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

Type of Change 1  ☒ Academic Change  ☐ Degree Program Change (THECB 2 form required)

Proposed classification 2  ☐ 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 ☐ No ☒
- Is this program being deleted?  Yes ☐ No ☒
- Does the program offer courses that will be taught off campus?  Yes ☐ No ☒
- Will courses in this program be delivered electronically?  Yes ☐ No ☒

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

Option 1, Biochemistry

Remove BCH 339N from requirement 8c and reduce number of biochemistry elective courses from 3 to 2

Reason: The majority of students are not adequately prepared for the computation aspects of BCH 339N even with a prerequisite of programming. The course will become an elective choice for students who are adequately prepared. The number of biochemistry courses are reduce by one in order to accommodate the addition of BIO 344 without changing the number of general elective hours that students take.

Add transcript-recognized minor to options in requirement 11

Reason: The department was unsure whether there would be sufficient transcript-recognized minors across campus when preparing legislation for the 2016-18 catalog. However, there are many options for students now.

Option III, Biochemistry Honors

Reduce number of biochemistry elective courses from 3 to 2

Reason: The number of biochemistry courses are reduce by one in order to accommodate the addition of BIO 344 without changing the number of general elective hours that students take.

Add BIO 344 to the option

Reason: The restructuring of the BS Biochemistry major courses in the 2016-18 catalog eliminated a concentration in molecular biology. Rather than create a new biochemistry course to address this, BIO 344 will be added to fulfill this gap in knowledge.

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.

Degree Program Impact Statement revised July 2016
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)
   - Courses in other colleges
   - Courses in proposer’s college that are frequently taken by students in other colleges
   - Course in the core curriculum
   - Change in course sequencing for an existing program
   - Change in admission requirements (external or internal)
   - Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
   - Flags
   - Courses that have to be added to the inventory

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.
5. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date: March 31, 2017  
Approved by whom: Karen Browning, Associate Chair

Dean's Scholars approval date: May 10, 2017  
Sept 27, 2017  
Approved by whom: Jeffrey Barrick, Biochemistry Honors faculty adviser

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

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

PROPOSED NEW CATALOG TEXT:

Bachelor of Science in Biochemistry
[no change]

Prescribed Work Common to all Options
[no change]

Additional Prescribed Work for Each Option

Option I: Biochemistry

5. Mathematics 408C and 408D, or 408N, 408S, and 408M
6. Biostatistics: Statistics and Data Sciences 328M
7. One of the following sequences:
   a. Physics 317K, 117M, 317L, and 117N (recommended);
   b. Physics 303K, 103M, 303L, and 103N; or
   c. Physics 301, 101L, 316, and 116L
8. The following chemistry courses:
   a. General chemistry: Chemistry 301 or 301H, 302 or 302H, and 204 or 317
   b. Organic chemistry: Chemistry 320M
   d. Physical chemistry: Chemistry 353 or 353M
   e. Analytical chemistry: Chemistry 455
9. One of the following sequences:
   a. Biology 311C, 311D, and 325; or
   b. Biology 315H and 325H

10. Biology 344

11. Completion of one of the following:
   a. 18 additional semester hours of upper-division biochemistry, biology, chemistry, and neuroscience; or
   b. A transcript-recognized certificate or a transcript-recognized minor

12. Enough additional coursework to make a total of 120 semester hours
Option III: Biochemistry Honors

5. Breadth requirement: An honors mathematics course, Biology 315H and 325H, Chemistry 301H and 302H, and three additional semester hours of coursework chosen from honors courses in the college. Credit earned by examination may not be counted toward this requirement.

6. The following chemistry courses:
   a. General chemistry: Chemistry 204 or 317
   b. Organic chemistry: Chemistry 128K, 128L, 328M, and 328N; or 220C, 320M, and 320N
   d. Physical chemistry: Chemistry 353 or 353M
   e. Analytical chemistry: Chemistry 455

7. Biology 344

6. 8. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser

7. 9. A section of Rhetoric and Writing 309S that is restricted to students in the Dean’s Scholars Honors Program

8. 10. Chemistry 379H or 379H and either a three-semester-hour upper-division research course approved by the departmental honors adviser or a second section of Chemistry 379H or Biochemistry 379H

9. 11. 24 additional semester hours of coursework approved by the departmental honors adviser.

10. 12. Six semester hours of coursework is from the College of Liberal Arts or and the College of Fine Arts.

11. 13. Enough additional coursework to make a total of 120 semester hours.

Special Requirements

Students in all 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 III, 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 8 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, may be found on the College of Natural Sciences website.

Order and Choice of Work
[no change]

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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.