College of Sciences Undergraduate Research Program
(COSURP) Awards 2023-2024

I. PROGRAM: College of Sciences Undergraduate Research Awards

II. PROGRAM DESCRIPTION:

The Old Dominion University College of Sciences (COS) invites the submission of proposals from its departments for funding of one-year projects through the College of Sciences Undergraduate Research Program (COSURP). The program will offer Annual Undergraduate Research Awards to science departments in support of the implementation of plans that will attract a regular stream of undergraduate students to participate in research instruction, research training and finally, independent research within the college.

COSURP MISSION:

a. Encourage students to be involved in research training activities early in their degree program to prepare them for other research opportunities before graduation.
b. Allow students to become more competitive for ODU and other awards, as well as for entry into future graduate education and laboratory/research related employment.
c. Provide basic research skills to Freshman/Sophomore students.
d. Increase opportunities for students to participate in group or individual research as a Junior/Senior.

GUIDELINES:

The COS Undergraduate Research Committee understands that COS departments have very different research involvements and cultures. We encourage each department to submit a proposal that best suits their program and the future of Undergraduate Research participation in their program. Departments are encouraged to develop a plan to attract more students into undergraduate research training and participation. The intent is to have a plan that will continually strengthen the undergraduate participation on an annual basis.

One possible model is to develop plans that will encourage students to become involved in learning basic research skills before Junior or Senior years, so that they are better prepared to participate in independent or group research in Junior and Senior years, and beyond. The award is not intended to support an individual undergraduate research project, but rather is aimed at developing a department-wide program to increase participation in undergraduate research.

The plans and proposals may be developed and written by an individual or a group, of faculty. However, the proposals must be submitted on behalf of the individual departments as part of their plans to improve undergraduate research opportunities and training, including increasing the number of student participants. Plans included in each proposal must have been approved within the department, at least at the Undergraduate Committee level, as well as by the
Department Chair. Proposals are expected to indicate a commitment to the continuation of the undergraduate research training opportunities in their degree programs.

Notes:

A. Successful projects are anticipated to last one year (Summer, Fall, Spring).
B. If a course is developed the timeline must allow for student registration. All instructional content must be aimed at developing and improving undergraduate research skills.
C. The proposal must include information about the current participation of undergraduates in research, as well as goals for increasing that number. It is important to establish metrics that can be realistically and reliably tracked.

D. Some undergraduate students are expected to attend the ODU Undergraduate Research Symposium each Spring and to present aspects of their work (oral, poster, or exhibit) to the undergraduate attendees. The number of such attendees from the college will be tracked.

III. PROPOSAL DEADLINE: Tuesday April 04, 2023, 5 p.m. (COSURP@odu.edu)

IV. AWARD INFORMATION:

A. Estimated Number of Awards: Varies, depending on availability of funding. In 2023, $30,000 is available for this program.

B. Anticipated Amount of Awards:

1. Awards will be made up to $15,000.

2. Allowable expenses include (i) course development materials, such as supplies and instructional equipment, (ii) costs for supplying student course requirements, (iii) Summer salary for faculty for program course development, training, or supervision, and (iv) undergraduate student Spring/Fall tuition support.

3. Proposed budgets should clearly indicate requested funds for each category in Section 2 above. Summer salary for course development is limited to a total of $3000 for the project. Undergraduate tuition support is limited to 1 credit hour.

4. Each award, including funding, is made to the Department submitting the successful proposal. Each department is responsible for distribution and accountability of the funds.

5. The COSURP Awards may not be used to fund research outside the goals listed under Section II. PROGRAM DESCRIPTION, listed above.

V. ELIGIBILITY INFORMATION:

A. Who May Apply: Academic departments in the College of Sciences

B. Limit on Number of Applications: One proposal per department per academic year. A joint proposal from two or more departments is acceptable.
VI. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS:

A. Procedure: COSURP Proposals must be approved within the Undergraduate Program and by the Chair for each department.

B. Cover Sheet: The COSURP Cover Sheet, attached, must be included with the submitted proposal. Please ensure that all required signatures are present.

C. Narrative Language: The proposal must be written so that faculty reviewers in other disciplines can understand it.

D. Proposal Format:

1. Proposal documents should be readable on-line, with minimum 11-point font.

2. The proposal must include sections a-d below (COSURP Cover Sheet, Abstract, Narrative, and Budget/Justification). Section e (Appendices) is optional.

   a. COSURP Cover Sheet form: (serves as cover letter)
   
   b. Abstract: (one page maximum)
   
   c. Narrative: (five pages maximum). Use the subsection headings shown below.

   i. Background and Rationale: Describe the present situation concerning undergraduate research opportunities in the department and barriers to increased participation.

   ii. Project Plan: Describe the department’s plan to enable and encourage undergraduate students to participate in research with increased numbers and/or more meaningful experiences.

   iii. Project Evaluation: Describe the department’s plan to evaluate the success of the project and how those successes will interface with present undergraduate research activities in the department. Describe how the participating students will be evaluated. Describe how the project’s evaluation will be used to further enhance undergraduate research training and participation in the department. Include metrics that will be tracked.

   iv. Timetable: Provide a brief timeline of project objectives.

   d. Budget and Justification: Recipients may request up to $15,000 for one year beginning Summer or Fall 2023. Allowable expenses are described in Section IV AWARD INFORMATION. Please briefly describe and justify each expense item.

   e. Appendices: Figures and references may be included but must not exceed 3 pages.

3. Submission Instructions:

   a. Submit proposals in .pdf format no later than Tuesday April 04, 2023 to the COS Undergraduate Research Committee (COSURP@odu.edu).

   b. Please use the words “COSURP 2023 Application” in the subject line to ensure delivery.
VII. REVIEW AND SELECTION PROCESS

A. Proposal Review:

1. Proposals will be evaluated by the College of Sciences Undergraduate Research Committee or others as designated by the Dean.

B. Proposal Review Information Criteria:

1. Proposals will be ranked by the review committee according to the following criteria:
   a. Quality of the instruction and/or training provided to undergraduate researchers.
   b. Likelihood that the proposed plan will attract more undergraduate students to be involved in undergraduate research
   c. The proposed plan’s potential to interface with the department’s existing undergraduate research offerings.
   d. Potential and intent for the proposed plan to be ongoing within the undergraduate program past the first 12 months.

2. All proposals are evaluated and ranked on the basis of merit.

3. Preference will be given to departments that are not prior recipients, in order to permit all departments equal opportunity to improve and expand their undergraduate research training and participation.

VIII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award: Notice of COSURP awards will be made on Tuesday April 18, 2023.

B. Obligations of Award Recipients: Departments are responsible for compliance with the COSURP program requirements presented in this document as well as ODU Compliance Regulations.

C. Reporting Requirements:

1. Each department must submit a Final Report by Friday May 31, 2024, to the COS Undergraduate Research Committee. A Post Award Report may be requested for submission by Friday May 30, 2025 to present results of ongoing Undergraduate Research Training and involvement of previously trained students with the department’s undergraduate research offerings, including presentations and materials developed through, and 12 months after, the funding period.

2. On-time reports are expected. If a department feels it cannot meet any of the deadlines above, then it must alert the COSURP beforehand and estimate when the report will be submitted. Chronic failure to submit reports on time will result in a department’s ineligibility for the award the following year.

2. Recipients are expected to acknowledge the support of the Dean’s Office of the College of Sciences when producing documents, publications, and Website announcements/articles, as
a result of this award. The following statement can be used: *This work was supported by the College of Sciences Undergraduate Research Program (COSURP) with a grant from the Dean’s Office, College of Sciences at Old Dominion University, Norfolk, Virginia, USA.*

**COSURP AWARD TIMELINE (2023-2024)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 30, 2023</td>
<td>The call for proposals will be sent via email to all Departments in the College of Sciences.</td>
</tr>
<tr>
<td>April 04, 2023</td>
<td>Deadline for submissions of proposals to the COS Undergraduate Research Committee.</td>
</tr>
<tr>
<td>April 18, 2023</td>
<td>Notification of successful applicants.</td>
</tr>
<tr>
<td>May 15, 2023 – May 14, 2024</td>
<td>Award period (can be somewhat flexible)</td>
</tr>
<tr>
<td>May 31, 2024</td>
<td>Final Report Due to COSURP</td>
</tr>
<tr>
<td>May 30, 2025</td>
<td>Post-Award Report Due to COSURP (if requested by COSURP)</td>
</tr>
</tbody>
</table>

Dated January 20, 2023
[COSURP@odu.edu](mailto:COSURP@odu.edu)

**COSURP 2022-2023**

<table>
<thead>
<tr>
<th>Area</th>
<th>Professor</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOLOGICAL SCIENCES –</strong></td>
<td>Professor David Gauthier</td>
<td><a href="mailto:DGauthie@odu.edu">DGauthie@odu.edu</a></td>
</tr>
<tr>
<td><strong>CHEMISTRY &amp; BIOCHEMISTRY –</strong></td>
<td>Dr. Christopher Freeman</td>
<td><a href="mailto:cjfreema@odu.edu">cjfreema@odu.edu</a></td>
</tr>
<tr>
<td><strong>COMPUTER SCIENCE –</strong></td>
<td>Professor Jing He</td>
<td><a href="mailto:jhe@cs.odu.edu">jhe@cs.odu.edu</a></td>
</tr>
<tr>
<td><strong>MATHEMATICS &amp; STATISTICS –</strong></td>
<td>Professor Xiang Xu</td>
<td><a href="mailto:x2xu@odu.edu">x2xu@odu.edu</a></td>
</tr>
<tr>
<td><strong>OCEAN, EARTH &amp; ATMOSPHERIC SCIENCES</strong></td>
<td>Professor Alexander Bochdansky</td>
<td><a href="mailto:ABochdan@odu.edu">ABochdan@odu.edu</a></td>
</tr>
<tr>
<td><strong>PHYSICS –</strong></td>
<td>Professor Desmond Cook (Chair)</td>
<td><a href="mailto:DCCook@odu.edu">DCCook@odu.edu</a></td>
</tr>
<tr>
<td><strong>PSYCHOLOGY –</strong></td>
<td>Professor Ivan Ash</td>
<td><a href="mailto:IAsh@odu.edu">IAsh@odu.edu</a></td>
</tr>
</tbody>
</table>
Title:

Submitting Department:

Amount Requested:

I agree to support and implement the attached COSURP proposal if awarded.

Undergraduate Program Director

   Comments:

   ____________________________   ____________________________   ___________
   Name     Signature    Date

Department Chair

   Comments:

   ____________________________   ____________________________   ___________
   Name     Signature    Date