

CAPSTONE Info sheet

Course title: AS.420.800 - Research Design for Capstone Projects in Energy and Environmental Sciences.

Important:

If you are doing capstone later this year, then read this information NOW and do not wait. All EPC students are required to complete the capstone course. However, if you are an ESP student, then the capstone course is an optional elective for you.

The capstone course is completed in one semester, however, there is a preparatory period. <u>The semester before you enter capstone</u> is the semester that you narrow down your topic idea, choose your mentor, and write your capstone proposal. All of these are important milestones to the process.

Required proposal development workshop session:

Twoproposal development workshop sessions will be offered each year: one in October (for the Spring semester capstone projects) and one in June (for the Fall semester capstone projects). Please watch for invitations to these events. Capstone students are required to attend one of these before starting their capstone semester.

What to research:

During the Capstone project, students engage in research and apply the multidisciplinary knowledge that they acquired during their program of study to a real-world question focused on energy and climate issues (for EPC) and environmental, sustainability, and conservation, etc. issues (for ESP).

Some students choose to work individually. Some choose to work in a small team on a project sponsored and mentored by an external entity, such as a governmental agency or not-for-profit group or a JHU faculty member. These projects result in a deliverable, such as a written report, and a formal presentation of research results to both the external entity and faculty.

Need ideas?

Feel free to check out what others have done for their capstones in the past! This can give you ideas about what is possible. Here is the <u>link to the capstones</u> in the JHU Library. Make sure you click on "Energy Policy and Climate" if you are in the EPC program and "Environmental Sciences and Policy" if you are in the ESP program.

How to register...

Instructor permission is required in order to register for capstone, as a project proposal needs to be developed the semester before the course is taken. Please read through the Capstone Guidelines below and reach out to the course instructor, Dr. Daniel Zachary (d.s.zachary@jhu.edu).

Capstone guidelines:

The Capstone Project PDF is the first document you should read through when preparing for your capstone, as it contains all of the important information and dates. Please reach out to the EPC program director, Dan Zachary (d.s.zachary@jhu.edu), to get the most recent Capstone Project PDF.

You will want to make sure you format the final Capstone report correctly. For the capstone format guidelines, title page example, and helpful reminders for the JScholarship (JHU online library) instructions, check out the <u>formatting</u> <u>guidelines</u> on the library's website.

Finally, you will need to submit the Non-Exclusive Deposit Agreement. This gives

us permission to post your completed report in the library repository at the end of the semester when you are finished with your work. Please request the Non-Exclusive Deposit Agreement from the EPC program director, Dan Zachary (<u>d.s.zachary@jhu.edu</u>).

Choosing a mentor:

The semester before you begin your capstone, you will need to select someone to serve as your research mentor for the process. The person serves as your research advisor and helps to guide you and advise you along the way. They will read, review, and make suggestions on your initial proposal and your final capstone draft. It is important that you choose someone who is familiar with your topic area, the research process, and who has at least a Masters degree. This person can be a JHU faculty member, a faculty member from another institution, a person at your professional organization, or an expert in the field.

Once you have identified a mentor, please reach out to Dr. Dan Zachary (<u>d.s.zachary@jhu.edu</u>), the capstone instructor, for the Mentor Agreement Form. You will also send the mentor name and contact information to Nicole Cosey (<u>ncosey1@jhu.edu</u>).

Testing on human subjects and animals:

If your research involves any humans, such as survey research or interviews, then please talk with Dr. Zachary (<u>d.s.zachary@jhu.edu</u>) and your mentor. You will need to seek the appropriate level of IRB approval for your study.

Electronic Homewood Institutional Review Board (eHIRB).

Users should log in using their JHED ID and password. Logging on once automatically creates an account.

- Please complete the CITI Program Training. All individuals engaged in human participant research at JHU Homewood are required to

completed CITI training every 5 years. Affiliate with JHU directly <u>through</u> <u>CITI</u>.

- Please take the <u>CITI training here</u>.
- <u>Animal Rights information</u> (if applicable). No waiver is needed to be signed, but if animal research is involved, the US Code should be reviewed.