Rangonese, PhD student in Ecology, under the direction of Dr. Richard Hall in the Odum School of Ecology. The goal of the project is to prevent bird collisions through retrofitting windows in the School of Ecology and to engage UGA students and the Athens community in science and outreach related to avian conservation. Project partners include Facilities Management Division Operations and Infrastructure, members of the Lilly Branch Audubon Society, and Ecology undergraduate student Emma Bay Dickinson.

Residential Community Garden Pilot Program submitted by Abigail Lauterbach, an undergraduate Environmental Economics and Management student in the College of Agricultural and Environmental Sciences, under the direction of Chera Jo Watts in the Franklin Residential College. The project will serve as a circular food sustainability initiative for students in the Franklin Residential College, including a compost program and garden to enhance students' relationship with the food they consume. Project partners include the Facilities Management Division Grounds Department and undergraduate Computer Science major, Casey Serrano.

Swap Shop submitted by Avery Lumsden, an undergraduate Environmental Economics and Management major, under the direction of Tyra Byers in the Office of Sustainability. The goal of the project is to reduce landfill waste and advance an equitable and circular economy in which students have opportunities to donate and freely receive supplies related to student life. Project partners include UGA Libraries, the Interdisciplinary Certificate in Sustainability, and student collaborator Jenna Franke who is pursuing undergraduate and graduate degrees in environmental economics.

Making the Cut: Eliminating Plastic Cutlery on Campus in Favor of Reusable Alternatives submitted by Claudia White, an undergraduate student double majoring in Anthropology and Geography, under the direction of Christy Tweedy in UGA Housing. The goal of the project is to increase awareness of feasible alternatives to single-use plastics and to provide students with a tangible strategy to reduce waste associated with carry-out dining during COVID-19 and beyond. Interdisciplinary student collaborators include Carlos Lopez Ramirez (Computer Science, Psychology), Shashank Ganeshan (Computer Science, Economics), Delaney Rea (Statistics), Matthew Miller (Management Information Systems), AliAnn Xu (Mathematics, History), Nicholas Kundin (Computer Science), and Rachel Halper (Master of Science in Business Analytics).**"**