

**OFFICE OF ACADEMIC AFFAIRS**  
**COURSE APPROVAL FORM**  
**COURSE CHANGE**



College: CoS Prefix/Subject Code: ESS Course Number: 498

Course Title: Undergraduate Capstone Proposal Credit Hours: 1 Cross Listed: \_\_\_\_\_

Nature of Change:  
(Check all that apply)

Effective Date: Fall 2017

Add to Charger Foundations

Course Title Change

Old Title:

New Title:

Course Number Change Old Number: \_\_\_\_\_ New Number: \_\_\_\_\_

Course Description Change

Old Description:

Students will identify an Earth system science problem and formulate their capstone research proposal under the direct supervision of a research advisor during this first semester of this two-part capstone. Must be followed by ESS 499 to complete the capstone research project. Prerequisite: taken in senior year and with consent of department.

New Description:

Applied concepts for professional and research development. Includes evaluation and discussion of published literature and department seminars, with focus on research synthesis and critique. Also includes development of professional and career skills focused on the Earth and Atmospheric Sciences.

Course Requisite Change

Old Requisite:

New Requisite:

Course Restriction Change

Old Restriction:

New Restriction:

Fee Change

Old Fee: \_\_\_\_\_

New Fee: \_\_\_\_\_

Move to Inactive

Return to Active

Delete

**Justification of Change:**

These changes are intended to adapt an unwieldy capstone experience for ESS students into a more appropriate capstone that focuses BOTH on research and professional development.

The goal is to provide a better and more uniform capstone experience and increase job and career readiness for our ESS students. In addition to research experiences (like literature review, hypothesis testing, research methods, and seminar discussions) in this capstone course, students will also participate in collaborative learning activities, and will be taught professional development topics such as self evaluation/SWOT analyses, career paths and how to find jobs in the Earth and atmospheric sciences, proposal writing basics, graduate school and fellowship applications, speed mentoring and mock interviews, resume and CV development, and how to present.

(see attached syllabus for details)

Will be offered Fall and Spring.

**Department Chair:** *Lawrence Carey* Digitally signed by Lawrence Carey  
DN: cn=Lawrence Carey, o=UAH, ou=ATS,  
email=chair@stsc.uah.edu, c=US  
Date: 2016.10.14 09:51:55 -05'00' **Grad. Council:** \_\_\_\_\_

**College Dean:** *Emanuel A. Waddell Jr.* **Graduate Dean:** \_\_\_\_\_

**College Curriculum Committee:** *Emanuel A. Waddell Jr.*

**Undergrad Curriculum Cmte:** \_\_\_\_\_ **Provost:** \_\_\_\_\_

**Charger Foundations Cmte:** \_\_\_\_\_

**Acknowledgements from other units:**

**Department Chair:** \_\_\_\_\_ **College Dean:** \_\_\_\_\_

## ESS 498: Research & Professional Development Capstone

W 12:45-1:40- National Space Science Technology Center (Cramer Bldg), 4065/TBD

**Instructor:** TBD, National Space Science and Tech Center, 320 Sparkman Dr,  
Office TBD; Ph: TBD; Email: TBD  
Office Hours: TBD

**Required Texts:** *None*

**Course Description:** Applied concepts for professional and research development for undergraduates. Includes evaluation and discussion of published scientific literature and invited department seminars, with focus on effective research synthesis and critique. Course also includes development of professional and career skills focused on the Earth and Atmospheric Sciences.

**Course Goals:** Students will have conducted collaborative research learning activities, including literature review and critique of UAH/NASA sponsored weekly seminars. Additionally students will be better prepared to enter either the workforce or pursue graduate studies by participating in professional development activities including but not limited to: mock interviews, resume and cover letter preparation, SWOT analyses, career resources, proposal and budget planning, speed mentoring, and techniques for applying to graduate programs in the Earth and Atmospheric Sciences.

**Grading:** S/U

Students will be graded on participation and submitted assignments over the course of the semester and a grade of C- or greater will receive a Satisfactory (S).

### Week Topic

Week 1 Introduction and Goals

Week 2 "Important research tools"

Week 3 Seminar 1

Week 4 "Applying to graduate school"

Week 5 "The publication process"

Week 6 Seminar 2

Week 7 "Making your resume/CV/cover letter"

Week 8 "Careers in the Earth Sciences and Job-finding resources"

Week 9 Seminar 3

Week 10 "Speed Mentoring"

Week 11 "SWOT analysis/Self Evaluation"

Week 12 SPRING BREAK

Week 13 Seminar 4

Week 14 "Proposal writing tips and tricks"

Week 15 "Seminar Critiques and Literature Review"

Week 16 "Mock Interviews"

**Academic Honesty:** Your examinations must be your own work. Academic misconduct will not be tolerated. To be sure that you are aware of what is considered academic misconduct; you should review carefully the definition and examples provided in the Student Handbook ([http://www.uah.edu/student\\_life/handbook/](http://www.uah.edu/student_life/handbook/)) Chapter 7, Code of Conduct, particularly Article III. If you have any questions, please contact me.

**Complaint Procedure:** If you have difficulties or complaints related to this course, your first action usually should be to discuss them with Dr. Robert Griffin. If such a discussion would be uncomfortable for you or fails to resolve your difficulties, you should contact Dr. Larry Carey, Chair of the Department of Atmospheric Science. If you still are unsatisfied, you should discuss the matter with Dr. Emanuel Waddell, Associate Dean of the College of Science. Dr. Waddell's office is MSB C207 Materials Science Building; phone number is 824-6844 and email [adeancos@uah.edu](mailto:adeancos@uah.edu).

**Students with Disabilities:** I would like to hear from anyone who has a disability that may require some modification of seating, testing, or other class procedures. In order to obtain exam or assignment accommodations the student must

provide a *letter of accommodation* within the first week of class, or else notify me that they are in the process of obtaining one. More information can be obtained by contacting Dr. Standley in the Office of Disability Support at 824.6203.

**Policy Changes:** The instructor reserves the right to amend, modify or add to the policies found in this syllabus through communication to the class either via email or in class.

**Technology Policy:** The use of personal mobile devices during class, unless otherwise allowed by the instructor, is prohibited. Personal mobile devices are defined as anything and everything from cell phones, mp3 players, smart devices, pads, laptops, etc. Recording of any part of the class lecture or discussions is prohibited, unless previously allowed by the instructor.

**UAlert Emergency Notification System:** UAH has implemented the **UAlert** emergency notification system. UAlert allows you to receive time-sensitive emergency messages in the form of e-mail, voice mail, and text messages. Everyone who has a UAH e-mail address will receive emergency alerts to their campus e-mail address. In order to also receive text and voice message alerts, you are asked to provide up-to-date phone contact information. Participation in UAlert text and voice messaging is optional, but enrollment is strongly encouraged. **You can't be reached through UAlert unless you participate.** The information you supply is considered confidential and will not be shared or used for purposes other than emergency notification. To review your UAlert account, add or update phone and alternate e-mail addresses, and set the priority for your contact methods, please visit the UAlert web site: <http://ualert.uah.edu>.