

OFFICE OF ACADEMIC AFFAIRS  
PROGRAM APPROVAL FORM



Undergraduate     Graduate     New Program     Program Change  
College: CoS    Department: Atmospheric Science

Program Title: BS in ESS

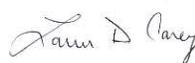
Program Type:  Major     Minor     Concentration     Certificate

Total Credit Hours: \_\_\_\_\_ Effective Date: Fall 2017

Is the new program or change in existing program part of an accreditation requirement? *If so, please explain.*    Yes     No

Does this course involve academic units external to the originating college? *If so, deans of all colleges involved must sign this form.*    Yes     No

**Attach a detailed description of proposed program to include the following:** background information, academic justification, student need and demand, listing of courses with credit hour requirements or deletions, facility requirements, and any other pertinent information.

Department Chair:  Digitally signed by Lawrence Carey  
DN: cn=Lawrence Carey, o=UAH,  
ou=ATS,  
email=chair@nsstc.uah.edu, c=US  
Date: 2016.10.14 09:22:35 -0500    Grad. Council: \_\_\_\_\_

College Dean:     Graduate Dean: \_\_\_\_\_

College Curriculum Committee: 

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

**Acknowledgements from other units:**

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

***Attach a detailed description of proposed program to include the following: background information, academic justification, student need and demand, listing of courses with credit hour requirements or deletions, facility requirements, and any other pertinent information.***

The following proposed changes reflect the development of the Earth System Science program and the evolution of our concentrations of study within the program. These are broken down into changes relevant to all concentrations and those relevant to individual concentrations.

(1) All concentrations

- a. *Remove ESS 112 from the Core courses.* This is to reflect a proposed change to course title (to ESS 212) and given that it should not be required for students in our diverse concentrations to take a severe weather course.
- b. *Remove ESS 499 from the Core courses.* This is to reflect a proposed change in how we conduct the ESS senior Capstone project.
- c. *Change Humanities GER PHL 102 or PHL 150 requirement to standard Charger Foundations choices*
  - i. *“Recommend PHL 102, PHL 150, PHL 201” (to be added in catalog only)*
- d. *Remove CS 102 Computer Science course and add “Choose 1: CS 102, CS 103”.* This more closely aligns our CS requirements to other departments in CoS.

(2) Human Dimensions and Societal Impacts concentration

- a. *Add ESS 305 and ESS 321 to the required Concentration courses.* These courses will contribute to the Earth science component of the HDSI concentration.
- b. *Remove ESS 414 from required Concentration courses.* This is to provide greater flexibility to HDSI students to elect to take an additional “tools” class or not.
- c. *From Upper Division elective courses remove SOC 369, SOC 480, PSC 480, HY 368, PSC 260, MGT 320, MGT 361, PSC XXX.*
  - i. *Add “ESS 300+, SOC 300+, PSC 300+, HY 300+, BYS 200+”.* These options provide more flexibility with students choosing social sciences classes to use as part of their program of study and uses the correct CoS nomenclature, ie “300+”.
- d. *For HDSI GER courses add “Strongly Recommended for those considering graduate school.” to MA 171, PH 111/114, and PH 112/115.* This is intended to get students interested in graduate school to take the appropriate PH and MA sequence courses that are required for graduate school in the Earth Sciences. (this is to be added to catalog only)
- e. *Make MA 281 part of the required ESS pre-professional requirements, not an optional Statistics class.*
- f. *For the Statistics Requirement, Choose 1: PY 300/L, SOC 303/304.* This, combined with the previous change forces students to take the statistics theory course in addition to an applied statistics course.

(3) GIS and Remote Sensing concentration

- a. *From Upper Division Elective courses remove ESS 407, CE 284, CS 487, SOC/PSC 4xx.*

- i. *Add ESS 212, ESS 409, ESS 499, PSC 300+, SOC 300+, CS 200+*. This change is intended to provide flexibility in course selection.
  - b. *Add ESS 407 to Required Concentration courses*. This will provide GIS students with more required policy background.
- (4) Atmospheric Science concentration
  - a. *Add ESS 212 to required Concentration courses*. This change reflects removal of ESS 112 from the ESS Core, and add 212 to the required concentration courses.
  - b. *Change ATS Upper Division Electives to "Choose 5" from "Choose 4"*
  - c. *Add ESS 499 to Upper Division Electives for the Atmospheric Science concentration ("Choose 5" section)*. This gives the students the ability to use new 499 research class as an elective.