

UAH HONORS COLLEGE

**DECODING THE
HONORS
CAPSTONE**

WHAT IS THE CAPSTONE?

CAPSTONE is an umbrella term

It could be more like a *thesis* (a thoroughly research term paper with your own arguments/interpretations included)

or

a *project* (a well-developed and documented lab report with original data and analysis)

or

a *creative project* (collection of original art work with commentary, description of development, etc.)

WHAT IS THE CAPSTONE?

Normally the term “capstone” suggests the final part of a program of study

For Honors, NOT necessarily so, but it...

Could be part of...

Senior Design or Major Capstone required for your major (don't worry that doesn't mean you have to do twice the work)

Could be...

Something you did for a project-based class which you decide to develop further (paper or project)

WHAT IS THE CAPSTONE?

Could be...

Something you did as part of summer research project, a co-op or internship, or study abroad

Could be...

Something you did as part an academic club

Could be...

A LOT of things...so don't be afraid to ask

Hopefully, it will be...

Something that you enjoy.

That will make the work more rewarding and less of a chore!

WHAT IS THE CAPSTONE?

It DOESN'T have to be...

- *In your major
- *Done during your senior year
- *Your own idea (but has to be your own work)

MOST Honors students find their capstone *organically*...

The things that you do as an Honors student will lead you
toward the Capstone

(contracting classes, academic clubs, research, internships,
Study Abroad)

STEPS TOWARD THE CAPSTONE

1. Think about it. Look at your class schedule, think about how you're planning on spending your summers. DO SOME RESEARCH. Go to poster sessions. Meet with Dave Cook.

2. Find a Project Director

They are the most important part of the Capstone

–Help you define the scope of the capstone

-Give you guidance and check your work

-Sign off on the final product

(Ideally, they will be the instructor of your Capstone Class)

The PD should be a PhD, UAH or elsewhere, if you have any questions ask early. We're definitely willing to work with you.

STEPS TOWARD THE CAPSTONE

3. Determine which class will be the Capstone Course (must be 300-400 level and at least 3 credits)
 - Ideally, you can use a course that you already need for your major (keep within the block tuition)
 - Can be retroactive (course you took already)
 - Ideally, your PD will be the instructor of the course

IF THERE IS NO COURSE as above, you can use HON499

Which class to use for the Capstone can be confusing, so if you have questions, please meet with Dave Cook to clarify.

WHAT IS HON499?

HON499 is NOT required for the capstone. It's a "placeholder class" if a class like described in #3 is not available.

- Let Nicole know when you are taking it and she will create a section for you
- HON499 isn't a scheduled class and doesn't meet regularly (but you should meet/communicate regularly with your PD)
- HON499 is graded S or U based on your PROGRESS, not the final project.
- You do NOT have to complete the Capstone in the semester that you take HON499 (or any capstone class), but you should keep in contact with your PD for guidance and final approval.
- If it's within the block tuition, you don't need to pay extra

STEPS TOWARD THE CAPSTONE

4. With your PD, come up with a title and general description of what you will be doing (these can change a little, but not a LOT). Make sure there are no surprises for the PD so that the proposal is approved.

5. Fill out the online Capstone Proposal Form

-Class/Semester

-Project Director

-Title

-Description

Fill out the form CAREFULLY. Typos or incorrect info may mean the form will not progress through the approval process

STEPS TOWARD THE CAPSTONE

The Capstone Proposal Form is due no later than the 10th day of classes in the semester in which you take the class.

Once everyone has approved it, you should receive an e-mail saying so. If someone declines it, you'll need to make the correction(s) and REFILE the form.

Once everyone has approved the form, you don't need to do anything else, except work on your Capstone with your PD.

The Capstone is due on the **LAST DAY STUDY DAY IN THE SEMESTER YOU GRADUATE**

STEPS TOWARD THE CAPSTONE

Questions?

FUNDED OPPORTUNITIES @UAH

The Research and Creative Experience for Undergraduates (RCEU) Program

- Open to all FT UAH students. Apply in Fall Semester through Charger Path
- Selections made in Spring
- Students work with Faculty/Research Staff for 10 weeks during the summer as stipend employee, professional development, fall poster session (encouraged to submit to *Perpetua*)
- Participants CANNOT take a UAH Class during the 10-week semester OR work for UAH in any capacity during the summer.

The Honors Capstone Research Summer Program

- Same as above, but for Honors Students only

OTHER OPPORTUNITIES AT UAH

Your Capstone can also be based on other UAH Programs & Classes

- Senior Design and Capstone Classes required for your major (don't need to do 2 capstones!)
 - You can't hand in the same thing non-honors students hand in for the major capstone as the Honors Capstone
 - Before the class starts work with the instructor (as your PD) to do some extended work on the project
 - Group projects are possible with advanced approval
 - The enhanced project will serve as your Capstone(s)

This can possibly work for any project-based class. ASK.

OTHER OPPORTUNITIES AT UAH

Especially for MAE Majors

- **HON401 Supplement for MAE 490-491 SENIOR DESIGN**
 - Sign up for Senior Design as usual
 - In the first 6 weeks of 490, you'll develop a proposal. You will get feedback and have until the 8th week to get it approved.
 - If the proposal is not approved, you cannot take HON401
 - With an approved proposal, take HON401 (1 credit) with MAE 491 (3 credits). You earn 4 Honors credits.
 - Your final project will also be your Capstone

OTHER OPPORTUNITIES AT UAH

Your Capstone can also be based on other UAH Programs & Classes

- Case Study/Project-based classes
- Independent Study Class
- Study Abroad Classes
- Project-based Academic Club Activities
- Voluntary research position with faculty or researcher

As mentioned before, you WILL HAVE TO do some extended work for the Capstone if it's part of a class project

OTHER OPPORTUNITIES ELSEWHERE

**Your Capstone can also be based on programs
OUTSIDE of UAH...**

- **National Science Foundation (NSF) Research Experience for Undergraduates (REU): Sites and Supplements, Offered USA-wide**
- **HudsonAlpha BIOTRAIN (Huntsville): biology, chemistry, graphic arts, science ed., economics, marketing, communications**
- **National Institute of Standards and Technology (NIST) Summer Undergraduate Research Fellowship (SURF) Program: chemistry, computer science, engineering, materials science, nanotechnology, information technology, mathematics, biology, or other STEM discipline**
- **Amgen Scholars Program: Summer Undergraduate Research Opportunities In Science & Biotechnology**
- **NASA DEVELOP (Huntsville): Paid research internship open to all majors (Su, F, Sp); NASA Space Flight Center Internships**

GENERAL ADVICE

1. Meet with Dave Cook early on (end of sophomore or beginning of Junior year). Start thinking about a plan. I suggest, one semester to plan, one to do the work, one to write up and submit.

2. Go to any posters sessions held on campus
Fall: Summer Community of Scholars
Spring: Research Horizons

3. Talk to other Honors students currently doing research or working on their Capstone

4. Research Faculty and Research Staff CVs
If you find someone interesting go and talk to them about their research and about Honors