

CNS BS IN ASTRONOMY

**PROPOSED CHANGES TO THE BS IN ASTRONOMY IN THE COLLEGE OF
NATURAL SCIENCES SECTION IN THE *UNDERGRADUATE CATALOG 2018-2020***

Type of Change¹ Academic Change
 Degree Program Change (THECB² form required)

Proposed classification³ Exclusive General Major

1. IF THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS IS YES, THE COLLEGE MUST CONSULT LINDA DICKENS, DIRECTOR OF ACCREDITATION AND ASSESSMENT, TO DETERMINE IF SACSCOC APPROVAL IS REQUIRED.

- | | | |
|------------------------------------------------------------------|------------------------------|----------------------------------------|
| • Is this a new degree program? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| • Is this program being deleted? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| • Does the program offer courses that will be taught off campus? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| • Will courses in this program be delivered electronically? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |

2. EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR EACH INDIVIDUAL CHANGE:

Option I, Astronomy

Requirement 9: Alter wording of requirement to make it clearer that AST 352K, 353, and 358 are required. Remove AST 351 as a recommended class. Add AST 364P (Planetary Systems), 376C (Cosmology), and 376R (Practical Introduction to Research Methods), as recommendations for the 4th course selected to fulfill the requirement.

Reason: AST 351 will be offered more infrequently in the next few years. Planetary Systems provides a rigorous introduction to one of the most exciting, core subjects of 21st century astronomy research. The Department of Astronomy wants to encourage astronomy majors to be exposed to the science of planetary systems.

Option II, Astronomy Honors

Change 6 hours from Fine Arts or Liberal Arts to 6 hours from Fine Arts and Liberal Arts.

Reason: In practice, the Dean's Scholars Program allows students to take 6 hours from a single college or a mixture of 6 hours from both colleges. The change will synch catalog copy to advising practice and eliminate the need for petitions.

Special Requirements

Standardize language regarding requirements to graduate with Dean's Scholars degree options.

Reason: Since the honors options were added at different times as new BS degrees were created, language began to differentiate between degrees. The Dean's Scholars steering committee voted to establish standard language for all of its options.

3. THIS PROPOSAL INVOLVES (Please check all that apply)

- | | | |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Courses in other colleges | <input type="checkbox"/> Courses in proposer's college that are frequently taken by students in other colleges | <input type="checkbox"/> Flags |
| <input type="checkbox"/> Course in the core curriculum | <input checked="" type="checkbox"/> Change in course sequencing for an existing program | <input type="checkbox"/> Courses that have to be added to the inventory |
| <input type="checkbox"/> Change in admission requirements (external or internal) | <input type="checkbox"/> Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office) | |

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4. SCOPE OF PROPOSED CHANGE

- a. Does this proposal impact other colleges/schools? Yes No
If yes, then how would you do so?

The original legislation stated that Dean's Scholars must choose 6 hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count 6 hours from one of the colleges, or a mixture from the colleges. This change will eliminate the need for petitions in situations where students choose to take a mixture of COLA and COFA coursework. In a constant state, the Dean's Scholars Program has approximately 200 majors.

There is no way to predict how this change will impact the College of Fine Arts and the College of Liberal Arts. Specific courses are not prescribed and the change is to match catalog language to current advising practice. Making an estimate, perhaps 10 seats per year distributed across all courses in both colleges may be impacted. Because the number of seats across both colleges is estimated to be so small, the College of Fine Arts and the College of Liberal Arts were not formally consulted for permission to make this change.

- b. Do you anticipate a net change in the number of students in your college? Yes No
If yes, how many more (or fewer) students do you expect?
- c. Do you anticipate a net increase (or decrease) in the number of students from outside of your college taking classes in your college? Yes No
If yes, please indicate the number of students and/or class seats involved.
- d. Do you anticipate a net increase (or decrease) in the number of students from your college taking courses in other colleges? Yes No
If yes, please indicate the number of students and/or class seats involved.

If 4 a, b, c, or d was answered with yes, please answer the following questions. If the proposal has potential budgetary impacts for another college/school, such as requiring new sections or a non-negligible increase in the number of seats offered, at least one contact must be at the college-level.

How many students do you expect to be impacted?

Impacted schools must be contacted and their response(s) included:

Person communicated with:

Date of communication:

Response:

- e. Does this proposal involve changes to the core curriculum or other basic education requirements (42-hour core, signature courses, flags)? If yes, explain: No.

If yes, undergraduate studies must be informed of the proposed changes and their response included:

Person communicated with:

Date of communication:

Response:

- f. Will this proposal change the number of hours required for degree completion? No.

Note: THECB Semester Credit Hour Change Form required, download from URL:

<http://www.thecb.state.tx.us/reports/DocFetch.cfm?DocID=2419&format=doc>

If yes, explain:

5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: November 5, 2015; Approved by whom: Astronomy Executive Undergraduate
February 10, 2017 Studies Committee

Department approval date: May 10, 2017 Approved by whom: Dean's Scholars Steering Committee

College approval date: Sept 6 and 20, 2017 Approved by whom: Course and Curriculum Committee

Dean approval date: September 20, 2017 Approved by whom: David Vanden Bout, Associate Dean
for Undergraduate Education

PROPOSED NEW CATALOG TEXT:⁴

CNS BS IN ASTRONOMY

Bachelor of Science in Astronomy

[no changes]

Prescribed Work Common to all Options

[no changes]

Additional Prescribed Work for Each Option

Option I: Astronomy

6. Six semester hours in biology, chemistry, computer science, and/or geological sciences; Chemistry 301 or 301H and the courses in the Elements of Computing Certificate Program may be counted toward this requirement; any other course to be counted must meet major requirements in the department that offers it.
7. Mathematics 408C and 408D, or the equivalent; and 427J or 427K, 427L, and 340L
8. Physics 301, 101L, 315, 115L, 316, 116L, 336K, 352K, 353L, 355, 362K, 369, and 373
9. 12 semester hours of upper-division coursework in astronomy, including Astronomy 352K, 353, and 358, and three additional hours of upper-division Astronomy. Astronomy 354, 364P, 376C, or 376R are is recommended
10. Nine additional semester hours of upper-division coursework in physics and/or astronomy
11. Enough additional coursework to make a total of 123 semester hours

Option II: Astronomy Honors

6. Breadth requirement: An honors mathematics course, Chemistry 301H, and nine additional hours of coursework chosen from honors courses in the college; credit earned by examination may not be counted toward this requirement.
7. Physics 301, 101L, 315, 115L, 316, and 116L
8. 12 semester hours of upper-division coursework in astronomy approved by the departmental honors adviser
9. 18 semester hours of upper-division coursework in physics approved by the departmental honors adviser
10. Three additional semester hours of upper-division coursework in astronomy or physics
11. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
12. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
13. Astronomy 379H and either a three-semester-hour upper-division research course approved by the departmental honors adviser or a second section of Astronomy 379H
14. 16 additional hours of coursework approved by the departmental honors adviser
15. Six semester hours of coursework ~~in~~ from the College of Liberal Arts ~~or~~ and the College of Fine Arts
16. Enough additional coursework to make a total of 120 semester hours

Special Requirements

Students in both Options must fulfill both the University's General Requirements for graduation and the college requirements. They must also earn a grade of at least C- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog*.

To graduate under Option II, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, earn grades of at least A- in the departmental research and thesis courses described in requirement 12 above, and must present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at <https://cns.utexas.edu>.

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¹ See <https://facultycouncil.utexas.edu/degree-program-changes> for detailed explanations.

² Submit required Texas Higher Education Coordinating Board forms to the provost's office.

³ **EXCLUSIVE:** of *exclusive* application and of primary interest only to a single college or school ("no protest" period is *seven calendar days*); **GENERAL:** of *general* interest to more than one college or school (but not for submission to the General Faculty) ("no protest" period is *fourteen calendar days*); **MAJOR:** *major* legislation must be submitted to the General Faculty for adoption ("no protest" period is *fourteen calendar days*).

⁴ The proposed text should be based on the text of the current catalog available at

<http://catalog.utexas.edu/undergraduate/>

Strike through and replace (with underlines) only the specific language to be changed. Do NOT use track changes, and do not include hyperlinks in the catalog copy. For questions on completing this section, please contact Victoria Cervantes, fc@austin.utexas.edu, 471-5936 or Brenda Schumann, brenda.schumann@austin.utexas.edu, 475-7654.