Purdue University Northwest Senior Design/Capstone Project Grant Spring 2023

Program Description and Application Guidelines

ONLINE APPLICATION

Purpose: PNW Senior Design/Capstone Project Grant provides up to \$1000 for group projects to pay for your research expenses needed to complete a senior design/capstone project.

Deadline: Deadline for the Spring 2023 submission is Friday, February 10th @ 11:59pm (EDT). Early submissions are welcomed.

Eligibility:

- All PNW undergraduates working on an independent or group project are eligible to apply.
- Students must have a faculty mentor.
- Students are responsible for writing the proposal and should only submit a single proposal. Students on multiple proposals will only be awarded a single grant.
- Students and faculty must complete the Purdue University's required CITI RCR Training before submitting their proposal.

Award Information: The award will cover <u>up to</u> \$1000 for group research project expenses. The project does not have to be a year-long project, but it must be completed before your graduation or May 1st, 2023 (whichever comes first). Upon completion of the studies, students must submit a Final Report, which will describe the research activities, funds used, and outcomes (presentations, etc) from the work.

Faculty Mentor Role: Faculty members can help you explore your research interests and develop a strong project. You will identify a faculty sponsor/advisor, and this person will help you develop your application materials and oversee your project and funds if you are awarded the grant.

Application Process: Applications must be submitted by the student(s) via the online application. Application formatting instructions and content requirements are detailed in the Required Application Sections.

Application Review and Selection Process: Your research grant proposal will be evaluated by a faculty review committee. The strength of your application will come primarily in your Proposal Narrative and Budget Justification. You should receive notification of award approximately three weeks after the deadline. Proposals will be rated on a scale of 1 (poor) to 5 (outstanding) based on the following criteria:

- Is the research problem or question well defined?
- Is the significance of the project clearly presented?
- Are the project objectives or hypothesis (if relevant to discipline) clearly articulated?
- Are the research design, methods, and activities well described?
- Does the budget appear reasonable and does the proposal provide a clear justification for items included in the budget?
- Does the proposal convey a well thought out project with potential for success?

Questions: If you have any questions, contact Associate Professor Michael Zimmer (sro@pnw.edu) in the Student Research Office.

Required Application Sections: Please have the following information available prior to beginning the online application.

- 1. Applicant Information
- 2. Proposal Narrative
- 3. Budget Form
- 4. Faculty Mentor Approval
- 5. Certification Form

1. Applicant Information

- Name(s), email address(es), and college of all student researchers
- PUID
- Name(s), email address(es), and college of faculty mentor(s)
- Anticipated project end date (Must conclude by your graduation date or May 1st, 2023, whichever comes first)
- Campus or location where research will be primarily conducted

2. Proposal Narrative

- a. Format
 - Two-page maximum (excluding references)
 - Single-spaced
 - 1-inch margins on all sides
 - 12 point Times New Roman OR 11 point Arial font
 - No name on the proposal document (this will be captured elsewhere in the application)
 - Save document as .pdf for upload
- b. Content Requirements
 - Project Title: A brief title of the research project
 - Introduction: Introduce the problem or question that this research is trying to solve.
 - **Significance of the Problem (Rationale)/Literature Review:** Explain why this project is worth doing.
 - Significance: Provide enough context for the project that a person <u>outside of your discipline understands why this project needs to be done.</u> Explain why your proposed work is relevant, and succinctly make the case that your research question will expand the body of knowledge or move conversations forward in your field. This is where you need to "sell" your project and describe the necessity and ingenuity of the research in non-technical language.
 - Literature Review and Justification: What other ideas does your project build on? Connect your work to renowned scholars in the field. The reviewer should understand where your project fits within the larger whole of current explorations in your field.

 Hypothesis and/or Objectives: What do you expect to learn through this research? If appropriate in your discipline, state a hypothesis. Detail the objectives that will be achieved. Make your objectives SMART:

S = Specific

M = Measurable

A = Achievable

R = Results-focused

T = Time-bound

- Research Design, Methodology, and Activities: What will you specifically do to answer your question(s)? How much time will each step take? Explain your action steps, from data gathering to analysis in non-technical language. If diagrams or images are necessary, insert them here. Convince the reviewer that if you follow the steps above, your project will be successful. You will then need to connect these methods to your budget justification (see Budget Form).
- **References** (excluded from page total, but included in the same document): Include the references cited in this application

3. Budget Form

- Your application <u>must include</u> a detailed budget explaining how you propose to use the funds and how it relates to your overall research design and analysis. A maximum award of \$500 per proposal (\$1000 for group) are available, but each application should only apply for funds necessary for completion of the project. If additional funds are required to complete your project, please indicate what additional sources of funds are available. In addition, it must be clearly described how the funds from this grant will be used in terms of your research methods/design if the project budget exceeds the maximum award.
- Research expenses can be any costs associated with the research: materials, study
 participant fees, supplies, travel, or any other item required for the project. Grants may not
 be used for purchase of books or other materials readily available within the department or
 the library. Grants may not be used for student stipends. Funds will be distributed to your
 faculty mentor and all purchases must be made through the department.
- Please use the budget form. Once complete, save as an Excel or PDF file and upload in the appropriate field of the online application.

4. Faculty Mentor Approval

- Your faculty mentor must provide application approval. During application, the applicant will
 provide faculty mentor's email (@purdue.edu). The faculty mentor will receive a request by
 email to login to InfoReady to review the student's submission and approve it. If you have
 more than one faculty mentor, it is only necessary for one of them to approve the
 application.
- Students engaging in research (1) using human subjects must have an IRB protocol approved, (2) involving animals must have an IACUC protocol approved, or (3) involving hazardous materials or organisms must have a Biosafety Review with the faculty mentor as PI before submitting the proposal. Faculty mentors are asked to certify this information on

the Faculty Mentor Approval Form and Students are asked to complete a Certification form verifying this information.

- i. Information about IRB can be found at https://www.irb.purdue.edu/
- ii. Information about IACUC can be found at https://www.purdue.edu/research/regulatory-affairs/animal-research/iacuc/
- iii. Information about Biosafety can be found at https://www.purdue.edu/research/regulatory-affairs/biosafety-and-rdna/
- Proposals without mentor/faculty approval will not be considered.

5. Certifications

All students who receive awards must agree to:

- All awarded students must complete the Responsible Conduct of Research (CITI) training.
 Inclusion of the CITI RCR completion certificate will be required for each proposal. The

 Student Research Office will provide training information to the awardees. Proposals will not be awarded if the training is not completed. Information about accessing CITI RCR training can be found here.
- All applications must indicate whether an IRB, IACUC, or Biosafety Review is required for completion of research. Awards will be withdrawn if IRB, IACUC, or Biosafety certification is not completed within 30 days of award acceptance.
- Submit a final report at the end of the grant period (May 1st, 2023) via InfoReady. Students
 will receive emails from InfoReady with instructions on how to complete this final report.
 Failure to complete the report will result in faculty ineligibility for URG funds for one year
 and retrieval of funds.
- Participate during the Days of Discovery in Spring 2023.