

# College of Science

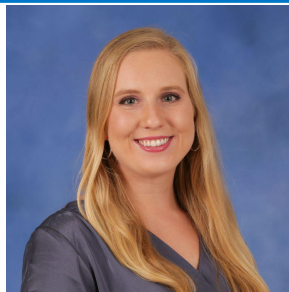
## The Spirit of Discovery



# College of Science Advising



**Jennifer Bradley**



**Kristin Hawthorne**



**Morgan Lewis**



**Jenny Harvard**



**Matthew Wilson**



# Director of Academic Advising

## **M.S. Education Psychology**

University of Wisconsin-Milwaukee

## **B.S. Zoology**

University of Wisconsin-Madison

- Originally from Minnesota
- Former school counselor
- Enjoys spending time with her family and pets, running, pilates, cooking, traveling, and listening to podcasts in between dancing to Hall and Oates and other amazing 80s music



**Jennifer Bradley**



# Freshman Cohort Advisor



**Jenny Harvard**

## **M.Ed. Secondary Education**

University of Montevallo

## **B.S. History**

University of Montevallo

- Former high school and college teacher
- Jenny is married with three young children and the whole family is proud to now be UAH Charger superfans!



# Sophomore Cohort Advisor

## **M.S. College Student Affairs**

Nova Southeastern University

## **B.S. Accounting**

Nova Southeastern University

- Originally from Homewood, AL, but has spent the past 5 years in Fort Lauderdale, FL
- Enjoys spending time with friends, family, and her two kittens, Henry and Margo. She likes filling her weekends with trips to the lake or new places. Kristin also enjoys staying active with hiking and working out but never says no to ice cream.



**Kristin Hawthorne**



# Junior Cohort Advisor



**Morgan Lewis**  
Junior Cohort Advisor

## **M.S. Biological Sciences**

University of Alabama in Huntsville

## **B.S. Biological Sciences**

University of Georgia

- UAH Science Advisor since 1998!!
- Spent a year at Manomet Bird Observatory near Cape Cod in Massachusetts.
- Has coached youth gymnastics for 25+ years, plays hockey in a local co-ed league, and of course, is an avid UAH hockey fan.



# Senior Cohort Advisor

## **M.S. College Student Personnel**

Arkansas Tech University

## **B.A. History**

University of Alabama in Huntsville

- UAH Cross-Country, Indoor/Outdoor Track alum.
- Previously worked as a Senior Records Coordinator in the UAH Office of the Registrar auditing and awarding degrees for students in the College of Engineering and the College of Science.
- Enjoys spending time with his family, running, writing songs on guitar, and performing music around town.



**Matthew Wilson**



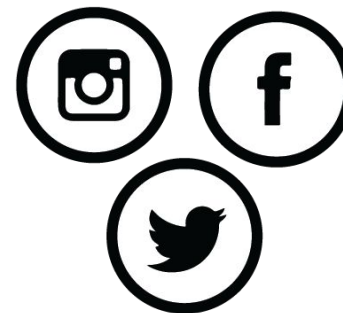
# Get In Touch With Us

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Science.Outreach@uah.edu

Science.Advising@uah.edu



@UAHscience





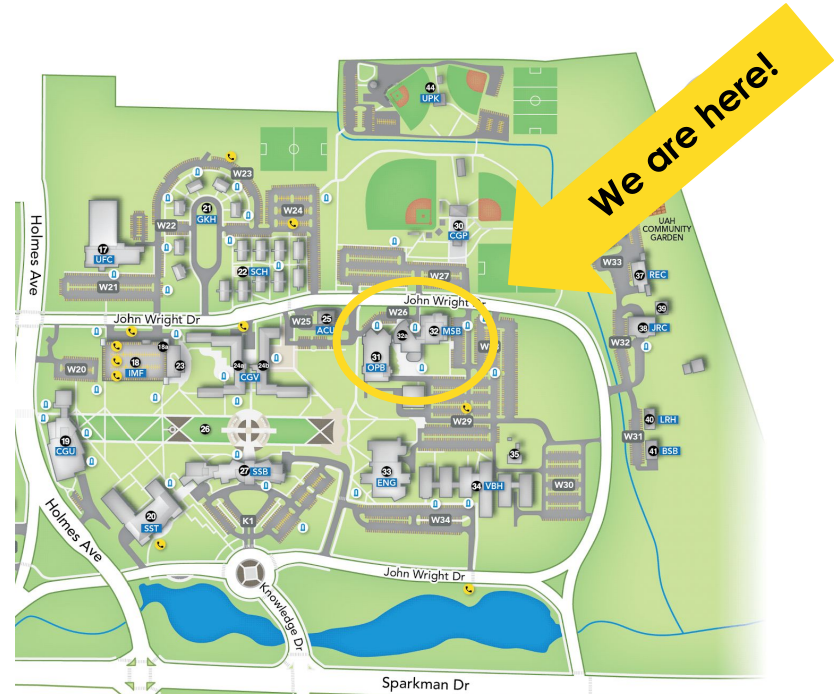
# Get In Touch With Us



256.824.2505



Materials Science Building



# What is Academic Advising?

Academic Advisors help with....

- Understanding your major, minor, concentration, and degree plan
- Choosing courses for each semester
- Course registration
- Creating a long range plan to stay on track to graduate
- Connecting you to resources such as the Office of Financial Aid, or Career Services
- Anything else you want to chat about!



# College of Science Degrees

**Overall requirements: 128 total credit hours & 2.0+ GPA to graduate**

## **Major: Your degree**

- Ex: Bachelor of Science in Biological Sciences

## **Minor: Courses that supplement or enhance your major/degree, if desired**

- Computer Science students take one additional math course to earn a Math minor
- Some Biology majors add a Chemistry minor because a Biology degree requires Chemistry courses
- If you have an interest in writing, add a Writing minor!

## **Concentration: A specific area of interest within your major**

- Ex: Bachelor of Science in Computer Science with a Entertainment Computing concentration
- Some degrees require concentrations, some do not

## **Charger Foundations: Common courses all UAH students have to take**

- Includes: Literature, History, Speech, Lab Sciences, and Social Science courses such as Psychology

## **Electives: Courses you take to reach your 128 credit hours.**

- Courses such as: yoga, kickboxing, music lessons, or any other course that is not part of your major, minor, or concentration



# College of Science Degree Programs

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- B.S. in Biological Sciences
- B.S. in Chemistry
- B.S. in Computer Science
- B.S. in Earth System Science
- B.S. in Mathematical Sciences
- B.S. in Physics



# Atmospheric & Earth Science Majors

## Concentration choices:

*A concentration is required.*

- [Atmospheric Science/Meteorology \(ATS\)](#)  
ESS major, with a concentration in Atmospheric Science/Meteorology
- [Geographic Information Systems \(GIS\) & Remote Sensing](#)  
ESS major, with a concentration in GIS & Remote sensing
- [Human Dimensions - Societal Impacts \(HDSI\)](#)  
ESS major, with a concentration in Human Dimensions/Societal impacts

## Career options upon graduation:

*This is not a comprehensive list.*

- Air Quality monitoring & control
- Climatology
- Ecosystem monitoring & restoration
- Emergency Management
- Energy Management & Analysis
- Environmental Policy
- Geographic Information Systems
- Hydrology
- Meteorology
- Public Planning
- ....and many more!



# Biological Sciences Majors

## Concentration choices:

A concentration is not required.

- [Biological Science](#)
- [Biochemistry](#)  
Biology major & Chemistry minor
- [Pre-Professional Health careers](#)  
Biology major & Chemistry minor  
*For students interested in Medical school, Dental school, Pharmacy, and Vet school.*
- [Ecology & Evolution](#)
- [Microbiology](#)  
Biology major & Chemistry minor
- [Secondary Education](#)  
High school Biology teacher

## Career options upon graduation:

*This is not a comprehensive list.*

- Healthcare: Medical, Dental, Pharmacy, Optometry, Veterinary schools
- Biotechnology
- Computational Biology
- Conservation
- Ecology
- Education
- Epidemiology
- Forensics
- Genetics
- Medicine
- Microbiology
- ....and many more!



# Biological Sciences Tips & Tricks

Biology and Chemistry courses go hand in hand.  
There is Chemistry in Biology and Biology in Chemistry.

If you haven't taken a Chemistry course since sophomore year of high school, take Intro to Chemistry class and lab, **CH 101 + CH 105**.

General Chemistry I class and lab, **CH 121 + CH 125**, moves at a fast pace. You're expected to have some prior Chemistry knowledge prior to this course.

**Remember: It's better to do well in a course that is a review and/or moves at a slower pace your first semester of college then it is to take on too much and be anxious about maintaining your GPA for your scholarship.**



# Chemistry Majors

## Concentration choices:

A concentration is required.

- [Basic Chemistry](#)

- [Biochemistry](#)

*The majority of Chemistry students are Biochemistry majors.*

- [Chemical Business](#)

- [Chemical Physics](#)

- [Environmental Chemistry](#)

- [Pure Chemistry](#)

- [Secondary Education](#)

## Career options upon graduation:

*This is not a comprehensive list.*

- Healthcare: Medical, Dental, Pharmacy schools
- Analytical Chemistry
- Biotechnology
- Clinical Lab Science
- Education
- Environmental Monitoring
- Epidemiology
- Forensics
- Industrial Chemistry
- Polymer Chemistry
- ....and many more!





# Computer Science Majors

## Concentration choices:

A concentration is not required.

- [Computer Science](#)
- [Entertainment Computing](#)  
CS major with a focus in gaming and entertainment
- [Data Science](#)  
CS major with an interest in analyzing and computing large quantities of data
- [Web Programming](#)  
CS major with a focus in building web pages and UIs

## Career options upon graduation:

*This is not a comprehensive list.*

- App Development
- Bioinformatics
- Computer Forensics
- Cybersecurity
- Data Science
- Game Design/Development
- Modeling & Simulation
- Software Development
- Software Engineering
- Systems Analyst
- Web Development
- ....and many more!



# Computer Science Cybersecurity

If you are interested in Cybersecurity, there are recommended sequences of courses so you are well-versed in cybersecurity upon graduation.

## Intensive Cybersecurity Schedule - 12 hours (9+ hours from Group A, any remaining from Group B):

### Group A:

- CS 370 Introduction to Computer Networks
- CS 465 Network Security
- CS 480 Mobile Digital Forensics
- CS 485 Computer and Software Security

### Group B:

- CS 454 Introduction to Cloud Computing
- CS 453 Client/Server Architectures (Web Programming and Middleware)
- CS 487 Database Systems
- IS 401 Survey of Information Assurance

There are some advantages to a general Computer Science degree, it can be more versatile than a more specific degree, and can swap between fields more easily if your plans change.



# Computer Science Tips & Tricks

**Many students choose a Computer Science major with a minor in Game Design & Development, instead of Entertainment computing. The Game Design minor provides in-depth game design skills taught by visual and graphic artists.** If you're interested in game design, take ARS 160 Intro to Drawing in the fall of your first semester.

## Game Design & Development minor - 30 hours:

### **Game Computing**

CS 102 Intro to C Programming  
or CS 103 Intro to JAVA Programming  
CS 121 Computer Science I  
CS 347 Intro to Video Game Design

### **Game Animation**

ARS 220 Intro to Animation  
and 2 of the following: ARS 321 Organic Modeling, ARS 327 Visual Story Development, ARS 425 Short Film I

### **Game sound**

MU 305 or 306, Music Technology

### **Game design**

ARS 210 Game Design Intro  
EH 301 Technical writing  
or EH 442 Usability Studies  
or EH 454 New Media Writing & Rhetoric  
ARS 415 Animation: Team Game Design



# Computer Science Tips & Tricks

## AP Credit FAQ:

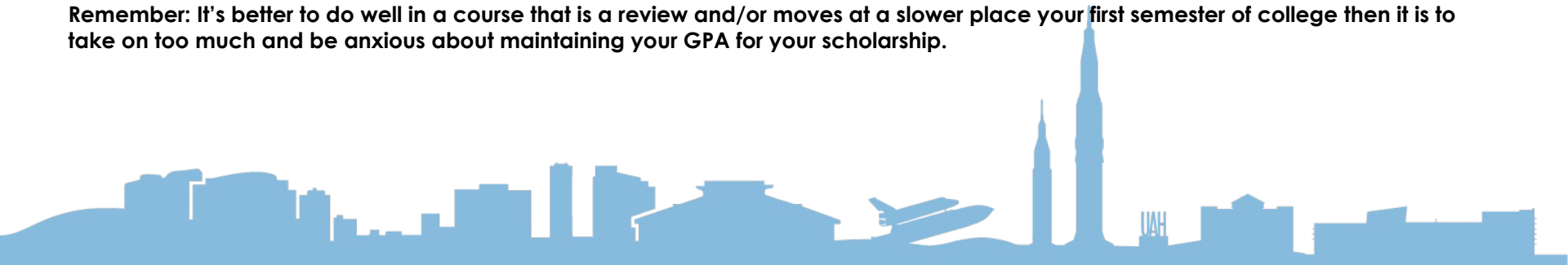
### I took AP Computer Science Principles and scored a 4 or 5, what should I take?

You will earn credit for CS 102 Intro to C Programming, and can take CS 121 Computer Science I. BUT, you'll be expected to be a fast learner and be able to program in C and C++ for this course. If you feel unsure about this take CS 102.

### I took AP Computer Science A and scored a 3, 4 or 5, what should I take?

You will earn credit for CS 103 Intro to JAVA programming. You can take CS 121 Computer Science I, but you will be expected to be a fast learner and be able to program in C and C++ for this course. If you feel unsure about your knowledge of C/C++, take CS 102.

**Remember: It's better to do well in a course that is a review and/or moves at a slower pace your first semester of college than it is to take on too much and be anxious about maintaining your GPA for your scholarship.**



# Computer Science Majors

**Per ABET accreditation rules, the CS degree requires 3 lab sciences.**

## Choices for your lab science sequence:

- General Chemistry I and II  
CH 121/125 + CH 123/126
- Biology I and II  
BYS 119 + BYS 120
- General Physics with Calculus I and II  
PH 111/114 + PH 112/115

## Choices for your 3rd lab science:

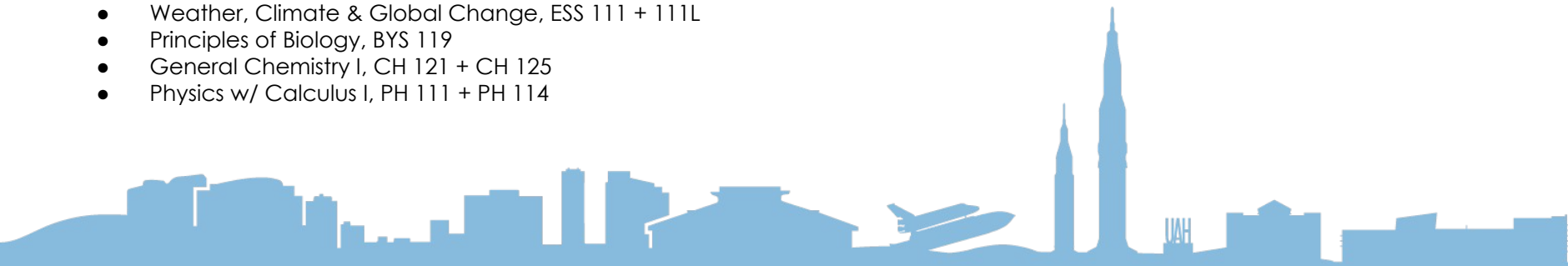
- Exploring the Cosmos/Astronomy, AST 106 + AST 106L
- Environmental Earth Science, ESS 103 + 103L
- Weather, Climate & Global Change, ESS 111 + 111L
- Principles of Biology, BYS 119
- General Chemistry I, CH 121 + CH 125
- Physics w/ Calculus I, PH 111 + PH 114

**The CS degree requires the following math courses:**

- Calculus A, MA 171
- Calculus B, MA 172
- Calculus C, MA 201
- Intro to Linear Algebra, MA 244
- Intro to Probability & Statistics, MA 385

If you take one more math class at the 300 or 400+ level, you earn a Math minor AND this course can count as your Technical Elective degree requirement.

If you want us to add a Math minor to your degree, email us at [ScienceAdvising@uah.edu](mailto:ScienceAdvising@uah.edu) with your name and A#.



# Mathematical Sciences Majors

## Concentration choices:

A concentration is not required.

- [Mathematical Science](#)
- [Secondary Education](#)  
High school Math teacher
- [Double Major](#)  
Two majors in the College of Science.  
Ex: Math & Computer Science
- [Dual Degree](#)  
Two degrees. Ex: Math & Mechanical Engineering, or Math & Economics

## Math majors commonly choose:

- A minor or double major with Computer Science
- A minor in Economics
- A dual degree with Economics & Computational Analysis

## Career options upon graduation:

*This is not a comprehensive list.*

- Actuarial Science
- Cryptology
- Economics
- Education
- Epidemiology
- Genetics
- Operations Research
- Statistics
- Systems Analysis & Engineering
- Urban Design
- ....and many more!



# Physics & Astronomy Majors

## Concentration choices:

A concentration is not required.

- [Physics](#)
- [Astronomy & Astrophysics](#)
- [Applied & Theoretical Physics](#)  
Chosen for students pursuing graduate school in Physics after UAH.
- [Engineering Physics](#)
- [Optics](#)
- [Secondary Education](#)  
High school Physics teacher

## Career options upon graduation:

*This is not a comprehensive list.*

- Aerospace Engineering
- Astronomy
- Astrophysics
- Education
- Materials Science
- Medicine
- Nanotechnology
- Physics
- Renewable Energy
- Robotics
- Systems Analysis & Engineering
- ....and many more!



# Minors

## Minors are not required

- You can minor in any area.
- See [catalog.uah.edu](https://catalog.uah.edu) to search for minors.

## See a major, minor, or concentration you want?

- You must have it formally added to DegreeWorks.
- Email [Science.Advising@uah.edu](mailto:Science.Advising@uah.edu) with your name and A# and we'll help you out.





# FAQ: Courses & Registration

## I am nervous I am not registered for the correct classes.

Totally understandable. Advisors are reviewing each of your schedules. If it looks incorrect, we will email you with changes.

## I have AP credits coming in July, how does this impact my registration/schedule?

Register for the courses listed on your registration sheet.

When your AP scores arrive, you can change your schedule and take a different course(s) if you wish.

## I have AP credits or dual enrollment credits from Sophomore and Junior year of high school and want to change my schedule now, what should I do?

Email [Science.Advising@uah.edu](mailto:Science.Advising@uah.edu) with your name, A#, and a copy of your unofficial AP credits or unofficial transcript *from the college* where you took the dual enrollment course.

We'll reply and let you know if you can or should register for a different course.

**Remember: It's better to do well in a course that is a review and/or moves at a slower pace your first semester of college than it is to take on too much and be anxious about maintaining your GPA for your scholarship!**



# FAQ: Math

## I don't understand my math placement.

Your math placement is based on your ACT/SAT math score, math placement test score, AP Calculus credit, and/or Dual enrollment credit.

## I don't like or am unsure of my math placement.

Take the **Math placement test** for free.

The highest math you can place into with the Math placement test is MA 171 Calculus A.

## I took the AP Calculus AB exam in May, but my registration sheet says to register for MA 171 Calculus A.

Register for MA 171 Calculus A. When your AP scores arrive, and if you scored a 3, 4, or 5 on the AP exam, you can stay in MA 171 Calculus A, or take MA 172 Calculus B.

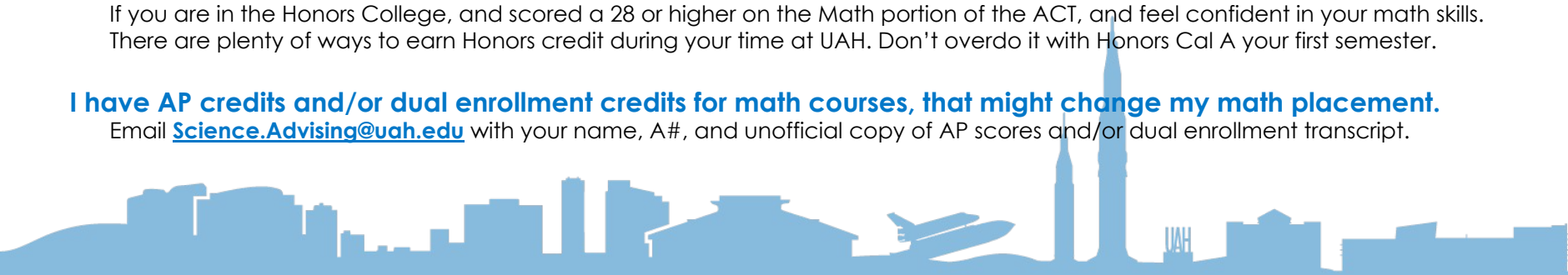
If you scored a 3 on the exam, it is strongly recommended you take MA 171 Calculus A at UAH. This gives you a chance to learn additional Calculus concepts and do well in a course in which you already know some of the material. This will help you feel more confident as you move to MA 172, Calculus B (known as one of the hardest classes at UAH.)

## Should I take Honors Calculus A?

If you are in the Honors College, and scored a 28 or higher on the Math portion of the ACT, and feel confident in your math skills. There are plenty of ways to earn Honors credit during your time at UAH. Don't overdo it with Honors Cal A your first semester.

## I have AP credits and/or dual enrollment credits for math courses, that might change my math placement.

Email [Science.Advising@uah.edu](mailto:Science.Advising@uah.edu) with your name, A#, and unofficial copy of AP scores and/or dual enrollment transcript.



# FAQ: English

## I am confused about my English placement.

English placement is based on your ACT/SAT english score, high school GPA, AP English Language and/or English Literature credit, and/or Dual Enrollment credit.

**Register for the course listed on your registration sheet. Options are:**

- EH/English 101, College Writing I
- EH/English 101S/101L, College Writing I w/ Studio
- EH/English 105, Honors English Seminar
- ***No English class listed, you will take EH 103, Accelerated College Writing in the Spring. It is only offered in the Spring. The course combines English 101 + English 102.***

## I took the AP English Lit and/or AP English Lang exam, but my registration sheet doesn't list an English course.

This means you placed into EH 103, Accelerated College Writing I in the Spring.

## I took the AP English Lit and/or AP English Lang exam, but my registration sheet says to take EH 105.

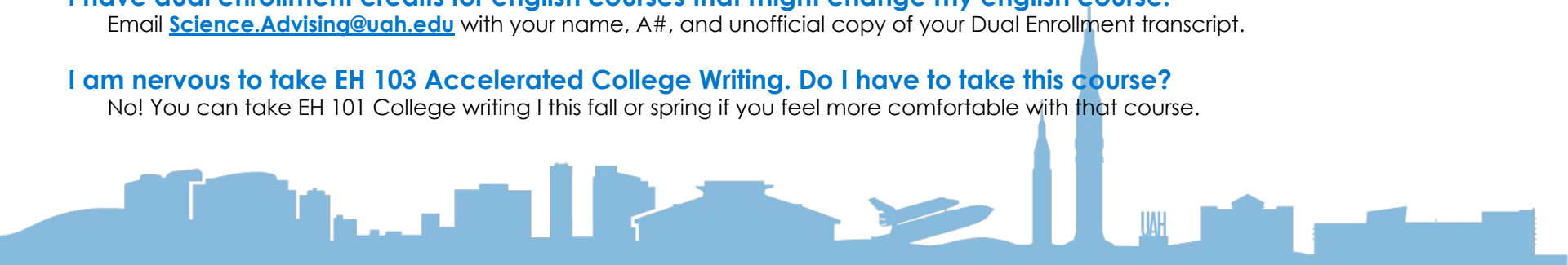
If you're in the Honors college, EH 105 Honors English Seminar is required regardless of your AP English credits.

## I have dual enrollment credits for english courses that might change my english course.

Email [Science.Advising@uah.edu](mailto:Science.Advising@uah.edu) with your name, A#, and unofficial copy of your Dual Enrollment transcript.

## I am nervous to take EH 103 Accelerated College Writing. Do I have to take this course?

No! You can take EH 101 College writing I this fall or spring if you feel more comfortable with that course.



# Next Steps....

## FRESHMAN | SOPHOMORE YEARS

First Year Experience (FYE) course

Declare concentration and/or minor, if applicable

**Advisor check in:**  
updated long-range plan

Experiential learning experience:  
study abroad, internship, research, etc.

## JUNIOR | SENIOR YEARS

**Advisor check in:**  
Updated long-range plan to ensure you are on track to graduate

Build resume through research, internships, co-ops, etc.

Apply to graduate!



# Contact Information

Check your UAH email frequently for updates on courses, waitlists, long range plans, pre-audits, upcoming event & opportunities, and more.



Science.Advising@uah.edu

