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March 16, 2018

Provost Marie McInnis
The University of Texas at Austin
MAI 201
Campus Mail Code: G1000


Approved by Executive Vice President and Provost Maurie McInnis on March 16, 2018

Dear Provost McInnis,

Enclosed for your consideration and action are proposed changes to the College of Natural Sciences Chapter of the Undergraduate Catalog, 2018-2020. The proposals are classified as being of general interest to more than one college or school and were approved by the Faculty Council on a no-protest basis on March 15, 2018. The authority to grant final approval of this legislation resides with your office on behalf of the President.

- Proposed changes to the BS in Medical Laboratory Science Degree Program (D 15924-15927)
- Proposed changes to the Pre-Health Professions Certificate (D 15942-15950)
- Proposed changes to the Minors and Certificate Programs Section (D 15951-15953)
- Proposed changes to the BS in Astronomy Degree Program (D 15954-15957)
- Proposed changes to the BS in Biochemistry Degree Program (D 15958-15962)
- Proposed changes to the BS in Biology Degree Program (D 15963-15972)
- Proposed changes to the BS in Chemistry Degree Program (D 15973-15978)
- Proposed changes to the BS in Computer Science Degree Program (D 15979-15983)
- Proposed changes to the BS in Human Development and Family Sciences Degree Program (D 1598415991)
- Proposed changes to the BS in Neuroscience Degree Program (D 15992-15997)
- Proposed changes to the BS in Mathematics Degree Program (D 15998-16004)
- Proposed changes to the BS in Nutrition Degree Program (D 16005-16009)
- Proposed changes to the BS in Public Health Degree Program (D 16010-16016)
- Proposed changes to the BS in Physics Degree Program (D 16017-16021)

Please let me know if you have questions or if I can provide other information concerning this item.
Sincerely,
Alan w. Dristan
Alan W. Friedman, Secretary
General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature
AWF:dlr Enclosures
ec: Lydia A. Cornell, Administrative Program Coordinator, Provost's Office
Michelle K. George, Administrative Manager for Faculty Affairs, Provost's Office
David Vanden Bout, Associate Dean for Undergraduate Education, College of Natural Sciences
Judith M. Quinney, Manager for College of Natural Sciences Records Office

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Medical Laboratory Science degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On September 13, 2017, the Program Director, the Course and Curriculum Committee, and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved the proposal. The Secretary has classified this proposal as legislation of exclusive interest to one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 8, 2018.
Alan W. Driebwen
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

Type of Change
Academic Change
Degree Program Change (THECB form required)
Proposed classification
マ
Exclusive $\square$ General $\square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$

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

Change BIO 160L to BIO 260L.
Reason: The department increased the lab hours and credit hours by one in Immunology Laboratory.
3. THIS PROPOSAL INVOLVES (Please check all that apply)Courses in other collegesCourse in the core curriculumChange in admission requirements (external or internal)Courses in proposer's college that $\quad \square$ Flags are frequently taken by students in other colleges
$\square$ Change in course sequencing for an existing program
$\square$ Courses that have to be added to the inventoryRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
4. SCOPE OF PROPOSED CHANGE
a. Does this proposal impact other colleges/schools?
YesNo $\boxtimes$ If yes, then how would you do so?
b. Do you anticipate a net change in the number of students in your college?
Yes $\square$ No $\boxtimes$ 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?
YesNo $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.

If $\mathbf{4} \mathbf{a}, \mathbf{b}, \mathbf{c}$, or $\mathbf{d}$ 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 nonnegligible 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 (42hour core, signature courses, flags)? If yes, explain:
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? 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: September 13, 2017
College approval date: September 13, 2017
Leanne Field, Program Director
Dean approval date:
September 13,2017 David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE

\{no change\}

## Prescribed Work

In the process of fulfilling degree requirements, all students must complete:

1. Core curriculum
2. Skills and experience flags:
a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
b. Quantitative reasoning: one flagged course
c. Global cultures: one flagged course
d. Cultural diversity in the United States: one flagged course
e. Ethics and leadership: one flagged course
f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the Course Schedule. They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.
3. One of the following foreign language/culture choices:
a. Beginning level proficiency coursework, or the equivalent, in a foreign language.
b. First course in a foreign language and a three-semester-hour course in the culture of the same language area.
c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers.
4. Mathematics 408C or 408 N, and Statistics and Data Sciences 304 or 328 M
5. Either Biology 311C, 311D, and 325, or Biology 315H and 325H
6. Biology $226 \mathrm{~L}, 326 \mathrm{M}, 330$ or $446 \mathrm{~L}, 344$ or $366 \mathrm{R}, 360 \mathrm{~K}, 260 \mathrm{~L}$, [ 160 L,$] 361,361 \mathrm{~L}$, and 365 S
7. Chemistry 301 or $301 \mathrm{H}, 302$ or $302 \mathrm{H}, 204,220 \mathrm{C}, 320 \mathrm{M}, 320 \mathrm{~N}$, and Biochemistry 369
8. Computer Science 303E, Management Information Systems 302F, or Public Health 323
9. Enough additional elective coursework, if necessary, to make a total of at least 100 semester hours of academic work completed at the University before the clinical education program.
10. Twelve to sixteen [16] months of clinical education in a program of medical laboratory science (or clinical laboratory science) accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The student must apply to and be accepted into a clinical education program. The clinical education program director works closely with each student to ensure his or her success in the program. Upon completion of the clinical education program, the student must submit a letter from the program director verifying completion of coursework and a transcript showing grades in all courses in the program to The University of Texas at Austin, Office of the Dean, College of Natural Sciences, 1 University Station G2500, Austin TX 78712. To be counted toward the degree, the coursework must be approved by the faculty adviser for medical laboratory science and the dean. None of the coursework completed in the clinical education program may be used to fulfill in-residence degree requirements, requirements 1 through 9 of the prescribed work above, or the requirements for a second bachelor's degree.

## Special Requirements

\{no change \}
Order and Choice of Work
\{no change \}

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE PRE-HEALTH PROFESSIONS CERTIFICATE IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Pre-Health Professions Certificate in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On September 20, 2017, the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved the proposal. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on December 14, 2017, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Llan W. Driedaen
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

## PROPOSED CHANGES TO THE PRE-HEALTH PROFESSIONS CERTIFICATE IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Type of Proposal
$\square$ New Certificate Program
இ Change an Existing Certificate Program
$\square$ Delete a Program
Note: If the certificate program proposed for addition or change includes a requirement of 21 to 24 semester credit hours, an additional form is required for THECB approval/notation.

Proposed classification $\square$ Exclusive $\boxtimes$ General $\square$ 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 transcript-recognized certificate program?

YesNo $\boxtimes$

- Is this a request to delete an existing transcript-recognized certificate program?

YesNo $\boxtimes$

- Does the certificate offer courses that will be taught off campus?
- Will courses in this program be delivered electronically? Yes $\square$ No $\boxtimes$
- Will courses be developed specifically for the new certificate?

Yes $\square$ No $\boxtimes$ YesNo $\boxtimes$

## 2. THIS PROPOSAL INVOLVES (Please check all that apply)

$\boxtimes$ Courses in other collegesCourses in proposer's college that are frequently taken by students in other colleges
$\square$ Course in the core curriculum Change in course sequencing for an existing programFlags
$\square$ Courses that have to be added to the
$\square$ Change in admission requirements (external or internal)
inventory
$\square$ Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)

## 3. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools? Yes $\boxtimes$ No $\square$ If yes, then how? An estimate of three seats per year per course added to certificate.
b. Do you anticipate a net change in the number of students in your college? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$ 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 $\boxtimes$ No $\square$
If yes, please indicate the number of students and/or class seats involved.

Retired from course inventory
Education: EDP 363, 369K; M 316 (to be retired)

Moved courses (not new to certificate, just rearranged due to addition of duplicate coursework)
College of Liberal Arts: PSY 346K

Added courses
McCombs School of Business: MAN 334M
Moody College of Communication: CSD 306K, 308K
College of Education: EDP 350E, 350L; HED 329K, 378D
College of Fine Arts: ART 339R
College of Liberal Arts: AMS 370 (Topic 49); AFR 374D (Topic 11); GRG 344K, 356 (Topic 1), 356T
(Topic 9); SOC 307P, 321G, 333K
College of Natural Sciences: HDF 343; NTR 315, 321, 332; SDS 301
Steve Hicks School of Social Work: SW 360K (Topic 9)

Natural Sciences majors must complete a minimum of nine hours from a variety of coursework spread across five themes: cultural awareness, health and anatomy, healthcare policy, human and societal development, and nutrition. The additional courses were identified through individual petitions by Natural Sciences majors over the last two years. The changes to the certificate add thirty-one courses to bring the total number of course choices to eighty-four. I estimate the number of seats per course to be one to three seats per year.

If $3 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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? Three seats per year
Impacted schools must be contacted and their response(s) included: Department of Management Person communicated with: Luis Martins, Chair Date of communication: September 26, 2017
Response: We would be happy to have Natural Sciences add MAN 334M, Healthcare Systems Management, to the healthcare policy theme.

How many students do you expect to be impacted? Three seats per year
Impacted schools must be contacted and their response(s) included: Department of Communication Sciences and Disorders
Person communicated with: Rajinder Koul, Chair
Date of communication: September 26, 2017
Response: I approve the addition to the certificate.

How many students do you expect to be impacted? Three seats per year per course
Impacted schools must be contacted and their response(s) included: Department of Educational
Psychology
Person communicated with: Cindy Carlson, Chair
Date of communication: September 26, 2017
Response: Yes, you have my permission to add these courses to your certificate program.

How many students do you expect to be impacted?
Impacted schools must be contacted and their response(s) included: Department of Kinesiology \& Health Education
Person communicated with: John Bartholomew, Chair
Date of communication: September 26, 2017

Response: We are happy to have the course listed.

How many students do you expect to be impacted? Three seats per year
Impacted schools must be contacted and their response(s) included: College of Fine Arts
Person communicated with: Jack Risley, Chair
Date of communication: email sent September 26, 2017
Response: We are enormously proud of this course and would be delighted to have it included in your Pre-Health Professions Certificate.

How many students do you expect to be impacted? Three seats per year
Impacted schools must be contacted and their response(s) included: Department of African \& African Diaspora Studies
Person communicated with: Edmund Gordon, Chair
Date of communication: September 26, 2017
Response: Yes it does.

How many students do you expect to be impacted? Three seats per year per course
Impacted schools must be contacted and their response(s) included: Department of Sociology
Person communicated with: Robert Crosnoe, Chair
Date of communication: September 26, 2017
Response: Yes, this would be fine for us.
How many students do you expect to be impacted? Three seats per year
Impacted schools must be contacted and their response(s) included: College of Geography \& the
Environment
Person communicated with: Sheryl Luzzadder-Beach
Date of communication: September 26, 2017
Response: I approve, feel free to work out the details on how these best serve your students.
How many students do you expect to be impacted?
Impacted schools must be contacted and their response(s) included: Steve Hicks School of Social
Work
Person communicated with: Allan Cole, senior associate dean for academic affairs
Date of communication: email sent September 26, 2017
Response: We would be pleased to have this course added to the certificate in NS.

How many students do you expect to be impacted? Three seats per year
Impacted schools must be contacted and their response(s) included: Department of American Studies
Person communicated with: Steven Hoelscher, Chair
Date of communication: email sent September 26, 2017
Response: We would be delighted to add this course.
4. OFFICIAL CERTIFICATE NAME: Undergraduate Certificate: Pre-Health Professions Certificate
5. CIP CODE (administrative unit awarding the certificate): N/A
7. STATEMENT OF OBJECTIVE: N/A
8. NUMBER OF STUDENTS EXPECTED TO RECEIVE THE CERTIFICATE EACH SEMESTER:
9. NUMBER OF HOURS REQUIRED FOR COMPLETION (Note: If the number of required hours is 21 to 24 , THECB form is required):
10. LIST FACULTY ON THE CERTIFICATE PROGRAM FACULTY COMMITTEE.

| Name of Faculty <br> Member | College/Department | Title at UT Austin | Highest Degree and <br> Awarding Institution |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

11. ACADEMIC COURSE REQUIREMENTS: Use this table to identify the courses that qualify for this certificate program.

| Course Abbreviation and Number | Course Title | SCH |
| :---: | :---: | :---: |
| AFR 374D, Topic 11 | Topic 11: Psychology of the African American Experience | 3 |
| AMS 370, <br> Topic 49 | Topic 49: Twentieth-Century United States Lesbian and Gay History | 3 |
| ARH 339R | Art, Art History, and Medicine | 3 |
| CSD 306K | Introduction to Communication Disorders | 3 |
| CSD 308K | Perspectives on Deafness | 3 |
| EDP 350L | Human Sexuality \# <br> \# Upper-division standing | 3 |
| EDP 350E | Introduction to Life Span Development \# \# Upper-division standing | 3 |
| GRG 344K | Global Food, Farming, and Hunger | 3 |
| GRG 356, Topic 1 | Topic 1: Children's Environmental Health \# \# Upper-division standing | 3 |
| GRG 356T, <br> Topic 9 | Topic 9: Human Health and the Environment \# \# Upper-division standing | 3 |
| HDF 343 | Human Development in Minority and Immigrant Families \# \# Upper-division standing; HDF 313, 113L, 315L | 3 |
| HED 329K | Child and Adolescent Health | 3 |
| HED 378D | Peer Health Leadership I \# <br> \# Consent of instructor | 3 |
| MAN 334M | Healthcare System Management \# \# Upper-division standing | 3 |
| NTR 315 | Nutrition through the Life Cycle \# <br> \# NTR 306, 312, or 312H | 3 |
| NTR 321 | International Nutrition: The Developing World \# \# NTR 306, 312, or 312H | 3 |
| NTR 332 | Community Nutrition \# <br> \# NTR 312 or 312H; 315, 326 | 3 |
| SOC 307P | Introduction to the Sociology of Health and Well-Being | 3 |
| SOC 321G | Global Health Issues and Health Systems \# \# Upper-division standing | 3 |
| SOC 333K | Sociology of Gender \# \# Upper-division standing | 3 |
| S W 360K, Topic 9 | Topic 9: Loss and Grief: Individual, Family, and Cultural Perspectives | 3 |

## 12. OTHER CERTIFICATE REQUIREMENTS:

## 13. GIVE A DETAILED RATIONALE FOR CHANGE(S):

Natural Sciences rearranged the some of the explanatory text from the last paragraph to the first paragraph. Reason: The first paragraph will now contain the information students are most interested initially.

Science major track changes
Add coursework across the university that was identified via individual petitions for students pursuing the programs. Delete coursework retired from the course inventory.
Reason: Clean-up of course lists within theme areas.
Rearrange coursework to allow no more than one course chosen from EDP 350L (Human Sexuality), HED 366 (Human Sexuality), and PSY 346K (Psychology of Sex).
Reason: Some amount of overlap between material. Certificate students would be better served taking course work to provide a broader background in courses that would be beneficial to pre-health professions students.

Remove M 316 and replace with SDS 301.
Reason: M 316 is being retired. Material will be taught in SDS 301.

## Non-science major track changes

Allow certificate to be completed by a combination of introductory and advanced coursework in the particular area of preparation that a student pursues.
Reason: The advanced coursework departments have sufficient seats available that there is no need to restrict enrollment on the basis of completing all of the introductory coursework. Students outside of Natural Sciences must still meet individual course prerequisites.

Add organic chemistry sequence to the pre-veterinary preparation.
Reason: Organic chemistry is required for pre-veterinary preparation.

## 14. COLLEGE/SCHOOL APPROVAL PROCESS:

College approval date: September 20, 2017 Course and Curriculum Committee
Dean approval date:
September 20, 2017
David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## Pre-Health Professions Certificate

The Pre-Health Professions Certificate assists students in preparing for post-baccalaureate, healthcare professional programs. The certificate consists of a minimum of eighteen hours, including nine hours in residence. Each course presented for the certificate must be completed with a grade of at least $C$ -

The certificate is composed of two separate tracks: a track for majors in the College of Natural Sciences, and a track for majors in other colleges across the university. Students must apply online for admission to the certificate through the university-wide portal for transcript recognized certificates.

Students are encouraged to work closely with the Health Professions Office to select healthcare themes relevant to their professional career goals. Some of the courses may contain prerequisites that are in addition to the coursework for the certificate.

Majors in the College of Natural Sciences must seek the Science Major Track. [No admission to the track is required.]

Majors outside of the College of Natural Sciences must seek the Non-Science Major Track. The composition of the non-science major track is science coursework necessary for admission to post-baccalaureate, healthcare professional programs. Non-science majors may apply to the certificate program upon completion of the following courses with grades of at least $B$-: Chemistry 301 or 302 , and one of the following: Statistics and Data Sciences 302, Mathematics 408C, $408 \mathrm{~K}, 408 \mathrm{~N}$, or 408R. Upon admission, the ability to progress in the certificate is dependent on completion of the certificate courses with satisfactory grades. [Non-seience majors who complete the certificate may be eligible to enroll in select upper-division courses necessary for application to the health professions programs to which they are applying.]
[Students must contact the dean's office in the College of Natural Sciences to request the certificate during the semester in which they are completing the requirements. The certificate consists of a minimum of 18 hours. Each course presented for the certificate must be completed with a grade of at least $C$-.]

## Science Major Track

1. Complete eighteen [18] hours chosen from the following themes relevant to healthcare. Students pursuing the science major track may substitute a maximum of nine hours chosen from the optional lists that follow requirement 1.
a. Cultural Awareness:
i. Anthropology 322M (Topic 5: Indians of Mexico and Guatemala)
ii. Asian American Studies 301 and Asian American Studies 310 (Topic 1: Psychological Perspectives on Asian American Identity)
iii. African and African Diaspora Studies 301 and 374D (Topic 11: Psychology of the African American Experience)
iv. Latin American Studies 324L (Topic 16: Mexican Immigration Cultural History)
v. Mexican American Studies 307
vi. Middle Eastern Studies 301L
vii. American Studies 370 (Topic 49: Twentieth-Century United States Lesbian and Gay History)
viii. Communication Sciences and Disorders 308K
b. Health and Anatomy:
i. Classical Civilization 306M
ii. Educational Psychology 350L, [363 (Topic 3: Human Sexuality) or] Health Education 366, or Psychology 346K
iii. Health Education $335,343,352 \mathrm{~K}, 370 \mathrm{~K}$, and 373
iv. Kinesiology 320 , $424 \mathrm{~K}, 425 \mathrm{~K}$, and 326 K
v. Psychology 301, 308, 332C, [Psychology] 341K (Topic 4: Health Psychology), [Psychology 346K,] and [Psychology] 353K
vi. Art History 339R
vii. Communication Sciences and Disorders 306K
c. Healthcare Policy:
i. Communication Studies 322 E
ii. History 350R (Topic 18: Women in Sickness and Health)
iii. Philosophy 325M
iv. Nursing 309 and Nursing 321
v. Sociology 307P, 319, 321G, 336D, 354K, 358D, 368D, and 369K
vi. Urban Studies 350 (Topic 2: Human Health and the Environment)
vii. Geography 344K, 356 (Topic 1: Children's Environmental Health), 356T (Topic 9: Human Health and the Environment), and 357
viii. Public Health 317
ix. 3 hours from Health Education 378D
x. Management 334M
d. Human and Societal Development:
i. Communication Studies 310 K and 322E
ii. Educational Psychology 350E [369K (Topic 10: Educational Neuroscience)]
iii. Human Development and Family Sciences 304, 313, 335, 342, 343, 351, and 378K (approved topics)
iv. Nursing 310
v. Psychology 301, 308, 332C, 333D, and 341K (Topic 4: Health Psychology)[, and Psychology 346K]
vi. Sociology 302, [and] 330 C , and 333K
vii. Health Education 329K
viii. Social Work 360K (Topic 9: Loss and Grief: Individual, Family, and Cultural Perspectives)
e. Nutrition:
i. Communication Studies 322E
ii. History 350R (Topic 5: American Cultural History of Alcohol and Drugs)
iii. Nutrition 306, $312,315,218,321,326$, [and] 331, and 332

Optional: If additional hours are needed to complete the 18 hours for the certificate, a maximum of nine hours chosen from the following may be applied to the science major track.

- Biochemistry and Chemistry: Chemistry 220C, 320M, 320N, and Biochemistry 369
- Biology: Biology 311C, 311D, and 206L
- Physics: Physics

302K, 102M, 302L, 102N; 317K, 117M 317L, 117N; 301, 101L, 316, 116L; 303K, 103M, 303L, 103N

- Statistics: One of the following courses: [Mathematies 316,] Statistics and Data Sciences 301, 302,304 , 306 , or 328 M
- Additional upper-division coursework in biochemistry, biology, and chemistry by approval of the undergraduate certificate adviser


## Non-science Major Track

1. Complete eighteen [18] hours [from one of the following areas of health professions preparations;] chosen from one of the health professions preparation sequences numbered a through $h$. The eighteen hours may be composed of introductory coursework, advanced coursework, or a mixture of the two. [a.i through h.i. Upen completion of the certificate, sttedents may enroll in the advanced coursework associated with their introductory preparation, chosen from a.ii through h.ii.]
a. Pre-dental preparation:
[i. Certificate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Physics $302 \mathrm{~K}, 102 \mathrm{M}, 302 \mathrm{~L}, 102 \mathrm{~N}$ *
[ii.] Advanced Coursework: Biochemistry 369; Biology 320, 325, 326R**; Chemistry $320 \mathrm{M}, 320 \mathrm{~N}, 220 \mathrm{C}$
b. Pre-medical preparation:
[i. Certificate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Physics $302 \mathrm{~K}, 102 \mathrm{M}, 302 \mathrm{~L}, 102 \mathrm{~N}$ *
[ii.] Advanced Coursework: Biochemistry 369; Biology 320, 325, 326R**; Chemistry $320 \mathrm{M}, 320 \mathrm{~N}, 220 \mathrm{C}$
c. Pre-occupational therapy preparation:
[i. Certifieate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Statistics and Data Sciences 302; Physics 302K, 102M*[, and one hour of additional coursework approved by the certificate adviser]
[ii.] Advanced Coursework: Biology 325, 446L, 365S, 165 U
d. Pre-optometry preparation:
[i. Certificate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Statistics and Data Sciences 302; Physics 302K, 102M, 302L, 102N*
[ii.] Advanced Coursework: Biochemistry 369; Biology 325, 326R**, 226L, 446L, 365S, 165U; Chemistry 320M, 320N, 220C
e. Pre-physical therapy preparation:
[i. Certificate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Statistics and Data Sciences 302; Physics 302K, 102M, 302L, 102N*
[ii.] Advanced Coursework: Biology 325, 446L, 365S, 165 U
f. Pre-physician assistant preparation:
[i. Certificate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Statistics and Data Sciences 302; Nutrition 306[, and two hours of additional coursework approved by the eertificate adviser]
[ii.] Advanced Coursework: Biochemistry 369; Biology $320,325,226 \mathrm{~L}, 326 \mathrm{R} * * 344,446 \mathrm{~L}, 365 \mathrm{~S}, 165 \mathrm{U}$; Chemistry 320M, 320N, 220C
g. Pre-pharmacy preparation:
[i. Certifieate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Statistics and Data Sciences 302; Physics 302K, 102M*[, and one hour of additional coursework approved by the certificate adviser]
[iii.] Advanced Coursework: Biology 325, 226L, 326R**, 446L, 365S, 165U; Chemistry 320M, 320N, 220C
h. Pre-veterinary preparation:
[i. Certificate] Introductory Coursework: Biology 311C, 311D, 206L; Chemistry 204; Physics $302 \mathrm{~K}, 102 \mathrm{M}, 302 \mathrm{~L}, 102 \mathrm{~N}^{*}$
[j] Advanced Coursework: Biochemistry 369; Biology 325, 326R, 226L, 344; Chemistry 320M, 320N, $\underline{220 C}$; Statistics and Data Sciences 321 or 328M

* A completed calculus-based physics sequence may substitute for the purpose of earning the certificate
** Previously completed Biology 326M may substitute for Biology 326R


## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO MINORS AND CERTIFICATES PROGRAMS SECTION IN THE COLLEGE OF NATURAL SCIENCES SECTION IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Minors and Certificates Programs section in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On September 20, 2017, the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved the proposal. The Secretary has classified this proposal as legislation of exclusive interest to one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on January 24,2018 , and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Driehwen
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO MINORS AND CERTIFICATES PROGRAMS SECTION IN THE COLLEGE OF NATURAL SCIENCES SECTION IN THE UNDERGRADUATE CATALOG 2018-2020 

Type of Change<br>【 Academic Change<br>Degree Program Change (THECB form required)

Proposed classification $\quad \boxtimes$ Exclusive $\quad \square$ General $\quad \square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?

| Yes $\square$ | No $\boxtimes$ |
| :---: | :---: |
| Yes $\square$ | No $\boxtimes$ |
| Yes $\square$ | No $\boxtimes$ |
| Yes $\square$ | No $\boxtimes$ |

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

## Minor and Certificate Programs

Establish a policy for how many transcript-recognized minors and certificates a student may attach to a single degree audit profile.
Reason: Currently, university legislation does not limit the number of transcript-recognized minors/ transcriptrecognized certificates a student may seek. The interactive degree audit software has a built-in limit of five separate credentials that may be attached to a single profile. The college is instituting a policy similar to its simultaneous major policy, requiring students to meet with their advisers to discuss the impact of adding more than one credential to their degree and how it would impact their expected date of graduation.
3. THIS PROPOSAL INVOLVES (Please check all that apply)
$\square$ Courses in other colleges $\quad \square$ Courses in proposer's college that are frequently taken by students in other colleges
$\square$ Course in the core curriculum

Change in admission requirements (external or internal)
$\square$ Change in course sequencing for an existing program

Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?

YesNo $\boxtimes$ If yes, then how would you do so?
b. Do you anticipate a net change in the number of students in your college?

Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$

If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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 (42hour 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

College approval date: September 20, 2017
Dean approval date: September 20, 2017

Course and Curriculum Committee<br>David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## MINOR AND CERTIFICATE PROGRAMS

In the College of Natural Sciences, only one transcript-recognized minor or transcript-recognized certificate may be declared per major.

A student who wishes to pursue more than one transcript-recognized minor or transcript-recognized certificate per major must consult with his or her academic advisor to get permission from the College. When considering whether to grant an exception and allow pursuit of another transcript-recognized credential, the academic advisor will take into account the student's long-term educational/professional goals and the student's ability to graduate within four years of entering the university.

Students admitted to transcript-recognized certificate and transcript-recognized minor programs must contact their academic advisors to have approved programs added to their degree audit profiles. This allows progress toward the programs to be tracked and ensures that certificates and minors are added to official transcripts upon graduation, if all requirements are met.

## Minor

\{no change\}

## Certificate Programs

\{no change \}

## DOCUMENTS OF THE GENERAL FACULTY

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

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Astronomy degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On February 10, 2017, the Astronomy Executive Undergraduate Studies Committee approved the proposal; on May 10, 2017, the Dean's Scholars Steering Committee approved it, and on September 20, 2017, Associate Dean David Vanden Bout, on behalf of Dean Hicke, granted approval. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Drielwan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

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

Type of Change $\quad \boxtimes$ Academic Change $\square$ Degree Program Change (THECB form required)

Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ 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 $\square$ No $\boxtimes$

- Is this program being deleted?
- Does the program offer courses that will be taught off campus? Yes $\square$ No $\boxtimes$
- Will courses in this program be delivered electronically?

Yes $\square$ No $\boxtimes$

## 2. EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR EACH INDIVIDUAL CHANGE: <br> Option 1, Astronomy

Requirement 9: Alter wording of requirement to make it clearer that AST $352 \mathrm{~K}, 353$, 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 $4^{\text {th }}$ 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 $21^{\text {st }}$ 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 six 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 six 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)
$\boxtimes$ Courses in other collegesCourse in the core curriculumChange in admission requirements (external or internal)Courses in proposer's college that are frequently taken by students in other colleges
$\boxtimes$ Change in course sequencing for an existing programRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?

Yes $\boxtimes$ 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 six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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 (42hour 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;
February 10, 2017
Department approval date: May 10,2017
College approval date:
Dean approval date:

September 6, 2017
September 202017
September 20, 2017

Astronomy Executive Undergraduate Studies Committee
Dean's Scholars Steering Committee Course and Curriculum Committee

David Vanden Bout, Associate Dean for Undergraduate Education

## 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 301 H 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 $427 \mathrm{~K}, 427 \mathrm{~L}$, and 340 L
8. Physics $301,101 \mathrm{~L}, 315,115 \mathrm{~L}, 316,116 \mathrm{~L}, 336 \mathrm{~K}, 352 \mathrm{~K}, 353 \mathrm{~L}, 355,362 \mathrm{~K}, 369$, and 373
9. [ 12 semester hours of upper division coursework in astrenemy, ineluding] Astronomy $352 \mathrm{~K}, 353$, [and] 358 , and three additional hours of upper-division Astronomy. Astronomy [354] 364P, 376C, or 376 R 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 301 H , 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 $301,101 \mathrm{~L}, 315,115 \mathrm{~L}, 316$, and 116 L
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 379 H 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 [өr] 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.

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN BIOCHEMISTRY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Biochemistry degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Department of Biochemistry approved the proposal on March 31, 2017; it was approved by the Dean's Scholars Steering Committee on September 27, 2017; and by the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, on September 20, 2017. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alen W. Driehewen
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN BIOCHEMISTRY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE <br> CATALOG 2018-2020 

| Type of Change | Academic Change <br>  <br> $\square$ |
| :--- | :--- | :--- |
| Proposed classification | $\square$ Exclusive Program Change (THECB form required) |

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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?

Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$

## 2. EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR EACH INDIVIDUAL CHANGE: <br> Option 1, Biochemistry

Remove BCH 339 N from requirement 8 c and reduce number of biochemistry elective courses from three to two.

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 reduced 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 three to two
Reason: The number of biochemistry courses are reduced 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 six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six 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)

$\boxtimes$ Courses in other colleges $\square$ $\square$ Courses in proposer's college that are frequently taken by students in other colleges
Course in the core curriculumChange in admission requirements (external or internal)
$\boxtimes$ Change in course sequencing for an existing programRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?

If yes, then how would you do so?
The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathbf{a}, \mathbf{b}, \mathbf{c}$, or $\mathbf{d}$ 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 nonnegligible 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 (42hour 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: March 31,2017
Dean's Scholars approval date: May 10, 2017
September 27, 2017

College approval date: April 20, 2017
September 20, 2017
Dean approval date:

Karen Browning, Associate Chair
Dean's Scholars Steering Committee
Jeffrey Barrick, Biochemistry Honors
Faculty Adviser
Course and Curriculum Committee

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 $317 \mathrm{~K}, 117 \mathrm{M}, 317 \mathrm{~L}$, and 117 N (recommended);
b. Physics $303 \mathrm{~K}, 103 \mathrm{M}, 303 \mathrm{~L}$, and 103 N ; or
c. Physics 301, 101L, 316, and 116L
8. The following chemistry courses:
a. General chemistry: Chemistry 301 or $301 \mathrm{H}, 302$ or 302 H , and 204 or 317
b. Organic chemistry: Chemistry 320M
c. Biochemistry: Biochemistry 339 F and 369 L , and [three] two additional courses chosen from Biochemistry 339J, 339M, [339N], and 370
d. Physical chemistry: Chemistry 353 or 353 M
e. Analytical chemistry: Chemistry 455
9. One of the following sequences:
a. Biology 311C, 311D, and 325; or
b. Biology 315 H and 325 H
10. Biology 344
[10.] 11. Completion of one of the following:
a. [18] Eighteen additional semester hours of upper-division biochemistry, biology, chemistry, and neuroscience; or
b. A transcript-recognized certificate or a transcript-recognized minor
[11.] 12. Enough additional coursework to make a total of 120 semester hours

## Option III: Biochemistry Honors

5. Breadth requirement: An honors mathematics course, Biology 315 H and 325 H , Chemistry 301 H and 302 H , 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 $128 \mathrm{~K}, 128 \mathrm{~L}, 328 \mathrm{M}$, and 328 N ; or $220 \mathrm{C}, 320 \mathrm{M}$, and 320 N
c. Biochemistry: Biochemistry 339F and 369L, and [three] additional courses chosen from Biochemistry 339J, 339M, 339N, and 370
d. Physical chemistry: Chemistry 353 or 353 M
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 379 H or 379 H and either a three-semester-hour upper-division research course approved by the departmental honors adviser or a second section of Chemistry 379 H or Biochemistry 379 H
[9.] 11. [24] Twenty-four additional semester hours of coursework approved by the departmental honors adviser.
[10.] 12. Six semester hours of coursework [in] from the College of Liberal Arts [өr] and the College of Fine Arts.
[14.] 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 $\}$

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN BIOLOGY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 20182020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Biology degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Biology Instructional Office approved the proposal on February 10, 2017; it was approved by the Department of Integrative Biology on September 6, 2017; and by the Department of Molecular Bioscience and Associate Dean David Vanden Bout, on behalf of Dean Hicke, on September 13, 2017. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Llan W. Oricharan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 12018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN BIOLOGY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 20182020 

## Type of Change

Academic Change
Degree Program Change (THECB form required)
Proposed classification $\square$ Exclusive $\boxtimes$ General $\square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$


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

Change Common to Options II (Human Biology), V (Cell and Molecular Biology), X (Computational Biology), XI (Biology),

Remove BIO 323L from list of approved labs.
Reason: Department of Molecular Biosciences is unsure when course will be offered again. Students who might have taken BIO 323L will be absorbed into the other lab course options.

Change Common to Options II (Human Biology), IV (Microbiology and Infectious Diseases), X (Computational Biology), XI (Biology)

Change BIO 160L to 260L.
Reason: The immunology lab was increased from one to two hours.
Change Common to Options I (Ecology, Evolution, and Behavior), VIII (Teaching), IX (Biology Honors), XI (Biology)

Remove NEU 365R.
Reason: Deleted from the course inventory effective fall 2017.
Option III, Marine and Freshwater Science

Remove the choice of six hours from pairs of coursework.
Reason: In the 2016-18 catalog, the six-hour course sequences were added to our degree option to guide students into a concentration in topics that we felt were relevant to Marine Science. Unfortunately, the GRG courses turned out to be very popular amongst Option III students and exceedingly difficult to get. This has caused a lot of stress for the students and advising exceptions on our part. Of the GRG courses listed, three courses sometimes have a small number of seats available for non-majors; of these two have lower division prerequisites, and the third most often has no seats available outside the major. Thus, we removed the sequences with these courses.

This left four BIO course sequences. Since some of the BIO courses in the sequences also have low availability, we opted to include them in a list of acceptable upper division courses rather than prescribed sequences. In this way, students don't run the risk of not being able to complete their chosen sequence if they can't get into a course. Instead of the previous twelve hours of upper division, it's now eighteen hours of upper division, of which a minimum of twelve hours must be in Marine Science.

We relocated GEO 341G, Geomicrobiology, from the six-hour course sequences to the list of acceptable upper division courses. Marine Science majors are not as interested in this class as they are the Geography classes. However, for the occasional student who enrolls, it is appropriate to count the course.

## Option VII, Plant Biology

When requirements were rewritten in the 2016-18 catalog, BIO 374, Plant Anatomy, was inverted as BIO 347, Biology and Genetics of Immune Disorders.
Reason: Correcting error.
Option IX, Biology Honors

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

Option X, Computational Biology
Remove M 362K from a list of approved courses in requirement 5.
Reason: M 362K and SDS 321 are in a duplicate relationship. Students can count only 1 of the courses. In requirement 5 , students are instructed to complete either M 362 K or $\operatorname{SDS} 321$. In requirement $6, \mathrm{M} 362 \mathrm{~K}$ is in an
approved list of choices. Due to the duplicate relationship, students cannot apply M 362K toward requirement 6 .

Remove NEU 365R.
Reason: Deleted from the course inventory effective fall 2017.

## Option XII, Genetics and Genomics

Add BIO 320, Cell Biology, to list of required biology courses.
Reason: The inclusion of this course was omitted in error when the option was created for the 2016-18 catalog.

Reduce from twelve to nine hours of additional hours in upper-division biochemistry, biology, chemistry, mathematics, and statistics and data sciences.
Reason: Reduction of additional science hours made to accommodate addition of BIO 320 in order to maintain the number of hours in the option and the number of elective hours students may take.

## 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)

$\boxtimes$ Courses in other colleges
$\square$ Courses in proposer's college that
$\square$ Flags are frequently taken by students in other colleges
Course in the core $\quad \square$ Change in course sequencing for curriculum an existing program
$\square$ Courses that have to be added to the inventory
$\square$ Change in admissionRequirements not explicit in the
requirements (external or internal)
catalog language (e.g., lists of acceptable courses maintained by department office)

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?

Yes $\boxtimes$ No $\square$
If yes, then how would you do so?
Option III, Marine and Freshwater Science: The proposal removes eleven GRG courses, which make up an estimated maximum of twenty seats per year distributed among the eleven courses.

Option IX, Biology Honors:
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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$ 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? $\quad$ Yes $\boxtimes$ No $\square$
If yes, please indicate the number of students and/or class seats involved.
Option III, Marine Science and Freshwater Biology: The proposal removes eleven GRG courses, which make up an estimated maximum of twenty seats per year distributed among the eleven courses.

If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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? Twenty
Impacted schools must be contacted and their response(s) included: Department of Geography and the Environment
Person communicated with: Sheryl Luzzadder-Beach, Chair
Date of communication: September 12, 2017
Response: If this helps Marine Science students graduate faster and smooths your degree pathway, and you will still send them to GRG courses for electives, I agree.
e. Does this proposal involve changes to the core curriculum or other basic education requirements (42hour core, signature courses, flags)? If yes, explain:
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?

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

Biology Instructional Office
Department approval date: February 10, 2017 Janice Fischer, director
College approval date:
Course and Curriculum Committee
Department of Integrative Biology
Department approval date: February 20, 2017
College approval date: September 6,2017
Department of Marine Science
Department approval date: May 8,2017
Department approval date: July 31,2017
College approval date: September 13,2017
Claus Wilke, chair
Course and Curriculum Committee

Department of Molecular Biosciences
Department approval date: March 31, 2017
College approval date: April 20, 2017
Karen Browning, Associate Chair
Course and Curriculum Committee
Dean's Scholars approval date: May 10, 2017
College approval date:
September 20, 2017
Dean approval date:
September 13, 2017

Marine Science Curriculum Committee BIO Course and Curriculum Committee Course and Curriculum Committee

Dean's Scholars Steering Committee
Course and Curriculum Committee David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

BACHELOR OF SCIENCE IN BIOLOGY
\{no change\}
Prescribed Work Common to All Options
\{no change $\}$

## Additional Prescribed Work for Each Option

## Option I: Ecology, Evolution, and Behavior

5. One course or pair of courses in each of the following areas:
a. Ecology: Biology 357, 373, or Marine Science 320 and 120L
b. Behavior and comparative physiology: Biology 322 and 122L, 359K, or 361T
c. Taxon-based course: Biology $321 \mathrm{~L}, 324$ and $124 \mathrm{~L}, 327$ and $127 \mathrm{~L}, 340 \mathrm{~L}, 448 \mathrm{~L}, 351,352,353 \mathrm{~F}, 453 \mathrm{~L}, 354 \mathrm{~L}, 455 \mathrm{~L}, 463 \mathrm{~L}, 369 \mathrm{~F}, 369$ L, Marine Science 352D, 354, 354C, 354E
6. Three additional courses or pair of courses chosen from coursework in 5 a through 5 c and from Biology 438L, 471G, 456L, 359R, 364, 373L, 374 and 174L, 375, 478L, Marine Science 352C, and 354Q
7. One course in cellular, developmental, genetics, microbiology, molecular, or neuroscience: Biology 320, 320L, 325L, 325T, 326R, 328, 331L, 344, 349, 349L, 350M, 366R[,Neuroscience 365R]
8. One laboratory course or pair of courses containing a substantial field component: Biology 321L, 340L, 353F, 453L, 354L, 455L, 456L, 369L, 373L, Marine Science

320 and $120 \mathrm{~L}, 352 \mathrm{C}, 352 \mathrm{D}, 354,354 \mathrm{C}, 354 \mathrm{E}$. A laboratory course or pair of courses may also count toward requirements 5 through 7
9. One additional laboratory course: Biology 320L, 321L, 124L, 127L, 325L, 331L, 438L, 340L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, 369L, 37 3L, 174L, 478L, Marine Science 120L, 352C, 352D, 354, 354C, 354E, 354Q. One-hour laboratory courses may require credit for or registration in a complementary lecture course. A laboratory course may also count toward requirements 5 through 7 . A course counted toward requirement 8 may not also count toward requirement 9 .
10. One course chosen from the following: Chemistry 320M, Computer Science 303E or 313E, Geological Sciences 401 or 303, Statistics and Data Sciences 332 or 348
11. Enough additional coursework to make a total of 120 semester hours

## Option II: Human Biology

5. Chemistry $320 \mathrm{M}, 320 \mathrm{~N}, 220 \mathrm{C}$
6. Biochemistry 369 or 339 F
7. Biology 346
8. Three hours from genetics, genomics, and computational biology: Biochemistry 339N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471, Statistics and Data Sciences 348
9. Six hours from cellular, developmental, and molecular biology: Biochemistry 339J, 339M, 364F, Biology $320,326 \mathrm{R}, 330,335,336,339,339 \mathrm{M}, 344,347$ or $360 \mathrm{~K}, 349,350 \mathrm{M}, 360 \mathrm{M}, 361$
10. Three hours from ecology, environment, and health: Biology 326R, 327D, 329, 330, 361, 364, Nutrition 306 or 312
11. Four hours from physiology and anatomy: Biology 446L, 365S and 165U, 478L
12. One additional laboratory course from: Biology 320L, 122L, [323L-] 124L, 128L, 129L, 325L, 328D, $230 \mathrm{~L}, 331 \mathrm{~L}, 340 \mathrm{~L}, 446 \mathrm{~L}, 448 \mathrm{~L}, 349 \mathrm{~L}, 353 \mathrm{~F}, 453 \mathrm{~L}, 354 \mathrm{~L}, 455 \mathrm{~L}, 456 \mathrm{~L}, ~[160 \mathrm{~L}] 260 \mathrm{~L}, 361 \mathrm{~L}, 463 \mathrm{~L}, 165 \mathrm{U}$, 369F, 369L, 371L, 373L, 174L, 478L, Marine Science 120L, 152L. One-hour laboratory courses may require credit for or registration in a complementary lecture course.
13. Enough additional coursework to make a total of 120 semester hours

## Option III: Marine and Freshwater Science

5. Chemistry 320M
6. Biology 326R and 373
7. Marine Science $101,310,320$, and 120 L
8. [12] Eighteen hours of coursework, including twelve hours in Marine Science, chosen from: Biology 320, 321L, 328, 344, 354L, 357, 361T, 364, 364E, 366, 375, Geological Sciences 341G, Marine Science 440, 348 (Topic 1: Training Cruise(s)), 352, 352C, 352D, 352E, 152L, 152S, 252S, 152T, 252T, 353, 354, 354C, 354E, 354J, 354Q, 354T, 354U, 355C, 356, 357, 367K, 170, 270, 370. Six hours in Marine Science must be completed at the Marine Science Institute in Port Aransas, Texas.
9. [Six hours of related courses chosen from one of the following options:]
[a. Biology 320 and 344
[b. Biology 328and 3617]
[e. Biology 357 and 375]
[4. Biology 364 and 366 or Geologieal Seiences 341G]
[e. Geography 301C or 301 K and 333 K ]
[f. Geography 301Cand 356 or 356 T ]
[8. Geography 306C and 334,339 , or 356 ]
[h. Geography 310 C and 360 G-or 335 N ]
[10.] 9. Enough additional coursework to make a total of 120 semester hours

## Option IV: Microbiology and Infectious Diseases

5. Biochemistry 369 or 339 F , and Chemistry 320 M
6. Biology 326R, 330, 339, 339M, 360K, 361, 366
7. Two upper-division biology laboratory courses chosen from: Biology 230L, 260L, [160L,] and 361L. Biology 377-FRI/377/379H may be used for one of the laboratory courses if approved in advance by the microbiology faculty adviser.
8. Fifteen [15] additional hours in upper-division biochemistry, biology, and chemistry
9. Enough additional coursework to make a total of 120 semester hours

## Option V: Cell and Molecular Biology

5. Biochemistry 369 or 339 F , and Chemistry 320 M
6. Biology 320, 326R, 349, and 344 or 350 M
7. Two laboratory courses chosen from: Biology 320L, [323L,] 325L, 331L, 349L
8. One additional upper-division laboratory course in biology. Biology 377-FRI/377/379H may be used if approved in advance by the cell and molecular biology faculty adviser.
9. Eighteen [48] additional hours in upper-division biochemistry, biology, and chemistry
10. Enough additional coursework to make a total of 120 semester hours

## Option VII: Plant Biology

5. Biology 328,373 , and 322 and 122L, 324 and 124 L , or 463 L
6. Two additional upper-division laboratory courses; Biology 377-FRI/377/379H may be used for one of the laboratory courses if approved in advance by the plant biology faculty adviser.
7. One of the following sequences:
a. Plant molecular biology: Biochemistry 369 or 339 F , Biology 320 and 350 M , and Chemistry 320 M
b. Plant environmental biology: Biology 357, [347] 374, and 375
8. Eighteen [48] additional hours in upper-division biochemistry, biology, chemistry, and marine science
9. Enough additional coursework to make a total of 120 semester hours

## Option VIII: Teaching

This Option is designed to fulfill the course requirements for certification as a middle grades or secondary school science teacher in Texas; the student chooses either composite science certification with biology as the primary teaching field or life science certification. However, completion of the course requirements does not guarantee the student's certification. Information about additional certification requirements is available from the UTeach-Natural Sciences academic adviser.
5. Chemistry $320 \mathrm{M}, 320 \mathrm{~N}$, and 220 C or 320 M and Biochemistry 369
6. Biology courses:
a. Biology 320, 226L, 326R, and either 324 and 124L, 322 and 122L, or 328 and 128L
b. At least three semester hours chosen from the following courses in physiology, neurobiology, and behavior: Biology 438L, Biology 359K, 359R, 361T, 365S, 367C[, Neuroscience 365R]
c. At least three semester hours chosen from: Biology

340L, 448L, 453L, 455L, 456L, 463L, 364, 369L, 373, Marine Science 352D, 354, 354C
7. One of the following research methods courses: Biology 328D, 337 (Topic 2: Research Methods:

UTeach), Chemistry 368 (Topic 1: Research Methods: UTeach), Physics 341 (Topic 7: Research Methods:
UTeach)
8. History 329U or Philosophy 329U
9. One of the following:
a. For composite science certification: Biochemistry 369 (to be counted as upper-division biology hours) and six semester hours of coursework in geological sciences. Courses intended for nonscience majors may not be counted toward this requirement. The remaining composite certification content requirements are met by the chemistry, physics, and science courses used to fulfill requirements 3 c , $3 \mathrm{~d}, 3 \mathrm{ei}$, and 5.
b. For life science certification: Biology 373, and three additional semester hours of biology chosen from the courses listed in requirement $6 b$ and $6 c$
10. Eighteen [48] semester hours of professional development coursework consisting of:
a. Curriculum and Instruction 651 S
b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
e. UTeach-Natural Sciences 101, 110, and 170
11. Students seeking middle grades certification must complete the following courses: Educational Psychology 363M (Topic 3: Adolescent Development), or Psychology 301 and 304; and Curriculum and Instruction 339E
12. Enough additional coursework to make a total of 126 semester hours

## Option IX: Biology Honors

5. Breadth requirement: An honors mathematics course; Biology 315 H and 325 H ; Chemistry 301 H and 302 H ; and an additional three-hour honors-designated course from a department in College of Natural Sciences. Credit earned by examination may not be counted toward this requirement.
6. An eight-semester-hour sequence of coursework in physics chosen from the following:
a. Physics 301, 101L, 316, and 116L;
b. Physics $317 \mathrm{~K}, 117 \mathrm{M}, 317 \mathrm{~L}$, and 117 N ; or
c. Physics $303 \mathrm{~K}, 103 \mathrm{M}, 303 \mathrm{~L}$, and 103 N
7. Biology 206L or 208L and Chemistry 204
8. Complete twenty-four [24] hours chosen from any of the following courses:
a. Biology 370
b. Cellular, developmental, and molecular biology: Biochemistry 369 or $339 \mathrm{~F}, 339 \mathrm{~J}, 339 \mathrm{M}, 364 \mathrm{~F}$, Biology 320, 326R, 330, 335, 336, 339, 339M, 344, 347 or $360 \mathrm{~K}, 349,350 \mathrm{M}, 360 \mathrm{M}, 361$
c. Genetics and genomics: Biochemistry 339N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471, Statistics and Data Sciences 348
d. Physiology, neuroscience, and behavior: Biology 328, 438L, 359K, 359R, 361T, 367C, 365S, 374, Marine Science 355C[,Nemroseience 365R]
e. Ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 471G, 373, 375, Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357
9. Three upper-division laboratory courses in biology; Biology 377 or 379 H may be used as only one of the three required upper-division laboratory courses. Courses used to fulfill this requirement may also be counted toward requirement 8 .
10. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
11. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
12. Two semesters of Biology 379 H
13. Fifteen [15] additional semester hours of coursework approved by the departmental honors adviser
14. Six semester hours of coursework [in] from the College of Liberal Arts [өr] and the College of Fine Arts
15. Enough additional coursework to make a total of 120 semester hours

## Option X: Computational Biology

5. Statistics and Data Sciences 329C or Mathematics 340 L or 341 ; Mathematics 362 K or Statistics and Data Sciences 321; and Statistics and Data Sciences 348
6. Two courses from: Computer Science 303E, 313E, 323E, 323H, 324E, 326E, 327E, 329E, Mathematics 408D, 358K, [362K,] 378K, Statistics and Data Sciences 322, 323, 329D, 332, 335, 352, 353, 358, 374C, 374D, 374E.
7. Two courses from genetics, genomics, and computational biology: Biochemistry 339N, Biology 321G, $325 \mathrm{~T}, 327 \mathrm{E}, 327 \mathrm{G}, 354 \mathrm{C}, 366,366 \mathrm{R}, 471$
8. Six hours chosen from any of the following courses:
a. Cellular, development, and molecular biology: Biochemistry 369 or $339 \mathrm{~F}, 339 \mathrm{~J}, 339 \mathrm{M}, 364 \mathrm{~F}$, Biology $320,326 \mathrm{R}, 330,335,336,339,339 \mathrm{M}, 344,347$ or $360 \mathrm{~K}, 349,350 \mathrm{M}, 360 \mathrm{M}, 361$
b. Physiology, neuroscience, and behavior: Biology 328, 438L, 359K, 359R, 361T, 367C, 365S, 374, Marine Science 355C[,Neuroscience 365R]
c. Ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 471G, 373, 375, Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357
9. One additional laboratory course chosen from: Biology 320L, 122L, [323L-] 124L, 128L, 129L, 325L, 328D, 230L, 331L, 340L, 446L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, [160L] 260L, 361L, 463L, 165U, 369F, 369L, 371L, 373L, 174L, 478L, Marine Science 120L, 152L
10. Nine hours of additional upper-division biochemistry, biology, chemistry, marine science, mathematics, physics, and statistics and data sciences
11. Enough additional coursework to make a total of 120 semester hours

## Option XI: Biology

5. Two courses from cellular, developmental, and molecular biology: Biochemistry 369 or 339F, 339J, $339 \mathrm{M}, 364 \mathrm{~F}$, Biology $320,326 \mathrm{R}, 330,335,336,339,339 \mathrm{M}, 344,347$ or $360 \mathrm{~K}, 349,350 \mathrm{M}, 360 \mathrm{M}, 361$
6. Two courses from genetics, genomics, and computational biology: Biochemistry 339 N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471, Statistics and Data Sciences 348
7. Two courses from physiology, neurobiology, and behavior: Biology 328, 438L, 359K, 359R, 361T, 367C, 365S, 374, Marine Science 355C[,Neuroscience 365R]
8. Two courses from ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 471G, 373, 375, Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357
9. Two additional laboratory courses: Biology 320L, 122L, [323L,] 124L, 128L, 129L, 325L, 328D, 230L, 331L, 340L, 446L, 448L, 349L, 353F, 453L, 3 54L, 455L, 456L, [160L] 260L, 361L, 463L, 165U, 369F, 369L, 371L, 373L 174L, 478L, Marine Science 120L, 152L. One-hour laboratory courses may required credit for or registration in a complementary lecture course.
10. Twelve [12] additional hours in upper-division biochemistry, biology, chemistry, marine science, mathematics, statistics and data sciences, and physics
11. Enough additional coursework to make a total of 120 semester hours.

## Option XII: Genetics and Genomics

5. Biochemistry 369 or 339 F
6. Biology $320,325 \mathrm{~T}, 349,344$, and 325 L
7. Chemistry 320 M
8. Three hours from: Biochemistry 339N, Biology 321G, Statistics and Data Sciences 348
9. Six hours from: Biology 326R, 327E, 327G, 354C, 366, 366R
10. Biology 320L or 349L
11. [12] Nine additional hours in upper-division biochemistry, biology, chemistry, mathematics, and statistics and data sciences
12. 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 grade point average in these courses of at least 2.00 . More information about grades and the grade point average is given in General Information.

To graduate and be recommended for certification, students who follow the teaching Option must have a University grade point average of at least 2.50 . They must earn a grade of at least $C$ - in the supporting course in requirement 8 , and in each of the professional development courses listed in requirement 10 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least $C$ - in each of the courses listed in requirement 11. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

To graduate under the [heners] Option IX, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, 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/.

Order and Choice of Work
\{no change \}

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN CHEMISTRY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Chemistry degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On May 10, 2017, the Dean's Scholars Steering Committee approved the proposal; and on September 28, 2017, the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved it. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
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Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN CHEMISTRY DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG

 2018-2020Type of Change $\quad \boxed{\text { Academic Change }}$Degree Program Change (THECB form required)
Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ Major

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- Is this a new degree program?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$


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

Option II: Computation
Change CH 368 (Topic: Computational Chemistry) to CH 354M, Introduction to Computational Methods in Chemistry.
Reason: The computational chemistry course has been offered under a variety of titles over the years. The Department of Chemistry created a stand-alone course, CH 354M, to standardize the titles.

Change SDS 222 to SDS 322.
Reason: The Department of Statistics and Data Sciences created the course to vary in hours (two to three), but the department has only offered it as a three-hour course.

Option III, Teaching
Update engineering courses under the mathematics, physical science, and engineering certification.
Reason: Engineering an UTeach Natural Sciences reviewed and approved the new courses for teaching certifications in the College of Natural Sciences.

## Option IV, Chemistry Honors

Breadth requirement: Change three hours of honors coursework in BIO or CS to three hours of honors coursework from any department in CNS.
Reason: Computer Science honors courses are restricted, and requiring BIO honors was too restrictive on the students. Chemistry would like more freedom for their honors students to make choices in this requirement.

Change six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six 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, standard 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)

$\boxtimes$ Courses in other collegesCourse in the core curriculumChange in admission requirements (external or internal)Courses in proposer's college that are frequently taken by students in other colleges
$\boxtimes$ Change in course sequencing for an existing programRequirements 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

Yes $\boxtimes$ No $\square$

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?

If yes, then how would you do so?
Option III, Teaching
Very few students seek the mathematics, physical science, and engineering certification. The UTeach Program did not provide an estimate of the number of students who might take E S 301 and M E 377K. However, the additions are approved by UTeach Engineering.

## Option IV, Chemistry Honors

The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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 $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
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?

$$
\text { Yes } \square \text { No } \boxtimes
$$

If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible increase in the number of seats offered, at least one contact must be at the college-level.

Option III, Teaching
How many students do you expect to be impacted? Not provided by UTeach Engineering or UTeach Natural Sciences; minimal number.
Impacted schools must be contacted and their response(s) included: UTeach Engineering
Person communicated with: David Allen, Director
Date of communication: September 22, 2017
Response: Suggested proposed changes.
e. Does this proposal involve changes to the core curriculum or other basic education requirements (42hour 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? 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

Dean's Scholars approval: May 10, 2017
UTeach Program: September 22, 2017
College approval date:
Dean approval date:

September 9, 2017
September 28, 2017
September 9, 2017
September 28, 2017

Dean's Scholars Steering Committee
David Allen, UTeach Program, director
Course and Curriculum Committee
David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN CHEMISTRY

\{no change\}

## Prescribed Work Common to All Options

\{no change \}

## Additional Prescribed Work for Each Option

Option I: Chemistry
\{no change\}

## Option II: Computation

Students who complete Option II may simultaneously fulfill some of the requirements of the Certificate in Scientific Computation.
7. Mathematics 408C and 408D, or 408N, 408S, and 408M; and Statistics and Data Sciences 329C or Mathematics 340L or 341
8. One of the following sequences:
a. Physics 301, 101L, 316, and 116L
b. Physics 303K, 103M, 303L, and 103 N or
c. Physics $317 \mathrm{~K}, 117 \mathrm{M}, 317 \mathrm{~L}$, and 117 N
9. Chemistry 354M [368 (Topic: Computational Chemistry)]
10. At least three semester hours chosen from the following laboratory courses: Biochemistry 369T, Chemistry $341,369 \mathrm{~K}$, and 371 K
11. Statistics and Data Sciences $\underline{322}$ [222] and three of the following courses; the student must complete coursework from at least two of the following areas.
a. Numerical methods: Chemical Engineering 348, Computer Science 323E, 323H, 367, Mathematics 348, Statistics and Data Sciences 335
b. Statistical methods: Biomedical Engineering 335, Mathematics 358K, 378K
c. Other computing topics: Computer Science $324 \mathrm{E}, 327 \mathrm{E}, 329 \mathrm{E}$ (approved topics), 377, Mathematics 346, 362M, 368K, 372K, 376C, Mechanical Engineering 367S, Statistics and Data Sciences 329D, 374C, 374D, 374E
12. Enough additional coursework to make a total of 127 semester hours

## Option III: Teaching

This Option is designed to fulfill the course requirements for certification as a middle grade or secondary school science teacher in Texas; the student chooses one of the following areas: composite science certification with chemistry as the primary teaching field; physical sciences certification; or physical science, mathematics, and engineering certification. However, completion of the course requirements does not guarantee the student's certification. Information about additional teacher certification requirements is available from the UTeachNatural Sciences academic adviser.
7. Mathematics 408C and 408D, or 408N, 408S, and 408M
8. History 329 U or Philosophy 329U
9. One of the following sequences:
a. For students seeking composition science certification: Physics 301, 101L, 316, and 116L; or Physics 303K, 103M, 303L, and 103N; or Physics 317K, 117M, 317L, and 117N. Science 365 and Physics 108 (Topic: Physics by Inquiry) may substitute for Physics 316 and 116L, 317Land 117N, or 303L and 103N. Physics 108 is offered on the pass/fail basis.
b. For students seeking either physical sciences certification or, mathematics, physical science, and engineering certification: Physics 301, 101L, 316, 116L, 315, and 115L;
or $303 \mathrm{~K}, 103 \mathrm{M}, 303 \mathrm{~L}, 103 \mathrm{~N}, 315$, and 115 L
10. The requirements of one of the following certification areas:
a. For composite science certification:
i. Biology 311C and 311D
ii. Six hours of coursework in geological sciences; courses intended for non-science majors may not be counted toward this requirement
iii. Enough additional approved coursework in biology, geological sciences, or physics to provide the required twelve [12] hours in a second field
iv. Chemistry 368 (Topic 1: Research Methods: UTeach) or, with the consent of the UTeachNatural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component
v. In place of requirements 4 c through 4 f of the prescribed work above, the following courses, for a total of at least thirty-four [34] semester hours of chemistry: Biochemistry 339 F or 369 ; Chemistry 353 ; and 455 or 456
b. For physical sciences certification:
i. Mathematics 427 J or 427 K and 427 L
ii. Chemistry $153 \mathrm{~K}, 354 \mathrm{~L}$, and 154 K
iii. Chemistry 354 and three hours of upper-division coursework in physics
iv. Chemistry 368 (Topic 1: Research Methods: UTeach) or, with the consent of the UTeachNatural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component
v. In place of requirements 4 c through 4 f of the prescribed work above, the following courses, for a total of at least thirty-four [34] semester hours of chemistry: Biochemistry 339 F or 369 ; Chemistry 353 , and 455 or 456
c. For mathematics, physical science, and engineering certification:
i. Mathematics 315C, 360M or 375D (Topic: Discovery: Introduction to Advanced Study in Mathematics), 427J or 427 K , and 333L
ii. Chemical Engineering 379 (Topic: Fundamentals of Engineering and Design), 379 (Topic: Engineering Energy Systems), and Mechanical Engineering 379M (Topic: Design of Machines and Systems)
[iii. Chemistry 368 (Topic 1: Research Methods: UTeach) or, with the consent of the UTeachNatural Sciences academic adviser, an upper division chemistry course that includes a substantial researeh compenent] Engineering Studies 301; and Mechanical Engineering 377K upon approval of the project by the UTeach Program.
[iv.] iii. In place of requirements 4 c through 4 f of the prescribed work above, the following courses, for a total of at least thirty [30] semester hours in chemistry: Chemistry 353 and $153 \mathrm{~K}, 455$, and Biochemistry 369
11. Eighteen [18] semester hours of professional development coursework consisting of:
a. Curriculum and Instruction 651S
b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
e. UTeach-Natural Sciences 101, 110, and 170
12. Students seeking middle grades certification must complete the following courses: Educational Psychology 363M (Topic 3: Adolescent Development), or Psychology 301 and 304; and Curriculum and Instruction 339E
13. Enough additional coursework, if needed, to make a total of 126 semester hours

## Option IV: Chemistry Honors

7. Breadth requirement: An honors mathematics course, Chemistry 301 H and 302 H , Physics $301,101 \mathrm{~L}, 316$, and 116 L , and an additional three-hour honors-designated course from a department in the College of Natural Sciences. [a three-semester hour honors course in biology or comptter seience.] Credit earned by examination may not be counted toward this requirement
8. Chemistry 317
9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
10. A section of Rhetoric and Writing 309S that is restricted to Dean's Scholars
11. Chemistry 379 H and a three-semester-hour upper-division research course approved by the departmental honors adviser, or six hours of Chemistry 379H
12. Twenty-two additional hours of coursework approved by the departmental honors adviser
13. Six semester hours of coursework [im] from the College of Liberal Arts [ $\because r]$ and the College of Fine Arts
14. 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 and be recommended for certification, students who follow the teaching option must have a University grade point average of at least 2.50 . They must earn a grade of at least $C$ - in the supporting course in requirement 7 , and each of the professional development courses listed in requirement 10 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least $C$ - in each of the courses listed in requirement 11. For information about the portfolio review and additional teacher certification requirements, consult the UTeach-Natural Sciences academic adviser.

To graduate under Option IV, 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 deseribed in requirement 10 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 [may be found on the College of Natural Sciences website.] is available at https://cns.utexas.edu

## Order and Choice of Work

\{no change $\}$

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Computer Science degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On May 10, 2017, the Dean's Scholars Committee approved the proposal; and on September 28, 2017, the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved it. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Drieluan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

## Type of Change

Academic Change
Degree Program Change (THECB form required)
Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$

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

Option III, Computer Science Honors
Change six 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 six hours from a single college or a mixture of six hours from both colleges. The change will synch catalog copy to advising practice and eliminate the need for petitions.

Option V, Teaching (senior grades)
Change M 362K (Probability I) and SDS 321 (Introduction to Probability and Statistics) to M 362K or SDS 321.

Reason: The courses are in a duplicate relationship in the course inventory. This change is to make a correction.

## Special Requirements

While standardizing language regarding requirements to graduate with Dean's Scholars degree options, it was discovered that this option did not include the program requirements.
Reason: This information was omitted in error from previous catalogs. 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)
$\boxtimes$ Courses in other colleges $\quad \square$
Courses in proposer's college that are frequently taken by students in other colleges
$\square$ Course in the core curriculumChange in admission requirements (external or internal)

Change in course sequencing for an existing programRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
4. SCOPE OF PROPOSED CHANGE
a. Does this proposal impact other colleges/schools?

If yes, then how would you do so?
The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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 $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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 (42hour core, signature courses, flags)? If yes, explain:
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?

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

Dean's Scholars approval date: May 10, 2017
College approval date: April 20, 2017
September 28, 2017
Dean approval date:
September 28, 2017

Dean's Scholars Steering Committee<br>Course and Curriculum Committee<br>David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN COMPUTER SCIENCE

\{no change\}

## Prescribed Work Common to All Options

\{no change\}
Additional Prescribed Work for Each Option
Option I: Computer Science
\{no change\}
Option II: Turing Scholars Honors
\{no change\}

## Option III: Computer Science Honors

6. Breadth requirement: An honors mathematics course; Computer Science 311 H and 314 H ; one of the following two-semester sequences: Biology 315 H and 325 H , Chemistry 301 H and 302 H , Physics 301, 101L, 316, and 116L; and either an additional three hours chosen from these courses or Physics 315 and 115 L . Credit earned by examination may not be counted toward this requirement.
7. At least six semester hours of upper-division coursework in mathematics
8. Computer Science $429 \mathrm{H}, 331 \mathrm{H}, 439 \mathrm{H}$, and twelve [12] additional hours of upper-division coursework in computer science
9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
11. Computer Science 379 H and a three-semester-hour upper-division research course approved by the departmental honors adviser
12. Twenty-five [25] additional semester hours of coursework approved by the departmental honors adviser
13. Six semester hours of coursework [im] from the College of Liberal Arts [ fr ] and the College of Fine Arts
14. Enough additional coursework to make a total of 120 semester hours

## Option IV: Integrated Program

\{no change \}

## Option V: Teaching (Senior grades)

6. History 329 U or Philosophy 329 U
7. Mathematics 408C and 408D, or 408N, 408S, and 408M , either 340L or 341 or Statistics and Data Sciences 329C
8. One of the following sequences of coursework:
a. Biology 311C and 311D
b. Chemistry 301 or 301 H , and 302 or 302 H
c. Physics 303 K and $103 \mathrm{M}, 301$ and 101 L , or 317 K and 117 M ; and 303 L and $103 \mathrm{~N}, 316$ and 116 L , or 317 L and 117 N
9. The following courses in computer science:
a. Theory: Computer Science 311 or $311 \mathrm{H}, 331$ or 331 H , and three additional hours from an approved list available in the department
b. Programming: Computer Science 312, 314 or 314 H , and three additional hours from an approved list available in the department
c. Systems: Computer Science 429 or $429 \mathrm{H}, 439$ or 439 H , and three additional hours from an approved list available in the department
10. The requirements of one of the following certification areas:
a. For computer science certification:
i. Mathematics 362 K [and] or Statistics and Data Sciences 321
ii. An additional sequence chosen from the following:
i. Biology 325 and 337 (Topic 2: Research Methods: UTeach)
ii. At least three hours of upper-division coursework in chemistry approved by the undergraduate adviser, and Chemistry 368 (Topic 1: Research Methods: UTeach)
iii. Physics 315 and 341 (Topic 7: Research Methods: UTeach)
iii. Fifteen [15] additional hours of approved computer science upper-division coursework
b. For computer science and mathematics certification:
i. Mathematics 315C, 333L, 362K, either 360M or 375D, and Statistics and Data Sciences 321
ii. Twelve [12] additional hours of approved computer science upper-division coursework.
iii. Biology 337 (Topic 2: Research Methods: UTeach), or Chemistry 368 (Topic 1: Research Methods: UTeach), or Physics 341 (Topic 7: Research Methods: UTeach)
11. Eighteen [18] semester hours of professional development coursework consisting of:
a. Curriculum and Instruction 651S
b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
e. UTeach-Natural Sciences 101, 110, and 170
12. Enough additional coursework to make a total of 127 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 grade point average in these courses of at least 2.00 . More information about grades and the grade point average is given in General Information.

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, and 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.

To graduate and be recommended for certification students who follow the teaching option must have a University grade point average of at least 2.50 . They must earn a grade of at least $C$ - in the supporting course in requirement 6 , and in each of the professional development courses listed in requirement 11 and must pass the final teaching portfolio review. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

Enrollment in Computer Science 312,311 or 311 H , and 314 or 314 H is restricted to computer science entrylevel majors. All other computer science courses that may be counted toward a degree in computer science are restricted to students who have been admitted to the computer science major or have the consent of the undergraduate faculty adviser.

An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate adviser in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upper-division computer science courses in a semester without written consent of an undergraduate adviser in computer science.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN HUMAN DEVELOPMENT AND FAMILY SCIENCES DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science Human Development and Family Sciences degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On April 14, 2017, the Human Development and Family Sciences Curriculum Committee approved the proposal; and on September 27, 2017, the College Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved it. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Llan W. Orielaran
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN HUMAN DEVELOPMENT AND FAMILY SCIENCES DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

## Type of Change

Academic Change
Degree Program Change (THECB form required)
Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ 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 $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$


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

We propose to update required courses in the Human Development and Family Sciences curriculum to conform with changes in the field and changes in the content and availability of our courses. The proposed changes and the rationales for each change are as follows:

Changes common to more than one degree option
M 408R: Add M 408R to the calculus options listed under \#6 for Options I-IV.
Rationale: M 408R has been added by the Mathematics department as an option and is appropriate for our students.
Rewrite the statistics and mathematics requirement for Option VI, Honors in Advanced Human Development and Family Sciences.
Rationale: The department does not feel that honors calculus is necessary for the HAHDFS students, so we make the math and statistics requirement the same as for the other HDFS Options. Only Option V, Deans Scholars, continues to require either an honors statistics or calculus course, to be in keeping with the other Dean's Scholars BS programs in CNS.

Drop HDF 312 (Family Resource Management) as a required course in all Options and replace with three hours of coursework in Human Development and Family Sciences in Options I, II, III, and IV.
Rationale: The area of family resource management is no longer considered to be an essential or core component of the field of human development and family sciences. Also, the faculty member who taught this course has retired and the course will not be offered again.

HDF 466 (Guidance in Adult-Child Relationships)
a. Add HDF 466 as a required course in Option I (Early Childhood).

Rationale: This course is essential to the early childhood curriculum, as it provides four hours per week of lab experience with young children as well as instruction in positive child guidance, and it is required for all early childhood practicums. We thought it was already required for Option I majors, and students in Option I have been advised to take it, but due to an oversight, it was not in the catalog.
b. Add HDF 466 to the list of courses in Option II (Human Development) from which students must choose three additional semester hours.
Rationale: HDF 466 now covers family interactions as well as interactions with young children.
Drop HDF 356 (Evolution of Relationships) from Options II, III, IV, V, and VI
Rationale: The faculty member who taught this course has left, and we do not plan to offer this course again.

Add HDF 338,340 , and 378 K to the list of courses in the honors programs (Options V and VI) from which students must choose upper-division HDF hours (\#8 in Option V and \#9 in Option VI).
Rationale: This adds flexibility in course offerings to our two honors options. Any HDF 378K topic will count.

## Option I, Early Childhood

Drop HDF 378L (Theories of Human Development) as a required course and add it to the list of courses in Option I from which students must choose six additional semester hours.
Rationale: Although this course is relevant and useful for students in the early childhood option, it is not essential.
Add 378K (Topic 9: Introduction to Child Life) to the list of courses from which students must choose six additional semester hours.
Rationale: This new topics course is designed for students who are interested in future careers as Child Life Specialists (pediatric health care professionals who work with young children and their families in hospitals to help them cope with the challenges of hospitalization, illness, and disability).

Add HDF 347 (Socioeconomic Problems of the Family) to the list of courses from which students must choose six additional semester hours.
Rationale: The content of HDF 347 was recently modified to include a greater emphasis on effects of poverty and discrimination in young children's development, making it relevant to this option.

Option II, Human Development
Add HDF 378K (Topic 10: Sexuality in Human Development and Family Relationships) to the list of courses from which students must choose three additional semester hours.
Rationale: This new topic course covers the role of sexuality in human development.

## Option III, Families and Personal Relationships

Add HDF 335 (Adult Development) and HDF 378K (Topic 10: Sexuality in Human Development and Family Relationships) to the list of courses in Option III (Families and Personal Relationships) from which student must choose three hours (Option III \#6).
Rationale: Previously, under Option III \#6, students were required to choose three hours from HDF 356 (Evolution of Relationships) and HDF 372K (Families in Transition). Since HDF 356 is no longer available, we would like to replace it with the choice of three hours chosen from the three courses in our curriculum that are most relevant to the topic of personal relationships (HDF 372K, HDF 335, and the new HDF 378K Topic 10: Sexuality in Human Development and Family Relationships). This also gives students more choices.

Add HDF 378K (Topic 10: Sexuality in Human Development and Family Relationships) to the list of courses in Option III \#7 from which students must choose six additional hours.
Rationale: As noted above, this is a new topics course that is very relevant to the topic of personal relationships.

## Option IV, Families and Society

Add HDF 338, 378K (Topic 9: Introduction to Child Life) and 378K (Topic 10: Sexuality in Human Development and Family Relationships) to the list of courses in Option IV (Families and Society) from which students must choose six additional hours.
Rationale: Option IV covers interrelations between families and social policies and institutions. Both of our new topics courses are relevant to this option. The Child Life topics courses deals with children and families in hospital settings, and the sexuality course covers how social policies affect human sexuality. In addition, HDF 338 has been overlooked as relevant courses for this option. HDF 338 deals with use of developmentally appropriate practices in childcare settings.

## Option V, Human Development and Family Sciences Honors

Reduce elective hours in Option V (Dean's Scholars) from twenty-one to ten.
Rationale: The Dean's Scholars option was off in hours. This is a correction to bring the degree to 120 hours.

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

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

| $\boxtimes$ Courses in other colleges | $\square$ Courses in proposer's college that <br> are frequently taken by students in <br> other colleges |
| :--- | :--- |
| $\square$ Course in the core curriculum | Change in course sequencing for an <br> existing program |
| $\square$Change in admission <br> requirements (external or <br> internal) | $\square$ Requirements not explicit in the <br> catalog language (e.g., lists of <br> acceptable courses maintained by <br> department office) |

$\square$ Flags
$\boxtimes$ Courses that have to be added to the inventory
HDF 378K, Topic 9
HDF 378K, Topic 10

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?
If yes, then how would you do so?
The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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)? No. If yes, explain:
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: April 14, 2017 Human Development and Family
Sciences Curriculum Committee
Dr. Stephen Russell, Chair, Department of Human Development and Family Sciences
Dr. Deborah Jacobvitz, Director, School of Human Ecology
College approval date:
September 27, 2017
Course and Curriculum Committee
Dean approval date:
September 27, 2017 David Vanden Bout, Associate Dean for
Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN HUMAN DEVELOPMENT AND FAMILY SCIENCES \{no changes \}

## Prescribed Work Common to All Options

\{no changes \}

## Additional Prescribed Work for Each Option

## Option I: Early Childhood

This Option is designed to provide the necessary foundation for further study or a career in working with children in applied settings.
6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
7. Chemistry 301 or 301 H ; Biology 311C; Biology 311D or Chemistry 302 or 302 H ; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted
8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals
9. Nutrition 306; Human Development and Family Sciences 304, [312,] 313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R and [three] six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652 P , and 355 R is restricted to students whose practicum applications have been approved. Practicum applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
10. Human Development and Family Sciences 338 and [378L] 466; and six additional semester hours chosen from Human Development and Family Sciences 342, 345, 347, 351, 358, 362, [and] 378K (Topic 6: Introduction to Early Childhood Interventiont and Topic 9: Introduction to Child Life), and 378L.
11. Enough additional coursework to make a total of 120 semester hours

## Option II: Human Development

This Option involves the study of development across the life span.
6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
7. Chemistry 301 or 301 H ; Biology 311C; Biology 311D or Chemistry 302 or 302 H ; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals
9. Nutrition 306; Human Development and Family Sciences 304, [312,]-313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R and [three] six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652 P , and 355 R is restricted to students whose applications have been approved. Applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
10. Human Development and Family Sciences 378L; six semester hours chosen from Human Development and Family Sciences 335, 351, and 371; and three additional semester hours chosen from Human Development and Family Sciences 335, 342, $343,345,351,353,356,358,466,371[$,and $372 K$, and 378 K (Topic 10: Sexuality in Human Development and Family Relationships).
11. Enough additional coursework to make a total of 120 semester hours

## Option III: Families and Personal Relationships

This Option involves the study of the formation and maintenance of close relationships, especially couple and family relationships.
6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
7. Chemistry 301 or 301 H ; Biology 311 C ; Biology 311D or Chemistry 302 or 302 H ; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals
9. Nutrition 306; Human Development and Family Sciences 304, [312, ]313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R; and [three] six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652 P , and 355 R is restricted to students whose applications have been approved. Applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
10. Human Development and Family Sciences 337, and [either 356 or 372 K ] three hours chosen from Human Development and Family Sciences 335, 372K, and 378K (Topic 10: Sexuality in Human Development and Family Relationships).
11. Six additional semester hours chosen from Human Development and Family Sciences 322, 335, 345, 347, 353, [356,] 358, 360, 371 [, and 372 K , and 378 K (Topic 10: Sexuality in Human Development and Family Relationships).
12. Enough additional coursework to make a total of 120 semester hours

## Option IV: Families and Society

This Option involves the study of the family and its interactions with larger socioeconomic systems, such as the economy, work, the media, public policy, and government.
6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
7. Chemistry 301 or 301 H ; Biology 311C; Biology 311D or Chemistry 302 or 302 H ; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals.
9. Nutrition 306; Human Development and Family Sciences 304, [312,] 313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R; and [three] six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652 P , and 355 R is restricted to students whose applications have been approved. Applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
10. Human Development and Family Sciences 347 and 362; and six additional semester hours chosen from Human Development and Family Sciences 322, 338, 342, 343, 353, [356,] 360, and 378K (Topic 6: Introduction to Early Childhood Interventiont, Topic 9: Introduction to Child Life, and Topic 10: Sexuality in Human Development and Family Relationships).
11. Enough additional coursework to make a total of 120 semester hours

## Option V: Human Development and Family Sciences Honors

This Option is designed to prepare students who have been admitted to the Dean's Scholars program for academic or research careers.
6. Breadth requirement: A calculus course and a statistics course, one of which must be a designated honors course; Biology 315 H and 325 H ; Chemistry 301 H and 302 H ; and three additional hours of honors-designated or approved coursework in biology, chemistry, computer science, mathematics, statistics and data sciences, or physics; credit earned by examination may not be counted toward this requirement.
7. Human Ecology 115H and 225 H
8. Human Development and Family Sciences 304H, [312,] 313H, 113L, 315L, and [15] eighteen semester hours chosen from the following: Human Development and Family Sciences 335, 337, 338, 340, 342, 343, 345, 347, 351, 353, [356,] 358, 362, $371,372 \mathrm{~K}, 378 \mathrm{~L}, 378 \mathrm{~K}$, and approved social science courses.
9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
11. Human Development and Family Sciences 355H and 379H
12. [24] Ten additional semester hours of coursework approved by the departmental honors adviser
13. Six hours of coursework [im] from the College of Liberal Arts [ $\because \mathrm{m}]$ and/or the College of Fine Arts
14. Enough additional coursework to make a total of 120 semester hours

## Option VI: Honors in Advanced Human Development and Family Sciences

This Option is designed for highly motivated and talented students who are interested in research experience and training.
6. [A caleulus course and a statisties course, one of which must be a designated honors course] Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332.
7. Chemistry 301 or 301 H ; Biology 311C; and Biology 311D or Chemistry 302 or 302 H
8. Three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for nonscience majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
9. Human Development and Family Sciences 304H, [312, ] 313H, 113L, and 315L; [15] eighteen semester hours chosen from: Human Development and Family Sciences 335, 337, 338, 340, 342, 343, 345, 347, 351, 353, [356, $358,362,371,372 \mathrm{~K}$, $378 \mathrm{~L}, 378 \mathrm{~K}$, and approved social science courses.
10. Human Development and Family Sciences 355 H and 379 H
11. Twenty-one [24] semester hours of additional upper-division coursework approved by the departmental honors adviser
12. 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 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 V, 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 eourse deseribed in requirement 10 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/.

To graduate under Option VI, students must remain in good standing with an overall in-residence grade point average of at least 3.30 and an overall grade point average of 3.50 in all human development and family sciences courses. In addition, student research conducted in Human Development and Family Sciences 355 H and 379 H must be presented in an approved public forum, such as the college's annual Undergraduate Research Forum. Students who fail to maintain the required grade point average may be subject to dismissal from the program. Under special circumstances and at the discretion of the human development and family sciences honors adviser, a student may be allowed to continue under academic review.

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN NEUROSCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Neuroscience degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Biology Course and Curriculum Committee approved the proposal on September 27, 2017; it was approved by the College Course and Curriculum Committee and by Associate Dean David Vanden Bout, on behalf of Dean Hicke, on September 29, 2017. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Clau W. Orieluan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN NEUROSCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

Type of Change $\quad \boxtimes$ Academic Change<br>$\square$ Degree Program Change (THECB form required)

Proposed classification $\quad \square$ Exclusive $\quad \boxtimes$ General $\quad \square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$


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

Option 1, Neuroscience Scholars
Req 12: Add NEU 365D to list of nine hours of UD Neuroscience chosen from approved list. Remove NEU 466G and 466 N from the approved list.
Reason: NEU 365D added to make it consistent with other NEU degree options. NEU 466G and 366N removed since they are already listed as course options in Req 11.

Remove NEU 377 from requirement 13 and add it to requirement 11. Limit the number of NEU 377 hours that may count toward the laboratory requirement.

Option 2, Neuroscience Honors
Add Biology 206L
Reduce the required NEU lab hours from nine to six.
Add BIO 359 K and 367C to the list of approved NEU courses in requirement 14.
Reason: George Pollak, the Dean's Scholars advisor in NEU brought this to my attention and the logic behind his proposed changes. He did a nice job of summarizing the issue, so I'm going to just copy his summary of the problem as he saw it.

There is a small problem with the current Dean's Scholars Neuroscience program that Mark
Hemenway brought to my attention. Specifically, BIO 206L needs to be added to the required curriculum because that course is a prerequisite for NEU 335, which is why it should be part of the degree requirements. What I suggested is that the number or required lab courses be reduced from three labs to two lab courses. This would reduce the number of required house by three, but would add two hours (206L), thus there would be a net reduction of one hour. To compensate, I suggest that the current eight additional hours, which are approved by the Honors Faculty Advisor, be increased to nine hours.
I talked to George about an alternative, in adding 206L, keeping the three labs but dropping those eight additional hours down to six, but he preferred his solution. So, we went with it.

Change the number of approved electives from eight to nine hours.
Reason: Altered due to the addition of BIO 206L and the reduction of three hours of lab coursework.
Change six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six hours from both colleges. The change will synch catalog copy to advising practice and eliminate the need for petitions.

Option 3, Neuroscience
Req 11: Add NEU 466G and 466M to the statement that courses may only count toward Req 10 or 11 . Remove all BCH and BIO courses from requirement 11.

Req 10: Specify that a maximum of six hours of NEU 377 may count toward requirement 10 . The course inventory form for NEU 377 will be altered accordingly.

Reason: We originally put all of those $\mathrm{BCH} / \mathrm{BIO}$ lab courses in the option III BS degree plan because we feared that we might not have the throughput to handle all of these students in NEU lab courses. At the time, we did not have good ideas of how many students would be in the various BS degree plans as well as in the BSA. Most of our students are flocking to the BSA option and our lab classes are not all filling. We thus feel we could accommodate all of the option III NEU students in our NEU labs and we'd rather have them take NEU labs than BIO/BCH labs. This is how we would like to have written the degree plans to begin with but were unsure about throughput, so we played it safe by adding all of those $\mathrm{BIO} / \mathrm{BCH}$ labs.

## 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, standard 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)

$\boxtimes$ Courses in other colleges

Course in the core curriculum
$\square$ Change in admission requirements (external or internal)Courses in proposer's college that are frequently taken by students in other collegesChange in course sequencing for an existing program $\square$ Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
Flags
$\square$ Courses that have to be added to the inventory

Yes $\boxtimes$ No $\square$

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools? If yes, then how would you do so?
The original legislation stated that Dean's Scholars must choose six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.

If $4 \mathbf{a}, \mathrm{~b}, \mathrm{c}$, 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 nonnegligible 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 (42hour core, signature courses, flags)? If yes, explain:
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?

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: October 18, 2016 September 25, 2017
Department approval date:
College approval date:
Dean approval date:

September 27, 2017
March 9, 2017
September 29, 2017
September 29, 2017

Michael Mauk, chair
Biology Course and Curriculum
Course and Curriculum Committee
David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN NEUROSCIENCE

\{no change\}

## Prescribed Work Common to All Options

\{no change\}

## Option I: Neuroscience Scholars

4. Mathematics 408C, or 408 N and 408S; Statistics and Data Sciences 328M
5. An eight-hour physics sequence chosen from the following:
a. Physics $317 \mathrm{~K}, 117 \mathrm{M}, 317 \mathrm{~L}$, and 117 N
b. Physics 303K, 103M, 303L, and 103N
c. Physics 301, 101L, 316, and 116L
6. Chemistry 301 or $301 \mathrm{H}, 302$ or 302 H , and 204
7. Biology 311 C and 311 D , or 315 H and 325 H , and 206 L
8. Three additional majors-level courses selected from one of the following sequences:
a. Biology: Biology 325 or $325 \mathrm{H}, 320,344,349$, and 370
b. Chemistry: Chemistry 328 M and $128 \mathrm{~K}, 328 \mathrm{~N}$ and $128 \mathrm{~L}, 353$ or 353 M , and Biochemistry 369
c. Computer Science: Computer Science 312, 314, Statistics and Data Sciences 335, 374E
d. Mathematics: Mathematics 427J or 427K, 427L, 340L or 341, $362 \mathrm{~K}, 378 \mathrm{~K}$, Statistics and Data Sciences 321 or 329C; Mathematics 362K and Statistics and Data Sciences 321 may not both count.
e. Physics: Physics $345,338 \mathrm{~K}, 355$
f. Psychology: Psychology 301, 323, 353K, 355
9. Neuroscience 330
10. Neuroscience 335
11. Twelve [12] semester hours of laboratory courses chosen from the following: Neuroscience 365L, $366 \mathrm{E}, 366 \mathrm{~L}, 366 \mathrm{~N}, 366 \mathrm{P}, 366 \mathrm{~S}, 367 \mathrm{~W}, 377,466 \mathrm{G}$, and 466 M . A maximum of 3 hours of Neuroscience 377 may count.
12. Nine semester hours of upper-division neuroscience to be chosen from: Biology 325, 359K, 367C, Neuroscience 337, 365D, 365T, 365W, 366C, 366D, [466G, 366N,] 367F, 367V, and 371M; Biology 325 or 325 H may count toward either requirement 8 a or requirement 12
13. Three semester hours of [either Nemroseience 377 (Undergraduate Researeh) or] Neuroscience 379H (Honors Tutorial Course) [; the research topic in Neurescience 377 or 379 H must relate to neureseience and be approved in advance by the faculty adviser]
14. Enough additional coursework to make a total of 120 semester hours

## Option II: Neuroscience Honors

4. Breadth requirement: An honors mathematics course; Biology 315 H and 325 H ; Chemistry 301 H and 302 H ; and one of the following: Physics 301 and 101L; or Physics 316 and 116L; credit earned by examination may not be counted toward this requirement.
5. Three hours of statistics chosen from the following: Statistics and Data Sciences 321, 325H, or 328M; other statistics courses may be approved by the departmental honors adviser.
6. One of the following:
a. Physics 315 and 115 L
b. Physics 316 and 116L
c. Physics $338 \mathrm{~K}, 345,355$

Courses counted toward requirement 4 may not also be counted toward requirement 6 .
7. Biology 206L and Chemistry 204
8. Chemistry $128 \mathrm{~K}, 128 \mathrm{~L}, 328 \mathrm{M}$, and 328 N
9. Biology 320 or 344
10. Biology 349 and 370
11. Neuroscience 330
12. Neuroscience 335
13. [Nine] Six hours of laboratory courses chosen from: Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 466G, 466M
14. Six hours of upper-division neuroscience chosen from: Biology 359K, 367C, Neuroscience 337, 365D, 365T, 365W, 366C, 366D, 367F, 367V, 371M, 377
15. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
16. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
17. Two semesters of Neuroscience 379 H
18. [Eight] Seven additional semester hours of coursework approved by the departmental honors adviser
19. Six semester hours of coursework [in] from the College of Liberal Arts [өr] and/or the College of Fine Arts
20. Enough additional coursework to make a total of 120 semester hours

## Option III: Neuroscience

4. Mathematics 408C, or 408 N and 408S; and Statistics and Data Sciences 328M
5. An eight-hour physics sequence chosen from the following:
a. Physics $317 \mathrm{~K}, 117 \mathrm{M}, 317 \mathrm{~L}$, and 117 N
b. Physics 303K, 103M, 303L, and 103N
c. Physics 301, 101L, 316, and 116L
6. Chemistry 301 or $301 \mathrm{H}, 302$ or 302 H , and 204
7. Biology 311C, 311D , and 325 or 315 H and 325 H
8. Biology 206L
9. Neuroscience 330 and 335
10. Fifteen [15] hours of upper-division neuroscience chosen from Biology 359K, 367C, Neuroscience $337,365 \mathrm{D}, 365 \mathrm{~L}, 365 \mathrm{~T}, 365 \mathrm{~W}, 366 \mathrm{C}, 366 \mathrm{D}, 366 \mathrm{E}, 366 \mathrm{~L}, 366 \mathrm{~N}, 366 \mathrm{P}, 366 \mathrm{~S}, 367 \mathrm{~F}, 367 \mathrm{~V}, 367 \mathrm{~W}$, $371 \mathrm{M}, 377,466 \mathrm{G}, 466 \mathrm{M}$. A maximum of six hours of Neuroscience 377 may count.
11. Six additional hours of upper-division laboratory course work chosen from the following: [Biochemistry 369T, Biology 320L, $321 \mathrm{~L}, 325 \mathrm{~L}, 331 \mathrm{~L}, 340 \mathrm{~L}, 446 \mathrm{~L}, 448 \mathrm{~L}, 453 \mathrm{~L}, 354 \mathrm{~L}, 455 \mathrm{~L}, 456 \mathrm{~L}, 369 \mathrm{~L}, 478 \mathrm{~L}$, Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 466G, 466M. Neuroscience $365 \mathrm{~L}, 366 \mathrm{E}, 366 \mathrm{~L}, 366 \mathrm{~N}, 366 \mathrm{P}, 366 \mathrm{~S}$, [and] 367W, 466G, and 466M may count toward requirement 10 or requirement 11.
12. Enough additional coursework to make a total of 120 semester hours

## Special Requirements

Students 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 grade point average in these courses of at least 2.00 . More information about grades and the grade point average is given in General Information.

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- 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.

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN MATHEMATICS DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Human Development and Family Sciences degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Mathematics Curriculum Committee approved the proposal on March 14, 2017; it was approved by the Dean's Scholars Steering Committee on May 10, 2017; and by the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, on September 27, 2017. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2,2018 , and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Llar W. Oriedaren
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN MATHEMATICS DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

Type of Change $\quad \triangle$ Academic Change<br>$\square$ Degree Program Change (THECB form required)

Proposed classification $\square$ Exclusive $\boxtimes$ General $\square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?

| Yes $\square$ | No $\boxtimes$ |
| :--- | :--- |
| Yes $\square$ | No $\boxtimes$ |
| Yes $\square$ | No $\boxtimes$ |
| Yes $\square$ | No $\boxtimes$ |

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

Option I (Actuarial Science) and VII (Mathematics)
Add statement that a mathematics independent inquiry flagged course may substitute for a course that is identified as containing an inquiry-based learning component.
Reason: Mathematics courses that have earned an independent inquiry flag is appropriate to meet the inquiry-based learning requirement.

Option V: Teaching
Update engineering courses under the mathematics, physical science, and engineering certification.
Reason: Engineering and UTeach reviewed and approved the new courses for teaching certifications in the College of Natural Sciences.

Option VI: Mathematics Honors
Replace an honors section of M 427K with an honors section of M 427J.
Reason: The Department of Mathematics is no longer teaching an honors section of M 427K.
Change six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six hours from both colleges. The change will synch catalog copy to advising practice and eliminate the need for petitions.

Option VII: Mathematics
Break requirement 8 into requirements 8 through 12. Require a minimum of thirty-three upper-division hours in Mathematics.
Reason: This option was new in the 2016-18 catalog. For the 2016-18 catalog, the department wanted students to complete eleven upper-division math courses with semester credit values of three or four hours. The purpose was to prevent students from counting courses with variable credit hours of one or two hours toward the total hours of upper-division mathematics. The 2016-18 proposal was altered to require students to complete a minimum of thirty-three upper-division hours regardless of the courses chosen for requirement 8 a . In practice, students who did not choose M 408 M ended up taking more than thirty-three upper-division hours. The department began writing petitions
to reduce requirement 8 d to seventeen hours for students in this situation. This 2018-20 revision is intended to resolve these issues without requiring individual petition approvals.

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

$\boxtimes$ Courses in other colleges $\quad \square$
$\square$ Courses in proposer's college that are frequently taken by students in other colleges
$\square$ Course in the core curriculum

Change in admission requirements (external or internal)Change in course sequencing for an existing program
$\square$ Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools?

If yes, then how would you do so?

## Option V, Teaching

Very few students seek the mathematics, physical science, and engineering certification. The UTeach Program did not provide an estimate of the number of students who might take E S 301 and M E 377K. However, the additions are approved by UTeach Engineering.

## Option VI, Mathematics Honors

The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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? Not provided by UTeach Engineering or UTeach Natural Sciences; minimal number.
Impacted schools must be contacted and their response(s) included: UTeach Engineering
Person communicated with: David Allen, director
Date of communication: September 22, 2017

Response: Suggested proposed changes.
e. Does this proposal involve changes to the core curriculum or other basic education requirements (42hour 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: March 14, 2017
Dean's Scholars approval: May 10, 2017
UTeach Program:
College approval date:
Dean approval date:

September 22, 2017
April 6, 2017
September 27, 2017
September 27, 2017

Mathematics Curriculum Committee Dean's Scholars Steering Committee David Allen, UTeach Program, director Course and Curriculum Committee

David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN MATHEMATICS

\{no change\}
Prescribed Work Common to All Options
\{no change $\}$

## Additional Prescribed Work for Each Option

## Option I: Actuarial Science

5. Eight semester hours of majors-level coursework in one of the following areas: astronomy, biology, chemistry, geological sciences, and physics.
6. Complete one of the following:
a. Mathematics 408C*, 408D, and 427L
b. Mathematics $408 \mathrm{~N}, 408 \mathrm{~S}$, and 408 M
c. Mathematics $408 \mathrm{~K}, 408 \mathrm{~L}$, and 408 M
*Mathematics 408 N , and 408 S , or 408 K and 408L, may substitute for 408 C
7. Economics 304 K and 304 L
8. Accounting 310F or both 311 and 312
9. Finance 357
10. Computer Science 303E
11. Upper-division mathematics courses, including:
a. Mathematics 325 K or 328 K . Mathematics 328 K is recommended for students with substantial experience in writing proofs.
b. Mathematics 341 . Mathematics 340 L may be substituted for 341 if the course was completed prior to entry into the mathematics entry-level major.
c. Mathematics 362 K , and either 358 K or 378 K
d. Mathematics 329F, 339D, 339J, and 339U
e. Two courses from the following: Mathematics $339 \mathrm{~V}, 339 \mathrm{~W}, 349 \mathrm{P}$
f. One additional course chosen from the following: Mathematics 339C, 339V, 339W, 349P, 349R, 378K

One of the courses fulfilling requirement 11a through 11f must be taught in the inquiry based learning (IBL) format or with an independent inquiry flag. IBL courses are identified each semester through a notation under the unique number in the course schedule and through a list maintained in the mathematics advising office in Robert Lee Moore Hall, room 4.101. Courses with an independent inquiry flag are identified in the Course Schedule.
12. At least six semester hours of upper-division coursework must be outside both mathematics and the fields of study listed in requirement 1 . Philosophy courses in logic, computer science courses in discrete mathematics, engineering courses, and actuarial foundation courses may not be used to fulfill this requirement.
13. Enough additional coursework to make a total of 120 semester hours.

## Option V: Teaching

This option is designed to fulfill the course requirements for certification as a middle grades or secondary school mathematics teacher in Texas; the student chooses mathematics certification or mathematics, physical science, and engineering certification. However, completion of the course requirements does not guarantee the student's certification. For information about additional certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

Students are encouraged to become familiar with a variety of mathematical software relevant to middle grades or secondary teaching, such as computer geometry systems, spreadsheets, and statistical software. Whenever possible, the student should take courses and sections of courses that use these types of software.
5. History 329 U or Philosophy 329 U
6. One of the following sequences:
a. Mathematics 408C* and 408D
b. Mathematics 408 N and 408 S
c. Mathematics 408 K and 408 L
*Mathematics 408N and 408S, or 408K and 408L, may substitute for 408C
7. Mathematics 315C
8. Biology 337 (Topic 2: Research Methods: Uteach), Chemistry 368 (Topic 1: Research Methods: Uteach) or Physics 341 (Topic 7: Research Methods: Uteach)
9. The requirements of one of the following certification areas:
a. For mathematics certification:
i. Mathematics 340 L or 341
ii. Mathematics 325 K or $328 \mathrm{~K}, 333 \mathrm{~L}, 358 \mathrm{~K}$, and 362 K . Mathematics 328 K is recommended for students with substantial experience in writing proofs.
iii. Mathematics 375D
iv. Mathematics 361 K or 365 C
v. Mathematics 343 K or 373 K
vi. Mathematics 427J.
vii. Two courses chosen from: Mathematics 328K, 339J, 339U, 343K, 343L, 348, 361, 365C, 365D, $368 \mathrm{~K}, 373 \mathrm{~K}, 373 \mathrm{~L}, 378 \mathrm{~K}$. A course used to fulfill requirements 9ai through 9avi may not also be counted toward requirement 9avii
viii. A three-semester-hour supporting course that uses mathematics but is in a field other than mathematics. The following courses may be used to fulfill this requirement: Accounting 310 F or 311, Architectural Engineering 323K, Astronomy 307, 352K, 352L, 358, 367M, Chemistry 301 or 301H, 303, Civil Engineering 321, 341, Computer Science 303E, 313E, Economics 420K, Electrical Engineering 302, 366, 366L, Geological Sciences 346C, 354, 476K, Geography 360L, Government 341M, Human Development and Family Sciences 322, Mechanical Engineering 320, 326, 366L, 366Q, 366R, Petroleum and Geosystems Engineering 310, Physics 301, 303K, 303L, Psychology 325K, 332, Sociology 369L
b. For mathematics, physical science, and engineering certification:
i. Mathematics 325 K or $328 \mathrm{~K}, 427 \mathrm{~J}, 333 \mathrm{~L}, 341,358 \mathrm{~K}$, and 362 K . Mathematics 328 K is recommended for students with substantial experience in writing proofs
ii. Mathematics 361 K or 365 C
iii. Mathematics 375D
iv. Physics 301, 101L, 316, 116L, 315, and 115L
v. Chemistry 301 or $301 \mathrm{H}, 302$ or 302 H , and 204
[vi. Chemical Engineering 379 (Topic: Fundamentals of Engineering and Design), 379 (Topic: Engineering Energy Systems), and Mechanical Engineering 379M (Topic: Design of Machines and Systems)] Engineering Studies 301; and Mechanical Engineering 377K upon approval of the project by the UTeach Program.
10. [18] Eighteen semester hours of professional development coursework consisting of:
a. Curriculum and Instruction 651 S
b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
e. UTeach-Natural Sciences 101, 110, and 170
11. Students seeking middle grades certification must complete the following courses: Educational Psychology 363M (Topic 3: Adolescent Development), or Psychology 301 and 304; and Curriculum and Instruction 339E. Students seeking mathematics, physical science, and engineering certification may not seek middle grade certification.
12. Enough additional coursework to make a total of at least 120 semester hours

## Option VI: Mathematics Honors

5. Breadth requirement: An honors mathematics course; one of the following two-semester sequences: Biology 315 H and 325 H , Chemistry 301 H and 302 H , or Physics $301,101 \mathrm{~L}, 316$, and 116 L ; and nine additional semester hours chosen from the preceding courses, Physics 315 and 115L. Credit earned by examination may not be counted toward this requirement
6. An honors section of Mathematics 427 J [ 427 K ,] and six semester hours of coursework chosen from Mathematics $365 \mathrm{C}, 367 \mathrm{~K}$, and 373 K
7. Twenty [ 20$]$ additional semester hours of upper-division coursework in mathematics approved by the departmental faculty adviser
8. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
9. A section of Rhetoric and Writing 309S that is restricted to students in the Dean Scholars Honors Program
10. Mathematics 379 H
11. Thirty [30] additional semester hours of coursework approved by the departmental honors adviser
12. Six semester hours of coursework [im] from the College of Liberal Arts [ $\because r$ ] and the College of Fine Arts
13. Enough additional coursework to make a total of 120 semester hours.

## Option VII: Mathematics

5. Eight semester hours of majors-level coursework in one of the following areas: astronomy, biology, chemistry, geological sciences, and physics
6. Computer Science 303E
7. One of the following sequences:
a. Mathematics 408C* and 408D
b. Mathematics 408 N and 408 S
c. Mathematics 408 K and 408 L
*Mathematics 408N and 408S, or 408K and 408L, may substitute for 408C
8. [Additional mathematies including:]
[a.] Three of the following: Mathematics 408 M or $427 \mathrm{~L}, 427 \mathrm{~J}, 341,362 \mathrm{~K}$. Mathematics 340 L may be substituted for 341 if the course was taken prior to entry into the mathematics entry-level major
9. [b.] Mathematics 325 K or 328 K . Mathematics 328 K is recommended for students with substantial experience in writing proofs
10. [ e.] One of the following: Mathematics $343 \mathrm{~K}, 361 \mathrm{~K}, 365 \mathrm{C}, 367 \mathrm{~K}, 373 \mathrm{~K}$
11. [ d. 21 additional] Complete thirty-three hours of upper-division mathematics, chosen from requirements 8 , $\underline{9,10}$, and the following courses: Mathematics
$325 \mathrm{~K}, 427 \mathrm{~J}$ or $427 \mathrm{~K}, 427 \mathrm{~L}, 328 \mathrm{~K}, 329 \mathrm{~F}, 333 \mathrm{~L}, 339 \mathrm{C}, 339 \mathrm{D}, 339 \mathrm{~J}, 339 \mathrm{U}, 339 \mathrm{~V}, 339 \mathrm{~W}, 340 \mathrm{~L}$ or 341,343
K,
343L, 344K, 346, 348, 349P, 349R, 358K, 361, 361K, 362K, 362M, 365C, 365D, 365G, 367K, 367L, 368
K, 372K, 373K, 373L, 374G, 374M, 375D, 378K, [and] 379H, and 375T. [Mathematies 375, 375C,
and 375 T may be applied toward this requirement with prior approval of the faculty adviser] Mathematics 374 M may not count toward both requirement 11 and 13
12. [e.] One upper-division mathematics course identified as taught in the inquiry based learning (IBL) format or with an independent inquiry flag. IBL courses are identified each semester through a notation under the unique number in the Course Schedule and through a list maintained in the mathematics advising office in Robert Lee Moore Hall, room 4.101. Courses with an independent inquiry flag are identified in the Course Schedule. Courses counted toward requirements $8,9,10$, and 11 may also count toward this requirement.
[Mathematies courses listed in requirements 8a through 8 d may only be applied toward one requirement.]
13. [9.] Mathematics in context. One course chosen from:
a. Mathematics 374 M
b. Chemistry 353,354
c. Computer Science $341,342,345,346,353,367$
d. Electrical Engineering 411, 325, 360C, 362K
e. Physics $329,336 \mathrm{~K}, 352 \mathrm{~K}$

Courses in requirements [ 9 b through 9 d ] 13b through 13 e may require additional prerequisites. Mathematics 374 M may not count toward both requirement [8 and 9 ] 11 and 13 .
14. [10.] At least six semester hours of upper-division coursework must be outside both mathematics and the fields of study listed in requirement 5 . Philosophy courses in logic, computer science courses in discrete mathematics, engineering, and actuarial foundation courses may not be used to fulfill this requirement.
15. [11.] Enough additional coursework to make a total of 120 semester hours

## Special Requirements

\{no change \}

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN NUTRITION DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Nutrition degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Dean's Scholars Steering Committee approved the proposal on May 10, 2017. On September 20, 2017, it was approved by the College Course and Curriculum Committee and by Associate Dean David Vanden Bout, on behalf of Dean Hicke. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Drielwen
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN NUTRITION DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG

 2018-2020Type of Change $\boxtimes$ Academic ChangeDegree Program Change (THECB form required)
Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ 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?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$


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

Option V, Nutrition Honors
Change six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six 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)
$\boxtimes$ Courses in other colleges

Course in the core curriculumChange in admission requirements (external or internal)Courses in proposer's college that are frequently taken by students in other collegesChange in course sequencing for an existing programFlags

Courses that have to be added to the inventoryRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
4. SCOPE OF PROPOSED CHANGE
a. Does this proposal impact other colleges/schools?

Yes $\boxtimes$ No If yes, then how would you do so?
The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts
(COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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 $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathbf{a}, \mathrm{~b}, \mathrm{c}$, 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 nonnegligible 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 (42hour core, signature courses, flags)? If yes, explain:
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?

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

Dean's Scholars approval date:
College approval date:
Dean approval date:

May 10, 2017
September 20, 2017
September 20, 2017

Dean's Scholars Steering Committee Course and Curriculum Committee David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN NUTRITION

\{no change\}

## Prescribed Work Common to All Options

\{no change\}

## Additional Prescribed Work for Each Option

## Option I: Dietetics

\{no change\}

## Option II: Nutritional Sciences

\{no change \}

## Option III: Nutrition and Public Health

\{no change\}

## Option IV: Honors in Advanced Nutritional Sciences

\{no change \}

## Option V: Nutrition Honors

4. Breadth requirement: A calculus course and a statistics course, one of which must be a designated honors course; Biology 315 H and 325 H ; Chemistry 301 H and 302 H ; and three additional hours of honors-designated or approved coursework in biology, chemistry, computer science, mathematics, statistics and data sciences, or physics; credit earned by examination may not be counted toward this requirement.
5. At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L
6. Chemistry 204, 320M, and 320N, and Biochemistry 369
7. Neuroscience 365R and Biology 365S
8. Nutrition $312 \mathrm{H}, 312 \mathrm{R}, 338 \mathrm{H}, 342$, 343 or 365 (Topic 1: Vitamins and Minerals), and 365 (Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health)
9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
11. Nutrition 355 H and 379 H
12. Six semester hours of additional coursework in nutrition or related area approved by the departmental honors adviser
13. Six semester hours of coursework [im] from the College of Liberal Arts [ $\wp \mathrm{f}]$ and/or the College of Fine Arts
14. Enough additional coursework to make a total of 120 semester hours

## Option VI: International Nutrition

\{no change\}

## 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 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 IV, students must remain in good standing with an overall grade point average of at least 3.30 and an overall grade point average of 3.50 in all nutritional sciences courses. In addition, student research conducted in courses described in requirement 10 must be presented in an approved public forum, such as the college's annual Undergraduate Research Forum. Students who fail to maintain the required grade point average may be subject to dismissal from the program. Under special circumstances and at the discretion of the nutritional sciences honors adviser, a student may be allowed to continue under academic review.

To graduate under Option V, 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 10,] 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/.

Note:
Nutritional Sciences courses with numbers ending in H are intended for students in Option IV, Honors in Advanced Nutritional Sciences and in Option V, Nutrition Honors. Students outside these options may enroll in these courses with the consent of the nutritional sciences honors adviser.

To be eligible to apply for a dietetic internship or to practice as a Registered Dietetic Technician, additional coursework would be required for students earning a degree in Options II-VI.

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN PUBLIC HEATLH IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Public Health degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Program Director, Leanne Field, approved the proposal on May 2, 2017; it was approved by the School of Human Ecology, Director Deborah Jacobvitz, on June 14, 2017; and by the College Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, on September 13, 2017. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Drieluan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN PUBLIC HEATLH IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

Type of Change $\quad \boxtimes$ Academic Change $\square$ Degree Program Change (THECB form required)

## Proposed classification $\quad \square$ Exclusive $\boxtimes$ General $\quad \square$ 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 $\square$ No $\boxtimes$

- Is this program being deleted?

Yes $\square$ No $\boxtimes$

- Does the program offer courses that will be taught off campus?

Yes $\square$ No $\boxtimes$

- Will courses in this program be delivered electronically?

Yes $\square$ No $\boxtimes$

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

Prescribed Work Common to All Options
Foundation courses, 1c: Addition of NTR 112L
Reason: NTR 312 will require credit or registration for NTR 112L beginning fall 2017.
Change common to Options I and III
Add M 408R as a choice of calculus course.
Reason: M 408R was developed by the Department of Mathematics for majors in which students need minimal exposure to calculus.

## Option I, Public Health

Requirement 9c: Remove HS 330
Reason: The course contains a restrictive statement that only one of the following count: HS 330, PBH 358D, and SOC 358D. PHB 358D is a required course for this degree.

Requirement 9c: Update restriction statements following 9c.
Reason: The addition of a requirement to the 2016-18 catalog changed the numbering but this was not caught in the 2016-18 catalog. This is a correction.

Requirement 9d: Remove BIO 347; change BIO 160L to 260L
Reason: BIO 347 instructor retired, and department is unsure when the course will be taught in the future. Department increased credit hours of Immunology lab from one1 to two hours.

Requirement 9f: Remove HED 370K, Topic 2; add HED 360.
Reason: The College of Education created a stand-alone course number for HED 370K, Topic 2 (HED 360).

Requirement 9f: Remove PHR 350K
Reason: The course was dropped by the College of Pharmacy in fall 2016.
Option II, Public Health Honors
Change six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six hours from both colleges. The change will synch catalog copy to advising practice and eliminate the need for petitions.

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)

$\boxtimes$ Courses in other colleges
$\square$ Courses in proposer's college that are frequently taken by students in other colleges
Course in the core curriculumChange in course sequencing for an existing program
$\square$ Flags
$\square$ Courses that have to be added to the inventory
$\square$ Change in admission requirements (external or internal)Requirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)

## 4. SCOPE OF PROPOSED CHANGE

a. Does this proposal impact other colleges/schools? Yes $\square$ No $\boxtimes$ If yes, then how would you do so? It would appear this answer is yes. However, see the notes below regarding each change.
Note: These changes do not seem to require permission from impacted colleges.

1) Removal of HS 330 - duplicates required class PBH 358D.
2) Dropping HED 370K, Topic 2 (Adolescent Health Risk Behavior) and adding HED 360 (Adolescent Health Risk Behavior) is a change in course number, not an addition to the requirements. The College of Education changed the course number effective fall 2016.
3) Removal of PHR 350K - retired from the course inventory effective fall 2016.

The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts
(COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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 (42hour core, signature courses, flags)? If yes, explain:

## 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? 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

Program approval date:
School approval date:
College approval date:
Dean approval date:

May 2, 2017
June 14, 2017
September 13, 2017
September 13, 2017

Leanne Field, Program Director Deborah Jacobvitz, SoHE Director Course \& Curriculum Committee David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN PUBLIC HEALTH

\{no change $\}$

## Prescribed Work Common to All Options

In the process of fulfilling degree requirements, all students must complete:

1. Foundation courses:
a. Public health: Public Health 317
b. Microbiology: Biology 326M and 226L
c. Nutrition and physiology: Nutrition 312 or $312 \mathrm{H}, 112 \mathrm{~L}$, and Biology 365S
d. Social and behavioral sciences: One of the following: Economics 304K, 304L, Psychology 301, Sociology 319, 354K
e. Political science/government: Government 358 or Management 320F
2. Public health core*:
a. Biostatistics: Statistics and Data Sciences 328M
b. Environmental health sciences: Public Health 338
c. Epidemiology: Public Health 354
d. Global health: Public Health 334
e. Health policy and health systems: Public Health 358D
f. Health behavior theory and practice: Public Health 368D
3. Core curriculum
4. Skills and experience flags:
a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
b. Quantitative reasoning: one flagged course
c. Global cultures: one flagged course
d. Cultural diversity in the United States: one flagged course
e. Ethics and leadership: one flagged course
f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the Course Schedule. They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flag from the same course. Students are encouraged to discuss options with their academic advisers.
5. At least [24] twenty-one semester hours of upper-division coursework must be completed in residence at the University. All students must complete at least [36] thirty-six semester hours of upper-division coursework.

## Additional Prescribed Work for Each Option

## Option I: Public Health

6. Mathematics $408 \mathrm{C},[$ [ $]$ ] 408 N , or 408 R .
7. Biology $311 \mathrm{C}, 311 \mathrm{D}$, and 325 or Biology 315 H and 325 H . These courses must be completed before the student progresses to other upper-division biology and upper-division public health courses.
8. Chemistry 301 or $301 \mathrm{H}, 302$ or $302 \mathrm{H}, 204,320 \mathrm{M}$, and Biochemistry 369 .
9. At least nine hours from one of the following areas of specialization; courses counted toward requirement 1 may not be used to fulfill this requirement.
a. Biostatistics and public health informatics: Biology 321G, Computer Science 303E, 313E, 327E, Geography 360G, Mathematics 408D, 408M, 408S, 340L, 358K, 362K, 362M, 378K,Public Health 320, 323, 341R, Statistics and Data Sciences 332.
b. Environmental health sciences: Biology 373, 373L, 375, Civil Engineering 341, 342, 346, 369L, Geological Sciences 302C, 346C, 476K, 476M, Geography 307C, 334C, 339K, 344K, 357, 360G, Marine Science 307, 320, 354Q, Public Health 341R, Urban Studies 315.
c. Health policy and management: Economics 304K, 304L, Government 357M (Topic 3: Supreme Court and Public Policy; Topic 4: Civil Liberties; Topic 7: Constitutional Structure of Power; Topic 8: Structure of Individual Liberties), 358, 360N (Topic 10: Introduction to International Relations), 370L (Topic 23: Politics of Health Care), Health and Society 320, [330,] Human Development and Family Sciences 362, Management 320F, Philosophy 325L or 325M, 347, Public Affairs 325 (Topic 1: Advanced Seminar in Ethical Leadership), Public Health 341R, Sociology 354K.

Economics 304 K and 304 L may not count toward both requirement 1 d and requirement [ 8 e ] $\underline{9 c}$. Government 358 may not count toward both requirement 1 e and requirement [ 8 e$] \underline{9 \mathrm{c}}$. Management 320 F may not count toward both requirement 1 e and requirement [8e] 9c. Sociology 354 K may not count toward both requirement 1 d and [8e] 9c.
d. Infectious diseases and public health microbiology: Biology 330, 230L, 336, [347 or ] 360K, 260L [160L], 361, 361L, Public Health 341R, 361P.
e. Nutrition: Nutrition 312R, 315, 321, 331, 337, 338W or 338H, 342, 365 (Topic 1: Vitamins and Minerals; Topic 4: Obesity and Metabolic Health), Public Health 341R.
f. Social and behavioral sciences: Only one advertising, communication, or public relations course may be counted: Advertising 305, 319, 334, 378, Communication Studies 306M, 315M, 332, 332K, 355K, Health Education 329K, 335, 352K (Topic 2: Psychological Issues in Women's Health), 360, 370K (Topic 1: Foundations of Health Promotion I[; Topic 2: Adolescent Health Risk Behaviorl), 371K, 373, Health and Society 301, 320, Marketing 320F, [Pharmacy PharmD 350K,] Public Health 341R, Public Relations 305, Social Work 310, Sociology 319, 322F, 329, 336D, 354K, 369K

Sociology 319 and 354 K may not count toward both requirement 1 d and requirement 8 f .
10. One of the following foreign language/culture choices:
a. Beginning level proficiency coursework, or the equivalent, in a foreign language
b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers
11. Enough additional coursework to make a total of 120 semester hours

## Option II: Public Health Honors

6. Breadth requirement: An honors mathematics course; Biology 315 H and 325 H ; Chemistry 301 H and 302 H ; credit by examination may not count toward this requirement
7. In fulfilling requirement 2 a , students must complete an honors statistics course
8. Chemistry 204, 320M, and Biochemistry 369
9. A section of Undergraduate Studies 302 or 303 that is approved by the program honors adviser
10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
11. Two semesters of Public Health 379 H
12. Nine additional hours of coursework approved by the departmental honors adviser
13. Six semester hours of coursework [im] from the College of Liberal Arts [ $\wp \mathrm{f}]$ and/or the College of Fine Arts
14. Enough additional coursework to make a total of 120 semester hours

## Option III: Advanced Program

This program provides students with a foundation in the natural sciences applied to public health and advanced specialist training in preparation for a leadership position in public health practice. This program leads to the completion of the Bachelor of Science in Public Health and the Master of Public Health, awarded by the School of Public Health at the University of Texas Health Sciences Center at Houston. During the senior year, students complete the first year of the Master of Public Health at the Austin Regional Campus. The second year of the Master of Public Health is completed at one of the five regional campuses in Austin, Brownsville, Dallas, El Paso, Houston, and San Antonio. Upon completion of the first year of the Master of Public Health, coursework may be applied toward Option III requirements. Option III students may apply to graduate upon completion of the undergraduate degree requirements and prior to the completion of the Master of Public Health.
6. Mathematics $408 \mathrm{C},[$ [ $] ~ 408 \mathrm{~N}$, or 408 R
7. Biology $311 \mathrm{C}, 311 \mathrm{D}$, and 325 ; or 315 H and 325 H ; these courses must be completed before the student progresses to other upper-division biology and upper-division public health courses
8. Chemistry 301 or $301 \mathrm{H}, 302$ or $302 \mathrm{H}, 204,320 \mathrm{M}$, and Biochemistry 369
9. One of the following foreign language/culture choices:
a. Beginning level proficiency coursework, or the equivalent, in a foreign language
b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers.
10. Enough additional coursework to make a total of 120 semester hours; a maximum of eighteen [18] hours of graduate coursework completed at the School of Public Health at the University of Texas Health Sciences Center may be applied as elective hours toward the Bachelor of Science in Public Health, Option III: Advanced Program, if needed to reach a total of 120 hours.

* Graduate coursework may not be applied toward the public health core requirements 2 a through 2 f .


## Special Requirements

\{no change \}

## Additional Requirements for Option II

To graduate under Option II, students must remain in good academic standing in the Dean's Scholars Program, must earn grades of at least $A$ - in the departmental research and thesis courses described in requirement 11 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/.

Additional Requirements for Option III
\{no change\}

## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN PHYSICS IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Physics degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. The Dean's Scholars Steering Committee approved the proposal on May 10, 2017; it was approved by UTeach Program Director on September 22, 2017; and by the College Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, on September 27, 2017. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Drieluan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN PHYSICS IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Type of Change $\quad \boxtimes$ Academic Change Degree Program Change (THECB form required)

## Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ 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 $\square$ No $\boxtimes$

- Is this program being deleted?
- Does the program offer courses that will be taught off campus?

Yes $\square$ No $\boxtimes$

- Will courses in this program be delivered electronically?

Yes $\square$ No $\boxtimes$

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

Option V: Teaching
Update engineering courses under the mathematics, physical science, and engineering certification.
Reason: Engineering and UTeach reviewed and approved the new courses for teaching certifications in the College of Natural Sciences.

Option VI: Physics Honors
Remove M 427K. It was replaced in the 2016-18 catalog with an honors section of M 427J.
Reason: The Department of Mathematics is no longer teaching an honors section of M 427K.
Change six hours from Fine Arts or Liberal Arts to six hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six 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, standard 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)
$\boxtimes$ Courses in other collegesCourse in the core curriculumChange in admission requirements (external or internal)Courses in proposer's college that are frequently taken by students in other collegesChange in course sequencing for an existing programRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
$\begin{array}{ll}\text { a. Does this proposal impact other colleges/schools? } & \text { Yes } \boxtimes \text { No } \square \\ \text { If yes, then how would you do so? }\end{array}$FlagsCourses that have to be added to the inventory
4. SCOPE OF PROPOSED CHANGE

Option V, Teaching

Very few students seek the mathematics, physical science, and engineering certification. The UTeach Program did not provide an estimate of the number of students who might take E S 301 and M E 377K. However, the additions are approved by UTeach Engineering.

## Option VI, Physics Honors

The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six 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 ten 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? $\quad$ Yes $\square$ No $\boxtimes$ 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 $\square$ No $\boxtimes$ 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? $\quad$ Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, 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 nonnegligible 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? Not provided by UTeach Engineering or UTeach Natural Sciences; minimal number.
Impacted schools must be contacted and their response(s) included: UTeach Engineering Person communicated with: David Allen, director
Date of communication: September 22, 2017
Response: Suggested proposed changes.
e. Does this proposal involve changes to the core curriculum or other basic education requirements (42hour core, signature courses, flags)? If yes, explain:
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?

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

Dean's Scholars approval date:
UTeach Program approval date:
College approval date:
Dean approval date:

May 10, 2017
September 22, 2017
September 20, 2017
September 27, 2017
September 27, 2017

Dean's Scholars Steering Committee David Allen, UTeach Program, director Course and Curriculum Committee

David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN PHYSICS

\{no change\}

## Prescribed Work Common to All Options

\{no change \}

## Prescribed Work Common to All Options for Each

## Option I: Physics

\{no change \}
Option II: Computation
\{no change\}

## Option III: Radiation Physics

\{no change \}

## Option IV: Space Sciences

\{no change\}

## Option V: Teaching

This Option is designed to fulfill the course requirements for certification as a middle grades or secondary school science teacher in Texas; the student chooses composite science certification with physics as the primary teaching field, physical sciences certification, physics/mathematics certification, or mathematics, physical science, and engineering certification. However, completion of the course requirements does not guarantee the student's certification. For information about additional requirements, students should consult the UTeachNatural Sciences academic adviser.
6. Physics 301, 101L, 316, 116L, 315, and 115L
7. Mathematics 408 C and 408 D or the equivalent, 427 J or 427 K , and 427 L
8. At least eighteen [48] semester hours of upper-division coursework in physics, consisting of Physics 341 (Topic 7: Research Methods: UTeach), 353L, 355, and three of the following courses: Physics $329,333,336 K, 338 \mathrm{~K}, 352 \mathrm{~K}, 373$, Science 365 ; with the consent of the UTeach-Natural Sciences undergraduate adviser, an upper-division physics course that includes a substantial research component may be substituted for Physics 341
9. History 329U or Philosophy 329U
10. The requirements of one of the following certification areas:
a. For composite science certification:
i. Biology 311C and 311D
ii. Chemistry 301 or 301 H and 302 or 302 H
iii. Six hours of coursework in geological sciences; courses intended for non-science majors may not be counted toward this requirement
iv. Enough additional approved coursework in biology, chemistry, or geological sciences to provide the required 12 hours in a second field
b. For physical sciences certification:
i. Chemistry 301 or $301 \mathrm{H}, 302$ or $302 \mathrm{H}, 204$ or $317,353,153 \mathrm{~K}, 154 \mathrm{~K}, 354 \mathrm{~L}$, and 455 or 456
ii. Three additional hours of upper-division coursework in physics
c. For physics/mathematics certification: Mathematics 315C, 325K, 333L, 341 or 340L, 358K, $362 \mathrm{~K}, 360 \mathrm{M}$ or 375D
d. For mathematics, physical science, and engineering certification:
i. Mathematics $315 \mathrm{C}, 325 \mathrm{~K}, 333 \mathrm{~L}, 358 \mathrm{~K}$, and 362 K
ii. Chemistry 301 or $301 \mathrm{H}, 302$ or 302 H , and 204
iii. [Chemical Engineering 379 (Topic: Fundamentals of Engineering and Design), 379
(Topic: Engineering Energy Systems), and Mechanical Engineering 379M (Topic:
Design of Machines and Systems) ] Engineering Studies 301; and Mechanical Engineering 377 K upon approval of the project by the UTeach Program.
11. Eighteen semester hours of professional development coursework consisting of:
a. Curriculum and Instruction 651 S
b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
e. UTeach-Natural Sciences 101, 110, and 170
12. Students seeking middle grades certification must complete the following courses: Educational Psychology 363M (Topic 3: Adolescent Development), or Psychology 301 and 304; and Curriculum and Instruction 339E
13. Enough additional coursework to make a total of at least 126 semester hours

## Option VI: Physics Honors

6. Breadth requirement: Biology 315 H and 325 H , Chemistry 301 H and 302 H , and Mathematics 427 J [ er $427 \mathrm{~K}]$ and 427 L ; at least one of the math courses must be a designated honors section; credit earned by examination may not be counted toward this requirement
7. Mathematics 340L and 361
8. Physics 301, 101L, 316, 116L, 315, and 115L
9. Physics 336K, 352K, 353L, 355, 362K, 362L, 369, 373, and 474
10. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
11. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
12. Physics 379 H and a three-semester-hour upper-division research course approved by the departmental honors adviser
13. Ten additional semester hours of coursework approved by the departmental honors adviser
14. Six semester hours of coursework [im] from the College of Liberal Arts [ $\wp \mathrm{f}]$ and/or the College of Fine Arts
15. Enough additional coursework to make a total of 120 semester hours

## Option VII: Biophysics

\{no change $\}$

## 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 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 and be recommended for certification, students who follow the Teaching Option must have a University grade point average of at least 2.50 . They must earn a grade of at least $C$-in the supporting course in requirement 9 and in each of the professional development courses listed in requirement 11 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least $C$ - in each of the courses listed in requirement 12. Information about the portfolio review and additional teacher certification requirements is available from the UTeach-Natural Sciences academic adviser.

To graduate under Option VI, 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.

