# SCIENCE RESEARCH DISTINCTION, CERTIFICATE

Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

## **Program Description**

The certificate will provide an incentive for students to write a thesis based on an independent research project. Students may be entered into the certificate program upon identification of a research mentor. Members of the graduate faculty are eligible to be mentors. Emeritus faculty or non-tenure track faculty members may serve as mentors, subject to approval by the Associate Dean for Undergraduate Education. Students must engage in research activities over the course of at least 3 semesters or 2 semesters and a summer. Theses must be approved by the research mentor, a reader who is a faculty member eligible to serve as a research mentor, and the Department Head or Director of Undergraduate Studies of a unit within ECoS unless the department has a specific alternative policy in place for thesis approval. The schedule for submission of theses will be the same as Schreyer Honors Theses. Honors students cannot use a single thesis to earn both the distinction of honors and a Research Distinction Certificate but may earn both distinctions by production of independent theses.

#### What is Science Research Distinction?

The Science Research Distinction program is available to students who are interested in working on an independent research project under the supervision of a faculty mentor, and documenting the results of their work in a research thesis.

#### You Might Like This Program If...

- · You are passionate about research in your field of study.
- You want to design your own research project with the help of a faculty mentor.
- · You plan to go to graduate school.
- · Your career path requires you to develop strong lab/field skills.
- You want to write a thesis as a summary of your research accomplishments.

# **Program Requirements**

**BIOL 496** 

**BMB 488** 

**BMB 496** 

To earn an undergraduate certificate in Science Research Distinction, a minimum of 7 credits is required.

Code	itte	Creaits
<b>Prescribed Cours</b>	ees	
SC 494	Research Project Courses (section 002 in semester that thesis is approved)	1
Select 6 credits in from the following	n independent research in Eberly College of Scien g:	ce 6
ASTRO 296	Independent Studies	
ASTRO 496	Independent Studies	
BIOL 296	Independent Studies	

Communities of Practice in Biochemistry and

Independent Studies

Molecular Biology

Independent Studies

CHEM 294	Special Problems and Research
CHEM 494	Chemical Research
FRNSC 496	Independent Studies
MATH 296	Independent Studies
MATH 496	Independent Studies
PHYS 296	Independent Studies
PHYS 496	Independent Studies
STAT 496	Independent Studies

# **Certificate Learning Objectives**

- Graduates will be able to communicate their research methods, analysis, and conclusions in written format.
- Graduates will be able to identify and interrupt concepts related to their thesis research from the primary scientific literature.
- Graduates will be able explain in written format how their research fits into the context of their field.

## **Academic Advising**

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

#### **University Park**

Tomalei Vess

Director, Office of Science Engagement 111 Ritenour Building University Park, PA 16802 814-865-5000 tjv4@psu.edu

### **Career Paths**

Completion of this program enhances career and graduate school opportunities for students in all disciplines. Students will be able to build a strong resume, and be better prepared for graduate school.

### **Contact**

#### **University Park**

OFFICE OF SCIENCE ENGAGEMENT 124 Ritenour Building University Park, PA 16802 814-865-5000 tjv4@psu.edu

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https://science.psu.edu/current-students/undergraduate-research/scires-certificate-program (https://science.psu.edu/current-students/undergraduate-research/scires-certificate-program/)