Curca
Center for Undergraduate Research
and Creative Activities

Reach: Research-Enriched Academic Challenge

An undergraduate research program at SIU Carbondale

Purpose: To support original research and/or creative activities by undergraduates working with a faculty sponsor.
CONTACTS

- REACH E-mail Address: reach@siu.edu
- REACH website for application packet & link to online application system: http://reach.siu.edu/awards.html
- Online application system: https://online.siu.edu
REACH AWARD (http://reach.siu.edu/)

Apply online only:
  Opens: December 1, 2013, 12:01 a.m.
  Closes: January 31, 2014, 11:59 p.m.

Award activities carried out between
  July 1, 2014 and June 30, 2015

Stipend available after July 1, 2014, and must be spent before
  June 30, 2015

Undergraduate Assistantship: mid-August 2014 through
  mid-May 2015: $10/hour, 10 hours/week

Progress Report: end of fall semester

Financial Report: last Friday of February of funding year

Research Forum: Poster presentation in March/April 2015

Final Report: Due late April/early May 2015
SUSTAINABILITY REACH AWARDS

- Potential for REACH awards funded in part by the Sustainability Council for sustainability-related projects
- Sustainability projects from all disciplines are welcome and encouraged
- Could be focused on SIU Carbondale campus sustainability or broader sustainability topics
- See sustainability definition in application packet
KEY COMPONENTS TO SUCCESSFUL APPLICATION

- FACULTY MENTOR
  - Able to advise and assist in directing your project
  - Consult your mentor at the beginning of and throughout application preparation for guidance and feedback

- SOLID RESEARCH QUESTION OR CREATIVE CONCEPT
  - Manageable in project award period

- FOLLOW APPLICATION INSTRUCTIONS
ELIGIBILITY

- Must be a current full-time SIU Carbondale degree-seeking undergraduate in any SIU Carbondale major at time of application

- **GPA: minimum of 2.5**

- Must be enrolled as full-time SIU Carbondale undergraduate during the 2014-2015 academic year for the project award period

- Past recipients are not eligible to apply
DEADLINE

- FRIDAY, JANUARY 31, 2014 at 11:59 p.m.

**ELECTRONIC APPLICATIONS ONLY:**

- Online Application system is accessible beginning at 12:01 a.m. on December 1, 2013 at [https://online.siu.edu](https://online.siu.edu)
- Closes at 11:59 p.m. on Friday, January 31, 2014

- Paper Applications will NOT be accepted
- No Application Accepted after Deadline
- REACH contacts available until 4:30 p.m. on January 31, 2014, if you have problems with online application system
STEPS for ONLINE APPLICATION

- Download & complete fillable application package from REACH website - [http://reach.siu.edu/index.html](http://reach.siu.edu/index.html)
- Submit through SIU Online - [https://online.siu.edu](https://online.siu.edu)
- Application must be submitted as a SINGLE PDF document
- Contact REACH if you need assistance in merging all of your application parts into one file
- See next slide for step-by-step instructions
STEPS for ONLINE APPLICATION

To submit an application for the 2014 REACH Award Competition, visit [https://online.siu.edu](https://online.siu.edu) and follow the steps below.

- Log into the system using your Network ID (SIU85xxxxxxxx) and your Network Password.
- Once you are logged in, in the Quick Links box on the right side of the page, click on **Self Register for Special Activities**.
- Click on **REACH 2014**.
- Step 1: View Course Offering Information – click on **Register**.
- Step 2: Enter Registration Information – your information should pre-populate, so click on **Submit**.
- Step 3: Confirmation – click on **Finish**.
- Registration Summary – click on **Go to Course Offering REACH 2014**.
- You are now in the Course Home Page for REACH 2014. Read the **Introduction**, **Application Instructions**, **Formatting Guidelines** and **Submission Instructions** news items in the Course news section in the middle of the page. Proceed with application submission when your application components are complete.
Complete Application Package

I. Cover sheet
II. Abstract (300 words)
III. Project Description (2 pages)
IV. Literature Cited (1 page)
V. Itemized Budget & Budget Justification (1 page)
VI. Resume (1 page)
VII. Transcript (Unofficial from SalukiNet)
VIII. Faculty Recommendation Form and Letter (NOT UPLOADED BY STUDENT)
Special Instructions for Team Projects

- Additional Requirements:
  - Team Leadership Plan – see team application instructions
  - Cover sheet, Transcript, Mentor Recommendation & Resume for each team member
  - Assistantship
    - Must work with faculty sponsor to determine number proposed and why each is needed, based on amount of effort
    - Must be included in the Team Leadership Plan
    - Undergraduate Advisory Committee makes final decision on number awarded to a team project
  - Budget
    - Up to $1,500 for total project expenses
    - Up to $600 for student conference travel (one student or split among team)
    - May request additional funds – determined on case-by-case basis and if funding is available

- The Team Leadership Plan should be added to single pdf and uploaded with the rest of the application package.
Application Tips

- **REMEMBER THIS:** The review committee consists of individuals from a variety of academic disciplines, and not necessarily in your field of study; avoid buzz words and identify acronyms!

- Follow formatting instructions:
  - Last Name & Page Numbers in upper-right hand corner
  - 10-pt font minimum, 1” margins
  - Label each section of the Project Description with the letters and section titles indicated!
  - Follow page limits
  - No attachments or appendices!
ABSTRACT

- Must be written to an educated but lay audience
- Should contain no technical language or jargon
- Maximum of 300 words
- Should be understandable to anyone who can read the NY Times
- Should briefly describe project objectives and expected results
PROJECT DESCRIPTION

- Can only be two (2) pages long!!!
- Consists of six components
  A. Background and Context
  B. Statement of Significance and Impact
  C. Statement of Project Objectives
  D. Methods/Procedures/Materials
  E. Outcomes
  F. Role of Faculty Sponsor
A. BACKGROUND AND CONTEXT

- Explain the present state of knowledge in the field.
- Use citations of pertinent literature.

MAKE IT CLEAR: Why you want to do this project and why it needs to be undertaken to fill a gap in knowledge.
Background and Context - EXAMPLES

- **Not good:** The movie on the Discovery channel said that no one knows what society occupied the area after the Maya civilization collapsed.

- **Better:** After the collapse of Maya civilization in the tenth century, the northern part of Guatemala known as Peten was nearly depopulated until Hernan Cortes marched through in 1524. Cortes reported meeting with the leaders of a group known as Itza, who lived in large cities around a lake. But, who were the Itza? And how long had they lived in Peten?

- **Best:** Although it has long been believed that the Maya “heartland” of northern Guatemala was depopulated after the Classic Maya collapse (Culbert 1977; Thompson 1960), recent archaeological research (Chase 1985; Smith and Smith 1990) has revealed substantial settlement in the Peten lakes area dating from the eleventh through seventeenth centuries....
B. STATEMENT OF SIGNIFICANCE AND IMPACT

- Explain the significance and impact of your project to:
  - The “Big Picture” or “Greater Good”  OR
  - Other research in your lab  OR
  - Other research in your field  OR
  - The enrichment of our cultural and aesthetic heritage

- Answer the question: WHO CARES?

- BOTTOM LINE: Tell us why we should fund your project!
C. STATEMENT OF PROJECT OBJECTIVES

- State the research problem/questions or creative concept to be addressed.
- Must convince the reader that you are prepared to carry out a specific, well-designed, original project.
Statement of Project Objectives – EXAMPLES

- **Unacceptable**: My goal is to finish my degree and get a job. [Note: Although this is a great personal goal, it is not a statement of a research objective!]

- **Not good**: My goal is to write a book.

- **Better**: The goal of this project is to write a book about animals working together on a farm.

- **Best**: The goal of this project is to write a book about the corruption of political power in an ideal community, using animals working collectively on a farm as an analog for human behavior. The book will be a commentary on how the good intentions of communism get corrupted and ....
D. METHODS/PROCEDURES/MATERIALS

- Describe your plan of work.
- Be specific!
- A timeline is required in this section!

TIP: Think this through thoroughly; talk with your mentor!
Methods/Procedures/Materials - EXAMPLES

- **Not good:** I will work in my sponsor’s laboratory.

- **Better:** My sponsor is an expert in gene sequencing, and my project involves this technology.

- **Best:** Because I am looking for the gene(s) in poison ivy that determine(s) the plant’s toxicity to humans, I will be using my sponsor’s gene-sequencer in my project. I will spend the first two weeks of my project collecting samples from Jackson County, then the next two weeks preparing samples for analysis using the XYZ method ..... The remaining four weeks will be spent doing the sequencing....
E. OUTCOMES

- In 3-4 sentences, explain what you think you will find at the end of your data collection & analysis.
- What are your expected results?
- What are your general conclusions if the data support your hypothesis?
- How will you interpret your results if they are not what you expect?
- For creative projects, what is your product?
  - Art show
  - Painting
  - Collection of literary work
F. ROLE OF FACULTY SPONSOR

- Explain how you will interact with your faculty sponsor during the project period.

**KEY HERE:** Include the involvement of your mentor in your project direction/design.
Role of Faculty Sponsor - EXAMPLES

- **Not good**: My sponsor will help me perform the research.

- **Better**: My sponsor will guide my initial literature search and help me set up my model.

- **Best**: My sponsor guided my initial literature search by providing a list of basic books and articles I needed to read. I will be responsible for developing a larger bibliography, and will meet weekly with my sponsor to discuss my readings. I will propose a method to model the economic structure that will then be critiqued by my sponsor based on her research experience. While the final form of the model will reflect both my work and the recommendations of my sponsor, I will perform all computer simulations and write up all the findings.
SIX MORE PARTS OF THE APPLICATION

IV. Literature Cited
V. Itemized Budget And Budget Justification
VI. Resume
VII. Unofficial Transcript
VIII. Faculty Mentor Form & Letter
IX. Checklist
IV. LITERATURE CITED

- One page

- Bibliography or works cited page of the sources cited in the Project Description.

**BE SURE:** It is thorough and current, includes the seminal work in the field.
V. ITEMIZED BUDGET AND BUDGET JUSTIFICATION

- One page
- How will the money be used?
- Be specific!!!!!

- Award may be used to:
  - Purchase supplies
  - Pay for student travel expenses associated with research
  - Contract for services
  - Student travel to professional conferences (up to $600)

- You must prepare a budget justification section, which should include an explanation and justification of each item in your budget.
You may NOT use the award for:
- Salary or wages for yourself, faculty sponsor or other personnel
- Computer or computer-related equipment
- Gift cards

Avoid inclusion of readily available office supplies, standard books, general use software.

**NOTE:** All commodities and equipment will remain at SIU Carbondale when the project is completed.

**TIP:** Use this extra page as an opportunity to give the reader more information about your project from the financial standpoint.
**Itemized Budget & Justification – EXAMPLES**

- **Unacceptable**: Part of the money will be used for books, and the rest will be used for lab supplies.

- **Good**:  
  $800: reimbursement of survey participants  
  $100: photocopying, photography  
  $300: travel  
  $300: computer software  

**Budget Justification**: The majority of the funds, $800, will be used to reimburse the survey participants for their time ($20 x 40 participants). $100 will cover the cost of survey preparation (xeroxing, color pictures, etc.). $300 is needed for transportation to and from the interview meeting locations. Computer analysis of data and final report production requires the purchase of Metaverse 4.0, at $300.
VI. RESUME

- One page
- Highlight any previous experience that would be helpful in completing your research/creative project.
- You may include a personal statement that explains any discrepancies or special circumstances in your experience, background or transcript.
VII. CURRENT UNOFFICIAL TRANSCRIPT

- Download unofficial transcript from SalukiNet.
- Preferred method: Save website files to your computer, then right-click to convert to PDF document. Other option: Copy/Paste into a Word document.
- Merge into your SINGLE application PDF document.
- GPA and grades in related classes are important. The review committee will review your grades, particularly in classes related to your project.
VIII. FACULTY RECOMMENDATION
FORM & LETTER

- Mentor must complete and sign recommendation form plus write letter of recommendation.
- Letter MUST address five areas described on the form, especially confirming that applicant has skills necessary to complete project.
- Make sure to call your mentor’s attention to the five criteria for the letter and the deadline.
- Mentor should print, sign, scan and email letter and form directly to reach@siu.edu.
IX. CHECKLIST

- After completing all of the parts of your application, confirm that you have followed all of the guidelines listed in the checklist.

- After uploading your application as a SINGLE PDF document into the REACH course in SIU Online, mark each box as completed and submit. Remember: Do not include the faculty recommendation form and letter in the single pdf you upload.

- Failure to follow guidelines may disqualify your application!
FINAL SUGGESTIONS

- Don’t procrastinate!
- If you bring your application in early, someone will check over it to make sure it is correctly formatted and packaged.
- Email REACH at reach@siu.edu to arrange a review of a draft of your application prior to submission if you are interested in doing so. Please provide at least one week in advance of the deadline.
Compliances

- If you are working with Human Subjects or vertebrate animals in your research, you must file paperwork with the University’s IRB or Animal Care Review and obtain approval before initiating research.

- Not needed before you apply, but approval must be received before you can start your project and have access to your REACH funds.
The SIUC Institutional Animal Care and Use Committee (IACUC) was formed to establish and enforce ethical, humane guidelines for the use of live animals in research at the University. The committee reviews all protocols involving the use of vertebrate animals for training, research, and testing to assure compliance with humane standards and federal regulations.

IACUC website:  http://iacuc.siu.edu/ &
http://ospa.siu.edu/compliance/animal-research.html

Contact Karen Rowland for more information: karowgo@siu.edu.
Human Subjects

- The U.S. Dept. of Health and Human Services requires that all research projects involving human subjects be screened to confirm that the subjects' rights, privacy, welfare, and civil liberties are protected. Human subjects are living individuals about whom an investigator obtains (a) data by intervention or interaction with the individual, or (b) identifiable private information. The private information may include the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens.

- The SIUC Human Subjects Committee is responsible for reviewing all human-subjects research projects conducted by individuals affiliated with SIUC, including students. This review protects not only the human subjects involved in a research project, but also the researcher and, by extension, the University. To submit a project for review, first familiarize yourself with the committee procedures and the Human Subjects Guide. Then fill out and submit a Human Subjects Research Application. No research involving human subjects should be conducted prior to receiving committee approval.

- Contact Karen Rowland for more information: karowgo@siu.edu.